ANDREW
MEIRION JONES

PREHISTORIC
MATERIALITIES

Becoming Material in Prehistoric
Britain and Ireland

OXFORD

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Prehistoric Materialities

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ANDREW MEIRION JONES

Preface

This book focusses on the events that connect materials and past peoples. One of the signal considerations of the book is the excessiveness of events: the fact that events can include both a series of intercutting relationships and that these relationships may be partial and ongoing. In this spirit, it seems appropriate to consider the events that led to the writing of the book.

In some ways, I have always wanted to write this book as it deals with issues of archaeological method and theory—such as categorization—that I have been grappling with since my doctoral thesis. However, the writing project was propelled by three major events.

First event: an influx of requests for reviews and references around Easter 2006. These requests were all concerned with my previous work on colour and archaeology. I was surprised, as the book I had edited on the subject had sold poorly, although it seemed to have caught the imagination of archaeologists, as well as the wider community of scholars concerned with colour. I began to consider whether I'd written everything I wanted to say on colour. It was sometime after this that a book proposal was written for Oxford University Press. At this time, I was thinking about dealing with the presentational character of artefacts and the book was ostensibly to be about prehistoric aesthetics.

Second event: sometime later in 2006 I bought Doug Bailey's book *Prehistoric Figurines* (Routledge, 2005). I initially bought the book as it covered a topic and period of prehistory I teach. However, I found the analysis of figurines as visual culture compelling. Not only this, the many, and various, sources used to discuss figurines was invigorating— the book seemed to offer a new way of situating archaeological discussions. I was intrigued as I still thought I was writing a book about aesthetics and Bailey's book seemed to offer a fresh new template. The influence of this book may not be immediately apparent in the present volume, although it influenced my interest in dimensionality (Chapter 3) and can be seen in my discussion of artefacts, such as the Folkton Drums, in Chapter 8.

Third event: in May 2007 I was invited to a day conference on 'time' at the Department of Sociology, Lancaster University. I duly

went and presented a paper on materiality and memory in the rock art traditions of western Scotland. I was never sure how the paper was received but, for me—like many conferences—the most interesting exchanges happened in the coffee break. I was chatting to two post-graduate students and I politely asked what they were studying. One gave a conventional answer, the other was studying 'waste manage-ment'. I was surprised by this answer and asked how this related to sociological questions. There was an embarrassed silence. One stu-dent whispered to the other something like 'don't worry he's an archaeologist' then the waste management student shuffled her feet and, rather shamefacedly, admitted that she no longer believed in sociology. This didn't surprise me as I had recently been reading Latour's *Reassembling the Social* (Oxford University Press, 2005) which seemed to make a similar point, and I assumed that—as usual—Latour was crystallizing deeper currents of thought. However, on my return journey I was thinking back on this moment and recalled a parallel conversation with a senior colleague in archaeology who had recently discovered the work of Alfred Gell and Bruno Latour. He expressed shock at these authors, as their work, in his words, 'drove a coach and horses through classical sociology'. This, he argued, could not be countenanced. Thinking about these two con-versations, I began to wonder why it was that some sociologists have been happy to question the concept of society—the very basis of their subject—while we in archaeology seemed to wish to cling to the divine word of Pierre Bourdieu, Anthony Giddens, and others. Is it because, as a discipline, we are backward, or behind, in our thinking, i.e. 'don't worry he's an archaeologist', or is there a deeper epistemo-logical reason for us to crave solidity, security, and a firm bedrock? As I began thinking about this, it became clear that this was something I wanted to write about and my interest in prehistoric aesthetics began to shift to an interest in prehistoric materials and materialities...

In addition to these three events, the writing of this book has also been influenced by my continued engagement with John Chapman's *Fragmentation in Archaeology* (Routledge, 2000), a profoundly im-portant book that I am still coming to terms with.

The book includes a number of original case studies and involved the analysis of several museum collections. I would therefore like to thank the staff and curators for all their help during my visits at the following museums: Marischal College Museum, Aberdeen; Salisbury and South Wiltshire Museum, Wiltshire; and Wiltshire Heritage

Museum, Devizes, Wiltshire. I am also extremely grateful to colleagues in Ireland who have provided photographic material for reproduction without charge; these include Professor Muiris O'Sullivan, Professor George Eogan, and Kerri Cleary. I am also grateful to Andrew Cochrane, Joshua Pollard, and Steph Moser, all of whom, in various ways, have influenced the course of this book, and especially to Steph for introducing me to the wonderful work of David Batchelor.

Every effort has been made to request permission to use the few literary references in this book.

Writing the book involved the usual trials, tribulations, and health scares. I would therefore like to dedicate the book to the staff working in that great British institution, the National Health Service (NHS), without whom this book would certainly not have been written. Long may this fine socialist project prosper.

I also dedicate the book to my partner, Hannah Sackett, who, over the course of writing, has acted as both nurse and intellectual advisor.

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An Archaeological Order

> Academic stories tend to organize phenomena, bewildering in
> their layered complexity, into clean overviews. They make
> smooth schemes that are more or less linear, with a demonstra-
> tive or an argumentative logic in which each event follows the
> one that came before. What may originally have been surprising
> is explained and is therefore no longer surprising or disturbing.
> Academic texts may talk about strange things, but their tone is
> almost always calm. (Law and Mol 2006, 3)

> One shouldn't complicate things for the pleasure of complicating,
> but one should also never simplify or pretend to be sure of such
> simplicity where there is none. If things were simple, word would
> have gotten round, as you say in English. (Derrida 1988, 119)

INTRODUCTION

I wish to begin this book by visually presenting three artefacts and
monuments from British Prehistory. The first of these are the arte-
facts excavated by the antiquarian Thomas Bateman at the Neolithic
burial site of Liff's Low, Derbyshire (Bateman and Glover 1848). The
burial is of a single adult male in a crouched position, accompanied
by an array of artefacts. I particularly want to draw the reader's
attention to the pottery vessel (Plate 1). Its form is unusual, having
a ridged profile and two distinct chambers.

Having pointed this out, I would now like to draw the reader's
attention to another Neolithic burial site in the North of England: the
site of Folkton in Yorkshire, which was, again, excavated by an
antiquarian—Reverend William Greenwell (Kinnes and Longworth

1985). This site was a child burial accompanied by three decorated cylinders of chalk, known as the Folkton Drums (Plate 2). Again, these artefacts are unusual, the decorations having wider Late Neolithic affinities (Longworth 1999), although the artefacts themselves are unique.

   We have looked at the unusual artefacts from two Later Neolithic burials; these are artefacts that are difficult to account for and they do not feature prominently in the literature. The next site I wish to discuss cannot be ignored as a result of its immense and impressive nature: the artificial mound known as Silbury Hill, Wiltshire (Plate 3). Silbury was also the subject of antiquarian investigation and was excavated most recently by Richard Atkinson and published many years later by Alasdair Whittle. Owing to subsidence, it has also seen more recent investigation by English Heritage (Whittle 1997; Leary and Field 2010). Excavations indicate that Silbury is constructed of a series of successive chalk mounds or platforms formed during the Late Neolithic. But how to account for this monument, what was it used for, what was its function, and how does it relate to the other monuments in the Avebury landscape?

   What links each of these pictorial examples? They all offer examples of artefacts or monuments that are unique or unusual; places or objects that stand outside of the usual current of archaeological experience. Archaeological method and theory deals poorly with the unique or unusual; how do we describe things that are messy, unusual, or odd? I wish to suggest that these artefacts and monuments pose a problem, as contemporary frameworks are very good at imposing order on the past, but less helpful for understanding the 'messy' or 'out-of-place'. Ironically, as a discipline, archaeology routinely deals with fragments and mess, but we are very poor at intellectually understanding either the mess or fragment.

   This book is an attempt to imagine ways of rethinking archaeology to better deal with mess, fragments, and complexity. To do this, I want to bring materials and performance to the fore. I argue that it is only by considering a performative approach to materials that we can grasp the complexities of the human past. In this opening chapter I will consider how British[1] archaeology in the 20th century has coped

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[1] I emphasize developments in British archaeology here. Of course, many of the intellectual developments in the discipline of archaeology have taken place in parallel with other archaeological traditions, especially the American, Australian, and

with mess by presenting the past, in Law and Mol's terms as a series of 'clean overviews'. I begin by looking at the messy relationship between people and things. In Chapter 2, I will consider the performative character of materials in more detail.

SOCIETY AND THINGS

The relationship between people and things has troubled archaeologists since the inception of the discipline in Britain. A number of recent studies have re-examined the social and political context of archaeology during the 1920s and 1930s, when the discipline was in its infancy and still finding its feet intellectually. Historian of archaeology, Adam Stout (2008), usefully discusses the birth of professional archaeology alongside the druids, ley-hunters, and hyper-diffusionists of pre- and inter-war Britain. During this period, archaeology was battling for professional status in an indifferent academic environment and was arguing for epistemological authority in a space occupied by various other interest groups, including druids and those interested in the pursuit of leys—much disputed ancient trackways imagined to criss-cross Ancient Britain from the Neolithic period onwards—the brainchild of Alfred Watkins (Watkins 1925). Many of these competing claims to know the past were reliant on religious or social belief as an explanatory factor, from the hyper-diffusionist notion of Egyptian sun-cults to the Universal Bond of the Druids. For this reason, archaeology sought to establish itself as an empirical science, and religious and social explanations for understanding past material culture were expunged from conventional discourse.

Alongside the broad belief in empiricist science, many intellectuals in the 1930s also had an increasing distrust in religion; many allied their belief in the potential of science with the attendant belief in the triumph of socialism: a rational and systematic epistemology for a rational and systematic social order. Gordon Childe is perhaps the most well known Marxist archaeologist of the period, although Kitty Hauser's intellectual biography of O. G. S. Crawford (Hauser 2008)

Scandinavian (mainly Swedish) traditions of archaeological thought. Nevertheless, I believe that British archaeology defines a peculiarly empirical tradition, which, despite recent re-evaluations, remains a strong motivating force in archaeological enquiry.

indicates that both men occupied a broader ideological milieu. The corollary of this for the discipline of archaeology was that ancient artefacts were to be analysed in a rational and empiricist framework in which aspects such as religion and society were disengaged from the material world. As Stout points out:

> 'simple', 'clean' and 'orderly' are concepts that can be applied to all aspects of the nascent discipline. From the emphasis on practical skills and techniques in excavation and recording; from the preservation and display of monuments and other artefacts, to the new emphasis on economy and ecology as constraining and defining influences on pre-historic society, inter-war scientific archaeology was unequivocally 'functionalist'. (Stout 2008, 158)

He goes on to argue that:

> 'functionalism' was an aesthetic of science: a 'streamlined' style of knowledge acquisition, reflecting the values of the society within which it was constructed. Accretions of theory and speculation were ruthlessly discarded in favour of the true, bare lines of honest fact. (Stout ibid.)

It would be hard to find a better description of the intellectual framework of early 20th century archaeology. It is precisely this framework that is later crystallized in Hawkes' famous 'ladder of inference' in which inferential statements about the past begin with empirical aspects, such as technology, followed by ever more complex inferences of economy, then society and finally religion (Hawkes 1954). Another important example of the functionalist aesthetic identified by Stout is pre-war archaeologists' definition of the concept of culture, which attempts to impose order by creating a series of mutually exclusive categories. In Gordon Childe's early formulation, cultures were identified by their repetitive associations: 'we find certain types of remains—pots, implements, ornaments, burial rites, house forms—constantly recurring together. Such a complex of regularly associated traits we shall term a "cultural grouping" or just a "culture"' (Childe 1929). The regularity of association was the basis of defining a culture group; those artefacts or sites that were irregular, or were not recurrent, could not be fitted into a culture group. Following this logic, the only option available was to exclude them.

I wish to argue that this attitude to the material world and its relationship to society in the early years of the discipline created an important epistemological legacy that haunts us to this day. One of

the key things established by the functionalist vision of the early discipline is a particular ontological description of the relationship between things and society, in which things are distinct, and stand apart from, the social. As Julian Thomas puts it:

> As part of the structure of modern thought, archaeology seeks clarity, objectivity, and a reduction to law-like or mathematical terms. It demands precision, unambiguous resolution, universality and the transcendence of local conditions. All of this is achieved by declaring the world to be object-like and free of meaning... (Thomas 2004a, 247)

The past was an ordered place, and this order could be known through detailed empirical analysis. I want to trace this description of ontology through the British archaeology of the 20th century; I argue that this description of the relationship between society and the material world is unhelpful if we wish to investigate the awkward, messy, and complex character of the prehistoric past.

Functionalism was also a key aspect of the New Archaeology of the 1960s and 1970s. For example, one of the major consequences of fundamental new methods, such as radiocarbon dating, was the *reordering* of the past into new evolutionary sequences of change, quite distinct from earlier diffusionist viewpoints (e.g. Renfrew 1973a). Alongside the scientific revolutions of the period there was a renewed vigour to explain the past in social terms. In this sense, the New Archaeology attempted to break with the perspectives of the early 20th century. However, the models of society adopted to explain past human behaviour were functionalist and evolutionist in flavour. For example, systems theory viewed cultural systems as an organic and functioning unity (e.g. Clarke 1968, 43–82), while the adoption of evolutionary frameworks of social change treated societies as distinctive units defined by their size and progression upon a preconceived stage of evolutionary succession (e.g. Renfrew 1973b, 1979). Sites, and also artefacts, were inserted into social or evolutionary systems. Again, artefacts and sites were symptoms of wider causes, whether environmental or evolutionary change (Clarke 1968). In both cases, archaeological evidence was to be fitted into an encompassing framework; society stood apart from, and encompassed, the material world.

These issues stand out particularly starkly with the appearance of contextual or interpretative archaeology in the 1980s and 1990s. The very notion of context frames the artefact or site, as the meaning of artefacts are to be understood by their contextual relationship:

'contextual archaeology...emphasizes the need to understand the meanings of an object by placing it more and more fully into its various contexts' (Hodder 1992, 15). Ian Hodder goes on to argue that contextual archaeology is also concerned with holism: 'we cannot even begin to make sense of the archaeological data without making *general assumptions*' (Hodder 1992, 15; my emphasis). The idea of construing one thing in terms of another is key to interpretative archaeology. Things are to be understood as symbols, texts, or metaphors (Hodder 1986; Tilley 1990, 1999). One of the other key features in characterizing interpretative and contextual archaeology is the adoption of social theory. One result of this is that the archaeological record becomes an illustration of recognized social theories, whether the structuration theory of Anthony Giddens or Pierre Bourdieu's habitus (e.g. Barrett 1994; Dobres and Robb 2000; Gardiner 2004). Although, rhetorically, material culture was argued to be active (Hodder 1986), in fact the material *character* of artefacts and monuments does not actively participate in these accounts. Instead, artefacts and monuments are reduced to reflections of particular kinds of social formation or behaviour. Again, one thing is construed in terms of another, past artefacts merely illustrate contemporary social theory. The underlying assumption here is that cultural ideas and values are impressed upon mute and formless artefacts; it is only through cultural values that materials can be meaningful. There are resonances here with recent criticisms of material culture studies in anthropology. As anthropologists Amiria Henare, Martin Holbraad, and Sari Wastell observe, the task of this modernist vision in anthropology is the elucidation of social or cultural contexts, as these are used to make sense of social life. An important outcome of this approach is that the social system becomes the object of knowledge and artefacts merely serve to illustrate the social system (Henare et al. 2007, 3).

Curiously, the ontological distinctions established by early 20th century archaeology are retained in contextual and interpretative archaeology; society is still treated as ontologically distinct from things. In contextual and interpretative archaeology, in the equation between things and society, the scales were tipped by the 1980s and 1990s and more emphasis was placed on society as an explanatory factor. However, as archaeologists borrowed their theoretical frameworks from the structural linguistics of Saussure and the structuralism of Levi-Strauss, the relationship between social meaning and thing is conceived of as arbitrary. This intellectual position has both

positive and negative outcomes. On the one hand, this produced a rich interpretative account of past society, as past meanings were read from the contextual association of excavated artefacts. On the other hand, this also produces a view of artefacts as ciphers of meaning, whose material existence is subordinate to their social or cultural meaning and value. In the words of the anthropologist Tim Ingold (2000, 340): 'culture is conceived to hover over the material world but not to permeate it'.

Each of the major intellectual frameworks of 20th century British archaeology offer ever more sophisticated methods of framing or intellectually categorizing the past and elements of the past are caught within these frameworks, while other components of past life escape us. One of the outcomes of these approaches, or frameworks, is that they tend to create a static vision of the past. This book is instead concerned with attempting to capture the fluidity of the past, placing an emphasis on past *processes* as opposed to past *stasis*. One of the points that characterizes all of the frameworks discussed above is an underlying assumption that the past is best understood as a set of reasonably specific, determinate, and more-or-less identifiable processes. This is obviously the case for culture-history, which is founded upon the notion of natural categories: the idea that things exist in the 'real world' out there awaiting categorization by the archaeologist (see Jones 2007, 123). This is less obvious for more recent frameworks. Nevertheless, although some recent approaches to archaeology have claimed, from a post-modern perspective, that the past is a construction of the present, when we examine interpretation in practice the past is presented as a *representation* to be discovered or read, thus Hodder reads the symbolism manifested in the monuments and artefacts of the European Neolithic (Hodder 1990), just as Tilley deciphers the totemic relations mapped on the rocks of Nämforsen, northern Sweden (Tilley 1991). This approach is also observed in historical archaeology, as Johnson (1996) discovered the patterns represented by the forces of capitalism in the architecture and field systems of Early Modern and Georgian England. In these approaches, the past is viewed through a series of analytic categories: symbolism, totemism, and capitalism. One of the results of this is that we reproduce static, often self-confirming categories for the past, of the way we expect the past to behave. If we are to overcome this constraining approach we instead need to consider fluidity and performance.

THE PHENOMENOLOGICAL MOMENT

There were two great intellectual movements in 20th century thought: structuralism and phenomenology. As archaeologists began to perceive the limits of an archaeology based on structuralist principles, they instead turned to phenomenology. The shift to phenomenology was, in part, to reconsider the issues of process and performance. It was also to rethink the problematic relationship between things and people (Bender 1993; Thomas 1996), as the simultaneity of the objective and subjective underscores phenomenological thought. Here, I wish to contrast two major strands in phenomenological archaeology, firstly the landscape phenomenology mainly associated with Chris Tilley and, secondly, the phenomenological thought of Julian Thomas and Chris Gosden.

As I understand it, the relationship between the objective material world and the experiencing subject is the central problem that phenomenology seeks to problematize and overcome. Heidegger, for example, is concerned with the problematic of representation, where representation is considered as a relationship in which whatever *is*, is figured as an object for man-as-subject. The objectification of what *is* by man-as-subject is, therefore, a central problem. What is the relationship between the material world and its objectification for human subjects? What role do materials play in this relationship and how do they impinge upon and come to have meaning for the human subject?

Given the central focus of the problematic relationship between objects and subjects in phenomenological thought, the deployment of phenomenological approaches in British archaeology is probably best described as idiosyncratic. I concur with Bjornar Olsen's (2007) assessment that much of the phenomenological literature reproduces the familiar distinction between the experiencing subject and the experienced world, or between society and thing, thereby softening the impact of phenomenological thought. A number of commentators have noted that the most influential school of landscape phenomenology (e.g. Tilley 1994, 2004, 2008) leans towards a subjective outlook in which the character of the experiencing subject plays a heightened role and the material character of experience plays a reduced role (critiques include Olsen 2007; Barrett and Ko 2009; Fuglestvedt 2009), indeed arguably phenomenological approaches, as made manifest by Tilley (2004, 2008), remain grafted to a semiotic outlook. Such an approach assumes the precedence of the

experienced world over the symbolization of that experience. As a result, the division between the material and the mental is retained intact.

Alongside the landscape phenomenology discussed above, a number of other authors explore phenomenological approaches (e.g. Gosden 1994; Thomas 1996). Both Thomas and Gosden place the relationship between the human and the material world at centre stage. I am less interested here in the deployment of phenomenological thought in their works and more interested in considering them as the wellspring for a rich series of discussions of materiality. For example, Julian Thomas (1996) moves from an exploration of the phenomenological thought of the 20th century to consider the roots of modernist thinking (Thomas 2004a), and the modernist distinction between humans and matter (Thomas 1998, 2004a). Importantly, drawing on the cultural theorist, Judith Butler, he argues that, rather than taking material categories as pre-given, we need to consider how they are performed (Thomas 1996, 2000, 2002). This has led to a useful reconsideration of other kinds of category, such as the person (see also Fowler 2004). In a similar strand of research, Chris Gosden continues to explore the agency of objects (Gosden 2005a) and is interested in the affects, aesthetics, and valuation (Gosden 2004, 2005b) of objects. Gosden's analysis of objects, drawing on anthropologist Alfred Gell, retains a residual distinction between animate subjects and inanimate objects, although, importantly, it offers a rich account of the interwoven nature of human and object worlds (see, in particular, Gosden 2005a).

I want to argue that, while the distinction between humans and the material world is preserved in the phenomenological thought of Tilley, the influence of phenomenology has been profound as it has provided the context for a critical rethink of the relationship. More importantly, it has placed things at the centre of analysis (see Olsen 2007). In this regard, the introduction of phenomenology into archaeological discourse has provided a juncture, or *moment*, for deeper reflection on ontological issues.

SOCIALITY AND MEDIATION

So far we have looked at the empiricist and functionalist legacy of British archaeology. I have argued that the ontological distinctions set

up between things and society by early 20th century archaeologists produced two complementary visions of the past. The first proposed an ordered and functional past determined by empirical factors, such as ecology and economy; a past expunged of the competing political forces of society. The second approach has emphasized the role of society in shaping or framing the meaning of past material culture. These approaches are complementary as they are equally reliant on the assumed distinction between things and society. In the first case, society is removed from the equation in order that things may be known in a more empirical, simple, or pure manner. In the second case, society is seen as critical in shaping the material past, although the material and physical components of the past are reduced in significance. In both cases, things and society stand apart from each other.

This rise of social explanations in late 20th century archaeology is especially curious, as contemporary sociology has begun to critically reassess the concept of society, the very basis upon which the subject is founded. The sociologist John Urry (2000, 195) highlights the problems with the classical concept of society when he asks: 'What ... stitches a "society" together when inhuman networks criss-cross it in strikingly new ways at ever-faster speeds?' He goes on to argue that the 'classic philosophical-sociological debates as to the respective virtues of methodological individualism versus holism, or in their later manifestations, structurationism versus the dualism of structure, are unhelpful here'. These critical reassessments come at a time of increasing global diversity, mobility, and complexity; societies are becoming increasingly networked and reliant upon intersections with material objects. Urry notes that classic notions of society as a distinct and separate entity to the material world are increasingly unable to cope with the complex consequences of diverse mobilities and the intersection of numerous regions, networks, and flows. Concepts such as 'structure' or 'agency' are simply unable to engage with the complexity of such relations. The anthropologist Marilyn Strathern (1996, 61) argues this point most forcefully:

> 'society' was reified as an individual thing, set up as an entity in antithesis to entities of a similar conceptual order: society versus economy, the material world, even biology or nature. Although these could be seen as conceptual domains carved out of human life, thought of as

"things" they appeared to have an identity prior to their being brought into relation.

She continues:

> . . . it led to the bizarre idea that people everywhere represented society to themselves as an external object, enshrined in ritual cohesion or legal orders. The one abstraction proliferated others—religion represented society, law represented society—alike in being set against the individual who had to be 'socialized' into appreciating the power of the external entity. In short, what the anthropologist made into an abstract object of thought in the ordering of material had to be made visible as the object of other people's representations. Hence the years of what now seems a futile search for social order. (Strathern 1996, 62–3)

Questions around the concept of society have emerged in recent years as the result of the quantum leap in global networks of interaction mediated by material objects. Sociologist Karin Knorr Cetina (1997, 1) positions the discussion of what she calls 'object centred sociality' in relation to modern concerns around individualization: a process by which social individuals—traditionally embedded in wider social communities—have become disembedded and are, arguably, becoming gradually embedded in communities of individuals and objects, a process by which objects take on many of the social roles earlier ascribed to people. While Knorr Cetina wishes to ascribe this process to particular modernist social agendas and trajectories I would argue it was ever thus. Archeologist Clive Gamble (2007, 96) argues for the use of natural objects, sticks, rocks, etc. as components of a relational network, or 'hybrid culture', potentially beginning 2.6 million years ago (Gamble 2007, 87). If we are persuaded by Gamble's assessment, and I believe we should be, then it appears that 'object centred sociality' is not uniquely modernist or contemporary. Given this, it seems imperative that, with our colleagues in anthropology and sociology, we reconsider the relationship between society and things.

Rather than conceiving of society as a force that stands outside of, and impresses itself upon, the material world I instead want to consider the way in which things or artefacts *mediate* the social. We need to be clear about the process of interaction described as mediation. Previous discussions concerning interactions between people and things argue for a reflexive process of objectification and sublation based on a dialectical understanding of the relationship (e.g.

Miller 1987). It is precisely this conception of interaction that I want to move away from, as it retains a notion of a relationship between two pure entities: person (or society) and thing. We see a similar deployment of the term 'mediation' in the work of the anthropologist Alfred Gell. For example, in *Art and Agency*, Gell is concerned with: 'the practical *mediatory* role of objects' (Gell 1998, 6). Gell appears to be bestowing agency upon objects through their role as mediators, although his definition of mediation is betrayed by his later discussion of 'primary' and 'secondary' social agency possessed by people and things respectively (Gell 1998, 17). In his account, the ontological distinction between person and thing is intact (see Holbraad 2009, 434) and the object simply serves as a conduit, or mediator, through which human agency flows. In discussing mediation I want to emphasize the way in which people and things articulate, interact, and act together in tandem. Science studies scholar Bruno Latour (2005, 37) draws a useful distinction between things as *intermediaries* and things as *mediators*. Intermediaries are things that transport meaning or force without transformation; they are conduits or vehicles for meaning. Mediators, on the other hand, transform, translate, distort, and modify the meaning or the elements they are supposed to carry. In agreement with this, Dant (1999, 14) argues for a shift in approaches to material objects away from treating them as 'products', 'commodities', or 'technology', to thinking about them as *allies*.

It is the performative alliance between things and people that is then of critical importance. The performative dimension of materials is significant, as it is through performance that materials act or mediate. Action is not so much performed against a backdrop of things, or enabled and constrained by things. Instead, things are constitutive of action: actions flow with, and through, materials as materials are recruited in social activities as substitutes for absent actors. We cannot consider the force of performance without considering the physical and material components with which these performances are articulated. The focus of analysis is then towards how actions are articulated between people and things, how things mediate the social actions of people, and how societies are configured and reproduced physically and materially.

This approach is fine as it stands, but, once again, we risk erecting a division between people and the things that they act upon. If we are to think of artefacts and sites as events or performances, how are we to imagine the materials from which these artefacts and sites are

composed? Is this stable material which is then simply acted on by humans? It may be more appropriate to consider the process in a more dynamic sense—a process in which the unstable and mutable components of the material world also act upon people (Ingold 2006; Bennett 2010; Connolly 2011). As Joshua Pollard notes: 'a tacit assumption that objects should embody a degree of stability and durability underpins all . . . ideas of material representation. After all, stability is often considered necessary to retain any sense of fixity in meaning or value' (Pollard 2005, 47). This approach to person-thing relationships is echoed by the geographers Ben Anderson and John Wylie when they note: 'textures and densities, liquidities and radiances, thus act as sets of imperatives within and through which movement and sensation are inspired and performed' (Anderson and Wylie 2009, 326). If we are to fully investigate the manner in which artefacts are performed, we need to acknowledge the mutability of substances.

One of the ways in which we can rethink the relationship between people and mutable substances is by considering the work of philosopher of science Karen Barad (2007). She examines the way in which knowledge and matter are mutually performed in the context of particle physics and, in particular, Niels Bohr's discovery and description of the atom. Bohr argued that '*theoretical concepts are defined by the circumstances required for their measurement*' (Barad 1999, 3; original emphasis). Plainly stated, the ways in which we describe the world (and the apparatus we use to describe it) are mutually related. We cannot describe the world without acting on it and shaping it. Barad argues that: 'it follows that there is an empirically verifiable discontinuity in measurement interactions' (Barad 1999, 3). There are therefore no unambiguous ways of differentiating between the 'object' and 'agencies of observation'; no inherent cut exists between objects and the methods we employ to observe objects. Given this, Barad argues that matter is neither fixed nor given, nor the mere end product of different processes. Matter is 'both produced and productive, generated and generative' (Barad 2007, 137). For Barad, humans and matter are caught up in mutual performances as agents, which bring each other into being. Observations of the world do not simply represent the world, they help to make the world. The world is produced, then, through what Barad calls 'agential realism', realism produced by agents both human and nonhuman, discursive concepts, and matter. She argues that the modes of

interacting, describing, and performing are constitutive of the world. This is not an argument that humans are engaged in the construction of the world 'willy-nilly' (a constructivist argument), but that the matter of the world also constitutes, and is constituted by, observation and action.

Barad offers an argument for a complex performative interaction between people and materials. One of the lacunae in her work is that materials are constituted by human observation and interaction; materials appear to have little visible life beyond this. In what follows, I want to preserve her emphasis upon the constitutive power of performance and on the mutability of materials. However, it is also important to highlight the liveliness of materials, their capacity and their potential to possess life, which may, or may not, impinge upon the human world (see Bennett 2001, 2010). This will be developed in the remainder of the book.

CONCLUSION

The argument for focussing on the material dimensions of perform-ance presented above is not an oppositional argument, somehow arguing for the significance or 'reality' of the material world against the 'ethereal' concept of society. It is quite the opposite; it is an argument *against* oppositional thinking. Therefore, my aim is to relocate society in material interactions and performances. It is im-portant to remember that social relations are intrinsic to human existence, not something that is abstracted and stands apart. By considering the role of materials in human interactions, I argue that we are closer to apprehending the centrality of sociality to human relationships both in the past and the present.

In this chapter I have reviewed archaeological discussions of the relationship between society and things. I argued that, for much of the 20th century, British archaeology has assumed that things and society were ontologically separate categories; this assumption has been perpetuated from the empiricism of the first half of the century to the symbolic approaches of interpretative archaeology. This assumed ontological distinction is problematic if we wish to understand the complex and messy connections between things and people that characterize contemporary societies, as well as those of earliest

prehistory. I outlined how the connections between people and things may be considered in terms of mediation. Finally, the mutable nature of the material world was emphasized and I argued that things and concepts arise from a mutual process of performative interaction. This chapter has begun to answer the questions posed at the outset, concerning how archaeologists deal with mess, and we have seen that the relationship between society and thing, far from being ontologically pure or distinct, is, in fact, performative and messy. While this chapter has begun to address this point, the indeterminate and messy character of performance has only been touched upon here. In order to reconsider how materials are performed, we need to consider the character of performance and the event in more depth. That will be discussed in the following chapter.

2

Archaeology in Flux

INTRODUCTION

In this chapter, I will discuss the way in which materials bring themselves to bear in practical performances. To what extent are artefacts and monuments the result of preconceived design? How do materials shape the form of artefacts and monuments? Some of these questions are addressed by the science studies scholar David Turnbull in his analysis of the construction of Gothic cathedral architecture (Turnbull 2000). Gothic cathedrals are some of the most complex architectural constructions of the Medieval period; their feats of architectural achievement amaze to this day. It is therefore surprising to realize that many of these buildings were constructed without the aid of architectural plans. In the contemporary world, the notion of building a complex architectural construction without a plan seems unthinkable. However, as Turnbull (2000, 53) remarks, plans and maps are synonymous with organized and systematized knowledge; they represent a particularly modernist and objective way of thinking about the world. They are a representation of the desire to grasp the world in its totality and thereby master it.

Traditional scholars of Medieval architecture have been puzzled by the feats of construction involved in Gothic cathedrals. As Turnbull (2000, 54–5) notes, previous attempts to discuss the construction of these magnificent buildings are mired in a series of dichotomies between technology and scientific understanding, or between the ad hoc and the theoretical. Many of the puzzles associated with building these monuments is resolved, Turnbull argues, by taking a performative approach to their construction and thinking of Gothic cathedrals as sites of experimental practice, as places at which people, practices

and diverse, but amorphous, materials can be shaped, manipulated, and assembled.

The key technological component in the transmission of knowledge and the construction of cathedrals, according to Turnbull (2000, 55), was the template—a pattern or mould, outlined on a thin piece of wood. It was 'the use of templates, along with constructional geometry and a relatively small range of simple tools that, in an experimental context, enabled the building of extremely high, radically innovative buildings' (Turnbull 2000, 55). Over time, of course, the role of the builder altered and plans became more commonplace. The role of master mason changed to that of architect. These later transitions have reinforced a distinction between science and technology, and between practical experiment and theory. The presumed epistemological pre-eminence of theory conceals the role of the local and messy practices that are typically involved in the production of knowledge.

I begin with this example as it beautifully underscores the issues that I want to discuss in this chapter: the role of performative process in the diverse assemblage of materials, practices, and people. I now want to consider how we may consider this alongside archaeological studies of materiality.

Along with many other disciplines, including anthropology, geography, and cultural studies (e.g. Whatmore 2002; Miller 2005; Thrift 2005; Henare et al. 2007; Anderson and Wylie 2009), archaeology has experienced a renewed interest in materials-based analysis. Arguably, the 'material turn' in archaeology has taken several different forms: a recognition of the importance of materials with less emphasis upon the theoretical impact that materials play in transforming our understanding of past societies (e.g. Noble 2006; Cummings 2010; O'Connor and Cooney 2010). A second strand of research stresses the critical theoretical importance of materiality to our understanding of past societies with less emphasis placed upon the role that materials play (e.g. DeMarrais et al. 2005; Meskell 2005; Miller 2005). The distinction between the two outlooks is perhaps explained by the continued recourse to a dialectical viewpoint, which perpetuates an ontological distinction between culture and materials (for critiques of this see Pinney 2005; Ingold 2007). A further strand of research has emphasized the importance of materials-based analysis to our understanding of human cognition and its evolutionary development (e.g. Knappett 2005; Boivin 2008). One of the problems with

the first two strands of research is that they take for granted the prior, and fixed, ontological status of things and people. I want to argue for the importance of examining materials and for theorizing materials, and also for understanding how materials shape the social and cognitive environments of humans. However, I wish to suggest that this is best achieved through the analysis of performance and process.

A number of recent studies of prehistoric archaeology develop these points. Lesley McFadyen (2007) discusses the process of monument construction at two British Neolithic long barrow sites: Beckhampton Road, Wiltshire and Ascott under Wychwood, Oxfordshire. The construction of these sites was dynamic and unstable. Architecturally recalcitrant materials were worked together to shape the final monument, an intimate process that required the interplay of people, materials, and artefacts. McFadyen emphasizes the practices of building and making these constructions and argues for the significance of focussing on making. She notes that, by focussing on practices of construction, we can no longer 'rely exclusively on the enduring physicality of these sites' (McFadyen 2007, 28). In many ways, McFadyen echoes Turnbull's analysis of Gothic cathedrals, when she notes that archaeologists tend to understand architecture in the schematic form of plans: designs that are simply translated into material form.

A further case study that develops notions of practice and performance is Stratos Nanoglou's (2009) analysis of Greek Neolithic figurines. In a diverse discussion of the deployment of animal skeletal materials and the production of animal imagery in the Greek Neolithic, Nanoglou argues for a shift away from thinking about figurines as resembling animals. Instead, he suggests that we consider the working together of diverse elements as a process of 'reassembling' (Nanoglou 2009, 187). The relationship between animals and people is not given; rather, these relationships are produced by performative practice. The representation of animals is then bound with a process of inhabiting the world in a particular way, a way of making the world inhabitable (Nanoglou 2009, 185).

Both McFadyen and Nanoglou emphasize that materiality is not a given concept, rather that it is produced as a result of performance. Materiality is produced through interaction and process and not simply the interaction of pre-given ontological entities. This chapter will deploy the insights of McFadyen (2007) and Nanoglou (2009) to consider how materialities are produced in performances. One of the key aspects I want to draw out is the way in which assemblages are

produced out of partial connections and the fragmentary; materials are not encountered as objects set apart at a contemplative distance from humans, rather materials are part of the fabric of human performances and, as such, they are used experimentally and creatively.

FRAGMENTATION IN ARCHAEOLOGY

One approach to the fragmentary comes from the inspiring work of John Chapman (2000; Chapman and Gaydarska 2007). Chapman argues—on the basis of the later prehistoric archaeology of the Balkans—for the significance of fragments and the social importance of the process of fragmentation. Objects are deliberately fragmented, he argues, as a means of creating enchained relationships—shared connections—between people. Chapman's insight is significant; however, in my view, this concept can be extrapolated.

I suggest that, rather than viewing the process of fragmentation and enchainment as an interesting case study in Balkan prehistory, that instead we view fragmentation and enchainment as an essential constitutive condition of archaeology. If we are to reconsider how sites and artefacts are performed, we need to re-conceptualize archaeological artefacts and sites, not as representations of wider overarching causes, but as so many fragments situated in enchained networks of practice. Knowledge is built from the ground up; it is assembled from locally available components.

I began the last chapter with the example of three unusual artefacts or sites; these do not fit conventional categories, they are unconventional fragments of prehistoric activity or events. If we are to account for the existence of such things, we need to reconsider how these sites or artefacts were assembled or performed. To do this we need to treat artefacts and sites as *iterations*. The concept of iteration derives from the philosophy of Jacques Derrida and, in particular, from his response to the linguists John Austin and John Searle (Derrida 1988). Derrida's particular concern is how utterances can be considered to be intelligible. The notion of intelligibility requires that utterances leave a trace or mark. All marks, whether they are characters, words, or sentences must be repeatable (or iterable). They must be able to function beyond a given context or situation if they

are to count as marks at all. The iterable mark is an unstable combination of sameness and difference. Without being iterable, no mark could ever mean the same thing in different contexts yet, because it is iterable, a mark can never be constrained to signify a single meaning (Loxley 2007, 168).

The concept of *iteration* emphasizes the idea that things need to be performed or reiterated. Rather than thinking of categories as a priori entities that are simply there to be discovered in the archaeological record, the approach I would like to develop here is that categories are intelligible because they are composed of iterations: repetitive acts that each refer to past events (see Chapter 5 for development of this argument) and look towards future events. Related to the concept of iteration is the concept of citation. I have previously developed the notion of citation (Jones 2007), directly citing the work of gender theorist Judith Butler (1993). In adopting the term 'citation' in an archaeological context, I have emphasized the way in which artefacts and sites, as cultural performances, are situated in networks of referentiality or reference. The concept of citation emphasizes the way novel cultural performances draw on past performances and, in so doing, reiterate and transform them.

We can consider this process of reiteration and citation in terms of physical fragments. In Chapman's terms, the breaking of artefacts creates enchained relationships, as what once was whole is now shared between two or more. Fragments can also be accumulated and their physical collection in an assemblage means that isolated fragments can be juxtaposed and related together. This applies to complete artefacts. The physical creation of artefacts is an act of juxtaposing differing cultural influences; artefacts embody things that came before. Similarly, the physical collection of artefacts together in an assemblage means that distinct groups of artefacts become a set in which differing cultural influences are juxtaposed. We can also approach sites and monuments in the same way. The construction of sites may involve the juxtaposition of differing constructional materials. This may be a continuous process, as sites may have long-term biographies in which an array of cultural materials may be brought to bear on the site, juxtaposing novel categories of materials.

Such an approach to understanding the performance of materiality has two important outcomes for archaeology: it rethinks the notion of archaeological categories and rethinks the notion of context. Rather

than thinking of categories as self-evident and a priori as natural categories 'out there' in the archaeological record awaiting discovery, we instead realize that categories are performed: they are composed of iterations. This is apparent in Gordon Childe's early definition of archaeological cultures (Childe 1929), as cultures are composed of *recurrent* features—features that are reiterated. Typical members of categories are composed of dense iterations and reiterations, while the kinds of artefacts I discussed in the opening section of Chapter 1 are composed of looser, or less dense, iterations. These are 'one offs'—intelligibly related to other categories, but not conforming to a single type.

The other key outcome of the approach to performance and materials outlined above is to rethink context. Rather than considering contexts as frames for meaning, if we instead consider contexts as components of fields of citation or reference, then we can consider contexts as *generative*. Contexts are moments in networks of performances. Contexts, therefore, are significant participants in the process of creating and re-creating meaning. Contexts are situations that perform each event afresh—they are components in the process of iteration and reiteration. Contexts do not frame meaning. Rather, they propel or generate meaning. They provide the situation by which performances can be assembled and comprehended. For example, writing of Clifford McLucas and Mike Pearson's Brith Gof theatre performances, performance theorist Nick Kaye notes the way in which place (as context) is explicitly constituted *in performance itself* (Kaye 2000, 55; original emphasis). This is particularly important if we wish to understand the way in which artefacts and sites may be juxtaposed in practice. The act of juxtaposition in itself produces context; the performance of juxtaposition is therefore generative.

The implications of my arguments concerning fragments are that knowledge and practices are partial, or incomplete (see Law 2005). Not everything can be known. For Derrida, the traces of incompleteness are discernable in the erasures enacted in whatever is present (e.g. Derrida 1994). What is made present depends on what is also being made absent. Like the discussion of iterations above, presence and absence are unstable terms and each is dependent on the other. To make something present is simultaneously to make something else absent, and to make something absent, also produces a presence. This is particularly important if we wish to consider the nature of performance, as performance involves the process of making things or

events present (presencing) for self and audience (Kaye 2000). We may think of performance as a careful balancing of presence and absence.

PERFORMATIVITY AND EVENTS

In Chapter 1, I argued for a more complex relationship between society and materials than traditionally entertained in the British archaeological discourse of the 20th century. I argued that materials perform a mediatory role, helping to articulate human values, ideas, and relationships. I further argued that, while offering a medium for action, materials also acted upon humans, as material is mutable, unstable and has material impacts, affects, and effects. Following on from this point the performative relationship between people and materials was argued to be one of mutual generation and constitution. In this sense, I wish to chart a shift away from a representational account in which practices are rooted to a larger structural model, to instead consider society to be composed of multiple, heterogeneous connections or articulations. To do this, I wish to locate the performative in *events*.

Events have seen little discussion in the archaeological literature, although a recent paper by Beck et al. (2007) draws on the Giddens-inspired sociology of William Sewell Jr to argue for the significance of the event, using four case studies: the conversion to Christianity in Medieval Iceland; barrow construction in the Thy region of Bronze Age Denmark; platform construction at Formative Chiripa, Bolivia; and the planning and layout of Cahokia, Illinois. Their analysis, following Sewell, opposes events, as unexpected ruptures in material culture patterning, against structures. 'Historical events effect the durable transformation of structures both by disjoining the points of articulation among resources and schema and by offering new opportunities for their creative rearticulation through human agency' (Beck et al. 2007, 844). As such, the definition of events often involves defining whole periods of time, such as the barrow-building period in Denmark as a single unified 'event'. This is problematic, as we then have difficulty in defining so-called events against so-called structures. As Joyce (2007, 849) notes in reply to this paper, the approach offered by Beck et al. (2007) implicitly suggests that continual

reproduction of societies is normal and, as such, agency is redefined so that human actors reproducing structures are said not to exercise agency. While I concur with Beck et al. (2007) that events are a worthwhile area of archaeological discussion, we need to grasp Joyce's critique in both hands. Rather than viewing unstable events in opposition to stable structures and finding the continual reproduction of societies as problematic I want to argue, on the contrary, that events are *central* to the continual reproduction of social and material relations. It is the continual re-working of events that compose societies; there are no stable structures, just events of varying stabilities. My approach to events would not see events as solely shaped by human actors, but by human interactions with a variety of material and physical forces.

Here, I particularly want to draw on the work of geographer J. D. Dewsbury (2000, 2010). Dewsbury argues that performative events are characterized by connection, heterogeneity, and multiplicity. Connectivity is important. In asking what something does, we consider how in its doing 'it connects with other things, digresses boundaries instigating new ones, whilst rejecting, separating and recomposing others' (Dewsbury 2000, 476). In this sense, events may also involve ruptures. Events involve the decomposition and recomposition of diverse connections. These connections are heterogeneous and may involve connections between disparate people, substances, and thoughts. The heterogeneous nature of events means that they embody multiplicities, as events encapsulate multiple permutations and transformations.

Events are ongoing performances. Above, I described fragments as iterations of previous performances that help to make novel performances intelligible. However, each performance itself is iterative. As Derrida notes, the performative 'produces or transforms a situation, it effects' (Derrida 1988, 13). What is produced in each performance is efficacious. It produces an effect, whether material, social, or psychological. This iteration, this effect, then goes on to make up future performances. Performances are therefore *continuous* processes in which prior elements are drawn on and certain aspects of performance are marked out for special attention. These aspects are then used iteratively to influence future performances (for a related discussion see Barber 2007).

The iterative or citational nature of the process of performance means that performances are inherently unstable in the effects they

achieve or produce. Performances delicately balance presence and absence. While certain things are made present in performance, others are made absent. Because of this, performances also balance creativity and tradition; the aspects of a performance that make it creative will necessarily mean it breaks from tradition, while traditional performances are unlikely to be creative or innovative in content (see also Jones 2007, 86–9). One of the critical tasks of a performative- and materials-based analysis of the social is to comprehend the stability of form amidst the dynamism of formation (Massumi 2002). Rather than assuming the prior existence of stable representations of society to which people refer in their practices, we instead need to explain how representations are performed and enacted amidst a backdrop of change; the deployment of materials as mediators for social representations offer the possibility of a degree of representational stability (Latour 2005).

While performances may serve to reproduce stable representations, they are also creative. The anthropologist Karin Barber (2007) argues that 'creativity need not only arise from *within* people, but also emerges in collaborative activity *between* people' (Barber 2007, 33; original emphasis). To this, I would add that creativity can also emerge in collaborations between people and materials. This is observed most frequently in the visual arts. For example, the painter Gerhard Richter observes the following in the creative process: 'something is going to come, which I do not know, which I have been unable to plan, which is better and wiser than I am' (quoted in Mitchell 2005, 226). Here, we observe creative activity emerging from an interaction with a painter and their medium. Creative products may also emerge in interactions amongst groups of people and materials, as we saw in the examples that opened this chapter. I argue that all performative activities capture part of this creative process. All performances are constitutive of materials and operate through interactions between materials and persons. In this sense, we can think of performative events as the locus for experimentation and the diverse assembly of distinct materials. Performances are then *relational* and they help to re-work and re-fashion prior ontological distinctions between substances. Then, in this sense, performative events offer a context for fashioning or manufacturing novel ontologies; new ontological relationships are achieved through performance.

To summarize, the performative event is particularly important as it adopts an open-ended stance towards human experience and

eschews any notion of deep structure. Rather, our performances propose and create connections that reconfigure what is allowed to materialize in discourse. Geographers Ben Anderson and Paul Harrison (2010, 18) remark that events are 'primary in a world in which the background is open to modification and in which diverse material bodies are constantly being brought into relation'. The discussion of events recognizes that social life is an ongoing process—that being social does not involve enacting the reflections of some a priori order waiting to be unveiled, decoded, or revealed. Rather, we are always caught in the midst of the enactment of events; events provide the chance to both connect and rupture, to apprehend and alter. Through the enactment of events, the past is made sense of and the future sensed.

On the face of it, this approach to events may appear capable of only explaining or interpreting the local and contextual. I want to briefly consider this. In an archaeological context, grand narratives, whether of the culture-historical, processual, or post-processual persuasion, are problematic as they assume the prior existence of overarching stable representations which are then simply played out materially. Equally problematic is an interpretative stance that presumes to interpret from a localized understanding of symbolic codes. By emphasizing the event we instead recognize that actions come about by attending to both local situations and wider forces. The task is, instead, to consider how the local- and wide-scale narratives interact, to consider how we register the world and how the world affords registration to us, and how both, in combination, bring the world into being (Dewsbury 2010, 149). I will pursue this question further in Chapter 3.

In this chapter, I have discussed the way in which fragmentary relationships are articulated in performance. The approach I am developing here is to examine material performances in terms of acts that both connect and rupture. To focus on performance shifts us away from previous discussion of practice in which practices play out, reproduce, re-work, or crystallize overarching social structures. Instead, by focussing on materials and performances, I wish to emphasize the way in which performances disarticulate and re-articulate the connections that bind materials and people; it is these connections that go on to generate social attachments (Strathern 1996; Knorr Cetina 1997). These connections may be multiple and need not be related to a single unity; they are decentred and heterogeneous.

PERFORMANCE IN ARCHAEOLOGY

A number of archaeologists have discussed performance in the sense
I describe above. For example, in her work on the Mesolithic period of
Yorkshire, Chantal Conneller (2000) has discussed the varied rela-
tionships between things, people, and animals as people moved
around the landscape. She demonstrates the way in which, through
the action of lithic reduction strategies, further connections are con-
tinuously being made. In a similar sense, Lesley McFadyen (2006)
examines the way in which space is created through ongoing practices
of landscape inhabitation in Mesolithic Wiltshire. Critically, locations
of ephemeral activity (scatters of lithic materials) are important, not
for what they mark, but for what they make. Further, she argues that
lithic scatters are assemblages that draw in a series of other activities,
including the butchery of animals and the processing of plants.
Assemblages of worked flint are 'therefore about process; they are a
mesh of connective dynamics made by people' (McFadyen 2006,
126). The action of lithic production is therefore performative. The
performative also emerges in another dimension of Conneller's work
in which she discusses the peculiar antler frontlets (the skull and
antler crown of red deer) found at the well known Mesolithic site of
Star Carr, Yorkshire (Conneller 2004). Conneller argues against pre-
vious views of the frontlets as either hunting disguise or ritual cos-
tume. Instead, she wishes to explore how human and animal bodies
were produced at the site. She argues that the antlers do not embody a
literal transformation into deer, but instead denote an act in which
the human body was turned into something else (Conneller 2004, 50).
The antler frontlets and their donning by humans constitute a per-
formative event in which human and animal are differently as-
sembled. This work on the Mesolithic is especially inspiring in the
sense in that it foregrounds the ongoing nature of performance and
the transformative significance of the performative act.

   A rather different sense of the term 'performance' has also been
discussed in archaeology. A recent edited volume on performance
(Inomata and Coben 2006) takes a particular stance on the subject.
The editors of this volume emphasize performance and spectacle as a
particular region of social activity, distinct from the current of every-
day activity. Tensions can be observed amongst the contributors to
the volume with this definition of performance. Ian Hodder (2006),
for example, questions the abstraction of spectacle and performance

from the everyday in his analysis of performative activities at the Neolithic settlement of Catal Höyük, Turkey. Hodder (2006, 82) argues that:

> I would prefer to see spectacle as just a showing and looking. The processes that lie behind such showing and looking, such as staging, performance, theatricality, and so on, occur however large the audience and however public or private that audience might be. So spectacle as such is not confined to the public realm, even if the mechanisms involved will change depending on the size of the audience and the scale over which performances are to be seen and heard.

This approach to performance and spectacle is vigorously argued against by another contributor to the volume, Stephen Houston (2006, 135):

> ... the 'scopic' definition, in which 'spectacle' pertains merely to acts of seeing and looking, [as explained by Ian Hodder...] explains little. It bypasses the quality of performance that so clearly operates in these effusions of human energy. If taken literally a 'scopic' definition applies equally to any showy, natural production, such as a volcanic explosion or tsunami. Krakatoa was thus a 'spectacle' and Hilo too.

Houston (2006, 136) continues:

> A second claim..., that scale is irrelevant and that the number of participants and observers counts for little, cannot be conceded from a sociological or anthropological perspective. Depending on scale, the preparation, intensity, and ability to influence must vary...

These tensions emerge, I believe, because of the differing scale and nature of the societies that both authors discuss. Hodder analyses a (relatively) small-scale Neolithic community, whilst Houston's subjects of analysis are the spectacles of the Classic Mayan state. As it stands, Houston's argument appears to reinstate an evolutionary scale of development, driving a wedge between state-level societies able to perform spectacles and pre-state societies that are unable to perform spectacles. This position is patently nonsensical when we consider the role of performances in hunter-gatherer societies, such as those of indigenous Australia (e.g. Morphy 1991; David 2006, 55). In addition, Houston also seeks to drive a wedge between human spectacles and natural spectacles and performances. As I argue above, and in the previous chapter, I believe that categorical distinctions between society and materials are unhelpful and unrealistic. Furthermore, Houston's

arguments concerning scale appear to wholly depend upon the number of human participants in spectacles and performances, overlooking the role of nonhuman materials in promoting spectacle.

As my subjects in this book are the small-scale communities of Neolithic and Bronze Age Britain, I agree, not unreasonably, with Hodder's assessment that spectacle and performance occurs at a variety of scales and occurs in both public and private domains. However, unlike the contributors to Inomata and Coban's volume, in this book it is not my purpose to abstract performance as a particular type of activity. Instead, I am concerned with the *performative* in all aspects of prehistoric life. I would, therefore, go further than Hodder and argue that spectacle and performance are constitutive of all human activity and that public displays are necessarily embedded in, and gain their meaning from, the routine procedures and performances of everyday life.

In this chapter I have examined the role of the fragment in the constitution of performance. In focussing on the performative event, I have argued that performances are made up of iterations, fragments of previous performances, that help to make individual performances intelligible. I have also argued that performance is an ongoing process that produces iterations used in future performances. The act of performance involves a delicate balance, then, in which some things are made present and effective, while others are made absent and therefore inactive. As a result of this, performance is also a medium for creativity and I argue that this creativity is constitutive of fresh ontological relationships between people and things.

THE SHAPE OF THINGS TO COME

The book is divided into three sections. The first section (Chapters 1 and 2) has introduced the problematic relationship between people and materials in British archaeology. The second section (Chapters 3–7) discuss performative materials in various case studies relating to the British and Irish Neolithic and Early Bronze Age, a period covering *c*.4000–1500 BC. The third section of the book (Chapters 8 and 9) forms a conclusion and deals with the presentational and performative character of materials.

It is not the aim of this book to provide overarching explanations for sweeping cultural changes over the period of study. Instead, my aim is to examine the performative significance of materials in a series of differing situations in the British Neolithic and Bronze Age. This book is unashamedly eclectic in its approach and the case studies discussed range widely, discussing materials from prehistoric England, Ireland, and Scotland.

I have deliberately eschewed a wholly materials-based analysis; the book could have focussed on stone, bone, clay, metal, or earth and its deployment during the Neolithic and Bronze Age. However, I believe the result would have been overly determinist and constraining. Instead, I have focussed on aspects of the qualities of materials and the nature of materials-based performative practices. Therefore, Chapter 3 discusses the nature of scale, gigantism and miniaturism in Irish passage tombs and the miniature cups of the Early Bronze Age of southern England. In Chapter 4, I discuss the significance of light and colour in the Neolithic rock art of Argyll, western Scotland, and the houses and passage tombs of Neolithic Orkney, northern Scotland. In these two chapters, I argue for an important focus on the performative interaction between materials. The number of material qualities I discuss here is limited by space and personal interest; there is an almost infinite number of aspects of materials that could have been discussed, such as surfaces, containers, fluidity, solidity, ephemerality, etc.

The next chapters deal more closely with materials-based performances. Chapter 5 forms an important central argument for the book and examines the nature of archaeological categorization through the performance of repetitious actions in a long settlement sequence in the bay of Firth region of Neolithic Orkney, northern Scotland, and in the character of pottery manufacture and mortuary traditions in the Early Bronze Age in Aberdeenshire, northeast Scotland. Chapter 6 examines the performance of material assemblage and focusses on artefact hoards and burials in the Early Bronze Age of central and southern England and on metalwork hoards in Scotland and northern England, with a particular focus on northeast Scotland. In Chapter 7, I deal more generally with the issue of performance and examine how it relates to monumentality, focussing on the Early Neolithic causewayed enclosures of eastern and southwestern England and on the performance of barrow construction in the well-known Early Bronze Age cemetery of Snail Down, Wiltshire. While I

have discussed material qualities and performances in distinct chapters, the case studies in section two of the book all inter-relate and could be read in any order. This is intentional as I aim to highlight the intercutting nature of materials and performances.

In Chapter 8 in the third section of the book, I discuss the presentational character of artefacts and sites through an analysis of the three anomalous artefacts and sites that opened the discussion in Chapter 1. In Chapter 9, I conclude with a discussion of approaches to materials and reiterate, and summarize, the approach taken in this volume, discussing the consequences of this for the wider study of archaeology.

3

Materials and Scale

'A little potassium hydrocyanide' a voice said, over the transatlantic telephone. 'Not fatal, not even dangerous. Merely relaxing...'

I started to get up off the floor. You ought to try it some-time. But have somebody nail the floor down first. This one looped the loop. After a while it steadied a little. I settled for an angle of forty-five degrees. I took hold of myself and started to go some-where. There was a thing that might have been *Napoleon's tomb* on the horizon. That was a good enough objective. I started that way. My heart beat fast and thick I was having trouble opening my lungs. Like after being winded at football. You think your breath will never come back. Never, never, never. Then it wasn't Napoleon's tomb any more.

(Raymond Chandler, *The Little Sister*, 1955, 147; my emphasis)

Perhaps it was an indulgence on my part—moving to a bunga-low next to the model village. It's true that when I sat, puffing on my pipe, watching my son and daughter move about amongst the four-foot-high, half-timbered semis, I would feel trans-ported, taken back to my own childhood. It was the confusion of scale that allowed for this. For if the model village was to scale, my children would be at least sixty feet tall. Easily big enough, and competent enough, to re-parent me.

(Will Self *Scale*, 1995, 14–15)

INTRODUCTION

Both of the quotes that open this chapter relate to confusions of scale and to drug-induced experience. This is clearly the case in the first

quote, where Raymond Chandler's well known detective, Philip Marlowe, is drugged during an investigation. The scale of objects change around him, and medium-size objects on the horizon assume the gigantic dimensions of Napoleon's tomb. In the second quote from satirist Will Self, the writer is recovering from heroin addiction and the confusions of scale occur at the model village of Bekonscot, Buckinghamshire, England. In both of these quotes, the altered perceptions that arise from drug experiences are evoked by changes in the everyday scale of objects. Chandler's evocation of Napoleon's tomb as a metaphor for an enlargement of scale is particularly apt as it is a vast and imposing edifice; a monument to one (small) man's ego and ambitions beyond normal human scale. Likewise, Self notes the confusion that occurs when normal scale is juxtaposed with the miniature, as his children apparently grow in size when compared to the 1:12 scale buildings of Bekonscot. In these examples, it is juxtapositions of scale that confuse and alter everyday perceptions. In one case, Marlowe himself is dwarfed by objects in the room around him that assume the dimensions of Napoleon's tomb. In the other, the miniature houses of Bekonscot magnify the size and accelerate the growth of Self's children. Of course, differences of scale are not solely the preserve of drug-induced experiences. In this chapter, I argue that dimensions are important constituents of the material environment. One of the key points to emerge from previous discussions of scale is that the scale of the environment is perceived with reference to the human body (Stewart 1993). Here, I argue that scale is a performative element in the constitution of materiality; it is the juxtaposition of differing scales that produce the vertiginous changes in experience discussed above. The production of scale is performative as it involves juxtaposing, or bringing into relation, disparate elements of the environment; it is the collision of these disparate elements that makes the apprehension of scale an emergent and performative process. As Levi-Strauss (1966, 24) notes, miniature objects result not from passive projections or homologies of real objects, rather they constitute a form of experimentation and play with the physical world. To this I would add that the physical world also impinges upon people and that all engagements with the physical dimensions of the world result in juxtapositions of scale.

The performative aspect of scale and the juxtaposition of elements of differing scale produce interesting psychological and phenomenological experiences. In a startling series of experiments, the architect

Alton Delong (1981, 681) noted the way in which subjects observing differently scaled environments undergo systematic shifts in the experience of time. Delong's experimental subjects were asked to engage themselves in scale-model environments for a duration of time and were asked to estimate the length of time they had been so engaged. The scale-model environments were either 1:6, 1:12 or 1:24. Importantly, subjects engaged with these scale models experienced a compression of time and, critically, this experience in the compression of time was systematic and exponential. Therefore, in a 1:12 scale environment, 5 minutes of time should result in 60 minutes of time experienced and 120 minutes in a 1:24 scale environment. Importantly, it appears that spatial scale plays a significant role in temporal experience (Delong 1981, 682) and that the experience of space and time are relative to each other. Delong's experiments were conducted with miniature models—no experiments were undertaken with enlarged models although, from the systematic nature of his experimental findings, we might expect that subjects in greater-than-normal-sized surroundings would experience temporal expansion as opposed to compression. In fact, Delong suggests as much when he notes that spatial scale is relative to the size of the observer: a giant would experience increased time compression, while a child would experience reduced time compression in a given experimental scale-model environment. I introduce this discussion here, as this chapter will explore the importance of gigantic scales, as well as those of the miniature.

ARCHAEOLOGY AND SCALE

The significance of the scale of artefacts and monuments has rarely been remarked upon and has only recently become the focus of analysis. Douglass Bailey, in his study of prehistoric figurines from various regions in the Neolithic and Chalcolithic Balkans has drawn the attention of archaeologists to the importance of scale and, in particular, miniaturism (Bailey 2005, 26–44). As Bailey notes when we consider the processes of reducing the size of an object, one way to conceptualize this process is that a small thing has been reduced in proportion to an original (Bailey 2005, 28). Models are one example of such reductions in scale; these are typically made at precise scales

and are attempts to reproduce an original in an accurate manner. Models are unlikely to be of significance during the prehistoric periods with which this book is concerned. Of more significance are miniatures: miniatures are small things that are not precise or accurate.

Bailey (2005, 2009, 2010) has taken care to discuss the power of the miniature, discussing the way in which figurines, such as those from Poduri-Dealul Ghindaru, Romania, because of their diminutive size, 'open up the minds of the people who hold and see them' (Bailey 2010, 125). Figurines can be contained in the hand of the viewer, offering the potential for control and understanding. As miniaturized figurines, these figures offer the viewer a chance to view the cultural world in its entirety, to take the world in at a glance and control and manipulate it.

While the significance of miniature artefacts has begun to be appreciated, it is important to realize that this is only one aspect of dimensionality. For example, there has been little discussion of the role of the gigantic in archaeological discussions. While monuments and the monumental have been consistent areas of archaeological discussion, the scale of prehistoric monuments in relation to human observers has rarely been the focus of discussion. Scale and visibility have been important areas of discussions when considering the phenomenological experience of movement around megalithic architecture. For example, both Julian Thomas (1993) and John Barrett (1994) remark upon areas of visibility and disclosure when moving along the monumental Kennet Avenue towards the Late Neolithic henge at Avebury, Wiltshire. Chris Tilley (2004, 137) likewise discusses the experience of entering the gigantic megalithic structure of the Neolithic temple of Tarxien, Malta. However, none of these accounts fully discuss the phenomenological significance of the gigantic in a comparable way to Bailey's (2005) treatment of the miniature.

We are required to look to the Egyptological literature for an appreciation of scale in monumental architecture. While this has not necessarily been theorized, here we have the advantage of contemporary accounts regarding the monumental. For example, Baines (2007, 269) quotes an account of the building of a temple to Amenhotep III (*c.*1390–1350 BC). The temple is said to be:

'A fortress for ever and for all time/in fine white sandstone.... its doorways in electrum/made broad and large, greatly,/enhanced for all

time./ . . . /of granite, quartzite, all sorts of precious stones/(that were) enhanced with everlasting work/their height rising to the sky/and their rays being in people's faces/like the sun-disc when it shines at dawn . . .'

While it may not describe the sensation of moving around the temple, this account of the temple, carved on an adjacent stela, nonetheless vividly depicts the significance of the scale of the monumental architecture. Important factors appear to be the fortress-like nature of its architecture, the size and height of its doorways, and the sensation evoked by this. This example from New Kingdom Egypt demonstrates the impact of gigantic architecture. Curiously, despite the appearance of megalithic architecture in many regions of Neolithic Europe, the phenomenological impact of the scale of this architecture has been underplayed in the archaeological literature.

SCALE, MATERIALS, AND ONTOLOGY

As noted in Chapter 1, Western philosophy persists in dividing the world into distinct ontological categories: inanimate objects and animate subjects, material and culture. These divisions are perpetuated in archaeological discourse of both a processual and post-processual persuasion, as well as in areas such as archaeological science; they are foundational to archaeology and, more generally, to modernist thought (Thomas 2004a). Here, I want to consider how these issues relate to matters of geographic scale and the way in which the archaeological discussion of geographic scale perpetuates these ontological divisions.

I particularly wish to consider the relationship between scale and materials. I will do this by considering two aspects of scale: firstly, the geographical scales at which we operate as archaeologists and, secondly, the physical scale of artefacts. My argument will turn upon the points at which the two definitions of scale are inter-related. One of the ways in which we can consider this inter-relationship is by considering the ontological distinctions between society and materials. I argue that the discussion of scale in both processual and post-processual archaeologies reinforces this ontological distinction.

We are familiar with arguments relating to the universalizing scales at which processual archaeology seeks to operate in opposition to the

fine-grained scales of contextual archaeology (Hodder 1999, 129–146). We may contrast a universalizing account, such as Kristian Kristiansen's discussion of the scales of the European Bronze Age (Kristiansen 1998), with Ian Hodder's discussion of scales of analysis in the European Neolithic period (Hodder 1990). For Kristiansen, the European Bronze Age exists as a series of interconnected regional systems connected by the circulation of goods, such as copper, tin, and amber. Kristiansen borrows his model of scale from social evolutionary theory and Marxism (world systems theory) and discusses the scales at which various ideal types of social formation operate— particularly chiefdoms. A key component of his argument is his attempt to reconcile the immense scales and networks at which materials circulate with the regional formation of types of society; exchange and political power are therefore intimately related (Kristiansen 1998, 54). It is for this reason that Kristiansen has more recently invoked an institutionalized cosmology to explain the perceived similarities in societies across Bronze Age Europe and Asia (Kristiansen 2005).

On the surface, Hodder's approach to scale appears to differ. He is interested in the inter-relationship between microscale and macroscale as he considers the way in which symbolic structures (his domus and agrios) play out across differing regions of Europe. For Hodder, 'symbolic structural change... has to be appropriate within a given set of economic and social structures and it usually has practical effects which have to be taken into account' (Hodder 1990, 278). Hodder's account is influenced by the sociology of Anthony Giddens. Central to Giddens' thinking was the idea of the 'duality of structure' in which structures emerge from human action and are also the medium of action. Giddens sought to find a rapprochement between fine-grained studies of symbolic interactionism and broader functionalist accounts within sociology.

Both Kristiansen's account of the European Bronze Age and Hodder's account of the European Neolithic are united by the sense that various scales operate at different registers. I argue that these registers serve to perpetuate ontological distinctions between the material and the social. Indeed, the ontological distinction between these scales is made more apparent by Hodder's statement that the macroscale and microscale are incommensurate (Hodder 1999, 130).

In Kristiansen's account, the large-scale circulation of materials remains distinct from the smaller-scale regional societies; the two

meet in dialectical terms. In Hodder's account, based on Giddens', the contextual and detailed material differences are the outcomes of broader symbolic structures; again, the material and the symbolic are kept as distinct entities. There is a problem, then, in that both macroscale and microscale approaches assume that geographic scale involves hierarchical divisions. In tandem with this, the distinctions in scale perpetuate an a priori ontological division of the world.

An alternative to such approaches comes from the field of Science and Technology Studies (STS). For example, Callon and Latour (1981) argue that the differences between macroscales and microscales are an illusion. Instead, actors are treated as isomorphic: whether acting at a grand- or local-scale, we are still dealing with the scale of human action. Differences in agency and the power and scale at which people act occur because of the enrolment of nonhuman or material actants to exercise agency at greater or lesser distances. For example, Latour (1987, 232–234) argues that the magnified scale of Western science exists as scientists draw together the results of scientific exploration and analysis in 'centres of calculation' consisting of maps, tables, and charts which then enable them to predicatively exercise power at greater and more magnified scales. In the words of Levi-Strauss (1966, 24) 'the intrinsic value of a small scale model is that it compensates for the renunciation of sensible dimensions by the acquisition of intelligible dimensions'.

Such an approach to scale assumes no ontological distinction between the material and the social. Rather, our focus of analysis is on the mutual engagement between human and nonhuman actants. We are no longer required to explain the material in terms of the social, or the social in terms of the material, as occurs with the ontologically hierarchical divisions of scale outlined above. I will pursue this 'flat' approach to scale through analysis of the relationship between the gigantic and the miniature in the Irish Neolithic period, and in a discussion of the miniature cups of the Early Bronze Age in southern England.

CASE STUDY ONE

Megaliths, Miniatures and Materiality: Irish Passage Tombs

The passage tombs of Neolithic Ireland are immense structures—they are some of the largest monuments in prehistoric Europe (Eogan

1986, 9). The earliest passage tombs were simple monuments; their construction began somewhere between 4200–3800 BC (Sheridan in Scarre et al. 2003). Passage tombs were constructed over a period from *c.*4000–3000 BC. The scale of some of these monuments has long been appreciated; the most influential account of their chronology and development argues for a gradual increase in scale and complexity over time linked to notions of competition and prestige (Sheridan 1986). At a fundamental level, this account is correct and archaeologists do observe a gradual increase in the size and complexity of monuments over time. However, here I argue that scale is integral to the experience and use of passage tombs, rather than solely being the outcome of the display of power and prestige.

The Construction of Passage Tombs

I want to consider this at the outset by discussing the construction of the Mound of the Hostages passage tomb, Tara, County Meath. My account derives from Muiris O'Sullivan's excellent excavation report (O'Sullivan 2005). The passage tomb is built in a prominent location on the Hill of Tara. The location was the site of some previous activity, including numerous pits and four fires (O'Sullivan 2005, 25–8). Earlier Neolithic pottery was recovered from one of these pits (pit B). In addition to this, 17 pits, or stone settings (burials 1–3, 6, 8, 9, 10, 12–15), filled with human cremation deposits ringed the site and a spread of mixed stone, animal bone, and charcoal underlay the area where the tomb would be located (Fig. 3.1).

The stone settings and pits are worth emphasizing, as they appear to contain token, or small, deposits of human bone. In some cases, the cremated bone had been 'crushed into pieces no larger than grains of rice' (O'Sullivan 2005, 29). The largest stone setting, burial 1, lay on an in-filled pit containing pottery sherds representing a variety of Neolithic vessels (O'Sullivan 2005, 30).

Large orthostats used for the construction of the tomb were dragged into place; during this construction phase some of the stones were decorated by carving. Built up against the back of some of these structural orthostats were stone cists. These were three in number and in each were deposited a series of human cremations and artefacts. Cist 1 contained eight cremated individuals, including adults and children. Near the base of the cist, a poppy-headed bone pin was
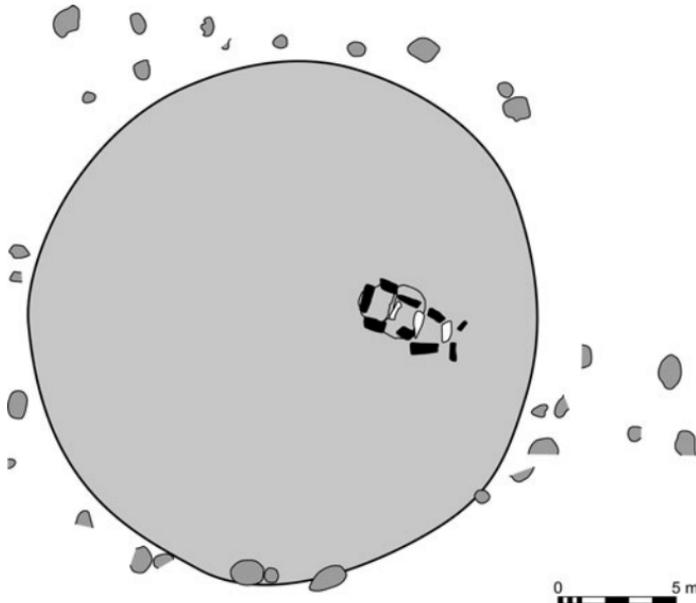
Fig. 3.1. The major features in and around the Mound of the Hostages tomb, County Meath, Ireland. The outline features (in grey) denote pits pre-dating and surrounding the tomb (illustration by Aaron Watson from an original in O'Sullivan 2005)

deposited, while a miniature Carrowkeel bowl was deposited mid-way up the deposits (Plate 4) and a small bi-conical bead of sandstone was deposited at the top of the cremated bone deposit. Cist 2 contained a minimum of 29 cremated adults and a total of 20 artefacts, including balls of chalk and sandstone and a variety of bone and antler pins. Cist 3 was located near the perimeter of the tomb; this contained a mixture of cremated and un-cremated human bone. Placed in the centre of the cist amongst thick deposits of cremated bone was a Carrowkeel pot (Plate 4). A minimum of nine adults underlay the pot: the deposit around the pot included elements of adult and child bone associated with artefacts, including a decorated stone pendant, bone beads, and antler pins (Plate 5). Within the pot itself was a collection of bones from both an adult and child, accompanied by a decorated stone pendant, bone beads, and antler pins (O'Sullivan 2005, 68–76). These cists were then sealed within the body of the cairn, which revetted the orthostats. The mound of the cairn was constructed of numerous small stones. Careful documentation of the

mound (O'Sullivan 2005, 307) indicates that a variety of different sizes and sources of stone were used, potentially indicating multiple groups or individuals involved in the cairn construction. The mound construction was interleaved with layers of sod or turf in order to provide support and stability. The interior of the tomb received a series of deposits of cremated human bone, potentially numbering around 180 individuals, during the duration of the tomb's use (O'Sullivan 2005, 122).

It is particularly important to emphasize here that the construction involved revetting the large orthostats with the stone cists containing human cremations; stone and human bone were integral to the construction of the monument. Indeed, the individuals deposited in these cists must have been derived from elsewhere prior to the construction process. It is notable that 'human bone was recovered from beneath parts of the cairn, and that the deposits at the periphery appear to have been more or less contemporary with the construction of the tomb' (O'Sullivan 2005, 63); the radiocarbon dates centre around *c.*3300–3000 BC (for a full list of dates see O'Sullivan 2005, Appendix 7). Is it possible, then, that the cremation pits encircling the mound were the *source* of some of the cremations incorporated into the cists? Whatever the case, it is evident that human bone was central to the early phases of the construction process. The construction of the Mound of the Hostages passage tomb was a question of balance, as the massive slabs of the orthostat were erected in an upright position and were juxtaposed with deposits of human bone. In addition, many of these deposits contained miniature artefacts, such as the miniature Carrowkeel bowl and stone ball from cist 1 and the pendants from cist 3. These intimate and small-scale acts of deposition are, then, materially juxtaposed with the communal and public statement evoked by the erection of the stone orthostats of the tomb and the construction of the cairn.

The Mound of the Hostages is, in some ways, unusual in that excavations of other passage tombs have not revealed similar stone cists in the mound construction. However, the construction of other passage tombs does indicate that a variety of materials were juxtaposed together. For example, like the Mound of the Hostages, the excavations of the major passage tombs at Knowth and Newgrange indicate that layers of sod or turf were used to support the smaller stones used as the major constructional material in the mounds (Eogan 1986; O'Kelly 1982). In addition, O'Sullivan (2010, 26)

notes that gaps in the roof structure at Newgrange were sealed with a mixture of burnt soil, animal bone, and sea sand derived from the mouth of the river Boyne, some 20 km away.

A variety of stones of different lithologies are assembled for the construction of passage tombs. This has been documented most clearly by the excavations at the major Boyne valley passage tombs, Knowth and Newgrange (Eogan 1986; O'Kelly 1982). The stones used in the construction of these tombs were sourced from several locations, often some distance away. Mitchell (1992) has suggested the likely geological sources of the decorated stones around the exterior of the passage tombs at Knowth and Newgrange: the white quartz that dominates the exterior entrance of Newgrange is likely to have been sourced from the Wicklow mountains, some 40 km away (see also Meighan et al. 2003) and the rounded granites and granodiorites and banded siltstones, again used at Newgrange, would likely have been derived from the northern shore of Dundalk Bay, around 35 km to the north. Along with these materials, local greywacke and shale from riverine deposits was used.

At the passage tombs at Knockroe, County Kilkenny, O'Sullivan (2010) notes the patterned use of stone, with quartzite blocks being used at the entrances to the eastern and western tombs. Along the southern perimeter of Knockroe, kerbstone 31 differs in its texture and distinctive megalithic art. Also, within the western tomb, orthostat R5 is distinguished by its singular geology, being of pink quartzite, and its exceptional status as the only undecorated orthostat. Like the major Boyne valley sites, Knockroe incorporates both local and nonlocal stones in an organized way.

The use of local and nonlocal stone is significant because each material embodies a sense of place that is re-articulated in the form of the passage tomb (Cooney 1999, 135–8). Passage tombs were then places of assembly—places in which a variety of different materials were assembled and juxtaposed and locations in which people and materials were assembled and arranged.

O'Kelly (1982, 118–21) discusses the building methods and sequence of construction at Newgrange in some detail. He envisages six work gangs deployed to do different tasks: selection of large slabs for the structure; setting up of orthostats and corbels; collection of cairn material; stripping of turves; timber working; and carving and artistry. This interpretation appears to offer a picture of work at prehistoric Newgrange organized according to Fordist principles,

with a strict division of labour and tasks. Given the historical speci-
ficity of such methods of working, this vision of the building of
Newgrange seems anachronistic. It is not clear, for example, why
those involved in the erection of orthostats would not also be involved
in the process of carving them, as careful analysis of the passage tomb
art indicates a clear appreciation of the material qualities of the stone
(e.g. O'Sullivan 1986). Indeed, the carvers are also likely to have been
involved in the selection of stone. However, the seamless integration
of knowledge and expertise in different areas is elsewhere acknow-
ledged; O'Kelly (1982, 119) notes that the constructional sequence
must have been initiated by astronomical expertise, given the mid-
winter axis of the passage and roof-box.

Whatever the organization of labour, the constructional sequence
at Newgrange is clear and must have begun with the laying out of the
passage and chamber. Excavation indicates the presence of an earlier
turf mound beneath the monument; this was accommodated in the
laying out of the kerb. The erection of the orthostats will have been
balanced with a revetment of cairn stones during construction,
although construction will, at various stages, have juxtaposed
the bodies of people and animals, wood and stone in order to shift
the major orthostats into place. The construction process involved the
careful balance of a variety of forces and the assembly and arrange-
ment of a series of material elements. Building continued by creating
a 'broad flat working-platform' (O'Kelly 1982, 119) level with the tops
of the orthostats. In this sense, the largest stones used in the tomb, the
orthostats, determined the overall scale of the monument. This is not
to say that passage tombs are only the height of the orthostats, but
that the size of the orthostats used in the tomb are an index of the size
of the monument as a whole.

O'Kelly envisages groups of people working in concert on the
interior and exterior of the monument as the corbelling was built
and the tomb rose in height. This process required a balancing of
forces: a balance and rhythm between the two groups of people to
prevent the collapse, and ensure the stability, of the monument. The
balance of forces can also be witnessed in the careful laying of
the stones for the corbel and in the way in which the final capstones
of the corbel may have been raised with minimal effort towards the
final stages of the tomb's completion, as shown by O'Kelly's practical
experiment with moving a one-tonne stone to the roof of the tomb in
a period of around 12 hours with 'minimal physical effort or strain'

(O'Kelly 1982, 112). Therefore, stone and person were balanced against each other during certain stages of construction. It is also evident from the careful construction of the water flow in the tomb, that the construction of Newgrange involved the balance of physical forces, as various corbel slabs employed grooves to allow water to flow away from the centre of the monument thereby keeping it dry. While there were no deposits of artefacts within the fabric of the tomb at Newgrange, we can observe intimate and secret activities being incorporated with the fabric of the monument, as with the decoration on the slabs of the roof-box and in the use of decorated stones in the corbelling. Similar decorated stones are employed in the corbelling at Knowth. Indeed, the interweaving of secret and intimate knowledge within an immense communal or public structure is a guiding principle at Newgrange, as revealed by the roof-box that allows the rays of the midwinter sun to penetrate the depths of the monument.

Scale and Intimacy in Passage Tomb Construction

The balance of different scales with different levels of intimacy and interaction is clearly observed at a number of passage tombs as we observe a distinction between right and left in the construction of side cells in the chamber area of passage tombs. Evidently, during construction, larger stones were selected for building the cells on the right side of the monument than for those on the left. This distinction is also often observed in other ways, as the right side often has more intense decoration and often contains basin stones also.

This is very much evident at the eastern tomb, Knowth 1, where there is a clear difference in intensity in art, with the right-hand side cell being more intensely decorated and also having a large basin stone (Eogan 1986, 83). Likewise, the right-hand stones of the passage are also more highly decorated. A similar pattern can be observed at Newgrange 1, where, again, the right-hand side cell is more intensely decorated. Again, the stones of the passage are also more intensely decorated (O'Kelly 1982). At Dowth North, there also appears to be a discrepancy between left- and right-side cells in terms of size and decoration, although this is less easy to substantiate as Dowth has seen less intensive research than the other Boyne valley tombs. However, the basin stone at Dowth, although smashed, could only have

fitted in the right-hand side cell (O'Kelly and O'Kelly 1983, 153). The right-hand side cell is also emphasized, as an annexe leads off from it.

This is also clearly observed at Loughcrew, as the right-hand side cells of cairn L contain a stone pillar and basin stone, while in cairns H, L, I, and U the sill stones and back stones of the right-hand side cells are more elaborately decorated (Cochrane 2006, 247).

The careful analysis of Guillaume Robin (2010) draws our attention to passage tomb construction. He indicates that the tumulus and the megalithic tomb contained within are related entities. Certain architectural arrangements, such as the concentric ring of boulders around Carrowmore 4, meet the megalithic tomb at significant locations. Again, three concentric delimitations are set between the kerb and the megalithic chamber at Knowth 4, and at Knowth 15 and 16 small stone courses organized systematically on each side of the passage constitute the extension of the sill stone. Similar organizational arrangements can be discerned at Newgrange, site K. In Knowth 1, several relationships are noted between the core cairn and the architectural design of the eastern and western tombs. In the western tomb, the location of the passage angle exactly corresponds to the point where the tomb meets the outer contour of the core cairn. In the eastern tomb, the outer contour of the core cairn corresponds to a narrowing of the passage. Robin (2010, 411) discerns the existence of two important constructional arrangements: a system of concentric spaces and a central axis that persists through mound construction, passage tomb decoration, and the arrangement of internal furniture. From this, Robin (2010, 411) argues for the existence of universal symbolic codes embodied in passage tomb construction. As an alternative, I would emphasize the performative qualities of passage tombs. The various elements of passage tombs interlock during construction and these constructional methods are perpetuated through continuous periodic events of passage tomb building. Simply because we discern systematic structure does not mean that passage tomb construction was the outcome of an invisible motivating symbolic code; a more expedient argument would see systematic structure as the result of a recognized performance: a repetitive and systematic way of doing things.

It is clear from Robin's analysis that a clear relationship exists between the invisible and the visible (Robin 2010, 385). Differences in scale are, therefore, 'built into' or are integral in the construction of passage tombs, as stones of different size are used to make up

differing parts of the monument. These differences in scale would be evident to those using the tomb, creating areas of more intimate interaction, and more public areas of interaction. This is further underlined by the differences in art and the positioning of objects, such as the basin stones.

Differences in scale and intimacy are also evident in the execution of passage tomb art. The differences between art in the chambers and on the exterior of monuments has long been noted (Eogan 1986; O'Sullivan 1986; Cochrane 2006; Jones 2007); there is a notable difference between the intimate scale of incised and picked motifs in the interior of passage tombs (Robin 2010), and the more public scale of the loose area picking on the orthostats of the passage (in sites such as Newgrange) and the picking on exterior kerbstones. The execution of different styles of passage tomb art in different locations on monuments (Robin 2010) effectively reiterates distinctions in intimacy, publicity, and scale.

Miniature Objects Associated with Passage Tombs

The balance or juxtaposition of the intimate and small-scale with the immense is also evident in the curious circular stone settings outside the entrances to passage tombs. We have already noted the remarkable token deposits of human cremations in the stone settings outside the Mound of the Hostages passage tomb. Similar stone settings are also found at Knowth and Newgrange. The stone settings at Knowth were outside the eastern and western tombs, the largest of those outside the eastern tomb was edged with glacial erratics and ironstone and the internal paving was covered by successive layers of quartz (Eogan 1986, 46–8). The stone setting at Newgrange was just east of the tomb entrance and consisted of a stone pavement bounded by fragments of schist. The setting contained two pieces of flint and an unusual piece of polished sandstone, and was subsequently covered by a low mound composed of quarried quartz, water-rolled quartz, and grey granite pebbles (O'Kelly 1982, 75–6). The setting at Newgrange was on the subsoil and was therefore contemporary with the use of the tomb (O'Kelly 1982, 127).

Other stone settings at passage tombs were placed not at the entrance, but on the top of the tomb, as at Knowth site 16 (Eogan 1986). At other sites, such as Townleyhall II, County Louth, the stone

setting was beneath the passage tomb (Eogan 1963). It is evident then that, whatever their purpose, stone settings were integral to the construction and use of the passage tomb. As I have previously observed (Jones 2007, 183–4), the stones deposited in the stone settings at passage tombs, particularly those at Knowth and New-grange, are geologically comparable to the large constructional stones utilized in the fabric of the passage tomb. As discussed above, the stones employed in the construction of the passage tombs are derived from a number of different, and distant, sources (Mitchell 1992). In this sense, the stones in the stone settings reference both the distant stone sources and the larger stones used in the passage tomb con-structions. The stone settings are condensed and potent performative iterations of the significance of stone (Jones 2007, 182).

The assemblage of settings of small stones juxtaposed against the large-scale stones of the tomb is a performative activity. What is more, this is an activity that has resonance with the deposition of artefacts in passage tombs. I have already noted, in relation to the Mound of the Hostages, a variety of small-scale and miniature arte-facts deposited in the stone cists at this site. These are components of a wider set of practices (Herity 1974, 126–9; Eogan 1986, 142–4). Pendants modelled on the form of Neolithic maceheads are found in a number of passage tombs (Fig. 3.2), including the western tomb, Knowth 1, Newgrange, Fourknocks 1, and the Mound of the Hos-tages. Stone balls are found in a number of sites, including Newgrange 1, the Mound of the Hostages, Fourknocks 1, and cairn L, Loughcrew; an unusual double stone ball was deposited at Newgrange. Miniature beads of a complex nature have also been found (Plate 6), such as the two unusual examples in clay associated with burial deposits 4 and 5 from the eastern tomb at Knowth (Eogan 1986, 41, Figs 13, 14). These examples are unusual in that they have been produced from clay and they mimic in form the carved stone balls of north and northeast Scotland (the more complete of the two is identical in form to carved stone balls of Marshall's type 4B (Marshall 1977); Kerri Cleary per-sonal communication). These artefacts are doubly significant as not only are they miniaturized forms of larger artefacts, but they are iterations of an exotic or nonlocal class of artefact.

O'Sullivan (2010, 25) notes an interesting distinction between the type of stone used for miniature artefacts (beads and pendants) at the Mound of the Hostages. All 38 beads were fashioned from locally available stone, including limestone, sandstone, mudstone, or shale.
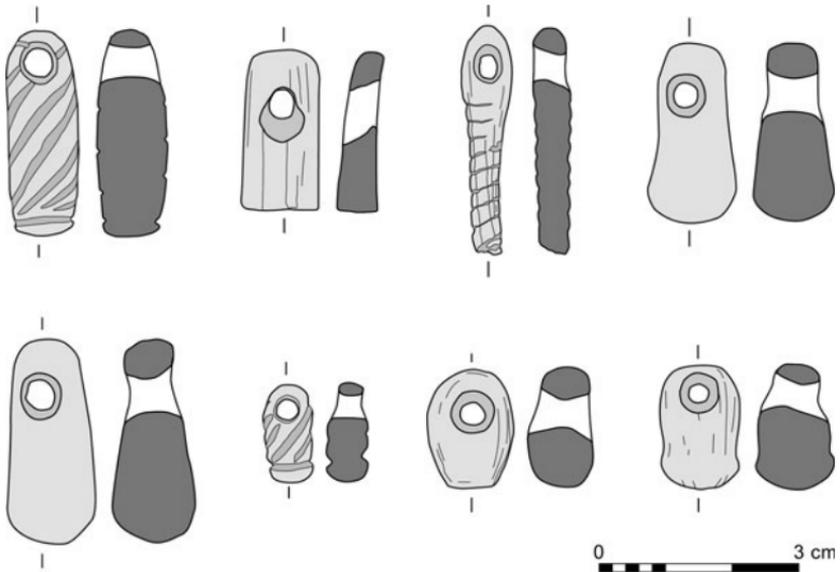
Fig. 3.2. Pendants from Irish passage tombs (illustration by Aaron Watson from an original in Waddell 1998)

In contrast, only 28% of the pendants are of these stone types: 36% are serpentine, 16% are jasper, and 8% are gabbro (all nonlocal stones). The remaining 12% are composed of bone. O'Sullivan (2010, 25) argues that the significance of the stone types used for pendants adds to the significance that pendants are often miniatures of recognizable Neolithic objects.

As Cochrane (2008, 143–4) points out, these miniature artefacts cannot simply be dismissed as children's playthings (*contra* Herity 1974, 136), instead these are durable, portable, miniature, three-dimensional objects that create 'choreographies of relation' (Cochrane 2008, 144). This point is critical, as it is the relationships between scales that particularly stands out in these depositional practices. While the deposition of miniature artefacts in passage tombs is intriguing, we should remember that the deposition of artefacts of normal dimensions, such as the delicately carved flint macehead deposited in the right-hand recess, eastern tomb, Knowth 1, against the backdrop of the immense scale of the monument, effectively serves to miniaturize a full-size artefact. It is all the more intriguing, then, that dimensions of scale were played upon in the manufacture of small-scale, or miniature, artefacts.

We can, of course, argue that miniature artefacts, such as the stone pendants in the form of maceheads, are simply decorative items worn on the body, and that these have been incorporated with the corpse in the burial deposit. However, this does not remove from the fact that the mortuary practices associated with passage tombs juxtapose the small-scale and intimate with the large-scale. Nor can we sidestep the fact that we do not observe this interest in miniaturization in other passage tomb-building communities. For example, we do not observe the manufacture and deposition of miniature artefacts in passage graves in Orkney and, although small clay balls are manufactured in the Orcadian Neolithic, they are confined to settlement sites. In the context of the British Isles, the deposition of miniature artefacts is unusual, although it may be found in other regions, such as western Iberia (Bradley 2009, 87–8). Whatever the case, the significance of the relationship between miniature artefacts and the large-scale nature of passage tombs has not been explored.

Scale and Passage Tomb Cemeteries

Juxtapositions of scale are not only confined to depositing miniature objects against the gigantic backdrop of the passage tomb, we also observe juxtapositions of scale in the size of passage tombs in passage tomb cemeteries. The conventional argument would be that larger passage tombs are simply a development of earlier passage tomb forms (Sheridan 1986). To an extent, this can be clearly observed in the development of passage tomb complexes, such as those of the Boyne Valley, as the enlarged later monuments such as Knowth 1 and Newgrange 1 are, in some cases, constructed over, or slight, earlier monuments in the complex (Cooney 1999, 153–8). However, in other complexes, such as Loughcrew or Carrowmore, this is less easy to substantiate. I will discuss both of these cemetery complexes below.

My analysis of Carrowmore is derived from Stefan Bergh's authoritative account (Bergh 1995). The Carrowmore cemetery in the Cúil Irra region of County Sligo is topographically divided into two areas, with a series of tombs in the lowland and a further series on the dramatic Knocknarea mountain. The tombs in the lowland are simple in form and relatively small in scale, with a range of diameters from 8–27 m. The radiocarbon dates associated with these monuments are controversial (Bergh 1995, 100), although most authorities agree they

are early in date (Eogan 1986; Sheridan 1986; Cooney 1999; Cooney and Grogan 1994). Bergh's critical analysis of the dates suggests that only the date of 3937–3675 BC from the primary phase of C27 can be trusted, although there are other reliable dates of 3370–3042 BC from the primary phase of passage tombs at Carrowkeel (Carrowkeel M). Göran Burenhult (in Scarre et al. 2003) argues that the earliest dates derive from Carrowmore, tomb 4, with dates of between 4200–3800 BC for a secondary phase of modification (earlier dates of *c.*5400–4600 cal BC for foundation deposits are treated as questionable).

Notably, the lowland tombs of Carrowmore—which probably originally numbered *c.*60 monuments (30 now remain)—are organized around a central space. Therefore, the cemetery exhibits pattern and organization (Bergh 1995, 39; Burenhult in Scarre et al. 2003). Differences in scale occur within the lowland tombs of Carrowmore as the tombs describe a circular space with an absence of tombs, save for the large tomb 51; differences in scale occur, then, within the lowland tomb complex. This sense of pattern is amplified when we consider the size discrepancies between the monuments in the lowland and the seven monuments on Knocknarea mountain. These upland monuments are immense: the largest is Miosgán Meadhbha which, with a diameter of 60 metres and height of 10 metres, is one of the largest passage tombs in Ireland. There is a clear distinction in scale between monuments in the lowlands and those on the mountain. Interestingly, while Miosgán Meadhbha clearly dominates the mountain and overlooks the Carrowmore cemetery, the sheer scale of Knocknarea mountain effectively dwarfs Miosgán Meadhbha. Indeed, as the mountain is delimited by a Neolithic earthwork, Bergh (2002) has argued that the mountain in itself should be considered as a natural monument. Both Miosgán Meadhbha and the mountain interact in terms of scale, with the enormous monument of Miosgán Meadhbha being encompassed by the mountain. Miosgán Meadhbha and Knocknarea mountain act in concert to dominate the lowland passage tomb cemetery of Carrowmore. There are no radiocarbon dates for the passage tombs on Knocknarea mountain (Bergh 1995) and, on the basis of Sheridan's evolutionary scheme of development, we could argue that these monuments post-date the smaller, lowland Carrowmore monuments. However, such a simplified evolutionary interpretation overlooks the evident patterning and contrast in the siting and scale of the two groups of monuments. While the monuments on Knocknarea mountain are most likely later in date,

I argue that they were constructed in that location so as to juxtapose a difference in scale.

I now wish to consider the passage tomb cemetery at Loughcrew, County Meath. My analysis of Loughcrew is derived from the work of McMann (1994), Cooney (1999), and Cochrane (2006). The cemetery at Loughcrew is located on four intervisible hills: Carnbane West, Carrickbrac or Newtown, Carnbane East, and Patrickstown (Fig. 3.3). The complex covers a distance, west to east, of some 3 km. The complex witnessed some archaeological attention in the mid-19th century and early years of the 20th century (e.g. Conwell 1866; Coffey 1897) but the only recent excavation comes from the 1940s (Raftery 1953). Consequently, there are no radiocarbon dates from the cemetery and the chronology is debated.

Cooney (1999, 158–63) and Cochrane (2006, 212–14) adapt Sheridan's evolutionary model for the phasing of the Loughcrew cemetery and, on the basis of the spatial relationship of the cairns, argue for a three-phase development (Fig. 3.3) Phase 1 begins with the construction of cairns of less than 15 km in diameter on Carnbane West and Carnbane East. On Carnbane West, the sites are located in two focal zones delineated by natural knolls that form a northwest/ southeast barrier. On Carnbane East, cairns are situated on the western slopes and summit. Cooney (1999, 159) suggests that the three small passage tombs at the western edge of Patrickstown ridge belong to this phase.

Phase 2 sees the construction of cairns of intermediate size, ranging in diameter between 15 and 20 metres. On Carnbane West, the distinction between the northwest and southeast is enhanced by the construction of three passage tombs with two forming a pair on the ridge of the knoll (cairns G and F), while the third is located to the northeast on the flatter slope (cairn H). This cairn is therefore positioned centre stage. In this phase, a cairn is constructed on the Newtown ridge (cairn M) and a larger cairn (cairn S) on Carnbane East. In phase 2, we begin to see tombs being positioned so as to orchestrate visibility (Cooney 1999, 159); the physical scale and positioning of these monuments is therefore important.

The larger passage tombs are constructed in phase 3, with diameters of between 45 and 54 metre diameter (Cochrane 2006, 214). While the earlier tombs are positioned in close sympathy with the local topography (typically being located on raised knolls and the periphery of flatter areas), the later tombs are positioned in dominant
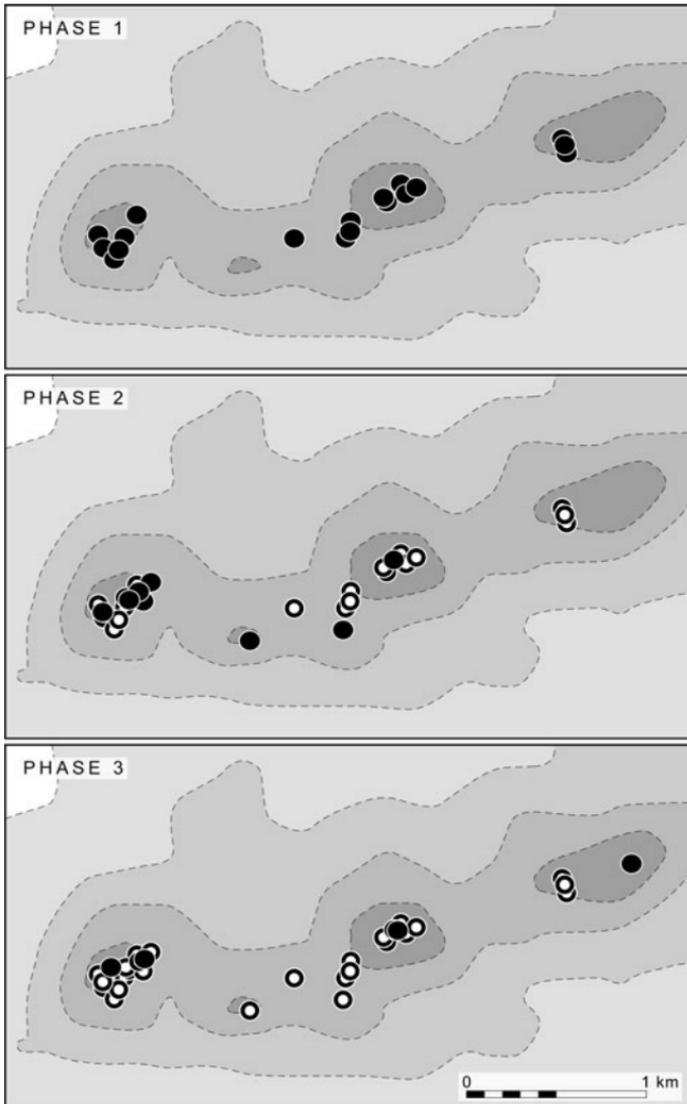
Fig. 3.3. The phasing of the Loughcrew passage tomb cemetery, County Meath, Ireland (illustration by Aaron Watson from an original in Cooney 1999)

locations. For example, cairn T, Carnbane East, is located on the highest summit of the complex and acts as a visual focus.

The phasing of the Loughcrew monuments underlines the point that they were not all constructed simultaneously. Instead, there were repetitions, lulls, and punctuated performances over a considerable period of time (Cochrane 2006, 215). The phasing and juxtapositioning of monuments in the complex further demonstrates the significance of the play of scale as a factor in monument construction.

Like the passage tombs in the cemetery at Carrowmore, the Loughcrew passage tomb builders were concerned with choreographing differences of scale. At Carrowmore, these differences in scale were made more apparent by topographic distinctions in monument construction. At Loughcrew, in a more subtle fashion, differences in scale were highlighted by the positioning of monuments of differing dimension in different topographic localities. At Loughcrew, one of the larger cairns (cairn T) was positioned in the most prominent location. However, at Loughcrew, the close juxtaposition of monuments clearly pointed up these differences as people moved around the complex.

Choreographies of Scale in Irish Passage Tombs

We are now in a position to consider the dimensionality of the Irish passage tomb tradition in more depth. I have argued that the physical dimensions of things are significant to the construction and use of Irish passage tombs. I wish to develop the argument that scale is a dimension of the materials used in Irish passage tomb architecture and the artefacts and stone settings associated with them. Scale is not a given. Rather, it is performed through the construction of tombs, the manipulation and working of stone, and the deposition of artefacts. Scale is, then, performed through stone; stone can be crafted but it is not infinitely manipulable. The qualities of stone, when quarried and encountered in the world, provide a means of apprehending scale. While stone is the benchmark for the apprehension of scale, it need not be the only material manipulated; miniature artefacts are also produced from bone and clay. It is particularly important to stress that scale is relational; it is performed through juxtaposition. In the terms used by Andrew Cochrane, scale is a 'choreography of relations' (Cochrane 2008, 144; see also Nakamura 2005).

If we accept that scale is a performative dimension expressed or worked through stone, we need to then realize that scale is a dimension in flux. If scale is constantly being performed and is a fluid, relational, and reiterative process then we need to question the notion of prototypes and originals. The notion that miniature artefacts, in particular, are copies of original artefacts of normal dimensions is no longer tenable. In certain circumstances, such as the clay beads that evidently reiterate the forms of the carved stone balls of northern Scotland, we are able to argue with certainty that the miniature artefacts are copies of exotic prototypes. However, in the majority of cases, especially with small stone pendants, it is important that we question which is the copy: the small-scale macehead or the large-scale macehead? The assumption of originality and copy is based on an underlying assumption of functionality—that maceheads are functional stone tools and macehead pendants are non-functional adornments. I argue that we cannot establish the functionality of Neolithic maceheads—we can, at best, describe them as ceremonial. After all, one of the most celebrated maceheads from a passage tomb context, the Maesmawr type carved in flint from the eastern tomb at Knowth (Eogan 1986, 141–2), is probably more elaborately carved than most miniature examples. Similarly, the phallic-shaped spiral carved stone found at the entrance to the western tomb at Knowth 1 (Eogan 1986, 143) is no more or less functional than the elaborately carved pendants from the Mound of the Hostages, which appear to reference this decorative form. I introduce this argument here, not to question the functional status of larger stone tools, but to argue that scale is a dimension in flux, that it is relational and referential. Larger artefacts will also refer to smaller examples, just as miniature forms condense the significance of larger forms.

Indeed, we need to bear this point in mind when considering the nature of the stone settings found in various contexts, beneath, around, and on top of passage tombs. It is particularly important that these stone settings bear a material correspondence with the materials used in passage tomb construction. I have previously referred to the construction of stone settings and the deposition of stone in them as a mnemonic process (Jones 2007, 184). I now think we can go further than this and argue that the manipulation of small stones with a geological similarity to the stones used in passage tomb architecture can be considered an efficacious act. The manipulation of something of small scale may be perceived to have a dynamic effect

upon the large scale. If we consider these stone settings as references to the substances used in passage tomb construction, then it is particularly intriguing that the small stone settings around the Mound of the Hostages contained token deposits of human bone. In some cases, these cremated bone deposits seem to have been reduced in scale, or miniaturized (O'Sullivan 2005, 30, 2010, 26). Are they miniature citations of the cremated bone deposits in the Mound of the Hostages passage tomb?

I have argued that small stone settings are citations of passage tombs. However, we have also seen that passage tomb cemeteries are composed of tombs of varying size and scale. If stone settings are physical citations of larger monuments, then it also seems reasonable to infer that passage tombs of differing scale reference each other. In this sense, we might consider passage tomb cemeteries to consist of a series of nested spaces which each refer to other such spaces. Tombs of differing size act as microcosms or macrocosms of each other. The sense that passage tomb construction is a performance that expresses a relation to a wider macrocosm is evident when careful geological analysis has been able to source the stones used in their construction and when careful analysis of their construction reveals regularities. The substances used in passage tomb construction condense and articulate geographic scale, as do commonalities in construction. The sourcing and manipulation of stones in passage tombs acts as a 'technology of remembrance' (Jones 2007, 188), positioning tombs in a wider landscape of significance. We can then consider stone settings, individual passage tombs of different scales, and the wider landscape to be interlinked in a network of interlocking references. Reference is both performed by shared substances being employed in their construction and by differences of scale. Susan Stewart (1993) underlines this point when she observes that objects of a gigantic scale typically refer to the public arena and to the wider landscape.

Passage Tombs, Scale, and Assemblage

I have argued that passage tombs perform scale and dimensionality. One of the ways in which this takes place is through the juxtaposition or assemblage of materials of differing scale and substance. Above, I note that the manipulation of scale and the juxtaposition of materials necessitates that each passage tomb references other monuments of

varying dimensions. The process of referencing and conjoining is not confined to materials, but also to people. During construction, passage tombs are sites of assembly and, through assemblage, different components of the social and material world are brought into relation. In some cases, as with the cists containing human bones that are integrated into the Mound of the Hostages, this process of assembly and juxtaposition is expressed physically and materially. However, the process of assembly and construction also involves more fleeting associations of people, of animals, and of materials. In this sense, people and animals were insinuated into the fabric of monuments. Therefore, passage tomb construction is a connective and regularized process, as people and things are connected, or articulated, together in making or building the monument. In a similar way, the building materials used to construct the tombs connect people with the wider landscape.

Passage Tombs, Performance, and Experience

I have already argued that scale is performative and relational in the context of Irish passage tombs. This occurs at the level of artefact manufacture and monument construction. The creation of artefacts refers to other artefacts of different scale, while the differential scale of passage tombs and the stone settings associated with them allows networks of referentiality to be established. Cochrane (2006, 215) argues that the positioning of cairns in the passage tomb cemetery at Loughcrew serves to provide a 'stage'-setting for performance. I now want to consider passage tombs as performance places. In particular, I wish to focus on the experience of scale in relation to passage tomb architecture and the deposition of artefacts. The gigantic scale of the architecture at passage tomb sites is such that they cannot be visually taken in at a single glance. Instead, the viewer is required to move around the exterior of the tomb to appreciate the size and scale of the monument. The gigantic architecture of the largest passage tombs will have orchestrated a sense of temporal expansion as the observer is positioned against the gigantic scale of the monument. However, the person entering a passage tomb will have experienced a paradox: while the scale of monuments such as Knowth, Newgrange, and Dowth is immense, these monuments enclose relatively small and restrictive chambers. Those progressing down the lengthy passages of these monuments into their chambers will have

been presented with a sense of temporal distancing (see Richards 1993 for a parallel argument for Maes Howe passage grave, Orkney). This sense of temporal and scalar confusion will have been intensified when depositing or encountering small-scale artefacts in the chambers of these monuments. Movement into the passage tomb involves the impression of a gradual reduction in scale. If the manipulation of miniature artefacts is associated with temporal compression, this effect is likely to have been intensified when these artefacts were juxtaposed against the immensity of the passage tomb environment. In this location, artefacts of any size will appear reduced in scale. The sense of a reduction in size and significance is perhaps key to the experience produced by human encounter with passage tombs. In many ways, this sense of reduction parallels the reduction of human bone through cremation in passage tomb mortuary contexts.

Some passage tombs, such as Fourknocks I and the Mound of the Hostages contain inhumation burials; however, the majority of excavated passage tombs contain deposits of cremated human bone. The mortuary rite associated with passage tombs is, therefore, concerned with the reduction in scale of the human body through cremation. The reduction in scale of the human body as it enters the gigantic backdrop of the tomb is paralleled by the treatment of the human body in the dominant mortuary rite, as cremation produces a reduction in the volume and mass of the body. Similar reductions in scale are observed in the treatment of human cremations, as in the stone settings around the Mound of the Hostages, where the bone appears to have been deliberately reduced in size (O'Sullivan 2005, 30); after the initial cremation of the individual bone, mass is manipulated to reduce its dimensions.

Summary

To summarize, my discussion of the scale of Irish passage tombs decouples the discussion of the dimension of passage tombs from the simple expression of prestige and awe. While the chronology offered by Sheridan (1986) holds true, the equation of scale and complexity with awe and prestige only offers a partial explanation. There is certainly a performative power to the scale of Irish passage tombs and a sense in which the construction of massive monuments is a statement in itself, which I believe is the sense in which Sheridan evokes scale in her account of the

evolution of passage tombs. Passage tombs do not represent power and prestige through scale, rather, as my analysis has demonstrated, through a construction process that articulates large numbers of people, animals, and a wide range of materials, they physically perform power and prestige. What is more, this performance is continuously reiterated through acts of deposition in, and around, these monuments.

CASE STUDY TWO

Materials and Miniatures: the Miniature Cups of Early Bronze Age Wessex

The discussion of scale above focussed on juxtapositions of scale and examined, in particular, the relationship between the gigantic and the miniature. The focus of this case study will, instead, be the miniature. However, in focussing on the miniature, we should not forget that experimentations in material scale necessarily evoke juxtapositions. One of the key points I want to emphasize here is that a signal component of miniaturization is the concentration of experience, as the miniature juxtaposes experience of the wider world. I want to pursue this argument at the outset by considering the issue of microcosms.

Microcosms

The anthropologist, John Mack, underlines the significance of mini-aturization as a means of distilling, or concentrating, knowledge; miniature objects represent the world in microcosm (Mack 2007, 69–74). Mack provides a series of examples of microcosms, such as the wooden divining bowls of the Venda of South Africa. The bowls allow the various forces of the Venda universe to be constrained and controlled within their boundaries; the bowls depict differing social groupings, genders, and levels of seniority, and were used for the detection of witchcraft. In Mack's terms, the bowl is a 'metaphorical theatre; it contains a condensed world of esoteric reference that is activated in divination to engage mystical and physical challenges' (Mack 2007, 112).

We need not look to the esoteric for an example of objects as microcosms. Models and maps also achieve the aim of condensing experience in order to manipulate it as we see, for example, in the miniaturized jade and bamboo carvings of Ming China. These carvings acted as focusses of contemplation for painters and calligraphers and, indeed, these miniatures served as templates for garden designs. There is a synergy, then, between miniature models and gardens and landscapes in the full-scale world (Mack 2007, 88–9). Maps appear to be such mundane objects that we rarely contemplate their function as miniature representations of landscapes, yet, from their earliest production, they effectively act as microcosms— containers of worlds. Miniature models and maps are therefore mimetic; they draw together knowledge of the real world and serve as mediums for contemplation and manipulation. In Latour's terms, miniature models and maps act as intermediaries that allow knowledge to be arranged and presented synoptically (Latour 1987, 215–55).

Introducing Early Bronze Age Miniature Cups

I want to consider the notion of artefacts as microcosms in my analysis of the miniature cups of the British Early Bronze Age. The antiquarians Colt-Hoare and Cunnington first classified the miniature cups of the British Early Bronze Age in the early 19th century. Colt-Hoare and Cunnington's barrow excavations in the counties of Dorset and Wiltshire, southern England, produced more than 20 examples. Colt-Hoare (1812, 25) initially described them as incense cups: 'we frequently find them perforated on the sides and one of them in the bottom, like a cullender [sieve], which circumstances induces me to think that they were filled with balsams and precious ointments, and suspended over the funeral pile'. These miniature vessels are sometimes found beside, or possibly inside, larger pots and are consequently also known as 'accessory vessels'. Because of their variety and, in some cases, non-functionality, miniature cups have confounded easy interpretation. In terms of form, the pots exhibit great variety (Fig. 3.4); Ian Longworth's (1984) typological analysis of miniature cups offers 11 different types, some with up to 7 subvariants.
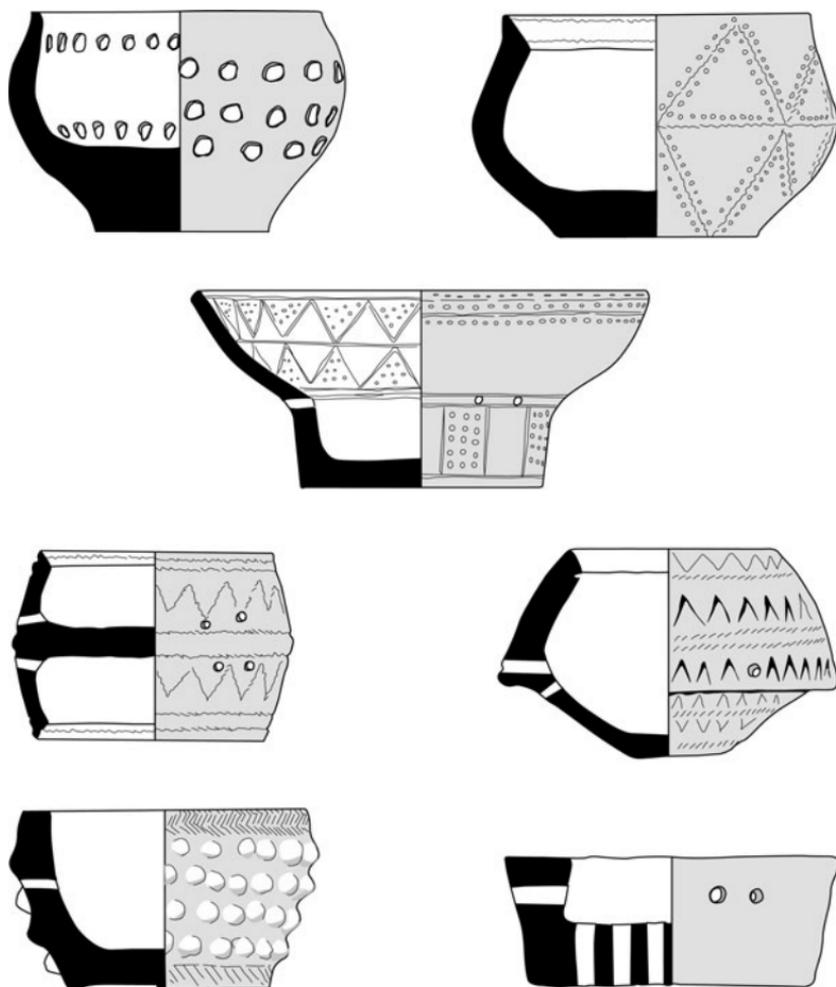
Fig. 3.4. Varieties of Early Bronze Age miniature cups (illustration by Aaron Watson from an original in Annable and Simpson 1964)

On the basis of the dates from Wessex dagger graves, with which they are associated, miniature cups are likely to date from the range of *c.*1950–1550 cal BC (Needham et al. 2006, 60). Needham and Woodward (2008, 7) argue for a sequence of stylistic development, with grape cups and slotted cups appearing from 1950–1750/1700 BC and the highly decorated Aldbourne cups being produced from 1750/1700–1550/1500 BC. I will adopt this typological sequence here.

Miniature Cups and the Wessex Culture

The discussion of miniature cups is inextricably related to the definition of the 'Wessex culture' (Piggott 1938). Stuart Piggott developed the notion of the Wessex culture to describe a series of spectacular 'rich' Early Bronze Age mortuary contexts focussing on the Wiltshire, Hampshire, and Dorset chalk downland of southern England (traditionally described as Wessex).

The burials of the Wessex culture are divided into two phases (Piggott 1938). Wessex I graves consist of a group of rich male burials with daggers, goldwork, and other finery. These are contrasted with a few rich female burials with pendants of gold, bronze, and amber. For the Wessex II burials, cremation became the dominant rite. We see no more goldwork being deposited, although we do observe a distinction between male burials with daggers, bronze pins, and whetstones, and female burials with necklaces of beads of a variety of types. The distinctions between phases and gendered burial are idealized and, as Woodward (2000a, 104) points out, 'almost all of these statements can be questioned'.

The deposition of miniature cups varies. In Wessex, they are generally placed with exotic artefacts and human cremations in the graves of the Wessex culture (Piggott 1938; Gerloff 1975; Woodward 2000a). In other regions of the British Isles, they often accompany human cremations contained in larger urns, typically food vessels, enlarged food vessels/food vessel urns or Collared Urns (Longworth 1984). Importantly, they are almost exclusively associated with cremation burials.

The spectacular grave deposits of the Wessex culture include artefacts of gold, amber, and jet, alongside daggers and other artefacts, such as miniature cups. With the emphasis on the archaeologically visible 'rich' burials, the traditional view of Wessex has been that the social groups of the chalk downlands of Wessex were set apart in some ways from the rest of the British Early Bronze Age. It had always been evident from Piggott's earliest definition of the culture (Piggott 1938), that the finery deposited in Wessex series graves was the result of trade and exchange with other regions of Britain and Europe. The traditional assumption was that the social groups making up the Wessex culture acted as key initiators or controllers of trade.

In a series of papers, Stuart Needham and others (Needham 2000a, 2008; Needham et al. 2006; Needham and Woodward 2008) have

questioned this traditional view. It has become increasingly clear from recent excavation and fresh analysis of artefact assemblages, that the coastal communities of the south coast of England, from Kent to Cornwall, were primarily involved in maritime trade. If we wish to pinpoint the initiators of trade and exchange in this period, we should therefore view these south-coast communities as pivotal agents in the long-distance movement of raw materials and exotica (Needham et al. 2006).

Needham (2000a) argues that the passage of exotic artefacts and materials was the result of cosmologically driven acquisition. Based on ethnographic research (Helms 1988), cosmological exchange often involves long-distance exchange undertaken by specialists as an individual enterprise. Greater geographical distance heightens the sense of greater exoticness, often leading to enhanced reverence for the materials and objects exchanged (Needham 2008, 315). This model for exchange arguably provides a framework for comprehending the richness of the Wessex region, which Needham and Woodward (2008, 42–3) argue had a 'spiritual draw vested in its legendary ritual landscape'.

At this juncture, I want to simply note that Needham's work offers us a fresh and nuanced understanding of the relationship between the Wessex region, southern England, and continental Europe. I broadly adopt this view here; however, I should also note that the notion of cosmologically driven exchange parallels the arguments made for the European Bronze Age by Kristiansen and others (Kristiansen 1998; Kristiansen and Larsson 2005). I discussed some of the problems with these arguments in terms of scale in the introductory section above; I will critically address these issues in more detail at the end of this chapter.

The Production of Miniature Cups

My discussion of miniature cups derives from Longworth (1983, 1984) and from Annable and Simpson's guide catalogue to the Devizes Museum collection (1964), as well as first-hand analysis of all of the miniature cups in the museum collections of Salisbury and Devizes, Wiltshire (many of which were originally excavated by Cunnington and Colt-Hoare). I will mainly focus on examples from

Wiltshire but will also discuss miniature cups in a number of geographical contexts.

Here, I want to focus on the production and decoration of these vessels as a form of mnemonic practice—a technology of remembrance. In terms of production, the pots are generally quite coarsely tempered and are typically formed as pinch pots or as small coil-built pots. The pots are typically highly decorated; however, perfection is not necessarily the intention. Alex Gibson (2004) notes that several pots from Scotland exhibit marked imperfections, including the bases of cups from South Ronaldsay, Orkney, and Rosshire, Scotland, while others show a degree of improvization during decoration, such as the example from Dunbar, Scotland. This was also notable amongst the collections from the Salisbury and Devizes museums. Examples with haphazard or asymmetrical decorative schemes came from Collingborne Kingston (cat. no. DM260), Ogborne St Martin (cat. no. 2004. 226.1), Preshute G1a (cat. no. 1953.69), Winterborne Stoke G8 (cat. no. Sthead 187), Winterborne Stoke G68 (cat. no. Sthead 70b), Wilsford G36f (cat. no. Sthead 172), West Overton G2 (cat. no. Sthead 297), Amesbury G19 (cat. no. Sthead 123a), Amesbury G19 (cat. no. DM163), and Wylye (cat. no. SBYWM 1960.98), all in Wiltshire, and Wimborne St Giles (cat. no. Sthead 215a) in Dorset. What this indicates is that design appears, not to precede the act of decoration, rather that design occurs as part of the overall performative flow of pot production. Designs were evidently produced as the pot was being turned in the hand of the potter; this process may result in asymmetry or certain decorative motifs being overly crowded or poorly spaced. Occasionally, continuous motifs fail to cohere or join together.

There are several other indications that miniature cups were rapidly produced. Alex Gibson (2004) notes that 10 of the miniature cups from Scotland examined by him were wasters, exhibiting spalling, cracking, or distortion. In addition, many of the perforations in cups are made in wet clay, as noted by Kavanagh (1977) for several Irish examples. This was also evident in the examples from Wiltshire in the Salisbury and Devizes museums collections. There is evidence of spalling on a cup from Winterborne Stoke G64b (cat. no. Sthead 69a). In several examples from West Overton G2 (cat. no. Sthead 297), Wilsford G7 (cat. no. Sthead 236), and Amesbury G19 (cat. no. 123a), it was notable that decoration was executed in wet clay, suggesting haste. Some cups exhibited severe distortion; this was especially evident in the Aldbourne cup from Durrington G65c (cat.

Fig. 3.5. The distorted profile of a miniature cup from Durrington G. 65(c), Wiltshire, England (photo by the author by kind permission of the Wiltshire Heritage museum, Devizes)

no. Sthead 92), which was completely distorted in profile (Fig. 3.5). I believe this is likely to be distortion caused by firing as opposed to post-burial, as the cup is otherwise intact. Other distorted examples came from Upton Lovell G2d (cat. no. DM 177) and the long barrow Warminster G6 (cat. no. DM 160). Evidence of spalling, distortion of profile, and the decoration of pots while wet (as opposed to leather hard), are all likely to have occurred if the pots were hastily made and given insufficient time to dry prior to being fired.

It is evident that miniature cups have relatively short biographies, being made relatively quickly with some imperfections in decoration, and being fired relatively rapidly. It is quite possible that they accompanied the cremation of the human corpse on the pyre (although this is, admittedly, difficult to substantiate, the fact that they are almost exclusively associated with cremation burials is suggestive). Given their rapid production and deposition, they are likely to have been only viewed by a few individuals other than the potter.

We appear to observe a shift in decoration over the currency of miniature cups from the grape cups and slotted cups, whose decorative devices appear to be unique to these vessels, to Aldbourne cups and unperforated miniature cups that appear to be adorned with decorative motifs in common with other contemporary ceramic forms. An example from Charnage Down, Wiltshire (cat. no. SBYWM 1964.114) has similar decorative schemes to the enlarged

Fig. 3.6. Miniature 'grape' cup from Upton Lovell G2e, Wiltshire, England (photo by the author by kind permission of the Wiltshire Heritage Museum, Devizes)

food vessel it accompanies. Looking further afield, the miniature cup from Gairneybank, Kinross, Perthshire (Cowie and Ritchie 1991) references a food vessel from the same cemetery. In each case, the decoration of miniature cups appears to revolve around the principle of condensation. For grape cups and slotted cups, decoration is a virtuoso performance concerned with displaying the technique of the potter by decorating the smallest space possible in the most intricate fashion (Fig. 3.6). In the case of later forms of miniature cups, decoration is concerned with condensing decorative motifs typically found on larger ceramic forms. Paradoxically, the decoration of miniature cups may be both different to, and may also relate to, contemporary ceramic forms. Again, there is a paradox in the fact that the decoration of these cups appears to relate to display and virtuosity, while many miniature cups, as we have seen above, are rapidly produced and may have barely been displayed prior to burial.

The relational character of miniature cups is underlined by recent doctoral research by Robert Law (2008) concerned with another contemporary funerary ceramic form: Collared Urns. Law (2008, 74–104) is concerned with examining the origin of Collared Urns and, in an important insight, he notes that, in terms of production, we can think of Collared Urns as consisting of a series of sections: rim, collar, neck, body, and base. Significantly, he notes that a simple enlargement or reduction of one of these elements is sufficient in

transforming Collared Urns into another contemporary funerary ceramic: food vessel urns. In addition, he points out that, with simple transformations of these key elements, almost all contemporary ceramics can be considered as transformations of each other. However, he concedes that the major exceptions to this case are miniature cups.

Law's research has two important implications for my discussion. Firstly, it suggests that the principle of citation is embodied in the physical production of a range of contemporary funerary ceramic forms. Secondly, it suggests that, in terms of production, miniature cups stand apart from other contemporary ceramic forms. However, miniature cups refer, by decoration and design, to other contemporary ceramic forms. Therefore, miniature cups embody a paradox: they are both different to contemporary ceramic forms but also have characteristics in common with contemporary ceramic forms. I argue that this relational difference defines miniature cups.

It is evident that miniature cups were not manufactured in the same componential way as other Early Bronze Age ceramic types. Nevertheless, several of these ceramic types, such as food vessels and Collared Urns are found in miniature forms (Kavanagh 1977; Longworth 1984; Gibson 2004). While these artefact forms differ from the miniature cups discussed in this chapter, they nevertheless underline the importance of the principle of citationality and referentiality embodied by the miniature cup proper.

I argue, then, that miniature cups embody a series of paradoxes. As such, they offer a means of playing with form and decoration; they are manufactured in a different way to contemporary ceramic types, yet they may act as a nexus for referencing other ceramic traditions. They are containers; however, their diminutive size and perforations preclude their practical use. The non-practical use of these pots is underlined by the negative results from recent chemical analysis of the residues in miniature cups (Gibson and Stern 2006), although many cups do contain signs of the residue of burning some type of substance (Allen and Hopkins 2000).

Arguably, previous research has underplayed a key aspect of miniature cups: their size. It is of signal importance that the cups are miniature, generally being sized between 5 and 6 cm in height, with rim diameters of between 3 and 5 cm. As discussed above, psychological accounts of miniaturization note that miniaturization affects time perception, compressing temporal experience (Delong 1983). As the cultural theorist Susan Stewart (1993) observes,

miniaturization also offers the human subject the ability to encompass or contain the miniature object. This characteristic of miniature cups was very evident from examination of the Salisbury and Devizes collections; while the recording of decoration on cups involved moving vessels around in the hand, the recording of decoration on the food vessels that accompanied them involved moving around the food vessels—a different form of bodily engagement.

This sense of encompassment is underlined by the intricate decoration of miniature cups as, in some cases, all surfaces are covered. In the case of miniature cups, this sense of containment relates to the way that cups refer to the decorative motifs on much larger ceramic forms. Yet, while the decorative motifs used on miniature cups encompass decorative motifs found elsewhere, many miniature cups are literally open (as with perforated and slotted examples). Metaphorically, they are containers that do not contain. In other cases, where they are placed within larger vessels, they become containers that are contained. The sense of containment or encompassment of experience is yet more concentrated or compressed by the rapid production and deposition of the miniature cups. Each miniature cup acts as a nexus of experience, as their production involves intricate displays of decorative motifs meant to refer to ceramic forms and types of decoration beyond themselves.

That miniature cup forms act as displays of decorative technique is underlined by the existence of several parallel cup forms made from exotic substances, such as the precious cups from Rillaton, Cornwall and Ringlemere, Kent, Hove, Sussex, and Clandon, Dorset. These precious cups overlap geographically and temporally with slotted miniature cups (Fig. 3.7), with a particular emphasis upon the southern and eastern coasts of England (Needham et al. 2006). Precious cups have longer use-lives than the miniature cups I have focussed on. Analysis by Needham and others shows that many of the cups made of exotic substances, such as amber, jet, or gold exhibit evidence for use-wear around the handle, probably relating to suspension and display (Needham et al. 2006).

Miniaturization in the Early Bronze Age

The phenomenon of miniaturization in the British Early Bronze Age extends to other artefact forms, such as the three miniature halberd
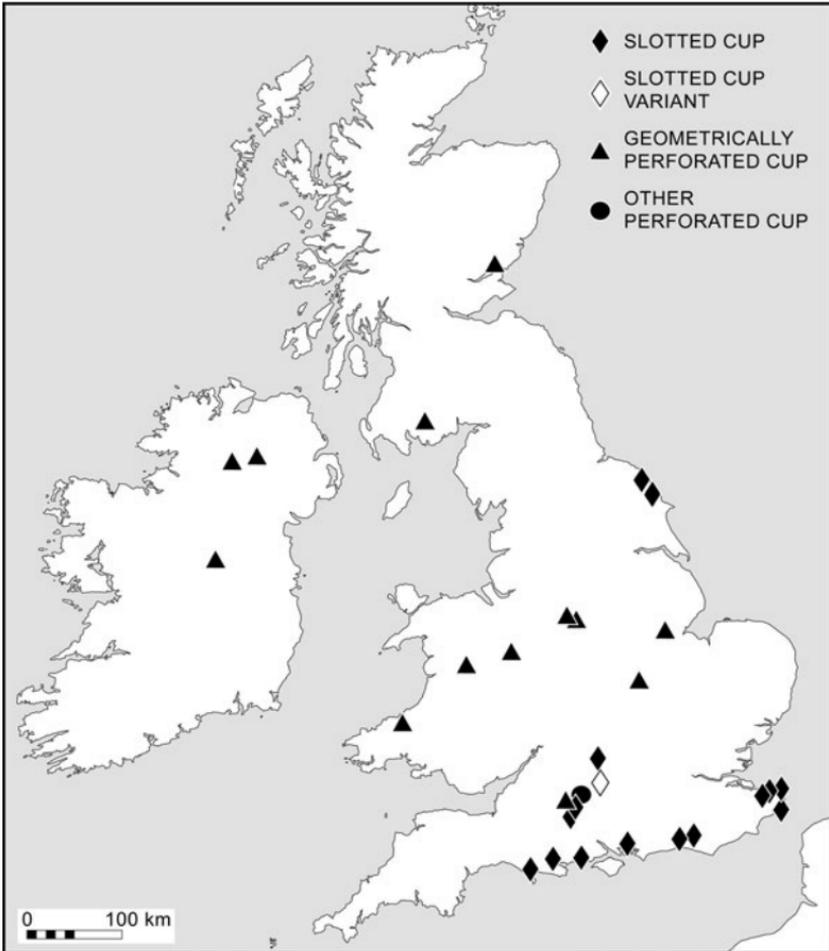
Fig. 3.7. The distribution of slotted miniature cups of the Early Bronze Age (illustration by Aaron Watson from an original in Needham et al. 2006)

pendants of gold, copper, and amber from Wilsford G8, Wiltshire, Manton, Wiltshire, and Hengistbury Head, Dorset. Stuart Needham (2000a, 2008) has recently noted that these halberd pendants post-date the British and Irish halberd series. As such, they are inspired by Aunjetitz halberd forms from Central Europe. These halberd pendants are unique to Britain; no parallels (in terms of size) exist in Central Europe. Therefore, these miniature artefacts are deeply mnemonic in nature; they refer to distant places and to an ancient form of

artefact. Further, the substances from which they are produced (gold, copper, and amber) also refer to distant places.

We can consider the production, use, and display of miniature artefacts as articulating different scales in the Early Bronze Age. Artefacts made of exotic substances, such as the precious cups and miniature halberds evidently had a longer use-life. The crafting of these artefacts involved articulating and expressing specialized knowledge concerning the connections between distinct places, substances, and forms. The significance of these connections was evident in their material form.

Matters of Scale

Miniature cups as physical forms are relational; their diminutive size invites comparison to other pottery forms. The decoration of miniature cups is likewise referential. The miniature cups make manifest questions of relationship and connection, while their fleetingly short use-lives and peculiar properties as containers that are unable to contain, or as containers that are contained, along with their close association with cremations, raise questions concerning the fleeting nature of the human life span and the evanescent nature of the human body. Miniature cups, too, articulate connections and relationships, albeit to a lesser degree than the precious cups and halberd pendants discussed above.

Both the miniature cups, precious cups, and other miniature artefacts augment and distribute people's conceptualization of their social lives in significant ways (Pedersen 2007, 153). Miniature cups are not mere vehicles for cognition; these things are not 'good to think with' in the sense described by Levi-Strauss: a process in which thoughts and meanings are arbitrarily attached to things or objects. Instead, miniature cups are treated as active components of thought; thought is embodied in the fabric of these artefacts. These miniature artefacts act as devices for embodying ideas concerning scale, distance, connection, and relationship.

In summary, miniaturization in the Early Bronze Age provides a way of concentrating diverse experiences and distilling or articulating memory. The crafting of miniature artefacts involves articulating specialized knowledge concerning the connections between distinct places, substances, and forms. In this regard, miniature artefacts act as

powerful socio-cognitive technologies in which the skills and know-ledge of certain individuals are valued above those of others. I have argued, then, that the miniaturization of certain Early Bronze Age artefacts offers a device for concentrating and articulating experience. Furthermore, I argue that miniature artefacts were deliberately produced in order to articulate and reference distant connections. Therefore, miniature artefacts helped to articulate the Early Bronze Age experience of scale.

Geographic Scale and Physical Scale Reconsidered

In the opening section, I discussed the relationship between geographical and physical scale in terms of ontological distinctions. I now want to return to this discussion and focus upon Kristian Kristiansen and Stuart Needham's work, as it is especially pertinent here. Kristiansen posits the existence of a series of regional groupings—components of a network based on the circulation of exotic goods, such as copper, tin, and amber (Kristiansen 1998). As noted above, his discussion of scale perpetuates familiar ontological distinctions. The task then becomes explaining the material in terms of the social. It is for this reason we alternately see a discussion of travelling chiefs connecting the networks or the discussion of a pan-Eurasian cosmological institution. As we might expect, a significant element that becomes lost in this discussion is the ontological nature of the materials that compose these networks. In a similar sense, Needham's discussion of exchange in the Early Bronze Age of southern England draws a distinction between the movement of materials and their cosmological reception, talking somewhat mystically of 'spiritual draw' (Needham and Woodward 2008, 43). There is obviously no doubt that people travelled across Bronze Age Europe and little doubt that materials were perceived as exotic, special, or cosmologically derived (Helms 1988; Kristiansen 1998; Needham 2000a). However, as I have discussed above, substances and materials are actively manipulated to express and embody relations of scale.

If we take the perspective that materials and people act in concert in heterogeneous networks or assemblages (Callon 1991, 136) in which materials translate or substitute for the actions of people (Latour 1991, 104–5), we no longer need to describe Bronze Age Europe in terms of material infrastructure and symbolic

superstructure (Kristiansen 1998; Kristiansen and Larsson 2005) or create distinctions between exchange and cosmology (Needham 2000a). Instead, we simply examine the way in which materials are mobilized to articulate social relationships in different regional locations. My analysis of miniature artefacts in the British Early Bronze Age offers just such an interpretation of how social relationships are articulated in practice. Scale is made manifest in materials; the significance of scale and the connection of communities is translated into substance. Rather than conveying complex myth cycles from one region to another, the physical substances circulated evoke, or embody, the significance of other places in material form. This is surely the significance of the miniature halberds found in southern England as they embody other places in their form and substance. Indeed, their form, peculiar to Britain in this period, embodies the very idea of the exotic.

What this suggests is that the hierarchy of scale adopted by European archaeologists is itself an illusion. Further, it is an illusion that creates its own imperatives. If, instead, we consider the possibility that the microstructure of society is synonymous with the macrostructure and that both are embodied in material form in the artefacts produced by people, the task then becomes explaining how assemblages of artefacts and people articulate together and how artefacts are made to produce scale.

CONCLUSIONS

In the first case study, I examined how both the gigantic and the miniature were deployed in the architecture and artefacts of the Irish Middle Neolithic. In the second case study I focussed on the significance of miniaturization in the British Early Bronze Age, with particular reference to southern England. I now want to reflect upon the issue of scale and materials to consider what we have learned from these two case studies.

The first point is that materials offer a way of inhabiting the world that would be otherwise difficult to comprehend. In the case of the Irish Neolithic, I argued that the manipulation of stone offered a way of articulating differences in physical scale. In the case of the British

Bronze Age, the malleability of clay offered the potential for producing miniature artefacts.

Secondly, in both cases, we have seen the way in which physical scale provides the potential for articulating geographic scale and a way of articulating people. In the Irish Middle Neolithic, the assemblage of stones in passage tomb architecture references distant places. Reference to distant places and artefacts of other scales is also evident in the materials and forms of the pendants of stone and clay deposited in passage tombs. For the Early Bronze Age of southern England, the decoration of miniature cups references other contemporary ceramic types. In addition, the miniature Aunjetitz-style halberds strikingly reference the significance of other places. Physical scale has an important part to play here as it helps to amplify or condense the significance of other places; in the Irish Middle Neolithic the large scale of the stones deployed in passage tomb architecture magnify significance, while in the case of the Early Bronze Age artefacts of southern England the diminutive scale serves to condense significance.

4

Materials, Colour, and Light

INTRODUCTION

This chapter will discuss the issues of colour, light, and materials. As such, this chapter begins with a question. To what extent is it permissible to discuss the material qualities of light? At first glance, the discussion of light appears to be perverse—light is intangible, it is neither a solid substance, nor is it a constant.

The anthropologist Tim Ingold (2007, 3–4) asks a similar question when he considers the parameters of material culture:

> …how about sunlight? Life depends on it. But if sunlight were a constituent of the material world then we would have to admit not only that the diurnal landscape differs materially from the nocturnal one, but also that the shadow of a landscape feature such as a rock or tree, is as much a part of the material world as the feature itself.

This short discussion of the material properties of light opens up two significant points: firstly, that light alters our experiential appreciation of materials; and secondly, it suggests that the effects of light are as significant as solid features themselves. Both of these issues will be considered below in brief case studies relating to the Neolithic period considering light and colour in rock art production and use in Argyll, Scotland, and light in the settlements and passage graves of Neolithic Orkney.

PHILOSOPHY AND VISION

We might consider light and vision as some of the signal issues concerning Western philosophy, from Plato to Heidegger and

Merleau-Ponty, and including such luminaries as Barthes, Derrida, Foucault, and Irigaray. Discussions of the significance of vision begin with Plato but were given increased emphasis by Descartes, who discusses the role of the eye in conveying sensory data to the mind. For Descartes, vision was the pre-eminent and surest sense and acted as a paradigm for cognition itself. He argued for a clear reflection of sensory data on the mind's eye. This Cartesian proposal presaged that of Enlightenment thinkers, such as Locke and Voltaire who likewise considered vision to be central to cognition. Indeed, Voltaire argues that ideas are nothing less than images that 'paint themselves on the brain' (Jay 1994, 83). In this statement, we observe the clear and direct correlation between vision and thought in Enlightenment philosophy.

These concepts were deeply questioned by phenomenological thinkers. For phenomenologists, consciousness was not independent of its object. An object was not a thing standing apart to be viewed from afar. Consciousness was always of something—the conscious mind and the object were inextricably related: objects were not contemplated from a distance. The mind was not completely distanced from a world that was represented to it as images in its metaphorical eye.

The subject of vision and philosophy is diverse and it is not my intention here to summarize this complex intellectual history in its entirety (for an in-depth analysis see Jay 1994). I introduce a discussion of vision to consider the role played by light in these ruminations. For Enlightenment thinkers, light is neutral and revealing; this is the 'light of reason' that conveys sensory information unmediated to the individual. Light also has revealing properties in the phenomenological thought of Martin Heidegger. Here, light manifests as the shining forth in which Being discloses itself. Light never creates openness or clarity—as with Enlightenment thought—rather, light pre-supposes openness. The thinking subject does not cast their light onto mute and opaque objects. Instead, Being is allowed to manifest itself to the conscious subject; light arises from this manifestation. In this philosophy, the viewer is situated in a visual field, not outside it.

Much of the philosophical discussion of light assumes a certain consistency in the quality of light: light is a neutral, revealing, revelatory phenomena. This apprehension is forcefully questioned by the Australian artist Barbara Bolt (2004, 128) who notes that it is a commonplace argument, from Plato to Heidegger, that there can be no outward appearance without light: light reveals. However, she argues that Heidegger's 'heliophilia [love of light or sun] prevents

him from seeing that light is a logical conspirator in representational thinking' (Bolt 2004, 124). This is because light is treated as a neutral medium. Bolt points out that in the glare of the Australian sun, the notion of the production of a work of art as a process of un-concealing, or bringing-to-light, does not take into account the properties of this bright, glaring sunlight. Bolt (2004, 125) argues that the glare of the Australian sun fractures the nexus between light, form, knowledge, and subjectivity; instead, the glare reconfigures the relationship between light and matter. Rather than shedding light *on* matter, she shifts her emphasis on shedding light *for* matter. While my case studies in this chapter wholly focus on light in the northern hemisphere—the light of Enlightenment philosophers and phenom-enologists alike—the approach offered by Bolt from the point of view of the southern hemisphere is important. We are mistaken, then, if we assume that light is neutral; we need to consider the active qualities of light in our accounts. This is particularly important if we wish to consider the relationship between matter and light as we shift away from treating light simply as a medium for revealing matter. Instead, we need to consider light as an active force that interacts with matter. Light does not simply reveal in a neutral fashion: it interacts with materials; changing lights alter the appearance of matter. It is this dynamic aspect of light that I wish to emphasize.

THE ART, ARCHAEOLOGY, AND ANTHROPOLOGY OF COLOUR AND LIGHT

Alongside the consideration of light discussed above, I also want to consider colour. I wish to begin my consideration with a remark made by the artist Frank Stella in a radio interview in 1964:

> I knew a wise-guy who used to make fun of my painting, but he didn't like the Abstract Expressionists either. He said they would be good painters if they could only keep the paint as good as it is in the can. And that's what I tried to do. I tried to keep the paint as good as it was in the can. (quoted in Batchelor 2000, 98)

The artist, David Batchelor, argues that this deadpan remark 'to keep the paint as good as it was in the can' reveals a fundamental change in the way artists conceived colour in the 20th century. It marks a shift

in the notion of colour as a representational device associated with colour paints that traditionally came in tubes and were used to render flesh tones and the like. The idea that paint came out of the can onto the canvas assumes a vision of colour as a thing in and of itself, no longer simply a cipher for rendering or conveying something else. I argue that this artistic shift in the conception of colour marks a more fundamental shift in the way we should begin to think about colour philosophically, materially, and archaeologically.

The topics of colour and light have seen relatively little discussion in archaeology and anthropology. Within archaeology, discussions of colour have traditionally been concerned with the identification of coloured artefacts, for example red ochre in mortuary contexts and gold artefacts placed with the deceased. More recent approaches have critiqued psychological attempts to universalize colour perception and linguistic and semiotic approaches to defining the colour field in favour of local, contextual, and phenomenological approaches to colour (Jones and MacGregor 2002, 3–7). This shift from a universalizing approach to a contextual one concerned with localized meanings, places great emphasis on the fixity of colour and on categorizing the colours of definable objects. However, this masks the dynamic relationship between colour and materials. As the artist David Batchelor (2000, 95) discusses:

> . . . colour is in everything, but it is also independent of everything. Or it promises or threatens independence. Or is it the case that the more we treat colour as independent, the more we become aware of its dependence on materials and surfaces; the more we treat colour in combination with actual materials and surfaces, the more its distinctiveness becomes apparent?

There is a dynamic and paradoxical component to our experience of colour. At times, colours stand out from surfaces and the materials that compose them and at other times, colours seem to be of matter. The paradoxical qualities of colour are underlined by the philosopher Gilles Deleuze. He points out that: 'colour is on the contrary the affect itself, the virtual conjunction of all the objects which it picks up' (Deleuze 1986, 118). Deleuze's remarks appear to presage the digital appreciation of colour, discussed by Batchelor (2000, 107–8):

> Colour is excess, but colour in art is the containment of excess. . . . The analogical flow of mixed colours decreases the intensity of any particular hue; but the intensity of hue provided by the digital colour also tends to localize that colour. Our awareness of its containment increases.

> Shiny begins to delocalize colour; it picks up other colour and redistributes its own . . . Colour begins to regain its excessiveness.

In short, our accounts of the material qualities of colour need to examine its local and contextual appreciation and significance while also embracing the extra-material affect of colour. Colours have a dynamic relationship with materials. Colour is not inextricably related to materials. As an affect, it goes beyond the material.

In the discussion of colour above, I have argued that it is insufficient to simply define colours as static and localized entities. Much the same argument could be made for anthropological treatment of light. While there has been relatively little archaeological discussion of colour, the archaeological and anthropological treatment of light is even more sparse. One of the few recent discussions of light in anthropology is that of Mikkel Bille and Tim Flohr Sorensen (2007). Bille and Flohr Sorensen provide a detailed review of philosophical, architectural, and anthropological arguments concerning luminosity. However, in their major case study which was concerned with the role of light and hospitality (*hygge*) in contemporary Denmark, the evanescent and changing properties of light become curiously objectified. Light appears in their account as a fixed entity upon which cultural values are freighted. A similar criticism could be made of Saunders' (2002) treatment of the valuation of luminous things amongst various Amerindian communities in the historic past.

Rather than thinking of light as an object that is culturally valued, I wish to, instead, consider luminosity as an emergent and changing process that intersects with the human experience of materials. I take inspiration here from the classic essay *In Praise of Shadows* by Japanese novelist Junichiro Tanizaki (2001 [1997]) whose discussion of the play of light in traditional Japanese architecture captures a sense, not of a static valuation of shadow, but of the dynamic and interactive experience of shadow and light on materials (particularly lacquerware) in a series of architectural settings. Here, the reader gains the sense of the shifting play of light and a fresh appreciation of commonplace materials under differing lights. At this juncture, it is worth re-asserting the importance of Barbara Bolt's discussion of the active qualities of light as they play across the surfaces of materials, not so much shedding light on pre-existing matter, but shedding light for matter—the interaction with light producing fresh encounters and appreciations of their material qualities. It is the performative and emergent accounts of light that I would like to pursue below.

In summary, while the material qualities of colour and light are important, the *affect* of colour and light is equally important. Here, affect is understood to be the changes and variations that occur when bodies or forces intersect or come into contact—the play of light on lacquerware in Tanizaki's account of traditional Japanese architecture is a form of affect. The relationship between colours and the materials with which they are related is another form of affect.

<div align="center">CASE STUDY ONE</div>

Surface, Light, and Performance in the Rock Art of Prehistoric Argyll, Scotland

Rock art researchers are dependent on light; images carved on rocks reveal themselves in different lights and it is a common practice when recording rock art to control the light source in some way to better see the images. I want to consider the role of light in the making and viewing of rock art images in the region of Kilmartin, Argyll, Scotland—a region that I have been studying for the past decade. This region has the greatest concentration of rock art sites in the British Isles, with some 133 individual sites in an area of 20 km². Like much of the British Isles and Atlantic Europe, the rock art motifs of this region are mainly abstract cup-and-ring motifs.

The carving of rocks is not a haphazard process. Indeed, research in the field and the use of geographical information system (GIS) analysis has demonstrated that certain motifs are carved at specific locations in the landscape (Jones et al. 2011). Furthermore, the rocks chosen for carving were specifically selected, with a particular selection of rocks with cracks and fissures created by geological action. Again, certain motifs were carved on rocks with differing systems of cracks and fissures (Fig. 4.1): rocks with large rectangular shaped cracks were carved with cups with multiple rings; rocks with small, rectangular or lozenge-shaped cracks were carved with simple cups with gutters or tails; rocks with criss-crossed systems of cracks were carved with complex motifs, including cups with multiple rings and complex motifs found in the passage tomb art repertoire, such as rosette or horned spiral motifs (Jones 2005a; Jones et al. 2011). The selection of specific rocks appears to imply a degree of design and

MULTIPLE RING   MULTIPLE RING   CUP MARK

PASSAGE TOMB   CUP MARK
ART MOTIFS   WITH TAIL
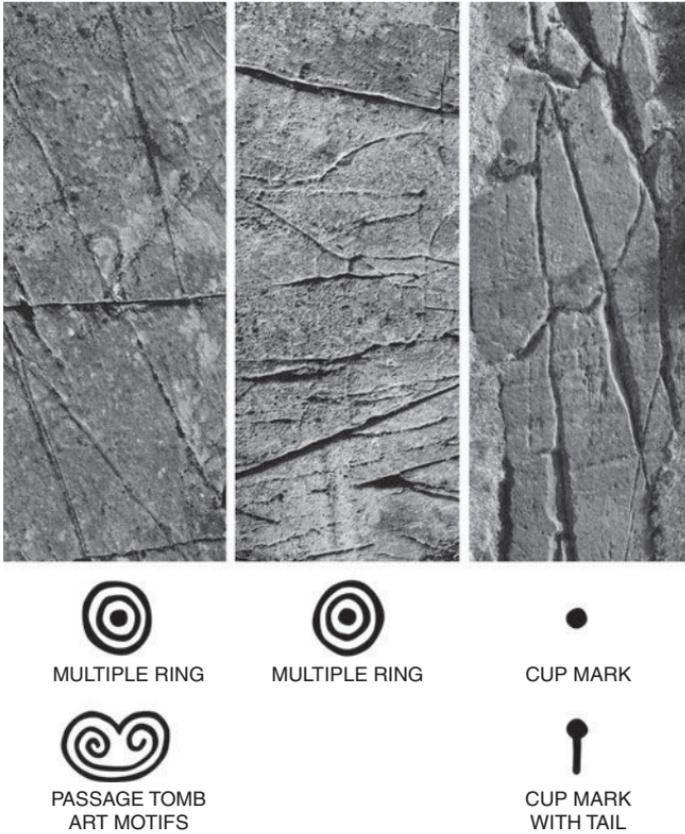
Fig. 4.1. The relationship between rock art motifs and different systems of cracks and fissures in the Kilmartin region. Illustration by Aaron Watson

forethought and I have previously argued that the systems of cracks and fissures on these rocks resemble the abstract designs of contemporary Neolithic artefacts, such as Grooved Ware pottery. If this is the case, the natural rocks are being addressed as previously carved and the rock art motifs are being executed over what are believed to be ancestral designs. To what extent are rock art motifs simply being imposed on rock surfaces?

Rock Art and the Rock Surface

Careful analysis of individual rock art panels in the field suggests that, rather than a process of imposition, rock art motifs are being *worked*

into the pre-existing geological features of the rock. For example, at the domed-shaped rock art site of Ballygowan, the engravings are situated in the centre of the rock and appear to be positioned between two fine cracks in the rock surface (Fig. 4.2). A cup with three concentric rings dominates the southern part of the panel. A tail emerges from the central cup of this motif and traces a line entering one of the fine cracks that 'frame' the composition. A further tail emerges from the third ring and follows the slope of the rock down-hill. In turn, it helps to create the third ring of the next cup-and-ring motif down the rock. On the other side of the panel, a further cup-and-ring motif with three concentric rings is engraved close to a fine crack in the rock. Here also, a tail emerges from the central cup mark and traces a path downhill and merges with another line traced by a tail emerging from the cup-and-ring motif above it. The engravings appear to be closely interwoven with the cracks in the rock and with each other.

Another excellent example of the way in which motifs and geological features are interwoven is at the site of Ormaig (Fig. 4.3). Ormaig is one of the most complex sites in the region; a full description of the site would take many pages. As a result, I want to focus on the decorated outcrop situated on the sloping rock exposure to the

Fig. 4.2. The rock art motifs at Ballygowan, Argyll, Scotland (photo by the author)

north of the site. This outcrop is divided by a series of lozenge-shaped fissures running diagonally across the rock. The lowest motif is a gutter or channel. Above this are a series of cup marks and cup and tails, and above these motifs is a series of parallel grooves. These are very unusual motifs that possibly mimic glacial striations, although they cut across the natural glacial striations on the rock. These parallel grooves flank two cups and tails with multiple rings. These are unusual, as the outer ring also forms the sides of a three-pronged tail. Above these motifs is a series of triangular crevices in the rock. There is another series of triangular crevices on the upper part of the rock. In between these two sets of crevices is a dense pattern of cups, and cups and rings. Above the second set of triangular crevices are four cup and rings very sparsely spaced on the rock. The uppermost motif has a single ring fitted exactly between two linear cracks (which frame it).

The presence of triangular crevices on this rock is curious as these resemble the organization of triangular motifs in Irish passage-tomb art. These natural cracks or fissures in the rock are seamlessly incorporated into the overall design of this panel at Ormaig. Likewise, the parallel carved grooves recall the natural glacial striations;

Fig. 4.3. The rock art motifs on the sloping panel, Ormaig, Argyll, Scotland (photo by Aaron Watson)

the natural striations are simply cross-cut and referenced by the carved grooves incorporated into the design.

The above offers an example of the relationship between rock surface and rock art (for a fuller discussion see Jones et al. 2011); this relationship is evident in different ways at all the rock art sites in the region. Rather than thinking of rock art sites in this region as being designs imposed upon a natural substrate, it is more appropriate to think of an interaction between rocks and the prehistoric carvers of rock art motifs. The carving of rock art motifs is a performative act that enacts a relationship between rock and rock carver and between motif and rock. These relationships are enacted by visually drawing attention to the relationship between the geological features of the rock and the carved motif, often by juxtaposing or conjoining the two. Relationships and interactions are made visibly manifest by the form of the carved motifs and the way in which they juxtapose or super-impose with geological features that compose the rock surface.

That the process of carving is performative is demonstrated by the results of excavations by the author between 2004 and 2009 at two rock art sites at Torbhlaren. The two sites at Torbhlaren were carved with cups with multiple rings, and cup and ring motifs. Here, I want to focus on excavations at the smaller site, Tiger Rock. Excavation indicated a complex history of depositional and constructional activity (Fig. 4.4). Activities around the rock began with the construction of a small stake-built structure dated to *c.*2500–2300 cal BC. This structure was burnt down and was overlain by a platform of clay and stone that encircled the eastern edge of the rock. The platform was covered with smashed quartz, with a major concentration of quartz directly in front of the panel of rock art motifs on the rock. Analysis of the quartz indicated the presence of numerous quartz hammerstones and experimental analysis indicated that much of the quartz debris resulted from rock art production. Furthermore, excavations of the larger fissures on this rock revealed the presence of quartz debris deposited in a number of fissures. One of the larger fissures located below the rock art panel contained a suite of quartz hammerstones and was dated to *c.*2900–2800 cal BC, indicating activity predating the constructional events around the rock. Again, these quartz hammerstones had been deployed in rock art production. In the case of both the deposits in this fissure and the deposits on the platform that encircled the rock, the debris of rock art production—quartz
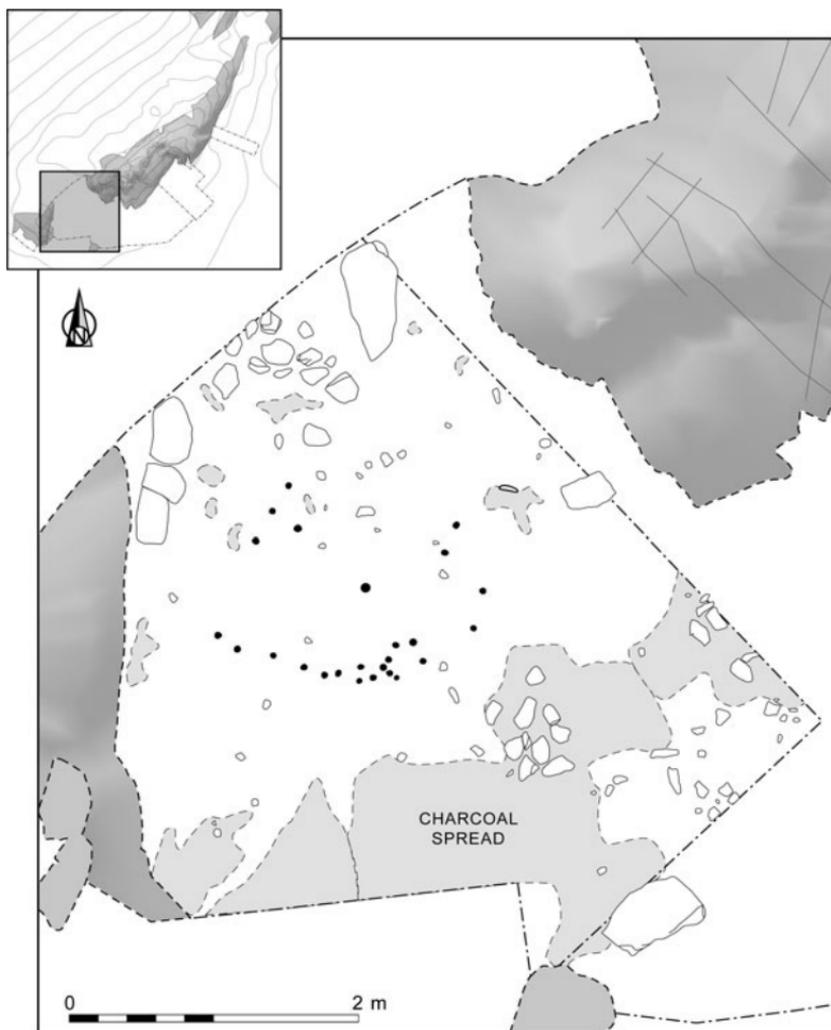
Fig. 4.4. Plan of features at Tiger Rock, Torbhlaren, Argyll, Scotland (illustration by Aaron Watson)

hammerstones—had been swept off the rock surface and deposited in areas below the carved surface.

Furthermore, experimental reproduction of rock art on comparable rock sources (epidiorites) retrieved from the Torbhlaren rock art site by Hugo Lamdin-Whymark, revealed the remarkable colours of the rock when carved. The rock weathers to a grey colour and beneath this outer crust is a layer of greenish rock and, below that, a rusty

red-coloured rock (Plate 7). Therefore, carving cup and ring motifs of differential depth produces a deeper cup of a reddish colour, encircled by a shallower ring of a greenish colour. The colour differences apparent in the freshly carved images underline the revelatory character of the performance of making rock art. The performance of rock art production is further enhanced by the use of a luminescent white crystalline substance (quartz) to produce rock art. While quartz glitters in sunlight, under low levels of luminosity it emits light (triboluminescence) caused by friction in the crystal structure of quartz. Whatever the light conditions, the production of rock art by quartz hammerstones is likely to have been a striking performance in which the coloured rock art motifs emerge from the luminescent qualities of the quartz. Given the spatial and height differences between the carved rock surface and the platform that surround it, the performance of rock art production is likely to have been striking as the carver stood or kneeled on the rock surface hammering and covering the surface with shattered quartz which was then swept from the surface to reveal the freshly carved, colourful motifs. The entire performance is one of initial concealment followed by revelation.

Light and the Rock Surface

The concealment and revelation enacted in the performance of rock art production is reprised in the subsequent viewing of rock art. Analysis of the motifs produced under experimental conditions noted that the carved surfaces 'healed' or weathered over a few short months (H. Lamdin-Whymark personal communication), thus rendering the motifs less easily visible. The rock art motifs of the Kilmartin region are difficult to see under most lights; they are most visible under low light during the early morning and evenings. At this time, motifs appear from the rock surface, often etched in shadow. On certain panels, and in certain low sunlight, the colours of the rocks, and occasionally the motifs, are revealed. This is most evident at the Upper panel at Cairnbaan (Plate 8). Low sunlight shining on the surface of carved surfaces therefore parallels the concealment and revelation enacted by the performance of rock art production. It also alters the character of the rock surface, occasionally altering the colour of the rock and always revealing the network of shadows in the undulating rock surface. At one moment the rock art motifs are

inextricably related to the rock surface, while, with the action of low sunlight, the rock art motifs stand out from the rock surface and—through shadow—reveal the connections between surface and image. Analysis of the orientation of panels in the Kilmartin region demonstrates that, of the 18 sites where it is possible to document the details, 72% (13 sites) of the rock surfaces are oriented northeast–southwest. The remaining sites are mainly oriented east–west, with one exception oriented north–south. Therefore, the majority of rock art motifs are carved on rock outcrops oriented so as to catch the light of the early morning and evening sun. As such, the performance of concealment and revelation produced by sunlight has a temporal character and the relationship between rock surface and carved motifs has a fleeting character; these relationships have their times, as well as their places.

In discussing rock art production, we assume the primacy of the act of carving stone, but should we not also consider the manipulation of light to be of equal importance? We cannot know what time of day the motifs were carved, although the significance of early morning and early evening sunlight may suggest either of these times were significant, as this would be when freshly carved motifs were most visible. Whatever the time the motifs were carved, we should also be aware that, while the rock surface is altered by carving, light is also being altered as the alteration in the rock surface produces shadow. In this sense, rock art carvers enhanced shadows and manipulated light.

Given the revelatory character of the interaction between rock surface and low light, we may think of rock art panels in this region as places that *condensed or revealed the significance of light* at certain times of the day. More generally, the significance of sunlight is underlined by the evident interest paid in the movement of the sun as evinced by the orientation of monuments in many regions of Late Neolithic and Early Bronze Age Scotland (Ruggles 1999; Bradley 2005a). Given this, we may think of rock art panels less as surfaces marked by carved motifs, and more as surfaces enhanced to manifest the relationship between surface, motif, and the significant rays of the sun.

Summary

The carving of rock surfaces at Kilmartin is performative in a number of senses. I have argued that both the action of carving and the action of sunlight produces a performance of concealment and revelation.

The motifs are also performative in another sense as the carving of individual motifs not only enacts a relationship between rock surface and motif, it also iterates, cites, or references motifs occurring in other places in the region (Jones 2006). The carving of motifs is, therefore, a performative act with multiple resonances and a series of affects, as individual motifs have a wider visual affect within the region, the interaction between rock surface, motif, and sunlight manifests light and shadow and the significance and comprehension of light has a wider affect upon the cosmology and landscape inhabitation of the people of Neolithic and Early Bronze Age Kilmartin.

CASE STUDY TWO

Luminosity and Materiality in the Settlement Architecture of Late Neolithic Orkney

In the first case study, we examined the way light relates to the rock art traditions of Neolithic Argyll. I want to continue the investigation into the affect and effects of light in a very different context: the Late Neolithic settlements and mortuary monuments of Orkney.

Light is a particularly important topic in Orkney as, because of the latitude of the islands (59° north), there are extreme differences in light levels over the course of the year. Midsummer, the brightest point of the year, sees around 20 hours of daylight and around 4 hours of semi-darkness. At the other extreme, midwinter sees around 4 hours of dim daylight and around 20 hours of darkness. As we shall see, this appreciation of light over the course of the year is particularly significant to Late Neolithic settlement architecture.

The Orkney Isles are situated off the northern-most coast of Scotland. One of the most remarkable aspects of the archaeology of this archipelago of around 70 islands is the exceptionally well preserved range of monuments dating to the Neolithic period, including chambered tombs, passage graves, stone circles, and stone-built settlements. The Neolithic sequence in Orkney begins with small, circular, timber-built houses, as with the settlement on the small island of Wyre (Antonia Thomas personal communication), and at Wideford Meadow. This architectural form is succeeded by linear, stone-built structures at sites such as the Knap of Howar and

Wideford Meadow (see Chapter 5 for more details). Around 3300 ʙᴄ, settlement architecture is substantially remodelled and circular, stone-built structures begin to be constructed. There are a number of settlements with this form of architectural scheme, the most celebrated being Skara Brae and Barnhouse, but also including sites such as Rinyo and Pool. There are, of course, variations on this architectural layout and houses with a more oval form are constructed at sites such as Crossiecrown and Barnhouse, while sub-circular houses of a variety of forms are found at the Links of Noltland and the Ness of Brodgar, with the recently excavated structures at the Ness of Brodgar being substantially enlarged in size.

The role of light in the architecture of Late Neolithic houses has previously been discussed by Colin Richards (Richards 1991; Richards and Parker-Pearson 1994; Downes and Richards 2005). Richards argues that, because of the orientation of the house en- trances, light will have divided the house into two regions: a darker left-hand side and a more illuminated right-hand side. He backs up this argument with the observation that in House 7, Skara Brae, the pathway leading from the door also turns to the right to the more illuminated section of the house. Since this interpretation was first published, it has been criticized by Clarke (2003) on the basis that the entrance to House 7, Skara Brae, is blocked by a wall preventing light from entering. I want to critically re-evaluate Richards' interpretation here, taking into account Clarke's criticism.

I want to argue, *contra* Clarke, that Richards' analysis concerning illumination is valid at a fundamental level, i.e. that light does enter Late Neolithic houses. There are two points that invalidate Clarke's argument:

1. The entrance to House 7, Skara Brae, is *presently* blocked, as the individual houses in the settlement are conjoined by a system of retaining walls and inter-connecting passages. However, it is evident that in earlier phases of the settlement, the houses at Skara Brae were once *free-standing*. Indeed, House 7 is likely to be one of the earliest structures on the site, as demonstrated by the early fieldwork of Childe (1931) and by Clarke's excavations (Clarke 1976) at the site. As this is the case, during the earliest phases of settlement occupation, the entrance to House 7 would have been open to illumination.

2. At a more general level, it can be observed that, if the specific case of House 7, Skara Brae, can be criticized, Richards nevertheless illustrates a general pattern that can be observed in a number of other cases, e.g. Barnhouse and Houses 2 and 3. There is consistency to the orientation of Late Neolithic houses and certain patterns in illumination can be discerned.

Having argued for the validity of Colin Richards' arguments concerning the access of light in Late Neolithic settlements, I now want to critically examine his interpretations. In a series of papers, Colin Richards argues for a common spatial order amongst the settlements, passage graves, and henges of Late Neolithic Orkney (Richards 1990, 1991, 1993, 1996, 1998; Downes and Richards 2005). He recognizes a consistency in the layout of Late Neolithic houses, as:

> . . . the internal organisation of stone furniture pivots around a central square shaped hearth. At the rear of the house is a stone built shelving arrangement, known as a 'dresser'. Two opposed rectangular recesses or boxes, interpreted as 'box-beds' by Childe (1931, 14–15), are defined by divisional uprights situated either side of the hearth. The doorway is positioned opposite the 'dresser' and when taken in combination with the boxes or recesses, a cruciform arrangement of spatial order is created. (Downes and Richards 2005, 58)

The argument goes that these organizational principles are deployed in all Late Neolithic houses and that because of this layout there co-exists a concentric spatial organization that interplays with the directionality latent in the cruciform arrangement of furniture (Fig. 4.5). Following Hodder (1982), this concentric spatial organization is extended to other contemporary monuments, such as passage graves and henges (Richards 1993). In Richards' account, architecture only participates as a spatialized symbol of an underlying social order—a representation. He describes the monumental architecture of the Maes Howe passage grave in similar terms:

> Although different, Maes Howe is inescapably a *representation* of a passage grave and would consequently have been imbued with all the associations of a place of the dead. (Richards 1993, 151; my emphasis)

Likewise, the architecture of the monumental Structure 8 House, Barnhouse:
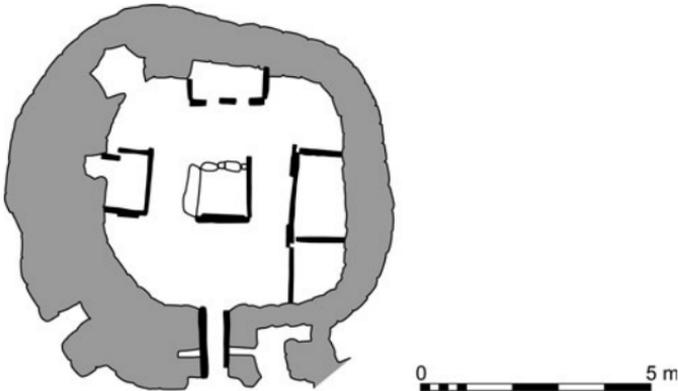
Fig. 4.5. The Late Neolithic house in Orkney (illustration by Aaron Watson from an original in Richards 2005)

> Structure 8 is a *representation* of a house in just the same way that Maes Howe is a representation of a tomb although neither appears to fulfil its function; there is little evidence of habitation in the former and there is no convincing evidence for human burials in the latter. Instead, they are tied into wider classifications of the world, involving life and death, decay and regeneration. (Richards 1993, 167; my emphasis)

This approach to architecture has important implications for Richards' discussion of luminosity in Late Neolithic houses, as we shall see below. From Richards' account, we gain the sense that architectural plans are carried in the minds of people as so many representations to be expressed in material forms. Some of these architectural forms—Maes Howe passage grave and Structure 8, Barnhouse—are exaggerated representations of a common ideal. Such an approach offers a peculiarly passive account of the human relationship with materials: materials appear to be infinitely malleable and serve merely as the conduit for the outward expression of internal ideas. In this account, materials appear to have little tangible substance. Instead, I argue that the construction of architecture involves a process of interaction in which materials impinge upon, or interact with, the human performer; that architecture is composed of materials that are performed or composed architecturally. Rather than viewing architecture as made up of a series of fixed components of an idealized spatial order, we can, instead, view architectural elements as fluid components of a network of relations in which individual material components are knowledgeably deployed.

This can be demonstrated by analysing the Late Neolithic architecture of the Stenness peninsula. The houses at Barnhouse contain elements of passage grave architecture, as with the corner buttresses and layout of House 2, Barnhouse (Richards 1990, 2005, 129–54), while the monumental House 8, Barnhouse (Hill and Richards 2005, 157–88), with its entrance passage and platform, is resonant of passage grave and henge combined. The immense passage grave of Maes Howe has architectural elements—standing stones—found in henges (Richards 1993; Challands, Muir, and Richards 2005), and the henge and stone circle at Stenness has features such as the central hearth, typically found in settlement architecture, and a central porch or passageway found in passage graves and the monumental House 8, Barnhouse. In fact, rather than conveying an underlying spatial order, each architectural construction—house, henge, and passage grave—involves a dynamic interplay of difference and similarity. If we take just one architectural feature—the hearth—it is possible to see that it is performatively deployed. The large hearth at the Stones of Stenness performs, on a grand scale, the domestic hearths in settlements, such as Barnhouse. In this sense, the hearths of settlements could be considered as performing small-scale hearths. The absence of a hearth at Maes Howe passage grave may be thought of as the performance of the lack of a hearth, while the hearths at settlements may be considered to perform the presence of a hearth. Rather than thinking of these architectural elements as fixed symbolic components, we instead consider them as performances of difference: they are performed singularities with material effects, not simply symbolic oppositions; each is performed alongside the other.

Returning to the issue of light in Late Neolithic houses, Downes and Richards (2005, 59) point out the consistency of hearth orientations in Late Neolithic houses on a northwest–southeast axis, with hearths orienting on the four cardinal points of the midwinter and midsummer sunrise and sunset. Because of these orientations, the orientations of houses to the south-east and the consistency of furniture arrangement in the house, Downes and Richards argue that time is intimately linked with illumination:

Interestingly the temporality embedded within the four elements of furniture within the interior also corresponds to the different levels of illumination within the house. Here the entrance and right hand recess-'bed' (the light area of the house) equates to the winter and summer

sunrises respectively while the rear 'dresser' and left hand recess-'bed' (the dark areas of the house) equates with regard to the midsummer, and midwinter sunsets respectively. (Downes and Richards 2005, 127)

While I do not wish to deny the significance of different levels of illumination at these critical junctures of the year, the above account treats light merely as a symbolic device and overlooks light as a tangible substance that will have interacted with the architectural components of the house to alter their material appearance and experience. It thus offers a curiously two-dimensional picture of illumination in Late Neolithic houses.

Fire and Light in Late Neolithic Houses

In addition to the two-dimensional picture of illumination offered by Downes and Richards, it is important to consider that, owing to the low entrances into Late Neolithic houses, light would have tended to illuminate floor level, making a darker roof-space. This is significant when we remember that storage boxes, or ambreys, are often located in the upper regions of the house walls, making these locations especially secretive and difficult to access. A further light illuminates Late Neolithic houses: the firelight provided by the central hearth. We would expect a dynamic interaction between the light provided by the hearth and the natural light from the house entrance. It is important to note that, because of the central location of the hearth, firelight will have equally illuminated all areas of these circular dwellings. The furniture in the Late Neolithic house would have created areas of illumination and shadow, with the facing uprights of the recesses or 'box-beds' flatly lit, while the corners, sides, and interiors were thrown into shadow. Meanwhile, the shelves of the 'dresser' will have created a series of box-like focal areas of shadow. It is especially interesting that one such recess in structure 8, Ness of Brodgar contained a cache of objects including 'a large whale tooth, several polished stone items, a whalebone macehead and a polished shale object' (Card 2010, 2).

The location of the hearth will have had a critical impact on both the illumination of the house and the experience of inhabiting the house. We are uncertain of the construction of the roofs of Late Neolithic houses, although they are likely to have been composed of wooden or whalebone superstructures overlaid with turves and reeds

to provide insulation, although the recent excavations at Ness of Brodgar suggest evidence for slate roofing (Card 2010). The interior of these houses would have been smoky from the central hearth and we can expect that smoke was allowed to escape through a central space in the roof. As well as partially illuminating the house, the smoke from the hearth would have induced an environment where touch was of equal significance to vision.

Over the course of the Late Neolithic, houses alter architecturally from earlier forms in which the internal furniture is recessed into the walls, to an enlarged later form of house in which the furniture stands proud of the house walls (Fig. 4.6). This change in the character of the house would have had profound effects on illumination. In the earlier houses, the edges of furniture would have stood in deep shadow from the central hearth but, by the later period, the furniture would have offered alternating planes of illumination and shadow from the central hearth.

The partial illumination provided by the hearth will have altered the physical appearance and appreciation of the artefacts used in Late Neolithic houses. Broadly speaking, over the course of the Late Neolithic, the decoration of Grooved Ware pottery changes from an emphasis upon incised decoration to an emphasis upon applied, or relief, decoration in later phases of the Neolithic (Hunter and MacSween 1991). In an environment illuminated by the partial and changing light of the hearth, the relief decoration of this later Grooved Ware pottery would have stood out in shadow. Analysis by the author of the Grooved Ware pottery at Barnhouse indicates differences in manner of decoration for different sizes of pot, with the small- and medium-size vessels being decorated by incision and the largest with applied decoration. In addition, there are differences in the burnishing of vessels, with 89% of the small vessels being burnished, while only 11% of the large vessels are burnished (Jones 2005b, 275). This is especially interesting when we consider the spatial location of these different sizes of vessels in the house: large, unburnished vessels are placed at the periphery of houses in recesses and around the edge of the walls. Their relief decoration may have been visible but their unburnished surface will not have attracted the light; however, their rough surfaces will have offered greater grip and tactility. Small- and medium-size vessels are more often located in the centre of the hearth, where their finer decoration and burnish will have interacted with the light cast from the fire.

EARLIER

LATER

0 — 5 m
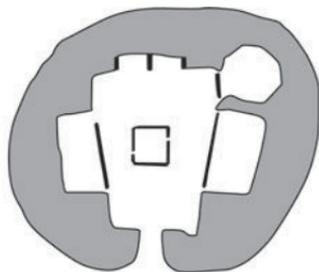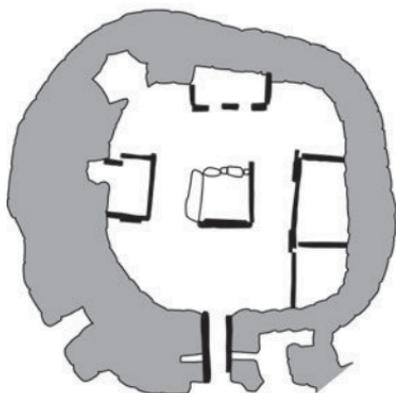
Fig. 4.6. The changing architectural configuration of the Late Neolithic house in Orkney (illustration by Aaron Watson from an original in Richards 1998)

The interplay between tactility and luminosity will have been evident with other objects, too, such as the carved stone balls with polyhedral shapes found at Skara Brae (Childe 1931). Maceheads (Fig. 4.7), produced from attractively veined rocks, occasionally exotic metamorphic rocks exchanged into Orkney, such as gneiss from the Isle of Lewis (Challands, Edmonds, and Richards 2005, 225), but also of attractive native rock sources such as banded mudstone (Simpson and Ransom 1992), are also found in Late Neolithic settlements. Maceheads of this native source were likely to have been produced around the firelight of the western hearth, House 2, Barnhouse, as evinced by a pecked and polished lump of banded mudstone from this area (Richards 2005, 148). The polished and multi-coloured rock will have had a glittering and changeable appearance in the light of the interior hearth.

Certain aspects of the architecture of Late Neolithic houses will have been encountered partially in terms of visibility and partially in
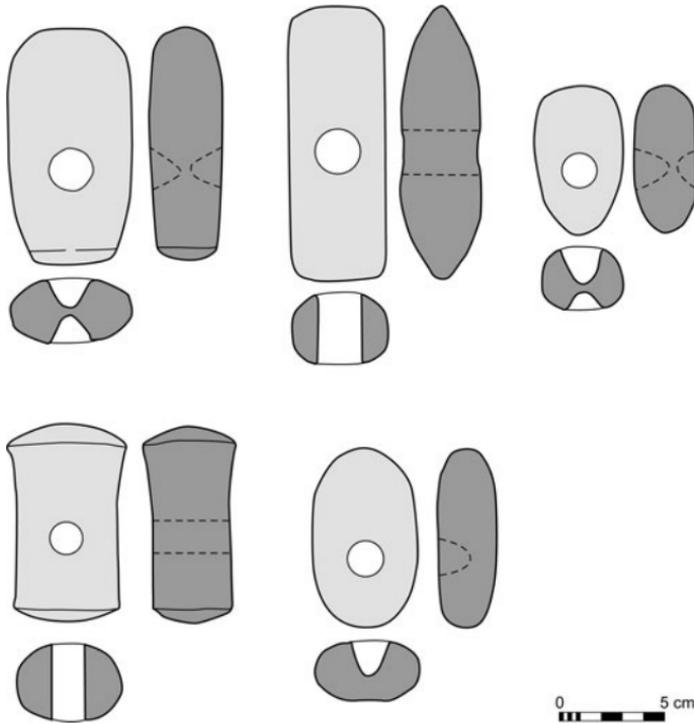
Fig. 4.7. Maceheads from Neolithic Orkney (illustration by Aaron Watson from an original in Simpson and Ransom 1992)

terms of tactility. This is particularly true of the incised bands of decoration encountered on the passage walls and house entrances at Skara Brae (Richards 1991), while the positioning of the recently discovered incised and painted panels at Ness of Brodgar—covered in pigments derived from ochre or haematite—also suggest that illumination and touch interplayed dynamically (Card 2010; Card and Thomas in press). This is also true of art in Late Neolithic passage graves (Bradley et al. 2001), where the fainter scratch art will have been encountered both by touch and the variable illumination of the torch. Importantly, preliminary analysis of the painted panels at Ness of Brodgar suggests repetition of performance, as many of these panels were layered with multiple layers of pigments (Card 2010, 2). More generally, the significance of colour is underlined by the whalebone 'paint pots' excavated by Gordon Childe (1931) at Skara Brae that contained pigments of white clay and red haematite.

I have argued above that the experience of firelight and smoke are of equal importance to people's appreciation of the dynamics of materials in Late Neolithic Orkney: people will have been acutely aware of the differing properties of materials in differing levels of lighting. While I have argued for the significance of the light from fires, we should not forget the importance of other sources of illumination. As Downes and Richards note, the orientation of houses will have imposed a temporality to the illumination of houses, with certain areas of the house being differentially illuminated at some times of the year. However, we should also remember that these changing effects of illumination will also have taken place over the course of the daily round, as the right-hand side of the house will have received the earliest rays of the sun, while the left-hand side of the house will have received the last rays of the sun. Luminosity will have offered a tempo to the experience of the day.

The construction of the house around the central hearth is critical as it incorporates the annual cycle of changing light in the solar calendar, while the centrality of the hearth also offers a central position to a primary source of light—firelight. These two light sources interact and create differing experiences of light at different times of year. For example, the variable illumination of the firelight from the hearth in midsummer will be compared against the slowly varying and more intense illumination of the midsummer sun. By contrast, at midwinter the controllable illumination of the hearth at the interior of the house will be all the more intense when compared to the weak illumination and sparse light of the season. At midwinter, firelight assumes an intense focus, while at midsummer natural light becomes a focus and, presumably, less time was spent within the house. The interaction of these lights will have offered a tempo for the experience of the year, and places and materials will have been experienced differently over the course of the year. The notion of the hearth as a central performative space is given added force by recent discoveries at Ness of Brodgar, where the focal hearth in structure 10 contained a central stone with a series of cup marks over which was deposited an upturned cattle skull (Card 2010, 2). The excavator, Nick Card, suggests, correctly in my view, that these deposits comprise a decommissioning ritual towards the end of the use of the structure.

In effect, the illumination of Late Neolithic houses involves a patchwork of luminosity. The slow, temporal cycle of the year is cross-cut by

other forms of illumination, such as the diurnal cycle of waking and quenching the hearth. The orientation of the house and hearth is significant and evidently refers to the striking differences in light levels apparent at different times of year. However, the position of the hearth suggests that firelight was also central to the house.

Luminosity, Intensity, and Performance

I have discussed the variable experience of light at different times of year and suggested that differing forms of illumination offer differing forms of experience. My discussion of light thus far has been abstract and I have not discussed the very different qualities of light over the course of the year. Rather than thinking abstractly of differing levels of illumination, it is important to remember that the light of mid-summer is enervating, while the light of midwinter is sluggish and draining. Differing light levels have differing intensities and it is these I now want to discuss.

Probably the clearest evidence for the significance of light comes from monuments on the Stenness Peninsula, where the earliest rays of light at midwinter illuminate Houses 2 and 3, Barnhouse (Fig. 4.8). These rays of light track across the interior of the house for around half an hour before disappearing. Towards the end of the same day, light illuminates the interior of the great passage grave of Maes Howe. Again, the light tracks across the interior of the tomb for around half an hour before eventually disappearing (Richards 1993, 1996). Light here is not a single clear and neutral entity, rather the light source is moving. Furthermore, it is creating intensities of experience: it is conjoining two differing regions of human experience, with the rising sunlight being associated with the living and the setting sunlight being associated with the dead. The briefness of the passage of light in these two architectural settings means that light is performative and produces an intensity of experience; the appearance of sunlight from a period of darkness to be followed by a period darkness is all the more intense as it enacts the possibility of the return of sunlight at midsummer.

Light can create performative intensities in other ways. For example, at the Stone of Stenness henge (Fig. 4.9), the standing stones in the perimeter have a differing character during daytime, as they produce areas of illumination and shadow, allowing those inside to

1 m

1 m
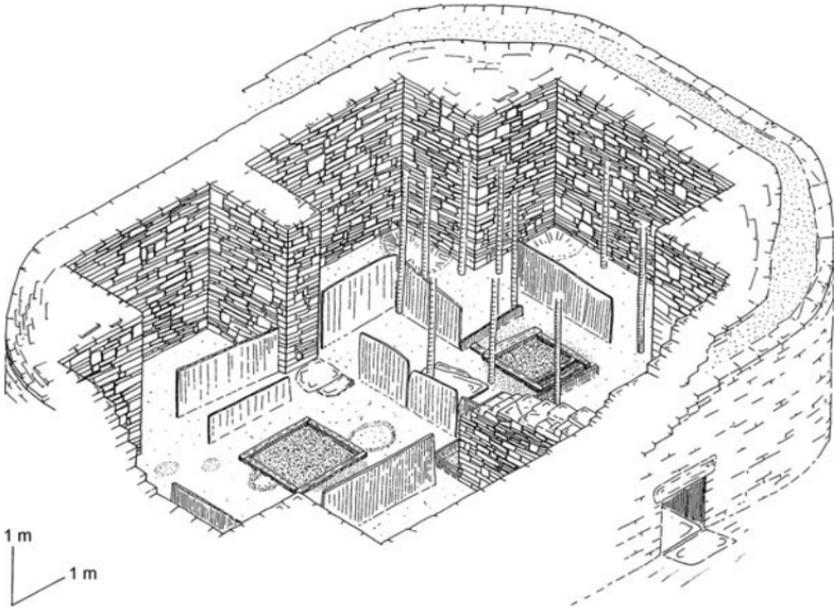
Fig. 4.8. House 2, Barnhouse, Orkney (reproduced from an original in Richards 2005)

view them against the illuminated backdrop of the landscape. At night, the hearth in the centre of the monument will create quite a different experience of the monument, creating a central point of illumination and throwing the standing stones into an encircling perimeter of deep shadow and darkness.

We have seen that light is performative and the performative character of light is echoed by the use of pigments at Ness of Brodgar (Card 2010). Although it is difficult to make any firm conclusions about the Ness of Brodgar evidence, it seems that colour—like light— was potentially deployed repetitively to alter the character of the stones to which it was applied. In effect, both light and colour interacts with, and animates, stone afresh.

Summary

In the discussion above, I reassessed Colin Richards' accounts of architecture and light in Late Neolithic Orkney. In his account, architectural forms exist as representations of an underlying social

Fig. 4.9. The Stones of Stenness, Orkney (photo by Aaron Watson)

order and light—as with other materials—merely exists as a static symbolic device. Instead, the approach adopted here discusses the architecture of Late Neolithic Orkney as one that is dynamically altered by light (both natural light and firelight); in this account architecture is not a representation, it is lived performatively.

My critique of Colin Richards' work need not invalidate the important observations he makes concerning the orientation of house hearths, the orientation of houses and tombs, and the significant role played by extremes of light in this northern latitude. Evidently, these orientations are built into Late Neolithic architecture in Orkney and were significant. However, rather than viewing them as reproductions of a rigid representational order, I prefer to see them as a dynamic playing out of, or working with, the environmental factors of this northerly latitude. Thus, rather than seeing cosmology as being overlaid on this environmental backdrop, cosmological concerns would be shaped in, and through, observations in the differences in lighting levels presented by the environment over the course of the year. Such a view offers a more dynamic and interactive account of the way in which architecture and cosmology are related in Late Neolithic Orkney.

The orientation on certain events of calendrical significance mean that light acts to create moments of drama, or performance, and

intensities that reference, not only the moment, but also the wider cosmological and calendrical cycle. In addition, the interplay of hearth light and natural light create differing appreciations of time, as differences in calendrical light levels intercut with the daily use of the hearth. The performative role of light is echoed by the repetitive application of colour to engraved stone at the Ness of Brodgar; here, too, colour is performed: as one layer of colour fades, another layer is applied. Colour is, therefore, not a constant; it is performed, it changes. My reassessment of the role of light in Late Neolithic Orkney provides a more textured account of the interactions between light and materials, of the way in which materials are performatively altered by the play of light, and the significance this may have had.

CONCLUSION: LIGHT, MATERIALS, AND AFFECT

By considering the changing character of light, I have also been able to explore the changing character of materials. The changing character of materials under light appears to have been significant to the prehistoric populations of Argyll, as the carving of rock art actively promoted a changed appearance under certain light conditions. In Neolithic Orkney, the orientation of house entrances and hearths upon calendrical events, and the centrality of the hearth, also actively incorporated light into the Neolithic house. One of the important outcomes of this engagement with light is that, because of the observed changes in the character of materials, light is simultaneously a means of observing changes in time.

The differential lighting of rock art sites in the Kilmartin region of Argyll brings to bear time, change, and movement. The carving of specific rock surfaces makes time apparent, as the appearance of the site changes at specific times of day. The performance of rock art production instantiates light at particular times, an act which links individual carved panels to other decorated panels in the landscape. Therefore, light links other times and other places. In a similar sense, because of their orientation, the houses and passage graves of Orkney also capture light and thereby capture instances of time at particular crucial moments of the year. The rock art of Argyll and the monuments of Orkney obviously focus light at particular times of the day or year, but light is much more significant than this. Rather, it is through

the play of light on materials throughout the day and throughout the year that an appreciation of time is gained. Light refers to particular instances, but the appreciation of light also goes beyond this; light is also an affect with wider significance. Light relates to movement and time: the altered character of lit materials offers a means of comprehending the immanent nature of time.

In the opening paragraph to this chapter, I questioned whether it was possible to examine the materiality of light, as light is an intangible, mutable, and inconstant subject. Rather than questioning whether the intangible and immutable subject of light is appropriate, instead, it is evident that the immutability of light and its changing qualities make it a more than appropriate topic of discussion. If materiality refers not to the properties of immutable and static matter but to the ways in which forces and materials interact and interrelate, then the discussion of light in this context is of critical importance.

5

Materials and Categories

INTRODUCTION

In the opening chapter of this book I discussed order in archaeological analysis. I argued that archaeologists throughout the 20th century sought to impose order on the unruly chaos of excavated material. One of the key principles by which this was done was through the creation of a series of defined archaeological categories, types, or styles. This chapter focusses on the issue of archaeological categorization, with a particular emphasis on pottery manufacture and deposition.

Pottery is particularly amenable to the analysis of archaeological categories. It survives well in most archaeological contexts: clay is a malleable substance and may be shaped into a variety of forms. Despite this, we observe consistent pottery making traditions; the subtle variations in pottery manufacture are routinely used to define temporal changes in the archaeological record. Changes in pot morphology are used to define archaeological cultures. In a sense, these imperatives of pottery analysis are taken for granted: it is almost as if—as a malleable substance—clay directly receives the impress of culture. If this is so, the material qualities of clay appear to have little role to play in pottery manufacture. Such an approach to artefact analysis assumes the prior significance of culture as a representational force and treats artefacts as blank canvases upon which cultural ideas are imposed, or, to use cultural theorist Jane Bennett's (2001, 80) memorable phrase, materials are treated as a blank that has had 'all life stolen from under it'. One of the principal aims of the book is to challenge this received assumption.

In many ways the issue of categorization lies at the heart of our understanding of the relationship between people and materials, especially if we recall the philosopher of science Karen Barad's point that

there is a mutual relationship between the ways in which we describe the world and the apparatus we use to describe it (Barad 2007). Barad describes the relationship between materials and human activity in terms of *matterings*: the relationship between the animacy of matter and human practices produce different compositions of matter.

We need to remember the heuristic status of archaeological categories and begin to consider a different set of questions concerning archaeological artefacts. How are archaeological cultures performed and what role do materials play in the forming of categories? Why should we observe stability and change in pottery making traditions? What is the significance of continuity in pottery traditions?

To this end, I will be looking at two case studies in this chapter. The first deals with pottery manufacture and changing forms and traditions over the course of the Neolithic of Orkney, Scotland, and the second examines continuity and tradition in the Early Bronze Age Beaker burials of Aberdeenshire, northeast Scotland. The first case study is intended to highlight continuity and change in a localized regional context, while the second case study looks at how tradition is maintained over a larger regional scale.

CATEGORIZATION

Since the early work of the founders of prehistoric archaeology, Christian Thomsen, Jens Worsaae, and Oscar Montelius, the formulation of categories and the analysis of stylistic change have formed the bedrock of the study of prehistory. Culture-historical methods of analysis have proved remarkably resistant to changing theoretical trends (Jones 1997, 27). Despite this, ethno-archaeological analysis has highlighted problems with the stylistic definition of artefacts (e.g. Hodder 1982) and has acknowledged the slipperiness of artefact categories (Miller 1985), especially when we take into account how artefacts are deployed and re-interpreted in a variety of social situations.

Many of the problems archaeologists encounter with artefact categories arise because objects are treated as natural kinds akin to zoological or botanical specimens. As such, they are assumed to have a predetermined set of properties that are amenable to categorization. However, it has long been recognized that archaeological categories are polythetic, possessing multiple attributes (Clarke 1968). More generally,

psychological work on categorization describes the view that categories are based on shared properties as a 'Classical' model (Lakoff 1987). Instead, practical experimentation shows that, cognitively, categories are typically formed as 'fuzzy' entities. Fuzzy categories are composed of two main elements: entities sharing a series of common features form the core of the category, while entities with only a few features in common exist at the edge of the category. A good ornithological example of this is that most people asked to consider the category 'bird' would describe a Robin (*Erithacus rubecula*) as a core member of that category, while most would consider an Ostrich (*Struthio camelus*) a peripheral member of the category (Lakoff 1987). The notion of fuzzy categories shifts our perspective away from the view that categories consist of predetermined entities and instead recognizes that categories are human products.

Robin Boast (1998, 2002) has considered the way in which the Beakers of Late Neolithic/Early Bronze Age Britain can be considered as polythetic, fuzzy categories. Boast analyses Beaker pottery in a series of regional contexts. His detailed and systematic analysis indicates how differing and distinct elements of pottery manufacture and decorative motif and design are articulated in differing regional traditions. Boast's analysis of archaeological categorization is an important step forward. Nevertheless, I have argued that Boast's analysis is restricted in scope, as it appears to predetermine the archaeological category 'Beaker'. As an alternative, I suggested the possibility of expanding the definition of categories to consider how individual artefacts are situated in wider citational or referential networks (Jones 2007, 122–40). If we are to consider the fluid creation of artefact categories more fully, we need to consider how categories are performed, maintained, and altered—something that has been missing in previous analyses. I want to pursue this line of enquiry below by first considering performance, improvisation, and materials. I will then go on to consider how performance relates to categorization.

REPETITION, PERFORMANCE, AND IMPROVISATION

I wish to argue that categories are not fixed or stable entities and that the reproduction of categories of artefacts does not involve the

mechanical reproduction of category-templates. To consider this, we need to focus on the issue of improvisation.

The anthropologists Tim Ingold and Elizabeth Hallam argue that improvisation is key to cultural performances: 'There is no script for social and cultural life', they say. 'People have to work it out as they go along' (Ingold and Hallam 2007, 1). In discussing the topics of creativity and improvisation, they distinguish between approaches that emphasize the significance of creativity, which typically figures creativity as a liberation from the constraints of the world, and those that emphasize the importance of improvisation. They argue that creativity is often treated as an opposition between human imagination and the determinants of nature and society. By discussing improvisation as opposed to creativity, we are, instead, focussing on an attribute that is of the world, as opposed to attempting to transcend it. Particularly significant is the point that improvisation is an ongoing process, or always in the making (Ingold and Hallam 2007, 3). Moreover, this is a process that occurs through interaction with materials. If we focus on improvisation as an embodied process, it becomes clear that—as stated above—copying or repetition is not a simple mechanical process of replication but instead entails a complex and ongoing alignment of observation of the model with action in the world: action that takes place with materials. The formal resemblance between model and copy is an outcome of an interactive process with materials and is not given in advance (Ingold and Hallam 2007, 5): it is improvisatory.

Having said this, performed or improvised activities—while involving a continuous flow—need not be smooth and homogeneous. On the contrary, research in human geography points out that performances may be composed of periods of repetition and boredom alongside periods of rupture, discontinuity, and change. What are the performative effects of boredom and repetition? The geographer Ben Anderson (2004, 743) argues that the immediate bodily effects of boredom that emerge with the incapacity in habit is one in which time-space does not move. Time-space creates, and is created through, mechanisms of stilling and slowing. Rather than equating this slowing and stilling as a being towards nothingness (the typical description of boredom and repetition), if we focus on the material qualities of the movements before and after boredom, boredom is disclosed as a profoundly enabling activity, characterized by a will to connect differently (Anderson 2004, 746–47). Rhythms of movement and affect as

the human body engages with, and encounters, the material sub-
stances of the world are performative and, in the carrying out of
tasks, the body will move between periods of inaction/repetition and
decisive action. Echoing this, J. D. Dewsbury's (2000) account of
performativity emphasizes the importance of *ruptures* in performative
activity (Dewsbury 2000, 477). Performances are characterized by
breaks and discontinuities. Performances of all kinds—whether craft
activities or others—are therefore heterogeneous in form, with con-
tinuous periods of regularity and repetition followed by events of
activity and change.

REPETITION AND SIMULACRA

The nature of performance feeds into our consideration of the nature
of categories, as discontinuities and repetitions in action are integral
to the bodily process of category formation and reproduction. There-
fore, I argue that categories are not simply thought and constructed:
they are the product of improvisatory activities.

   A performance-based perspective on categories returns us to the
question of citation. To reiterate, by discussing citation we are treat-
ing categories not as given social or cultural attributes, but as cat-
egories constructed through performance. Categories are therefore
characterized not by a pre-existing essence or unchanging social
determination, but by the ever shifting dynamic of performance.
Following the philosopher Gilles Deleuze (2004), I want to develop
this concept further. A category tends to enable us to see a class of
things as the same, despite their differences. This classical, represen-
tational model of categories prevails in much contemporary archae-
ological categorization. On this basis, the repetition of categories
means copying things as faithfully as possible in an attempt to adhere
to a prototype, model, or origin. Equally, we could note that each
repetition of a thing is always a different inauguration of that thing,
transforming it contextually and historically. This complicated rela-
tionship between the prototype or origin and the copy, leads us to
consider copy and original as *simulacra*. As Deleuze (1990, 262) notes
'the simulacrum is not a degraded copy. It harbours a positive power
which denies the original and the copy, the model and the reproduc-
tion.' On this basis, the act of repetition produces difference—it

produces a series of forms that are similar, but also different, to each other. By necessity, categories, as groups of similar things, are composed of simulacra; categories are composed of groups which it is permissible to categorize because of their similarity, but which all differ.

I take the above to be an incontrovertible statement of fact. Anyone who has spent time examining categories of archaeological artefacts would recognize this state of affairs. Returning to my argument in Chapter 1, I believe that difference is suppressed in archaeological analysis to retain a semblance of order and stability. I believe that this desire to order and regularize comes at a cost, as the performative and dynamic nature of the past is overlooked at the expense of creating a routinized and static vision of it. Indeed, the creation of stable and fixed archaeological categories provides a stable substrate over which to overlay systems of signs. Fixed and stable categories therefore *underpin* semiotic analyses of artefacts.

To sum up this argument, we have shifted away from the traditional archaeological view of fixed or stable cultures or types: the treatment of categories as natural kinds. Instead, I have argued that categories are performed and that, through performance, the rhythm and repetition of tasks produces certain affects and effects. Repetitions produce dynamic differences in categories. All this suggests that we cannot take archaeological categories for granted; we need to consider how categories are maintained, changed, and performed. Thus far, this discussion of performance has only lightly touched on the question of materiality. To do this, I want to introduce the first case study in this section, an analysis of pottery production in a series of settlements in Neolithic Orkney.

CASE STUDY ONE

Pottery Production, Tradition, and Change in Neolithic Orkney

The islands of Orkney, an archipelago of some 70 islands of varying size, are situated off the north coast of Scotland. The archaeology of Orkney commences with human activity in the late Mesolithic, mid-5th millennium BC (Saville 1996). The impact of Mesolithic communities is most strikingly observed in the pollen record. The climax birch and hazel

woodland saw at least three episodes of decline that led to the creation of an open heath/grassland landscape, not dissimilar to the Orkney of today. These dramatic changes in the nature of the landscape occur from the Mesolithic to the Neolithic (Tipping 1994). This change in tree cover would have substantially altered the perceptual experience of the Orkney landscape, with the environment of the Neolithic being largely dominated by stone (Jones 2005c).

The settlement record for Neolithic Orkney is remarkable, with well-preserved stone-built houses from both the earlier and later Neolithic; the settlement architecture of the Early Neolithic (4000–3300 BC) contrasts with that of the Late Neolithic (3300–2500 BC). Early Neolithic houses are generally characterized by linear forms, most clearly highlighted at Knap of Howar, Papa Westray (Ritchie 1983). In contrast, Late Neolithic houses tend to be circular in form with a characteristic suite of features including a central hearth, a rear 'dresser', and right- and left-hand 'box-beds', all constructed of flag-stone. These features are set in a cross-shaped arrangement within the house and are most clearly seen at settlements such as Barnhouse (Richards 2005) and Skara Brae (Childe 1931). This brief overview of the settlement record offers an idealized picture of the differences in settlement structures. With recent discoveries, this picture is begin-ning to change and we appear to observe more complexity and variation (see Chapter 4). In what follows, I will draw out a more nuanced account of differences in settlement.

Changing Settlements in the Bay of Firth Region

I will focus on the results of a research project concerned with the Neolithic settlement sequence in the Bay of Firth region of Mainland Orkney (Fig. 5.1) running from 1993–2003 (Downes and Richards 2000; Card et al. in press). Here, I will examine changes in settlement architecture alongside changing pottery traditions. The Bay of Firth region of Orkney has a concentration of Neolithic passage graves, including those at Quanterness, Wideford Hill, and Cuween Hill (Renfrew 1979; Davidson and Henshall 1989). These monuments occupy a large natural bowl or amphitheatre looking out to two tidal islands and the open sea. The settlements and passage graves in the region appear to form a discrete cluster and the tombs are
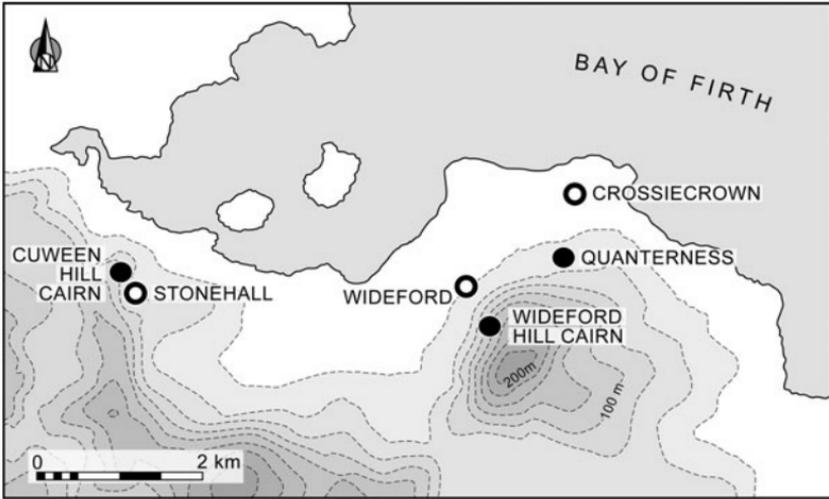
Fig. 5.1. The Bay of Firth region, Orkney with settlement sites indicated (illustration by Aaron Watson from an original in Downes and Richards 2000)

intervisible; the entrances of Cuween Hill and Wideford Hill directly face each other.

The initial research objective was concerned with territoriality: could settlements be located relative to each tomb, as had previously been predicted by Colin Renfrew (1979)? Fieldwork confirmed the presence of settlements in close proximity to each passage grave, although the picture was more complex than that predicted by Renfrew. In some cases, settlements had been occupied and abandoned before the construction of the passage grave, as at Wideford Meadow. Instead, what the project focusses on is the biography of inhabitation and the connections between settlements. As such, it offers an unparalleled picture of changing settlement and craft practices over the entire course of the Orcadian Neolithic. I will begin with an account of settlement change in the region before going on to discuss the changing dynamics of pottery production.

Wideford Meadow

The earliest settlement excavated is Wideford Meadow, situated just below the Wideford Hill passage grave. The settlement begins with two circular post-built houses with central hearths, with dates in the

earliest phases of 3530–3350 cal BC. These houses are associated with Early Neolithic 'Unstan ware' pottery. Following the abandonment of these houses, a linear stone-built house, associated with midden and occupation debris dating to approximately 3240–3100 cal BC, was constructed to the north. To the east was a cobble pavement associated with the house. The pavement was interpreted as a working floor as large concentrations of lithics and pottery were recovered from this area. This site is important as it is the earliest Neolithic settlement yet recorded from Orkney. In addition, it has the largest assemblage of Early Neolithic pottery.

Stonehall

The settlement at Stonehall is situated just below the Cuween Hill passage grave. Stonehall is a Neolithic village with several discrete, linear stone-built houses constructed both on and below a prominent grassy knoll (Fig. 5.2). These houses are similar in character to the later house at Wideford and would be considered typical Early Neolithic house forms. They are all associated with plain pottery bowls of Early Neolithic type. In addition, the settlement included a large house structure very similar in character to the immense Late Neolithic house excavated at Barnhouse (Richards 2005). This structure is associated with Late Neolithic Grooved Ware pottery and appears to have been transformed towards the end of its life, as several of the hearths appear to have been transformed into burial cists (although owing to the acidity of the soil, no bone was discovered to confirm this). On the face of it, we appear to have a dispersed Early Neolithic village, with evidence for settlement shift and nucleation in the Late Neolithic. It was all the more curious, then, to discover that the radiocarbon dates for the occupation of all structures suggest comparable dates for occupation in the Late Neolithic, with dates centring on *c.*3300–3000 cal BC.

Crossiecrown

The third settlement (Fig. 5.3) was situated on a large flat shelf of arable land, just above the shoreline and within sight of the Quanterness passage grave. The site consists of a large, double house with two central hearths, similar in character to House 2, Barnhouse (Richards 2005). The site was associated with a substantial midden, the lowest deposits
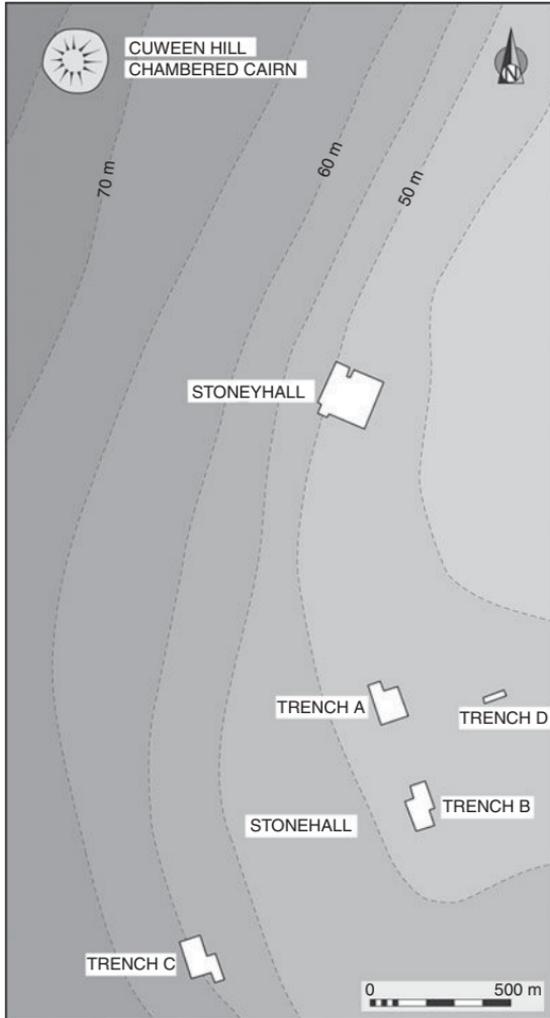
Fig. 5.2. Area plan of the Stonehall excavations (reproduced from an original in Downes and Richards 2000)

being dated 3120–2910 cal BC. There was good evidence for midden material having been incorporated within the wall cores—a common practice for Neolithic Orkney. The house was associated with Late Neolithic Grooved Ware pottery and some of the first evidence for Early Bronze Age 'Beaker' pottery in Orkney. This site gave a spread of dates spanning the Late Neolithic from 3120–2910 cal BC for the lower midden deposits, to 2780–2560 cal BC in the upper midden. Dates for

123E, 133N

135E, 121N

0 — — — — — 2
Metres

☐ BAULK

☐ CLAY
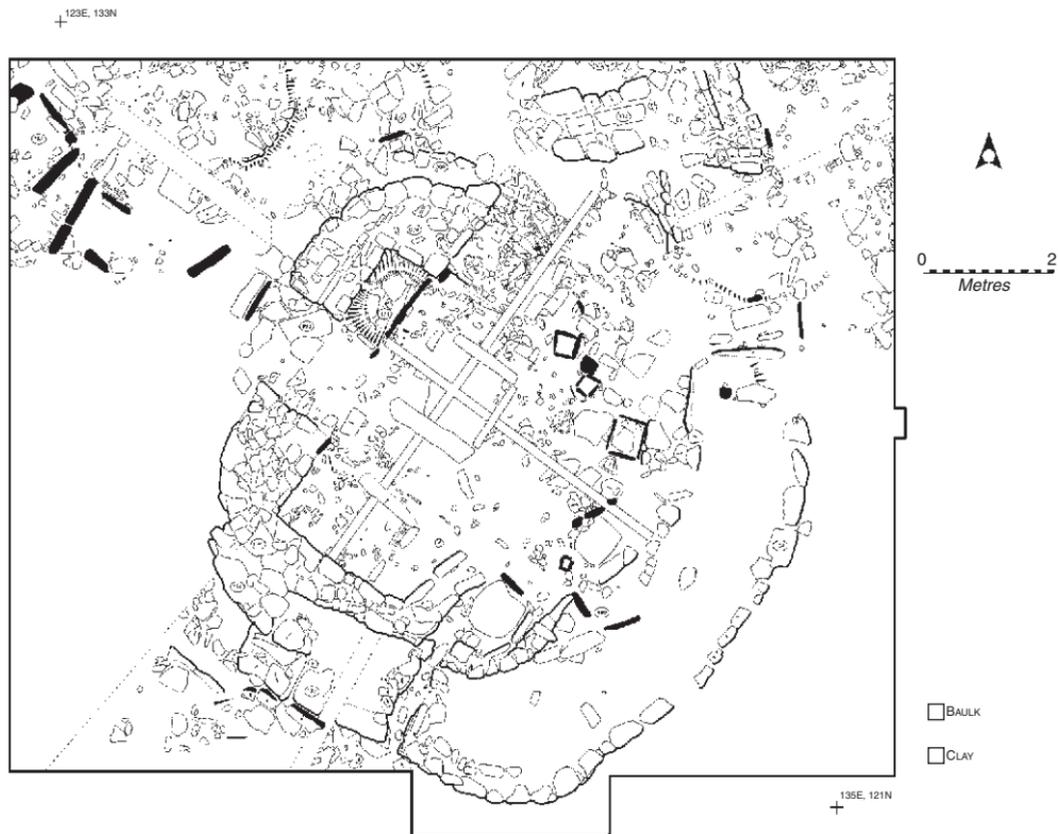
Fig. 5.3. Plan of the Crossiecrown settlement

activities associated with the hearths in House 1, Crossiecrown are relatively late (2480–2270 cal BC). Beneath this settlement were earlier, partially destroyed, settlement structures associated with Early Neolithic 'Unstan ware' pottery. This site is therefore important as it offers evidence for all phases of the Orcadian Neolithic.

Performance, Tradition, and Change: Inhabitation in Late Neolithic Orkney

Based on the evidence from the three settlement sites introduced above, it is possible to write a long-term account of practices of dwelling in this region of Neolithic Orkney. Our account must begin with the clearance of the climax vegetation by Mesolithic communities prior to 4000 BC. This activity generates immense environmental changes and forms the backdrop to much Neolithic activity. The archaeologist Graeme Warren argues for the symbolic significance of woodlands during the Scottish Mesolithic (Warren 2005). He suggests that the changing character of woodlands offered a means of understanding temporal and seasonal changes (Warren 2005, 72–4). Furthermore, there is good evidence for the management of woodland in the Mesolithic (Tipping 1994; Warren 2005, 67–70); woodland was not simply experienced, it was also acted upon. This 'management' practice is starkly observed in Orkney, with the loss of tree cover over the course of the Mesolithic and Early Neolithic. The timber posts of the earliest houses at Wideford Meadow are significant, then, as the performance of building houses of timber will have referenced or cited the resources of earlier periods of Orcadian prehistoric life in a form of structure that simultaneously recalls Mesolithic settlement structures from other regions of Scotland. The use of timber posts to construct houses may also be considered as a means of 'anchoring' the settlement in place, utilizing resources with an apparently ageless character.

Over the course of the Early Neolithic, the management of woodland had produced a tree-less landscape. Belonging and attachment to place at this later stage are then best expressed through the use of a far more permanent resource: the local Caithness flagstone that outcrops dramatically on the Orkney coasts (Jones 2005c). It was for this reason that the later constructional phases at Wideford Meadow and Crossiecrown were drystone buildings. This rupture with the

past was marked by a novel constructional technique and linear architectural form drawing a distinction with earlier circular forms of timber construction. Although the construction of the building at Wideford marked a break with the past, a foundation deposit of pottery from the earlier settlement was incorporated into the wall of the structure to perform continuity of practice. Notably, the central hearth of earlier dwellings was retained, although this too was edged with stone unlike the scoop hearths of earlier periods. The continued centrality of the hearth is suggestive of a continuity of communal social relations in the earliest phases of the Orkney Neolithic.

The linear drystone architecture of the Early Neolithic continued in use into the later Neolithic, as observed with the houses at Stonehall. Towards the end of the later Neolithic, and drawing on practices from neighbouring settlements, as well as more distant kin in settlements such as Barnhouse, a novel circular or oval architectural form that embodied aspects of earlier settlement architecture was constructed at Crossiecrown. This architectural form was also used in the construction of the neighbouring passage graves at Quanterness, Cuween, and Wideford. It seems likely that these three passage graves were built simultaneously given their analogous ground plans and their intervisibility, although there are no radiocarbon dates to substantiate this.

The use of this double-hearth house construction marks Crossiecrown out as a focal settlement for the region, around which several groups of people gathered, just as the double-hearth house at Barnhouse in the centre of mainland Orkney was used as a gathering place. People from the Barnhouse settlement were likely to have been actively involved in the construction of these sites and to have buried their dead in the Quanterness passage grave. On the basis of petrological analysis, it is evident that Grooved Ware pottery that originated at Barnhouse was deposited at Quanterness, alongside Grooved Ware pottery from Crossiecrown and other locations (Jones 2002). Further potential links with the settlement of Barnhouse were performed by the construction of an immense circular drystone hall on the edge of the settlement at Stonehall, similar in form to the later structure, Structure 8, at Barnhouse (Richards 2005).

Eventually, as the life of the Stonehall settlement came to an end, the space of communal gathering was transformed into a gathering place for the dead prior to their transferral to the passage grave. Similarly, the settlement at Crossiecrown had a long history and, as such, accrued significance as a focal place in the late Neolithic

landscape of this region. As the settlement of Crossiecrown was finally abandoned, it was deliberately filled in with the accumulated midden material of its occupants—commemorating the lives once lived at this place. In addition, two decorated vessels of the new style of 'Beaker' pottery were smashed and deposited in the uppermost midden material placed in the house, closing the use of the site.

Performance, Tradition, and Change in Pottery Production

We can observe similar performative practices occurring in pottery production and use at the three settlements. My account of continuity and change in pottery production comes from first-hand analysis of the three pottery assemblages, the analysis of a suite of petrological thin-sections from each site, and field survey for the resources used in pottery production in the region.

Earlier Neolithic Pottery Production

The earliest pottery was produced at Wideford Meadow. Pottery associated with the circular timber houses included a mixture of decorated and undecorated bowl forms, suggesting that decoration was integral to the earliest pottery. Decorated and undecorated forms continued to be produced into the later phases of the settlement. The clay used to make this pottery was readily available at the shoreline, where igneous dyke rocks had weathered. As the weathering product of the dyke rocks, the clay was used in an untreated form with no tempering material added. Pots were formed by first creating a circular impression in the ground which was lined with clay. From this circular and rounded base, the walls of the vessels were built up with successive rolls of clay until the vessel reached the required height. The untreated clay containing small fragments of weathered rock worked against the fingers of the potter to produce vessels with relatively thin walls, although vessels thickened towards the collar or rim area. Decoration of these vessels by impression was confined to the upper collar of the pot and is comparable to the decoration of contemporary pots at nearby Crossiecrown and the decoration found on pots in several contemporary chambered tombs (Fig. 5.4). It appears to constitute an Orkney-wide decorative tradition.
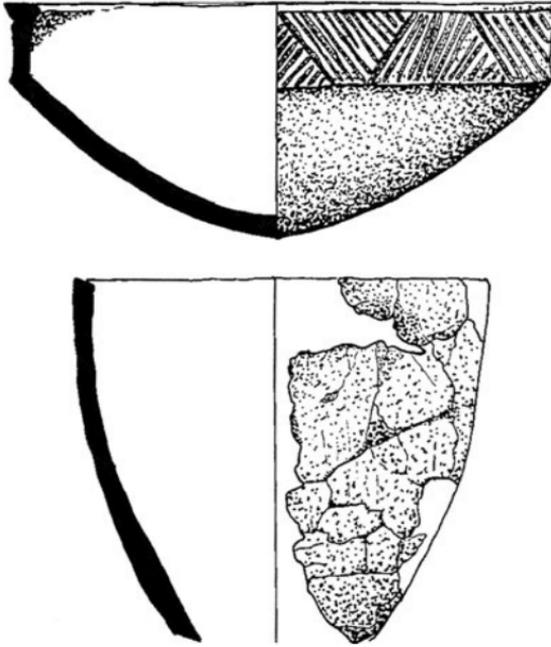
Fig. 5.4. Unstan ware and plain ware bowl (reproduced from an original in Jones 2000)

Later Neolithic Pottery Production

The practice of using untreated clay sources for pottery continues into the later Neolithic at Stonehall. While round-based pots were still produced here, a taller profile predominated, occasionally decorated with sparing blobs of clay added to the outer rim (Fig. 5.4). A much smaller, circular impression in the ground was required for forming the early stages of these vessels; again, the walls were formed of successive rolls of clay. These vessels had much thicker walls than previously, suggesting that the untreated clay was at the limits of its mechanical capabilities. At a later date, at Stonehall and Crossie-crown, these taller profiles were now produced with flatter bases and were decorated by incision and the addition of bands of clay on their outer surfaces (Fig. 5.5). These vessels were begun on flat, stone surfaces; it is possible to discern experimentation with a variety of base forms. In some cases, rounded bases were stabilized with a ring of clay, although in most cases the bases were flat and angled in
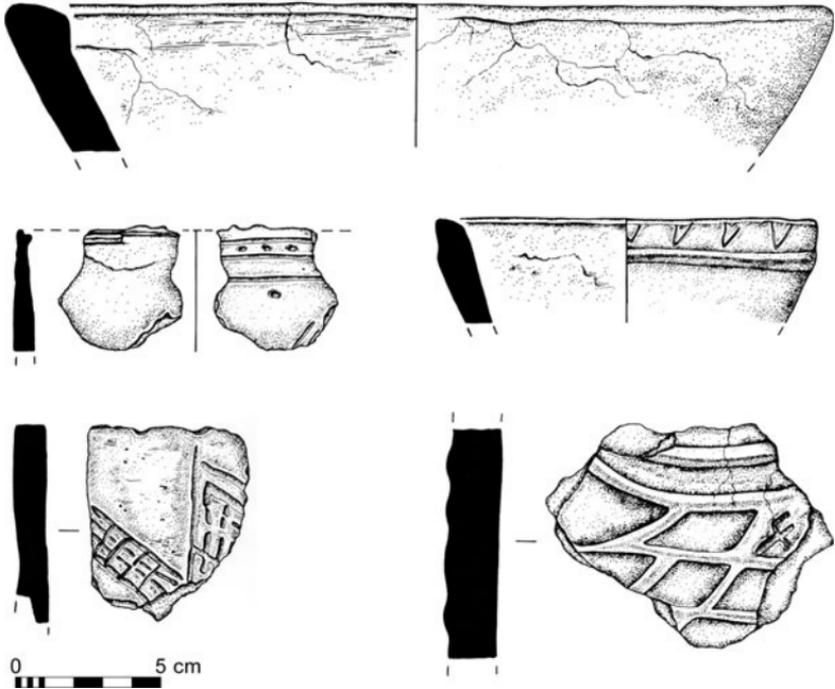
Fig. 5.5. Grooved Ware from Crossiecrown (reproduced from an unpublished original)

profile. To accommodate the flat bases and taller profiles of this later Neolithic Grooved Ware, the clay was treated before firing by the addition of igneous rock and sandstone quarried from the seashore. Notably, the same sources of igneous rock were utilized as previously, referencing earlier places of clay procurement but transforming them in the process. The decoration of these pots was no longer uniform. Indeed, decoration differed considerably between the contemporary settlements of Crossiecrown and Stonehall.

Towards the end of the occupation sequence at Crossiecrown, a new form of pot was produced (Fig. 5.6); its form based on novel pots exchanged into the islands from further south. These Beaker pots referenced elements of the previous Grooved Ware design scheme with incised decoration. Their manufacture cited earlier forming and tempering strategies. Again, pots had flat bases, although the clay utilized to form these pots was more refined: the grit used in the pots—although from the same igneous rock source as previously—
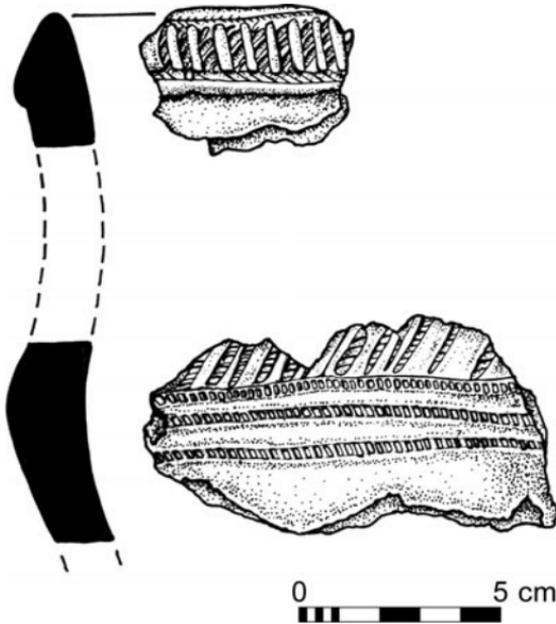
Fig. 5.6. Beaker from Crossiecrown (reproduced from an unpublished original)

was crushed much finer to accommodate the thinner walls and more graceful profile of the pots.

Curiously, while the potting tradition had transformed and changed over millennia, the uses of pots, to hold cattle milk (determined by gas chromatography/mass spectroscopy (GC/MS) analysis; Mukherjee 2004), had continued unchanged through the course of the Neolithic.

Materials, Continuity, and Change in Neolithic Orkney

I have discussed improvisation, tradition, and change in the settlement record and pottery of a specific region of Neolithic Orkney over at least two millennia. I now wish to begin by focussing on the pottery. Interestingly, the pottery traditions of the three settlements analysed exhibit evidence for both continuity and change. One of the most striking points to emerge from the analysis of the petrological thin-sections, is the continuity in the resource used to make pottery in the settlements of the region: most of the tempering material used to strengthen the

pottery was derived from a single, discrete igneous dyke outcropping on the shoreline in the Bay of Firth. Against this, we observe differing strategies of use, with clay being firstly untreated, then refined and ever more refined towards the end of the sequence. Again, we also observe change in the forming of the pots over time, with rounded bases being produced to begin with. We observe a period of experimentation around 3300 BC with changes in the height and thickness of pots and experiments with forming flatter bases. Through much of the later Neolithic, and with the production of Beaker pottery, flat bases have become the norm. Throughout the tradition, one constant was maintained—the pots were consistently used to contain cattle milk.

The production of pottery is characterized by periods of repetition and discontinuity. Obviously, the production of pottery is not a continuous activity; it is difficult to be certain about the periodicity of production although, given the inclemency of the Orcadian weather and the requirements of drying prior to firing, it seems reasonable to assume that pottery production was a seasonal activity, probably occurring in late summer. It is notable that the earlier Neolithic pottery has a high incidence of cereal impressions, suggesting production around harvest time (Jones 1999). The reproduction of categories almost certainly involved working with previous pots as templates and, necessarily, involved the improvisatory recall of potting skills. Repetition of skills and procedures, improvised and recalled from year to year, produced a consistency of pottery forms over a considerable period of time. Around 3300 BC, we begin to observe a series of ruptures in the products of these skills, as round-based pots with thicker walls began to be produced at Stonehall and, at a later stage, flatter bases were produced, again with thick walls, forming Grooved Ware pottery forms. It is important to note that the repetition of bodily skills involves working with the physical and mechanical properties of materials. Clay was used in untreated form for a considerable period and as more complex composite Grooved Ware pot forms with distinct bases and distinct joins between base and wall began to be produced, a more refined clay was required. In this case, coarsely crushed grit was added to control the shape and form of the pot during manufacture. The materials required for pottery production act upon the potter to promote certain consistencies and continuities in production techniques; however, each pot produced was the product of improvisation. These improvisations often produced continuity, but we also see the repetition of skills

producing novel forms. Furthermore, we observe techniques and materials being extended and re-worked. Certain continuities appear immovable: despite the re-working of the grit used in pottery composition, the same igneous rock resource was continuously utilized over a considerable period of time and the use for which pots were made—as containers for cattle milk—appears to remain constant. The production of pottery over the lifetimes of the inhabitants was a performative, improvisatory activity. As such, it produced long periods of continuity and bursts of innovation and change—all of this as potters worked with a uniform set of materials and resources.

How do these periods of continuity and change in pottery production relate to changing settlement architecture? I charted a change in settlement forms from the earliest circular timber-built houses at Wideford Meadow, to linear stone-built structures which appear at Wideford Meadow, Stonehall, and the earliest phases at Crossiecrown. These continue to be built into the later Neolithic at Stonehall, although we do begin to see other novel forms of architecture being built, such as the double-hearth house at Crossiecrown and the large circular structure at Stonehall.

Notably, the changes in pottery traditions do not coincide with changes in settlement architecture. Instead, they appear to intersect them. For example, round-based Unstan ware pottery was produced both in the circular timber houses and stone-built houses at Wideford. Flat-based Grooved Ware pottery was produced in very different architectural contexts—the double-hearth house at Crossiecrown and the circular structure at Stonehall. Further, the change from flat-based, bucket-shaped Grooved Ware pottery, to flat-based, S-profiled beaker pottery occurred in the later phases of occupation at Crossiecrown. The tempo of settlement construction and reconstruction and the tempo of pottery tradition and change occur at differing periodicities and intensities, although, nevertheless, they do occasionally cohere. Materials also cohere, as clay is also used as a constructional material used to floor the later house at Crossiecrown.

Potting skills are improvisatory and performative, and we observe continuity and rupture in pottery forms over the period of inhabitation of the three settlements. However, these potters, while working with the physical capabilities and mechanical properties of clay, were also producing pots in a changing physical environment. Here, I want to emphasize that potting skills emerge as part of a material nexus, as part of a wider materiality. As discussed at the outset, the physical

environment of Orkney was altered from an Early Neolithic, tree-filled landscape to a later Neolithic, tree-less landscape dominated by stone. The differing materials available were incorporated into the settlement architecture of the period; indeed, these changes were also worked into the participatory improvisation of pottery-making as we observe a gradual shift from round-based pots manufactured and often contained in pits during use in the earthen floor of houses as at Wideford Meadow and Knap of Howar, Papa Westray (Ritchie 1983). With the dominance of a stone-built architecture we begin to see the emergence of flat-based Grooved Ware vessels. Often, these vessels are built into the stony architecture of Late Neolithic houses, as is the case with the largest vessels at Barnhouse (Jones 2002; Richards 2005) and Skara Brae (Childe 1931). These changes in pottery technology are improvisatory and emergent; they do not appear rapidly with changing architectural traditions. Rather, they are the result of a dynamic interaction between materials and skills: a process of mattering.

CASE STUDY TWO

Technologies of Remembrance: The Beaker Burials of Northeast Scotland

This chapter is concerned with the relationship between repetition and materiality. In Case Study One, we observed the way in which repetition performs rupture and change in pottery traditions. At the end of the Neolithic sequence in Orkney, this repetition and change produced a novel form of pottery: Beakers. In this second case study, I want to consider an example in which repetition performs continuity of tradition in the context of the Beaker burials of northeast Scotland. As I discussed at the beginning of this chapter, archaeologists routinely define categories of archaeological artefacts. Yet, there is little reflection on how categories are created and maintained; how do traditions remain the same? That will be the major focus of this second case study.

On Beakers, Interaction, and Development

Before we begin to look at the specific group of prehistoric burials that comprise this case study, I want to briefly introduce, and discuss,

Beaker pottery. Beaker pots are relatively finely produced ceramic vessels, often decorated with cord, comb, or other forms of impression. In many regions, they accompany the corpse in burials and are often associated with a stereotypical assemblage of artefacts, including archery equipment, such as stone bracers or wrist guards, barbed and tanged flint arrowheads, and metalwork. Beaker pottery is found in a wide distribution across Europe, from the Iberian peninsula and North Africa in the south, to the northern European plain and—at the limits of distribution—southern Scandinavia, from Ireland in the west to Hungary in the east. One of the major areas of discussion centres on the origins of the tradition and its relationship with the Corded Ware tradition of northern and central Europe.

Traditionally, it was supposed that these two ceramic traditions were produced in succession over the third millennium BC; however, with new radiocarbon analysis the picture becomes more complex and more interesting. The earliest radiocarbon dates for Beaker pots in Europe come from Portugal: the earliest vessels were distributed up the Atlantic coastline. It therefore appears that we have two contemporary groups, both employing fine, decorated pottery, with Beakers predominating in the south and west, and Corded Ware to the north and east. Analysis of the relationship between these two groups suggests that they were initially linked together through an exchange network associated with the exploitation and long distance movement of Grand Pressigny flint from western France (Salanova 2002). This material was distributed over an enormous area, extending along the Atlantic coastline as far north as the Netherlands; it also extended inland to connect the distribution of the two pottery styles. Over time, the two traditions lost their distinctive identities and, in this second phase of interaction, new artefact types were adopted and the distribution of pottery extended into Britain and Ireland (Needham 2005).

The history of Beaker pottery is a history of interaction, repetition, and change. The development of this tradition appears to encompass both flexibility and convention. In many ways, as a category, Beaker pottery and its associated practices embody what I described earlier as a simulacrum: as categories of artefacts defined by their similarity but which also differ. The briefest analysis of Beaker pottery across Britain and Ireland indicates difference, with obvious differences between southern and eastern England where Beaker burials dominate, and Ireland, where Beakers are mainly associated with settlement assemblages. We can observe further differences between the south, where

Beaker burials are associated with burials in coffins or beneath earthen barrows, and the north, where Beaker burials are found in stone cists. There are, of course, commonalities across all areas: beakers are often associated with the re-use of Neolithic sites, such as henges (northern and southern Britain) and passage tombs (Scotland and Ireland).

Beaker Burials in Northeast Scotland

Recent radiocarbon analyses have refined the date range of beakers from *c.*2400–1800 cal BC. A number of dates on human collagen have been obtained from northeast Scotland. These include: 2190–2160/2145–1900 cal BC from Fetterangus; 2345–1955 cal BC and 2460–1880/1835–1825 cal BC from Keabog; 2280–1755 cal BC from Dalladies; 2015–2005/1980–1595/1570–1525 cal BC from Berrybrae; and 2570–2535/2505–2140 cal BC from Boghead (Kinnes et al. 1991). These dates indicate that many of the northeast Scottish Beaker burials are relatively early in date, although some of the dates (such as the first from Keabog) offer a broad range and should be treated with caution.

As with other regions in the British Isles, beakers in northeast Scotland are also associated with earlier monuments, such as the long barrow at Dalladies (Piggott 1972) and ring mounds at Boghead (Burl 1984) and Midtown of Pitglassie (Shepherd 1996). However, this region has a high concentration of Beaker burials in stone cists (Shepherd 1986). These are occasionally found in cemeteries, as at Borrowstone (Shepherd 1986, 13), but are usually isolated or found in pairs. Apart from the site at Memsie, they remain unmarked by cairns. In short, the Beaker burials of this region are rarely monumentalized and are not placed in proximity to notable landscape features, generally being situated on the crest of low gravel knolls (Shepherd 1986, 13).

Curiously, despite their relatively isolated position in the landscape, the mortuary practice associated with these burials is strictly conventionalized. The performances associated with burial involve the digging of a pit lined with stone slabs (a cist) into which a crouched or flexed individual is inserted. Male and female burials are typically oriented in a precise fashion and grave goods are placed in strict locations at the head or foot of the burial (Shepherd in Greig et al. 1989). The cist is then sealed with a stone cover. Sometimes, as

at Chapelden (Greig et al. 1989), a closing deposit of smashed beaker sherds covers the top of the sealed cist.

Beaker Pottery in Northeast Scotland

Analysis of the 104 individual Beaker pots associated with these burials in Marischal College Museum, Aberdeen similarly indicates regularities (Plate 9). Most of the Beaker vessels from this region are relatively short and squat in shape. The range of motifs used to decorate the pots is restricted. These include: criss-cross motifs, zig-zag, vertical lines (short), chevrons—both vertical and horizontal—and lenticular impressions. One hundred per cent of the vessels had one or more of this range of motifs. An unusual motif that distinguishes the region is the criss-cross. This is used inventively to define borders of zones of decoration and as an infill motif. Only 7 per cent of vessels possessed this motif. In addition, comb decoration seems to predominate as a major method of execution. The initial analysis examined distinct design elements or motifs.

As well as looking at distinct design elements, my analysis examined zoning and the repetition of motifs. Zones are defined as distinct breaks in bands of decoration on the pot surface, often distinguished by spaces in decoration, but also defined by decorative elements. Typically, most beakers have between 1 and 6 zones, although some 6 per cent of examples were produced with up to 15–29 zones of decoration. In addition to looking at distinct zones of decoration, I also examined the symmetry of distinct design elements or motifs. Often with smaller numbers of zones of decoration, we see the simple repetition of design motifs, or one motif 'sandwiched' by other motifs. Motifs can also be creatively repeated, as with motifs that are reversed. However, with the more complex pots, with zones of decoration numbering 15 or more, we observe complex and inventive patterns produced from the repetition of simple design elements, often with reversed or opposed design elements.

To summarize, we observe regularities in Beaker decoration, with occasional design motifs, such as the criss-cross, marking out certain beakers. In addition, most beakers have zoning, with low numbers having complex decoration with 15–29 zones of decoration. A picture emerges of regularity, with occasional unusual motifs, and complex designs of multiple zones. However, on all beakers we observe repetition

of design elements. I want to emphasize the commonalities in decoration amongst Beaker potters in this region. As a whole, I noted that, as a category, beakers can be considered as simulacra, as the category is distinguished by commonality and flexibility, repetition and difference. The beakers buried with individuals in third millennium BC northeast Scotland, are—in some ways—no different to those of other regions. They are distinguishable as Beaker pots; however, this region possesses great regularity in design, with little obvious divergence from this.

This region can be compared with the variety of Beaker decoration across Britain as a whole. Clarke (1970, 16) notes that there are 38 design elements or motifs used to fill the zones on British beakers. He further argues that there are 10 motif types that underlie the decoration of all beakers (Clarke 1970, Appendix 1.4), his Basic European motif group 1. A further group of motifs, his Primary Northern British/Dutch motif group 2 conform to many (but not all) of the motifs found amongst the beakers of northeastern Scotland. We therefore have a variety of motifs deployed in Britain but groups of these motifs being deployed together in certain regions. This seems to relate to the pattern observed in northeast Scotland.

Beaker Mortuary Practices

In addition, the mortuary practice associated with Beaker burials also possesses strong commonalities almost all beakers being buried in short stone cists. We also observe regularities in the positioning of grave goods with respect to the corpse, and the orientation of the corpse based upon gender. I have previously described these regularities in terms of 'technologies of remembrance' and pointed out the paradox that in the Beaker burials of northeast Scotland, the mortuary ritual produced a grave site that was unmarked and hidden from view yet appeared to produce similarities in mortuary rituals (Jones 2003, 82). To this we can now add that the Beaker vessels themselves also have commonalities of decoration. While I believe that the commonalities of mortuary ritual and pottery decoration can be attributed to a technology of remembrance (by which I mean a deliberate and distinctive practice of remembrance), here I want to emphasize the performative aspect of this practice. I previously argued that in situations where remembrance is associated with ephemeral practices—as we find in the Beaker burials of northeast Scotland—we observe

similarities of practice as remembrance is strictly controlled. In essence, remembrance is performed. We appear to observe this in the regularity of decoration and the commonality of mortuary ritual. The manufacture of Beaker pots adheres to strict repetitive principles and certain design elements were selected for Beaker decoration. Occasionally, a Beaker pot was produced with an unusual motif or overall design, although here the design related to other regional practices of pottery decoration. The deposition of the pottery vessel with the deceased individual was also strictly performed, as was the location and character of the burial, the location of the vessel in the grave, and the orientation of the corpse. In the case of the Beaker burials of northeast Scotland, tradition appears to be performed by strict repetition; traditions have to be maintained by performance and practice.

CONCLUSION

This chapter has examined repetition and performance in relation to prehistoric pottery manufacture in two regions of Neolithic and Early Bronze Age Scotland. In the first case study, I examined potting traditions in three settlements in a restricted region of Neolithic Orkney. I discussed the way in which the repetition of practices also performed rupture and change. In the second case study, I examined the potting traditions associated with the mortuary rituals of Early Bronze Age northeast Scotland. I discussed here the way in which the repetition of practices performed a recognizable continuity or tradition. What are we to make of these two examples? In some ways, a sceptic would argue that these two examples are of a different character: the first takes a long view of change over a restricted area, while the second examines a single tradition over a relatively short period in a single region. However, this would be to miss the point of the two examples.

Instead, what the two examples highlight is the significance of improvisation and performance, the point that repetitive performances are improvisatory in nature; they are creative and excessive in character, with the potential for producing both change *and* regularity. Given this perspective, the Orcadian Neolithic example emphasizes that both regularity and change may be produced by repetitive practice, as the potting tradition produced long periods of

continuity with recognizably similar Unstan ware vessels. We also observed periods of rupture and experiment in which novel ceramic styles, such as Grooved Ware and Beakers, were produced. In the case of the Beakers of northeast Scotland, we instead saw that the performance of tradition was improvised according to a strict template or series of rules. To perform an adequate Beaker, or an adequate Beaker burial, relied on improvisation within rigid parameters.

Importantly, these repetitive performances took place within a material nexus. The potting traditions of Neolithic Orkney worked with the available local resources for potting and the material components of the settlements. In the case of northeast Scotland, the tradition worked with the dynamics of the mortuary tradition, the stones used for the construction of cists, and the corpse around which the pot was arranged. Repetitive practices are performed, but they are performed with attention to materials.

6

Materials and Assemblages

INTRODUCTION

In Chapter 2, I discussed the performative power of fragments and their association with events. To correspond with this analysis of fragments, here I also examine assemblages or accumulations of artefacts. The significance of both fragments and assemblages or accumulations is highlighted by the work of John Chapman and Bisserka Gaydarska (Chapman 2000; Chapman and Gaydarska 2007). For Chapman and Gaydarska, the social practices of fragmentation and accumulation are linked by the principle of enchainment; the exchange of objects expresses a relationship between the thing and the exchanger such that part of the person metaphorically grows out of the exchange object passed on to the next exchange partner (Chapman and Gaydarska 2007, 9). Chapman and Gaydarska argue that in the case of fragments, each fragment stands simultaneously as an object in its own right and a symbol of the once-complete object (or synecdoche). Fragments of once-complete objects can be described as 'fractal' because they interpenetrate other objects, humans, and places, betokening relationships at all scales of their completeness (Chapman and Gaydarska 2007, 9). While fragments betoken relationships or links between people, conversely, accumulations of fragments or complete objects also relate to enchained relationships. By accumulating disparate objects, previously distinct relationships can be linked by being brought into fresh relation.

Assemblages, as envisioned by the philosophers Gilles Deleuze and Felix Guattari (1987), are constellations of objects, bodies, qualities, or territories that come together for varying periods of time to create new ways of functioning, or new orders. Assemblages are innovative and productive. Importantly, assemblages are emergent, the notion of

assemblage implies process, as it encapsulates the idea that the constituents of an assemblage are temporary and can be easily dismantled to create fresh relationships. The idea of assemblage harmonizes with the notion of accumulation as discussed by Chapman (2000), as it highlights the importance of the *relationships* created by the fresh association or articulation of material qualities or properties. Indeed, the integrity of an assemblage is held together by its relationships. Therefore, assemblages imply assembly and disassembly, a sense of relationship, and movement.

Chapman and Gaydarska (2007) argue that fragments have fractal-like properties that enable fragments to interpenetrate with other objects and people. As Chris Fowler (2010, 141) notes: 'the image of the "fractal" illustrates that there are really no social "wholes", only unfolding relationships which can be viewed at different scales.' Likewise, the principles of fragmentation and enchainment lead us to reconsider the ontological status of the object. Rather than viewing the object as a fixed and bounded entity, we can instead conceptualize it as a processual or performative arrangement of relationships; a complete object can be fragmented and enter into a series of enchained relationships, while distinct objects can also be related together, a process that involves drawing out the relationships between objects. Rather than an object being fixed, it is, instead, performed.

Similarly, prehistorians have begun to question the fixed and taken-for-granted status of the person. Our contemporary description of the person as an individual is a modern construct: we are individualized through social institutions such as schools and workplaces, as well as the forces of consumerism. As Chris Fowler (2004, 17) relates, what is a shifting, coping, learning personhood is projected as a fixed totalized individual. Along with our relational analysis of objects, we can also consider the person as a processual or performative entity made up of a series of relationships. There are numerous ethnographic examples of the complex exchange and kin relationships that perform different kinds of person (e.g. Strathern 1988; Busby 2000). Importantly, Fowler (2004, 33) distinguishes between two broad forms of personhood: the partible personhood of Melanesia and the permeable personhood of southern India. Both conceptions of the person view the person as relational and, while for Melanesian persons identities are presented or performed, the southern Indian person—while relational—is more closely bounded but composed of a series of substances that relate them to other people

and entities. Fowler (2010, 139) puts it succinctly: 'persons are composite entities with both seemingly tangible (e.g. body, image) and intangible (e.g. spirit, breath) features, but all of those features are invested in the material world in some way and are manifested not just in the human body but in objects, plants, animals, buildings and so on, in which a person invests labour'. The point about this questioning of personhood is not to seek the ethnographic other in the prehistoric past and oppose this with the fixed conception of the individual in the historic West, instead it is to recognize the performative qualities of all conceptions of personhood. It is in this spirit that I introduce the question of the person here. Like objects, persons may be regarded as performative assemblages composed of a series of relationships. Importantly, with Chapman and Gaydarska (2007), we can also consider how assemblages of objects and people interpenetrate.

Previous chapters have examined both Neolithic and Bronze Age archaeology. This chapter will exclusively focus on the archaeology of the Early Bronze Age. This is not because the topic of assemblage is not relevant to the Neolithic—there are numerous examples of assemblages of artefacts in the Neolithic period, from pits to chambered tombs, causewayed enclosures, and henges (as we shall see in Chapter 7). Instead, I want to focus on the Early Bronze Age as it allows me to consider the peculiar qualities of metalwork. I will contrast a series of Early Bronze Age depositional contexts where we observe accumulations of material.

CASE STUDY ONE

Burials and Hoards in Southern England

I want to begin by considering two remarkable burial contexts in southern, central England: the sites of Gayhurst, Buckinghamshire and Irthlingborough, Northamptonshire (Fig. 6.1). The two sites are Early Bronze Age round barrows located some 30 km apart and both are distinguished by the remarkable accumulation of cattle bone associated with the burials. Both sites are situated in cemetery complexes alongside other barrows. The Gayhurst barrow was the second barrow amongst a complex of seven barrows located on the floodplain of the river Great Ouse. The burial at the centre of the barrow was of an adult male in an
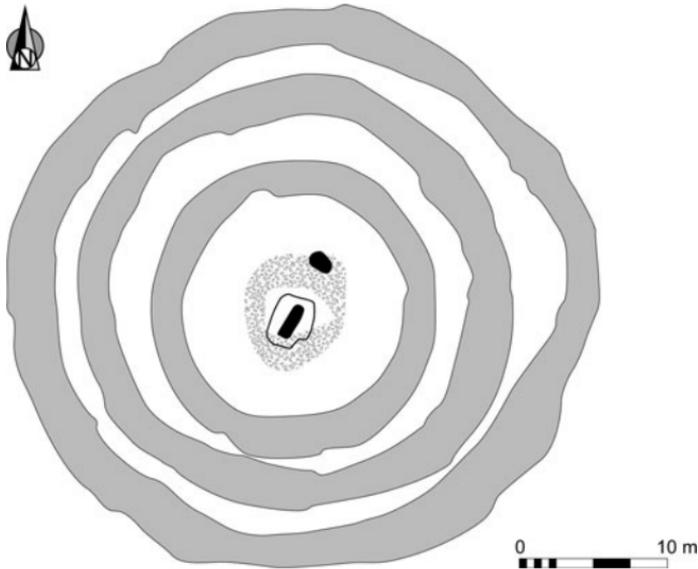
Fig. 6.1. The Irthlingborough barrow, Northamptonshire (illustration by Aaron Watson from an original in Harding and Healy 2007)

oak-lined chamber. The only artefact accompanying the burial was the foreleg of a pig. On the basis of dates from the oak chamber, the burial was radiocarbon dated to 2200–1780 cal BC. While the burial was associated with comparatively few artefacts, the ring ditch associated with the perimeter of the barrow contained the remains of an estimated 300 cattle (Towers et al. 2010). The assemblage of cattle remains mainly consists of three skeletal elements: limb bones, skulls, and mandibles, suggestive of the deliberate selection of body parts. Analysis of these cattle remains suggests a sequence of activities, beginning with the slaughter of the cattle away from the barrow followed by the consumption of some meat, while many of the carcasses were simply left to rot (a process potentially taking many weeks or months). After this, limb bones were selected and disarticulated with a knife and spread across the barrow surface above the human burial. Finally, the remains of this activity were swept into the ditch as a single event. The cattle bones produced a radiocarbon date of 2290–2010 cal BC, suggesting close contemporaneity with the burial deposit.

The burial at Irthlingborough was the first amongst a group of barrows located on the floodplain of the river Nene (Harding and Healy 2007). The barrow covered a wooden chamber that contained

an adult male skeleton accompanied by a rich selection of grave goods. At the feet of the skeleton was a long-necked Beaker pot beside a compact pile of other artefacts comprising: three cattle-rib spatula; a boar tusk; a flint dagger; five jet buttons; a stone archers wrist guard; an amber ring; a slate 'sponge-finger' stone; an unfinished triangular arrowhead; two flint knives; two flint scrapers; a retouched flint flake; and five un-retouched flakes (Allan et al. in Harding and Healy 2007, 153). Covering the barrow was a mixed deposit of cattle bone held in place by a cairn of limestone blocks. Indeed, the barrow may have actually been composed of a mixture of cattle bone and limestone blocks. Analysis of the cattle bones estimates skulls from 185 animals, mandibles and scapulae from 35–40 animals, and pelvises from another 15 animals (Davis and Payne 1993). Amongst the assemblage of cattle bones were several Aurochs (*Bos primigenius*) indicated by five teeth, the fragment of a horn core, and two possible scapulae. Analysis of the cattle bones from Irthlingborough suggests that—unlike Gayhurst—de-fleshed skulls were brought to the barrow as tribute (Towers et al. 2010, 510). The cattle bones at Irthlingborough were not swept from the barrow surface but remained on its surface. The primary burial activity of an adult male at Irthlingborough was dated on the basis of seven radiocarbon dates to *c.*2140–1800 BC. The site also saw much additional burial activity, with the burial of an adult male *c.*20–30 years old accompanied by a perforated bone pin located close to the head (suggesting a hair fastener). This burial was located in the sand and gravel within the areas of the first mound, but clear of the cairn. Another cremation burial of an adult of 20–40 years old and a child of 13–14 years old placed in a tripartite Collared Urn was to the south of the first mound. A further possible burial was also located on the summit of the mound, contained in a Collared Urn. In addition, the mound of the primary barrow was extended on at least two more occasions with the successive cutting of two more ditches (Allan et al. in Harding and Healy 2007, 161).

These two barrow burials offer intriguing examples of processes of accumulation. The burial at Irthlingborough was accompanied by a wide variety of objects, suggesting links outside the local area: the jet coming from Whitby on the Yorkshire coast, the flint dagger derived from East Anglia, and the amber sourced in the Baltic (Towers et al. 2010, 508). More importantly, the cattle remains from Irthlingborough and Gayhurst represent a large-scale accumulation. Strontium isotope analysis of the cattle tooth enamel from the two sites indicated

intriguing results. Owing to the sequential deposition of enamel and the uptake of sources of strontium in the geology upon which they fed, it is possible to determine the localities from which these cattle were derived. All but one of the Irthlingborough cattle were locally derived. The one animal that was not locally derived came from western Britain, possibly the West Midlands (Towers et al. 2010, 512). At Gayhurst, most animals originated locally, although here, one came from a region of chalk geology, possibly the Chiltern Hills, and the other from Cretaceous geology, possibly in western Britain (Towers et al. 2010, 514). Whatever their derivation, the cattle represent an important performance in which large numbers of cattle, and some Aurochs, were gathered together for the purpose of display, consumption, and deposition on the barrow surface. At least one of the Aurochs from Irthlingborough was several centuries old before it was deposited (Allan et al. in Harding and Healy 2007, 164), indicating curation and the accumulation of materials with long histories and prior significances. The deposition of these cattle articulate a series of different times and places as a herd (or several herds); they also articulate the links between, and within, communities. Further, the material residues of these performances came to be worked into subsequent histories as Barrow 1, Irthlingborough continued to be enlarged and used for mortuary deposits as late as 1390–1140 BC (Allan et al. in Harding and Healy 2007, 164).

I now want to consider a different kind of accumulation of material in two hoard deposits from Lockington, Leicestershire and Clandon, Dorset. The barrow cemetery at Lockington is located on an area of sand and gravel in the floodplain of the river Trent. The cemetery consists of six possible barrows. We will focus on the excavation of site VI at Lockington (Hughes 2000). Barrow VI at Lockington consists of a series of central pits and scoops, a ring ditch and palisade surrounding the barrow. Excavation of the features at the centre of the barrow produced a small cremation burial. In addition, a small pit was excavated at the perimeter of the barrow, near the palisade. It contained a spectacular group of artefacts comprising two incomplete Beaker vessels, two gold armlets, and a copper dagger (Fig. 6.2). The two pottery vessels were inverted (one inside the other) and partially covered one of the gold armlets. The second armlet and the copper dagger were immediately beside the pots. Traces of an organic scabbard attached to the copper dagger produced two radiocarbon dates of 2580–2200 cal BC and 2190–1880 cal BC (Hughes 2000, 9–10).
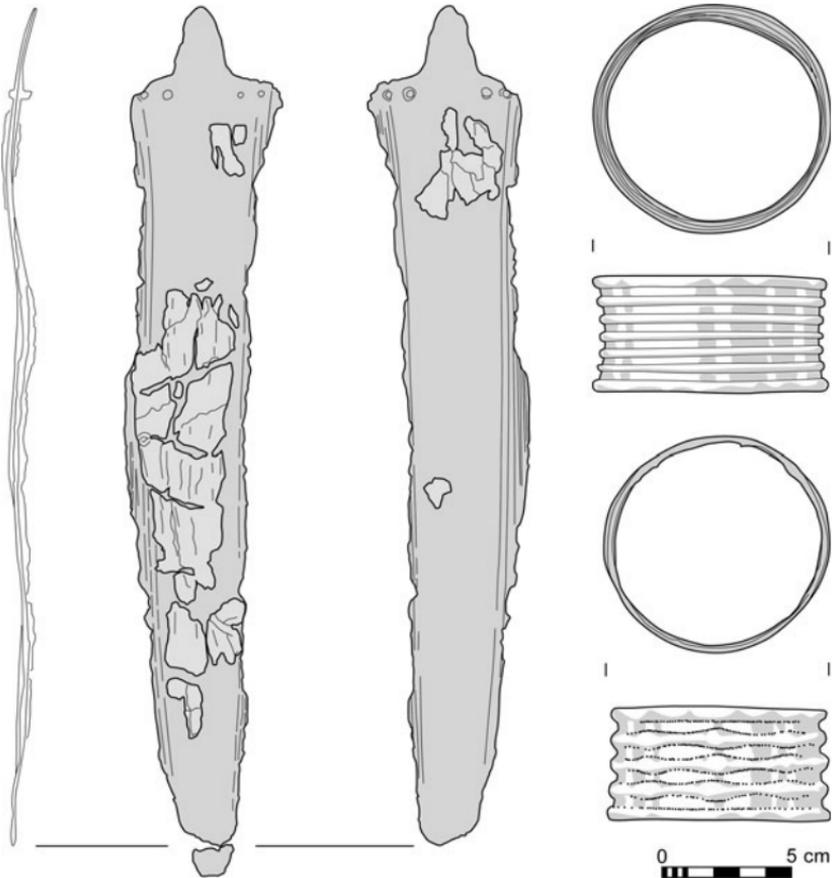
Fig. 6.2. The dagger and bracelets from Lockington, Leicestershire (illustration by Aaron Watson from originals in Hughes 2000)

The deposit at Lockington comprises a hoard or assemblage of artefacts with a wide series of associations—the dagger having parallels in Armorica—while the armlets are paralleled by a series of examples in Scotland. Importantly, the association of gold armlets and copper dagger is unusual (Needham 2000b). Accompanying the metalwork were two fragmentary Beaker pots. These vessels may have been deliberately smashed on deposition as they lack any fragments from the upper part of the vessel (Woodward 2000b). The sequence of mortuary rituals at this site is potentially complex, with a potential date of between 2100–1900 BC for the deposition of the hoard (on the basis of radiocarbon dates and the typo-chronology of the artefacts).

This contrasts with the dates of between 1870–1520 BC and the fragments of Enlarged Food Vessel under the mound. Hughes (2000, 100) argues that it is possible to envisage at least two distinct events: firstly the construction and use of the palisade enclosure and the deposition of the hoard; and, secondly the construction of the barrow. Whatever the sequence, the hoard is unusual in that the artefacts within the hoard are more typical of those associated with burial.

The Clandon barrow (Needham and Woodward 2008) outlies the Midlands region we have been discussing above. It is located in a tract of gently undulating chalkland between the rivers Frome and South Winterborne in one of the densest clusters of prehistoric monuments: the South Dorset Ridgeway. The barrow is remarkable for its size, currently surviving to over five metres in height. Excavation by Edward Cunnington in 1882 revealed a deposit of six artefacts amongst a flint cairn at a depth of 2.13 metres from the barrow surface. These artefacts include a bronze dagger, gold lozenge plaque cover, jet macehead with gold-covered shale studs, an amber cup, miniature cup, and a Collared Urn (Fig. 6.3). Recent re-analysis of the artefacts by Needham and Woodward (2008) underlines the remarkable nature of this assemblage. Several of the artefacts, such as the decorated macehead, gold lozenge plaque cover, and the amber cup are rare, making their association at Clandon significant. Most importantly, Needham and Woodward (2008, 38–9) argue that the artefacts reference a series of wider links and places: the amber cup part of a suite of 'precious cups' found along the south coast of England and north coast of France (Needham et al. 2006); likewise, the slotted miniature cup links communities along the south coast (see Chapter 3 for discussion); and the Collared Urn references inland regions, including northeast England and the East Midlands. The gold lozenge references comparable pieces of goldwork in inland Wessex and East Anglia; the macehead may have links with northeastern England, while the Armorico-British bronze dagger has associations with other daggers in eastern England and northeast Scotland. There is a sense of the performative destruction of some of these artefacts, for example the amber cup was fragmented, as was the miniature cup and bronze dagger (Jones 2005d, 171). There are no radiocarbon dates for Clandon, although the typological association of the artefacts suggest a date of *c.*1950/1900 BC–*c.*1750/1700 BC. It is therefore considerably later in date than the sites I have discussed above. Like Lockington, the assemblage is difficult to define. In the absence of a corpse it is
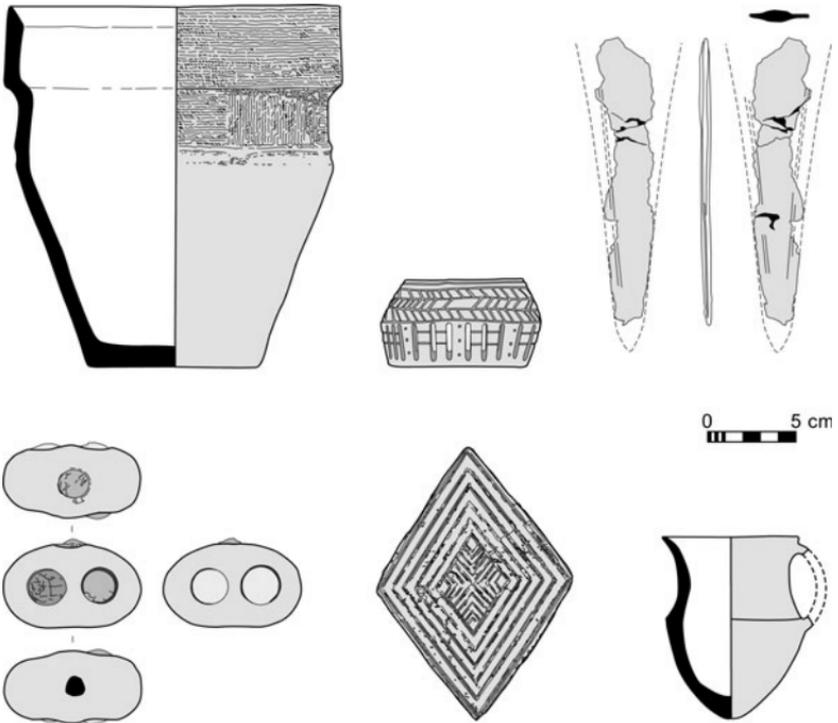
Fig. 6.3. The artefacts from Clandon, Dorset (illustration by Aaron Watson from originals in Needham and Woodward 2008)

difficult to categorize Clandon as a 'burial' assemblage, although it is not a classic 'hoard' deposit either (Needham and Woodward 2008, 43–4). Importantly, the Clandon artefacts are an assemblage significant for the 'bringing together of the most cosmologically-charged materials of contemporary material culture—jet, amber and gold' (Needham and Woodward 2008, 44). Therefore, the Clandon assemblage significantly articulates and performs a series of foreign connections and links. These links are performed or magnified precisely because a series of disparate materials are deposited in association together.

Summary

I now want to consider what the sites discussed above have to tell us about the wider issue of assemblage and performance. The sites of Gayhurst and Irthlingborough are instances of long periods of

collection and, potentially, curation. The numbers of cattle involved in both burials surely constitute several herds. Towers et al. (2010) note that although the propensity of animals come from the local area, there is some evidence for gathering cattle from further afield. The wider gathering and curation of skeletal remains is also evident from the wild Auroch bones from Irthlingborough. These burials are compositions of an enormous performative scale involving a huge effort in the gathering together of materials—amongst them herds of cattle. We may reasonably describe these deposits as 'hoards' of cattle remains. The deposition of these cattle remains will have been a powerful performance—a significant enactment of a memorable event that simultaneously located that event at a specific place in the landscape. Indeed, in the case of Irthlingborough, it is possible that the cattle bones composed that place, as bones were pinned into place in the barrow mound with limestone blocks; in this case, place, event, and material were as one.

The burial at Irthlingborough was associated with a selection of artefacts that referenced a series of links with distant places; the burial also instantiates the series of linkages involved in the composition of the person. In a similar sense, the cattle deposited at Irthlingborough and Gayhurst also iterated a series of links, as they referenced the community involved in the performance of the burial. As Joakim Goldhahn (2008, 77–8) points out in the context of a discussion of Scandinavian Bronze Age burials, the living were made manifest in the composition of the burial. The articulation of these links in the form of the immense assemblage of cattle bones magnified the significance of these links for the community. These sites are less the burial of an elite individual, rather than the enactment of the links of a community with a significant person. Indeed, it is through these performances that communities are produced and performed.

The two assemblages of artefacts at Lockington and Clandon are also concerned with the creation of connections and linkages. As with the Gayhurst and Irthlingborough burials, the artefacts grouped in these assemblages will have been gathered and curated over some period of time. The linkages made manifest by the materials used to make these artefacts was most evident at Clandon, but are also true of the assemblage of artefacts at Lockington. The memorability of these links is also promoted by the performance of their deposition. As was noted for Lockington, the gold bracelets and copper dagger at Lockington were fragmented and crushed and were covered by fragmented

Beaker pots. At Clandon, the amber cup was broken into pieces, the miniature cup was fragmented, and the bronze dagger was crushed and fragmented. As I have previously argued, these practices of deliberate destruction act as focusses for remembrance. In a similar way to the burial deposits discussed above, these assemblages, both located in proximity to barrows, also performatively 'presence' people in the landscape and instantiate the connections between people. In a sense, through the articulation and association of artefacts, a person is composed or made manifest. These assemblages, too, with their linkages to contemporary burial assemblages, may be considered as performing personhood. Again, the links between the various components of the assemblage are performatively magnified by being grouped or articulated together. As assemblages, then, they are more than the sum of their parts.

CASE STUDY TWO

Axe Hoards, Single Finds, and Moulds in Northern Britain

To contrast with my discussion of assemblages in southern England above, I now wish to consider the metalwork hoards, single finds, and moulds of northern Britain. I will focus on the deposition of axes of the Migdale period, dating from *c.*2100 to *c.*1900 BC. This discussion overlaps chronologically and geographically with my discussion of Beaker graves in Chapter 5. Indeed, the main concentration of hoards and moulds is coincident with the major concentration of Beaker graves (Needham 2004, 237). I include in my discussion the early copper axes, as well as those of bronze of classic Migdale and near-Migdale type (see Needham 2004). My account draws on the catalogue of finds produced by Burgess and Schmidt (1981).

There are some 282 axes in total (figure derived from Burgess and Schmidt 1981, including all copper axes, types Dunnottar, Biggar, Nairn and Migdale, plus unclassified axes). Of these, only 7% (20 of 282) are decorated. Most of these axes are deposited as single finds, although there are 10–12 hoards consisting of between two (e.g. Durris) and seven axes (Colleonard Farm, Hill of Finglenny). Most hoards appear to consist of axes only, although some hoards include a mixture of artefacts, such as the Sluie hoard which

contains two axes, one halberd, and one arm ring, or the Migdale hoard which contains a mixture of metalwork and other artefacts, including one axe, six cast arm rings, two strip armlets, nine tabular beads, two earrings, and nine jet buttons or cones (Piggott and Stewart 1958).

Significantly, Burgess and Schmidt point out that most of the hoards from northern Britain consist mainly of multiple axes (with the exceptions of Sluie and Migdale noted above). We also find hoards of other multiple metal artefacts, such as the hoard of four copper halberds from Auchingoul. Burgess and Schmidt (1981, 55) bemoan the fact that hoards consist of multiple types of the same artefact, affording them little typo-chronological value. However, I want to argue that it is precisely that hoards consist of multiples of repetitive artefacts that make them significant. As such, they compose a distinctive kind of repetitive assemblage.

Assemblages and Production

If we are to understand the significance of these repetitive assemblages of metal artefacts, we need to consider their production. We have good evidence for the production of flat axes from open moulds in northern Britain, with a particular concentration of moulds around the Buchan region of Aberdeenshire (Burgess and Schmidt 1981; Needham 2004). These open moulds consist of a conveniently shaped piece of rock, typically sandstone (Plate 10). Some moulds have been shaped to facilitate handling. The moulds predominantly consist of matrices for the production of flat axes, but also sometimes for bars, arm rings, and knives. Moulds often have several matrices on one face. There is good evidence that the moulds were used, with signs of blackening from heat and traces of metal (Burgess and Schmidt 1981, 52). The axe matrices were carved so as to approximate the desired form of the finished axe. As Needham (2004, 223) points out, as the moulds are single-valve—the other half of the mould being completed by a flat stone—the finished product was likely to have been asymmetrical. Once the axe was produced from the mould, it would then be finished and the castings produced by these moulds would have required extensive forging in order to achieve the pointed oval section of Migdale axes. This finishing procedure would presumably also include—in those rare instances—decoration. Decoration in this

period was relatively restricted, the most common form of decoration being 'raindrop' motifs or variants of chevron decoration. I introduce a discussion of moulds here as the production of artefacts from moulds enables the craftsperson to produce multiple artefacts of the same type. Metal artefacts therefore constitute *simulacra*; the act of producing artefacts from the same mould produces a series of forms that are similar, but also different to each other. Moulds are therefore powerful technologies, as through a repetitive performance—the production of an axe from bronze—a series of related copies are produced. Therefore, moulds provide the conditions of possibility by which assemblages can be created and by which the similarities and differences between artefacts can be articulated. It is particularly significant then that in Coles' (1968; 1970) analysis of Migdale axes, 50 could be attributed to 11 Scottish moulds. If this is the case, then around a fifth of the axes in northern Britain can be grouped together as having had a common reference point. Further to this, Burgess and Schmidt (1981, 52) argue that the axes from Bracobrae, Perthshire, and Drumdoch, Wigtown, Dumfries and Galloway were produced from the same mould. These axes, deposited and circulated at either end of Scotland, will also have had a common source, forming an *extended assemblage*. The technology of the mould is of signal importance, then, as it forms the source of an artefact's biography and is one way in which distinct artefacts may have been related as having come from a common source. Given this emphasis on commonality, it seems unsurprising that the axe hoards of this region largely consist of assemblages of multiple, similar, artefacts. In this light, the secondary decoration of axes takes on more significance, as decoration is an act that differentiates one axe from another.

Assemblages and Deposition

I now want to focus on some of the hoards from this region and to draw out their performative qualities. I will begin with the hoard from Colleonard Farm (Fig. 6.4). The hoard consists of seven axes: three of these are decorated with 'raindrop' motifs; another three of the axes have a distinctive ridged surface pattern and may have been derived from the same mould (one of these has lost both the blade and the butt); the last, and smallest, axe is plain. The Colleonard Farm hoard is a coherent, repetitive assemblage; however, there are also factors

Fig. 6.4. The hoard of bronze axes from Colleonard Farm, Aberdeenshire (reproduced with kind permission from the National Museum of Scotland, Edinburgh)

that differentiate the hoard and the axes might be considered to consist of three distinct groups of 'raindrop' motif, ridged surface pattern, and plain. Significantly, the plain axe is also distinguished from the rest of the hoard by size. The hoard performs both repetition and difference. The sense of performance is heightened by the fact that the axes were deposited, blades uppermost, in a food vessel, thereby enacting or referencing contemporary burial practices.

The differentiation of axes by size is also observed in the hoard at The Maidens, Ayrshire, consisting of five axes—two of which are markedly smaller than the rest. Again, this hoard performs coherence and repetition, as well as differentiation. A sense of performance can also be witnessed by the hoard deposited at the Hill of Finglenny which, again, consists of seven axes. These axes appear relatively undifferentiated in terms of size and decoration—all being plain. However, three of the axes have been broken midway across: a dramatic act that presumably took place immediately prior to deposition as the axes are otherwise complete. The axes at Finglenny were also coated in a thin layer of tin, making them a distinctive and memorable assemblage.

Many of the axes in the three hoards mentioned above show signs of wear and we should remember the curation practices involved in forming these hoard assemblages. While some of these axes may have

been produced from the same moulds, they need not have been used together and may have been widely circulated. It is possible that some of these hoards were gathered over a number of years; however, the performance of deposition in hoards allows individual metal artefacts to be reunited or re-articulated.

We have looked at the performance of hoard composition and assemblage. I now want to consider the wider landscape setting of hoards. Deposition takes place in a variety of settings, occasionally in close proximity to monuments, as with the Hill of Finglenny hoard deposited overlooking the henge at Wormy Hillock, and Migdale hoard overlooking the henge of the same name (Cowie 2004). In addition, Trevor Cowie (2004) draws our attention to a series of hoards deposited in spectacular mountain-top or mountain-slope settings, including the sites at Dunaspie Crag, Edinburgh—part of the suite of geological features associated with Arthur's Seat—with a deposit of three axes; Kinloch Rannoch, Perthshire where a hoard of four axes was discovered in a hollow on a fluvio-glacial terrace; the Pass of Ballater, Aberdeenshire, a spectacular mountain pass where two axes were deposited; the Port Murray, Ayrshire hoard which was deposited *c.*150 metres from a prominent standing stone that overlooks the findspot (Cowie 2004, 260); and the Dail na Caraidh, Invernesshire hoard which was deposited in proximity to a large, axe-shaped glacial mound (Barrett and Gourlay 1999). The depositional context of many of these hoards is often intimate. For example, the Kinloch Rannoch hoard was wedged into a small cleft in the rock. Yet, these deposits also evidently draw on the wider landscape. These hoards work performatively at a series of scales, they perform a sense of intimacy, and also draw on the wider landscape. Strikingly—given the generally low numbers of decorated axes—the majority of the axes deposited in these settings are decorated (Cowie 2004). The axes comprise a coherent, repetitive assemblage, while also being marked out as unusual. The assemblage of these hoards draws on the internal coherence of the metalwork of which the hoard is composed, while also forming a dynamic relationship with the wider landscape.

Summary

I now want to consider what these axe hoards have to tell us about performance and assemblage. I argued that the appearance of open

mould technologies was of signal importance as the moulds are articulation or reference points for the generation of similar axes produced from the same mould; secondary working and decoration subsequently differentiate these simulacra. Because of their common origins, it is possible to consider the wider group of Migdale axes as part of an *extended assemblage* related by commonality. Even when metal artefacts are deposited as single finds, their commonality means that they are components in a wider assemblage of artefacts.

However, we also saw that there was a tendency to group similar artefacts together. When drawn together, the points of similarity produce the possibility of a *repetitive assemblage* in which the significance of the individual constituents is magnified by repetition. The extended and repetitive assemblages are then different moments in the cycle of metalwork movement and exchange across northern Britain; they are different modes by which metal artefacts articulate to make up assemblages.

These assemblages are differentiated from contemporary Beaker grave assemblages and it has long been noted that we tend not to find the same artefacts in each category of assemblage, graves, and hoards (Needham 1988). As we saw in Chapter 5, the Beaker graves of northeast Scotland are defined by the repetition of a fixed and common burial assemblage. The axe hoards of the same region are likewise marked out by their repetitive compositions. However, we do observe a degree of fluidity in the composition of hoards. For example, the hoard at Sluie, consisting of both axes and a halberd was deposited in a cist-like arrangement, potentially recalling contemporary burial practices (Cowie 1988; Jones 2010a), likewise the Colleonard Farm hoard also recalled food vessel burials. These assemblages of metalwork, while being distinct from contemporary burial assemblages, drew on absent persons in their composition. In some ways, we might consider hoards, such as Colleonard, as performing personhood. While performative statements are produced from the associations between individual artefacts in hoards, wider performative statements are made when hoards are deposited in spectacular landscape locations; hoard deposition here performs landscape and the performance articulates landscape features with the metalwork deposition. Landscape and metalwork consist of a single compositional assemblage.

CONCLUSION

I now want to consider the relationships between the two regions discussed in the case studies in terms of assemblage and performance. We have seen that the creation of an assemblage may be a lengthy affair. This was most obvious with the enormous cattle bone assemblages at Gayhurst and Irthlingborough, some of which had been curated for centuries prior to deposition. It was also evident from the Clandon and Lockington hoards. However, given the wear on some of the northern axe hoards, we can also surmise that assembling the individual components of the hoard was a long process. In the northern case study, I noted the way that assemblages can be composed of repeated elements. This was also true of the cattle-bone assemblages from southern, central England. While these assemblages are all the more powerful for the scale of repetition, as we saw at Clandon and Lockington, the performative effect of an assemblage is also achieved from the juxtaposition of differing materials. In both regions we noted that assemblages are usually different from burial assemblages, but may be performatively related to them, especially when they compose artefacts (as at Clandon and Lockington) that are typically found in burial contexts. We may then consider burials as a specific, restricted form of assemblage of which the corpse need only form a part. The presence of 'burial' assemblages at Clandon, Lockington, and possibly Colleonard Farm attest to the way in which the notion of burial is simultaneously distinct from, while also cutting across, hoard assemblages.

We can think of the processes of assemblage as gatherings. Barrows can be considered as gathering places—places in which materials are accumulated. The significance of these materials trails off into the wider community and landscape, while also being reconfigured in the process of gathering. Meanwhile, barrows also gather significance as the barrow continues to accumulate in scale, be worked, and acts as a focus for burial for centuries to come.

We can also think of metalwork hoards as gatherings. Hoards are moments of gathering that, in bringing together artefacts, draw attention to the relationships between them. Those hoards deposited in mountainous locations also gather place and draw attention to the relationship between hoard and location. As gatherings they also recombine, enact, or express future relationships. Therefore, metalwork

hoards are but moments of gathering in the flow of metalwork across landscapes.

The notion of assemblage and gathering seems particularly significant to the discussion of Early Bronze Age material performances. As I argued above, the production of metal artefacts from open moulds provides the conditions of possibility for creating relationships as, for the first time, simulacra could be produced from the same reference point with the same materials. More importantly, the production of metal alloys is itself an act of assemblage and mixing. As Barbara Ottaway and Ben Roberts note, the alloying of tin bronzes may have taken place in a number of diverse ways: 'tin bronzes could have been made by mixing tin and copper oxide ores in a crucible or furnace, co-smelting copper sulphide with tin oxide ores, adding tin oxides to liquid copper or by smelting tin oxides to obtain metallic tin, and then adding this product to metallic *molten* copper under reducing conditions' (Ottaway and Roberts 2008, 208; original emphasis). Suffice to say that alloying involves multiple diverse ways of mixing metals or metal ores. The act of dividing, multiplying, and mixing has been noted to be of significance in the context of Bronze Age Europe (Bradley 2005b). In both alloying and recycling, individual materials are assembled to produce a new kind of object; these assemblages produce an effect difficult to achieve from distinct components.

Significantly, assemblages have to be performed. The relationships between materials have to be assembled or produced. As we have seen, assemblages are not static: they are inter-referential, referring to other contemporary practices; moreover, they are always in a process of movement. As a material performance, assemblage–a process characterized by periods of stasis and fluidity and by mixture—seems particularly apt to understand a substance such as metal produced by a mixture of materials and characterized by both its fluidity and solidity. It is for this reason that the philosophers Gilles Deleuze and Felix Guattari (1987, 453) highlight the significance of the itinerant nature of metal: 'Matter and form have never seemed more rigid than in metallurgy; yet the succession of forms tends to be replaced by the form of a continuous development, and the variability of matters tends to be replaced by the matter of a continuous variation.' Performance, assemblage, fluidity, and movement are all fundamental components of prehistoric metalwork and of the archaeology of the Early Bronze Age.

7

Materials and Performances

INTRODUCTION

So far, much of the book has focussed on performativity and materials. In this chapter, I want to focus more specifically on performance, particularly with reference to ritual activity and mnemonic practices associated with monument building. The term 'performance' appears innocuous and commonsense; but what do we really mean by performance? As performance theorist Marvin Carlson (1996, 1) reminds us, the term performance is essentially a contested concept. In defining the concept as contested, Carlson points out that the term 'performance' has arisen in an atmosphere of sophisticated disagreement—an atmosphere associated with continuing dialogue and opposing positions. Part of this disagreement arises from the fact that, since the early 1990s, performance studies has exploded, with contributions from theatre practitioners (Carlson 1996; Kaye 2000; Schechner 2003; Pearson 2006), performance or action artists (Carlson 1996; Kaye 2000), linguistics (Austin 1975; Derrida 1988; Loxley 2007), gender theorists (Butler 1993), anthropology (Turner 1974; Schechner 2003) and, latterly, archaeology (Pearson and Shanks 1997; Inomata and Coben 2006). In this introduction, I want to minimally define what I mean by performance.

With Carlson (1996, 3), I argue that performance is a species of patterned behaviour: that performances involve the display of skills and that performance is 'always performance for someone, some audience that recognises and validates it as performance, even when, as is occasionally the case, that audience is the self' (Carlson 1996, 5). I believe this definition overcomes some of the disputes raised by archaeologists—discussed in Chapter 2—concerning the scale of audience required for an act to constitute a performance.

PERFORMATIVITY AND MEMORY

To the above definition, I want to add the proviso that performances may be *performative*, i.e. they are efficacious and may constitute *performativity*, by which I mean performances may be created and sustained by repeated performance. In short, performances produce effects and these effects are sustained by repetition. This was discussed in more detail in Chapter 2. While performances may follow prescribed sequences, this does not mean that they are not improvisatory in character. I want to argue that performances embody repetitions and, as such, each repeated performance may produce different intensities, different flows, and different connections so that each performance is always a singular behaviour.

In arguing for the improvisatory aspects of performances, we need to think carefully about the relationship between performance and memory. I have previously argued that memory formation is performative in character; material performances draw on, or 'cite', previous performances and, in turn, serve to reinforce or iterate the significance of a performance (Jones 2007). As it stands, this provides an insufficient account of the relationship between memory and performance. We are, perhaps, best considering memory and performance as intertwined. While memories may shape the form that performances take, if performances are improvisatory, then memory cannot be said to *determine* the shape of performances. As improvisatory actions, performances may produce a number of outcomes that, in turn, implicate the formation of memories; memories are produced in performance.

RITUAL AND PERFORMANCE

In my previous discussions of memory and performance, I have argued that, during performance, cultural materials are juxtaposed, iterated, and reiterated (Jones 2007). This was also discussed in Chapter 2. Further to this, I have highlighted the important dimension of materials—materials play a critical role in constituting performances. A focus on performance, and the performative, is then critical to understanding how the world is shaped; how people and materials are involved in mutually constituting or assembling the

world. One context for considering this kind of process in prehistory is ritual performance. Arguably, we can consider the performative character of ritual in precisely the same way as we have considered performance and materials more generally. Indeed, ritual may be considered as a performative and transformative activity *par excellence*.

The distinction between ritual as a type of performance and myth, which sustains it, has often been drawn in anthropology (Parkin 1992). In many ways, arguments concerning the relationship of ritual to myth rehearse the distinctions between performative action and society, which were discussed in Chapter 1. Parkin (1992, 11–25) argues for the significance of action in ritual, particularly what he calls 'formulaic spatiality' (Parkin 1992, 18). He also emphasizes that rituals are composed of overlapping partial 'truths' and partial 'falsehoods', and that they are performative of situated knowledge composed of fragments of differing elements.

Recent discussions of ritual activity define ritual thus: 'the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performers' (Rappaport 1999, 24). Rappaport (1999, 32–46) expands his definition noting several key features of ritual:

- Ritual encodes features other than those produced by the performers. Ritual therefore features elements that came before the present day; they juxtapose or assemble elements from a variety of sources.
- Ritual is invariant. A key feature of ritual is then its repetition. Ritual is recurrent in character (Casey 1987). Repetition is employed as a means of commemoration and as means of 'changing while staying the same'. It is the recurrent and repetitious nature of ritual activity that allows rituals to appear timeless.
- Rituals are performances; they are formal and decorous and also efficacious. Their formality and decorum, along with their invariance, mean that ritual activities are productive or generative. These features allow some rituals to possess affective force and persuasiveness. Rituals are therefore about changing the state of the world.

Given the above discussion, we can note that ritual is performative in character; rituals feature iterations and citations of previous performances. Indeed, the 'formulaic spatiality' or directionality that Parkin (1992) describes may be one way in which the fragmentary iterations and citations of prior performances are drawn into, and incorporated

with, the whole. That rituals are transformative processes is well established by ethnographic observations (Van Gennep 1960; Turner 1969; Bloch and Parry 1982). Anthropologists have long argued that the ritual process involves the transformation of individual members of society. If we are to view ritual as performative in character and that performances are associated with processes of assembly, disassembly, and juxtaposition, and—in Karen Barad's terms—with processes of mutual constitution, then a fuller view of ritual would see ritual performances as processes of mutual transformation and generation, in which both people and materials are formed and constituted.

Indeed, these aspects of ritual are encapsulated in many discussions concerning ritual; if rituals are concerned with efficacy, one of their key characteristics is the desire to create. As the anthropologist Roy Rappaport (1999, 155) notes: 'in including within itself both word and substance ritual may contain within itself a paradigm of creation'. We might look at small-scale acts of efficaciousness, such as the garden magic of the Trobriand Islanders, as an example of the creativity of ritual performance. However, on a grander scale, many rituals are concerned with world-making. While they may not relate to the empirical physical creation of the world, rituals may re-affirm or re-enact creation myths. Rappaport (1999, 155–60) provides an example in the song cycles of the Walpiri people of Central Australia. Song, dance, and movement across the land do not represent a path that already exists, but a plan or blueprint for a path. As people progress across country, their singing and observation of species and places, by comprehending them, brings them into the world by subsuming them into the pre-existing order, if not actual material existence.

I have developed a framework for the analysis of performance, which treats performance as an assemblage, or juxtaposition of cultural elements; a mutually transformative process in which people and things are engaged. Alongside this, I have argued that ritual can be treated as a species of such performance.

CONCEALMENT, REVELATION, AND MEMORY

I now want to focus on the transformative processes of concealment and revelation. The anthropologist Michael Taussig (1999) focusses especially on the social significance of concealment and revelation.

Importantly, Taussig emphasizes the material character of such activities. Taussig is concerned to discuss a series of practices he describes as the 'labour of the negative', including defacement, destruction, concealment, and sacrifice. For Taussig, each of these activities is creative of sacred power: as things or people are *desecrated*, they rupture or alter the surface appearance of everyday life. It is the relationship between depth and surface that is crucial here; it is the act of rupturing or sacrificing, thereby revealing that which is concealed which brings the relationship between surface and depth into dramatic focus. These types of activities less reveal hidden secrets than reveal the social significance of secrecy. These acts, Taussig argues, reveal the importance of the public secret—'that which is generally known, but which can rarely be articulated' (Taussig 1999, 56–8). These practices are a network of activities that help articulate the relationship between depth and surface and aid the negotiation of the relationship between public secrets (knowing what not to know) and public knowledge. The possession of the knowledge of public secrets, as much as public knowledge, is a route to social power.

One subject absent from Taussig's account of the negotiation of public secrecy is memory. How are acts of concealment, sacrifice, and defacement remembered? How significant are the material forms that these activities take? A number of Taussig's case studies draw on the drama of revelation and concealment, masking and unmasking that take place in initiation rituals. Here, the material accoutrements of ritual, masks, face, and body paint are critical to the sensory appreciation of the public secret. The materials of ritual therefore help to convey or impress themselves upon memory. Taussig charts many acts of defacement from the destruction of dollar bills or the American flag, to the deliberate defilement of a statue of Queen Elizabeth II and Prince Phillip outside the Australian Parliament in Canberra. Each of these events pivot upon the dramatic and spectacular destruction of material objects held to be sacrosanct. Here, I want to develop the point that it is the material character of the medium and its dramatic destruction that is crucial to the formation of memory. As we are aware from other ethnographic and historical contexts, the destruction or deliberate forgetting of artefacts forms a critical space for remembrance (Forty and Küchler 1999).

I want to develop the arguments concerning the efficacy of performance, the generative constitution of people and things in ritual performance, and the performative and transformative power of

acts of concealment and revelation in two case studies: the first is concerned with the causewayed enclosures of southern England and the second with the Early Bronze Age barrow cemetery of Snail Down, Wiltshire, southern England.

CASE STUDY ONE

Display, Repetition, Connection, and Disruption: Ritual Activity at the Neolithic Causewayed Enclosures of Southern England

Neolithic causewayed enclosures are generally concentrated in southern Britain (Oswald et al. 2001, 108). They are conventionally dated to the first half of the 4th millennium BC, with probable dates for their inception centring on 3600 BC (although a current project directed by Alasdair Whittle examining dating is likely to provide exciting new insights on their date). Causewayed enclosures are composed of interrupted ditches and banks often (but not exclusively) arranged in circular concentric forms (Evans 1988). It has long been appreciated that causewayed enclosures have lengthy histories with many episodes of re-working (Edmonds 1993; Bradley 1998; Oswald et al. 2001) during which the ditches are re-cut and artefacts, and animal and human bone are deposited within the ditches. Some causewayed enclosures also have evidence for timber-laced earthworks, most particularly at the Stepleton enclosure, Hambledon Hill, Dorset. Timber substructures of this kind have been interpreted as defensive in nature and have drawn comparison with the box ramparts of Iron Age hillforts.

Our problems with defining the 'function' of Neolithic causewayed enclosures arise partly from the fact that so many are discovered by aerial photography—we are used to observing and depicting causewayed enclosures in plan form. This has an important flattening effect and creates a static image of the site. As a recent survey of these sites by English Heritage archaeologists relate 'plans produced by surface survey are often like photographic multiple exposures: all the phases of the construction, modification and later use of a monument are represented in a single image' (Oswald et al. 2001, 75). To alleviate this problem, I wish to emphasize the *processes* of

causewayed enclosure construction and the connective and disruptive qualities of both causewayed enclosure construction and depositional activity. I particularly want to discuss the process of causewayed enclosure construction and use as cycles of performative ritual activity.

Making Causewayed Enclosures

The topographic plans and aerial photographs of causewayed enclosures have revealed a key aspect concerning the construction of these monuments: their interrupted ditches. The construction of these monuments has been refined by excavation; the ditches exhibit evidence of having been cut in a piecemeal fashion, suggesting that small gangs of people were responsible for digging out separate segments (Startin and Bradley 1981, 291). As a result, there are considerable variations in the length of ditches in many causewayed enclosures, although most have ditches of around 20 metres in length. Variation may also exist in the length of ditches in the various circuits at causewayed enclosures.

The act of digging causewayed enclosures would have brought distinct groups of people together: people worked the soil with antler tines, exposing the bedrock, typically white chalk, limestone or river gravels, shifting their workings with ox scapula shovels and baskets. Working together would therefore be a connective and rhythmic activity, as teams of people were combined in digging, lifting, and shifting; an activity that simultaneously revealed the quality, colour, and texture of the earth that lay beneath people's feet.

If the construction of the ditches and low banks that make up causewayed enclosure boundaries can be considered as a cohesive or connective activity, what of the causeways that give the monuments their name? The existence of causeways is curious as, on one level, they disrupt the coherence and connectivity formed by digging the ditches. In this sense, the causeways can be seen as divisive architectural features, dividing the work of each individual gang; however, causeways are also connective—they allow access to the monument and they provide the means by which the distinct ditches of the monument are connected together. Thinking of the construction of causewayed enclosures as performances, we are, perhaps, best thinking of these monuments in terms of periods of performance and activity related to the activity of digging the ditches, punctuated by

intervals of rest related to the causeways between them. Although the causeways are not overtly related to performance, we are, perhaps, best to view causeways as junctures, around which performances are articulated—just as pauses or periods of inaction in performance offer the improvisatory potential for action (see Chapter 5 for a discussion of repetition and inaction). It is the connective, but disruptive, character of causeways that offer the potential for thinking about these monuments as ritual performances. I want to pursue this line of thought below in considering deposition.

Assemblages

The structured nature of depositional activity at British Neolithic sites was first recognized by Richards and Thomas (1984) at the late Neolithic henge of Durrington Walls, Wiltshire. For Richards and Thomas, the materials deposited at various locations on the site were not considered to be the result of simple discard and disposal. Rather, the deposits were overtly symbolic and were considered to be the material residue of ritual practices. Arguably, the materials deposited at Durrington Walls '. . . represent nothing more than the largely unconsidered materialization of a "symbolic grammar"' (Pollard 2008, 43). In this sense, those making deposits were simply slavishly reproducing a prior symbolic representation. Joshua Pollard (2001, 2008) has criticized this notion of deposition on the grounds that simply viewing material deposits as symbolic statements fails to explain the context and format of deposits. Likewise, in a discussion of the Late Neolithic henge at Maumbury Rings, Richard Bradley (2000, 124–7) relates the structure of the deposits in the shafts at the perimeter of the monument to the procession and movement of people in, and around, the monument. He emphasizes the performance of deposition, noting that, at Maumbury, deposits must have been placed in a prescribed sequence. In a discussion of causewayed enclosures, Joshua Pollard (2008, 49) points out that 'the act of deposition was a performance that drew together different combinations of people and things, often within symbolically charged arenas at critical moments in time'. Here, I want to emphasize the performative and improvisatory nature of material deposits in causewayed enclosure ditches.

Pollard (2008) analyses the deposits at the causewayed enclosure of Etton, Cambridgeshire (Fig. 7.1). At the macroscale he notes the differences in deposits to the east and west of the enclosure, with a greater emphasis on bone, antler, and wood-working activities on the western side of the monument—an area that also saw more re-cutting of ditches. Furthermore, at the general level, we can observe that different categories of artefacts were deposited in differing locations at Etton. For example, stone axes of Welsh group VII rock were deposited to the southwest of the enclosure, while those of Cumbrian group VI rock were generally deposited to the northeast, near the main entrance to the monument. Animal and human bone clustered together in a series of regions in the southwest, northeast, and southeast of the enclosure. At the microscale, he emphasizes the fact that the deposits in each ditch section differed, as with the propensity of re-cutting and unusual deposits in ditch sections 1 and 2. Moreover, Pollard discusses the potency of the materials deposited, especially human and animal bone. He argues that the herds from which the animal bone deposits were derived represent accumulations being

Segment 6

Human cranium
Antler baton
Cattle bone

Segment 7

Inverted Fox skull
Inverted pottery bowl
Antler comb
Small pottery bowl
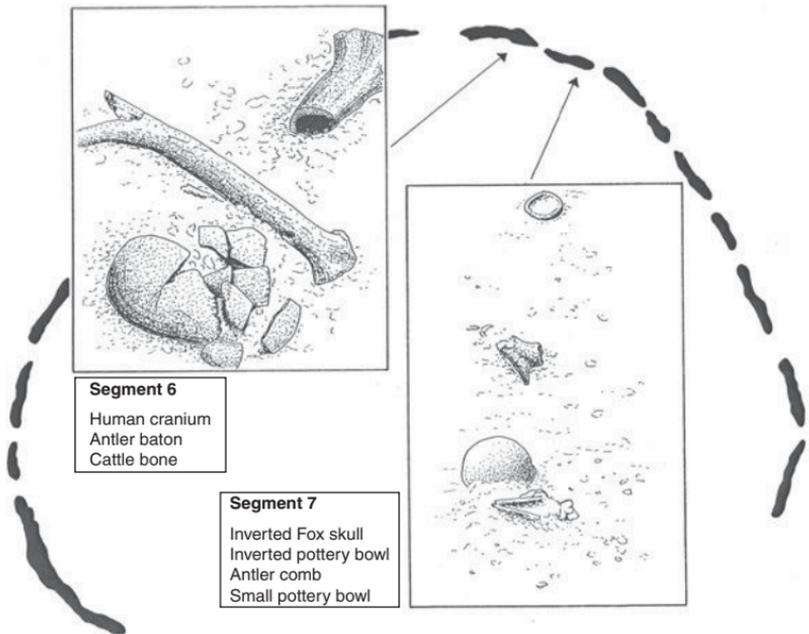
Fig. 7.1. Etton causewayed enclosure with assemblages of artefacts in ditches (illustration by Joshua Pollard)

'built up through complex exchanges that were valued for the social connections they facilitated and the histories attached to certain animals' (Pollard 2008, 52). He argues that burying both animals and people provided a mechanism for building kinship connections into the fabric of the monument.

I now want to focus on the causewayed enclosure at Haddenham, Cambridgeshire (Fig. 7.2) by way of comparison. Haddenham has not been as extensively excavated as Etton; nevertheless, we can discern some interesting spatial patterns in the deposition of artefacts within the ditches. This is most strikingly observed amongst the lithic assemblage, as in the primary ditch silts there is a pattern of segments with high numbers of flint and those with low numbers of flint (Middleton, in Evans and Hodder 2006, 296). There are also distinctions between implements and the by-products of lithic production, with ditches F/G, I, and M having high ratios of implements to by-products. A similar pattern prevails in the secondary silts, with large numbers of cores and implements being associated with large numbers of flakes in certain segments. The patterns of lithic production suggest some segments of the causewayed enclosure are associated with periods of intense activity, while others appear to have an

Fig. 7.2. Haddenham causewayed enclosure (illustration by Aaron Watson from an original in Evans and Hodder 2006)

absence of activity. Performance, and the display of skill, inform lithic production at Haddenham; these performances appear to be punctuated and spaced around the enclosure. They also changed their character and spatial location over time, as the fluid nature of the processes producing ditch variation is evident in that the frequencies of finds within them altered. For example, ditch K had the equal highest pottery sherd frequency in the secondary fills, and one of the lowest in its tertiary fills (Evans and Hodder 2006, 325). We can, perhaps, consider these differences in the flow and intensity of activities in terms of periods of display and concealment, revelation and defacement.

The performative character of the deposits in causewayed enclosure ditches is, perhaps, exemplified by the deposits in ditch section I at Haddenham (Fig. 7.3). This segment of the ditch contains a concentration of deposits with the greatest numbers of lithic artefacts. The ditch contains a raised trapezoidal platform of earth at its centre and placed on this is a 'beheaded' butt-end fragment of a polished stone axe of Cumbrian source. Directly in front of the platform are three human skull fragments. Mark Edmonds (2006, 352–3) draws our attention to the performative play evoked in the deposition 'there is a play here with shape and alignment. The mound/platform, like the ditch in which it is set, maintains a longitudinal axis, as does the blade. The morphology of the blade and the mound/platform also bears some relation to the form of the nearby [Haddenham] long barrow.' In addition, the deposit comprises an axe without its cutting
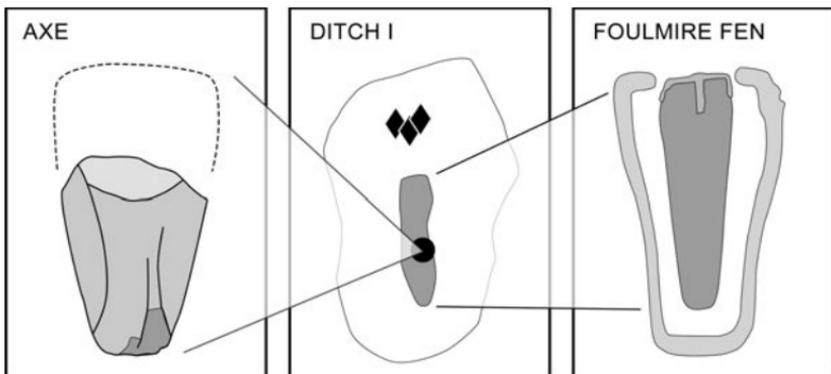
Fig 7.3. The ditch I deposit, Haddenham, and its resonances (illustration by Aaron Watson from an original in Evans and Hodder 2006)

edge laid on a mound/platform at the end of which were fragments of a human skull. We then have a composite, fragmented body; a scarred torso of stone and a head of bone (Edmonds 2006, 352). The deposit in ditch I, Haddenham is both potent and performative—it iterates a series of connections at a wider scale between the ditch and other contemporary monuments, such as the nearby long barrow. It also performs relationships and connections between materials of differing substance, stone and bone. Ditch I also underlines the point that the ditch deposits do not serve as a backdrop for deposits, rather that working of the earth is a performance in itself—the earth is shaped and articulated alongside, and with, deposits.

This analysis of the causewayed enclosures at Etton and Haddenham indicate that deposits in ditches differ in character. Moreover, we also observe that deposits are specifically placed in certain locations within the ditches, such as the terminals of the ditches. The causeways of causewayed enclosures therefore serve as junctures, or points of articulation, where deposits of a particular character placed in ditches change and become deposits of another character; causeways are points of transformation and change. In terms of performance, it is especially fitting that they also comprise entry and exit points to monuments. Many previous commentators have noted the significance of causeways as transitional zones between one arena of values and another (Evans 1988; Edmonds 1995; Harding 1998). Deposits are therefore visibly displayed at these points of entry and departure.

The deposits themselves also constitute sites of articulation, recombination, and reconfiguration; they often comprise assemblages of artefacts, animal and human bone. The performative assemblage and display of these groups of materials produce new combinations of experience and understanding, as previously distinct materials are recombined. In a sense, we can consider the deposits within causewayed enclosure ditches in terms of rupture and defacement, as the character of things, animals, and people are broken down and re-worked: a 'labour of the negative'—in Michael Taussig's terms—that, in revealing secrets, simultaneously conceals them through practices of reworking. It is especially significant that at many sites the display of groups of artefacts is followed by a process of covering up. Artefacts displayed in the ditches through these revelatory performances provide the potential for the production of memory, as artefacts are rapidly displayed, re-combined, and then concealed.

Fire, Re-working, and Repetition

Above, I have emphasized the deposition of artefacts within the ditches of the causewayed enclosures of Cambridgeshire. However, we also observe other kinds of performative activity. For example, at Haddenham, Evans and Hodder (2006, 326) note that in many of the ditch sequences, the initial phase of formalized activity was brought to an end by a phase of burning; the upper fills and the final use of the ditch were also associated with burning. This evidence is supported by the distribution of burnt struck flint, which is concentrated in the upper fills. While the firing of monuments occurs in causewayed enclosures in eastern England, it is a prominent feature of monuments in southwest England upon which I will now focus.

Fire played a significant role in the final phases of activity of phase 1c at Crickley Hill, Gloucestershire, and the backfilling of the final re-cuts involved fire. As the excavator, Philip Dixon, observes: 'several lengths of the inner ditch, in particular, were fire-reddened on their rock faces and the bank material itself had been thoroughly burnt before it was once again dug out and piled behind the ditches' (Dixon 1988, 81). There was only one re-cut after this phase of activity, which may have held a slight fence. After this, the site was abandoned for a probable period of decades, based on the nature of the ditch fill (Dixon 1988, 81). At a later stage, a further enclosure was constructed in phase 1d that enclosed the flat area on the western summit of the hill. This phase incorporated a low palisade erected at the back of the base of the ditch (comparable to an earlier construction in phase 1b). This final phase of activity is marked by the concentration of leaf-shaped arrowheads (totalling 400) in its eastern entrance, taken to indicate the attack of the enclosure (Dixon 1988, 82).

Further evidence of destruction is seen at Hambledon Hill, Dorset (Mercer 1980, 1988; Mercer and Healy 2008). My analysis is based upon the account published by Healy (2005) and the excavation report (Mercer and Healy 2008). The site at Hambledon Hill is complex, with at least four phases or periods of Neolithic activity (Mercer and Healy 2008, 13). The main causewayed enclosure is situated in the centre of the hill, while a series of outworks are built on spurs (Fig. 7.4). Of these, the Stepleton enclosure on the south-eastern spur is the most significant for my account. Healy notes that the timber substructure in the inner Stepleton outwork 'showed signs of hasty construction and of abandonment in an incomplete state'
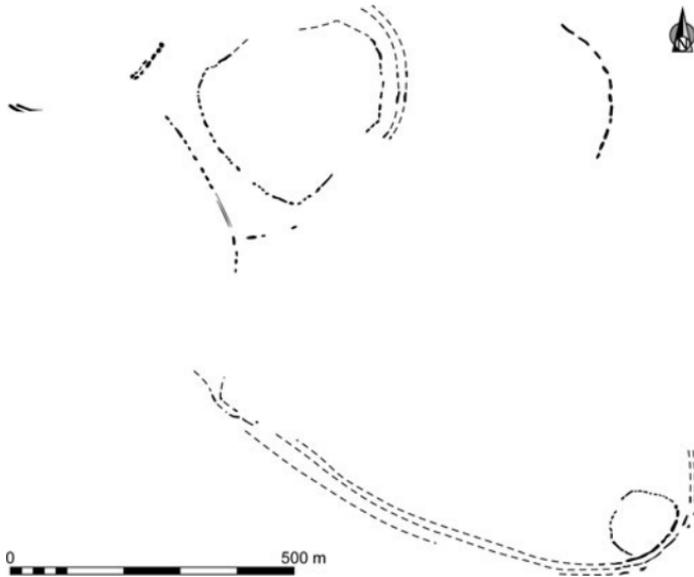
Fig. 7.4. The features of the Neolithic causewayed enclosure, Hambledon Hill, Dorset (illustration by Aaron Watson from an original in Healy 2005)

(Healy 2005, 32). Parts of it may never have been finished. This is difficult to reconcile with excavator Roger Mercer's claim that the outworks 'appear to accumulate to form a systematic function' (Mercer in Mercer and Healey 2008, 760). The sequence at Hambledon suggests episodic phases of occupation and construction during the 4th millennium BC (Mercer and Healy 2008, 744–77), potentially indicating gradual accretions or accumulations of architectural constructions, as opposed to a single, cohesive military plan.

The timber exhibits evidence of having been burned over a length of 200 metres; it appears that these timbers burned intensely as they are charred down to their post-holes. The timber substructure then collapsed (or was pushed) into the ditch (Mercer 1988, 104) and the chalk rubble scorched by the event was turned over and buried in the ditch in an act reminiscent of that at Crickley Hill. This event is also associated with the death of two human males: one buried with burnt chalk rubble and clay in a grave 80 metres away from the area and the other buried in the base of the ditch. The early phases of this structure are also associated with burial—this time of a neonatal child buried in the freshly-cut ditch (Mercer 1988, 104).

These destruction events do not mark the end of activities on this part of the hill; in fact, there is evidence for the rebuilding of the timber

substructure and gateway (Healy 2005, 32). At this time, a third outwork was built on the Stepleton spur; this too was associated with violence, as a young male with a leaf arrowhead amongst his ribs was placed in the base of the freshly-excavated ditch. This burial is coincident with a similar burial of a young male, also with an arrowhead amongst his ribs, placed in the partly silted inner outwork (Healy 2005). Curiously, despite the violent destruction of the site, there are few arrowheads found at Hambledon Hill compared with other causewayed enclosures: a total of 42 thinly spread in time and space across the site (Healy 2005, 33), and therefore not especially associated with destruction events.

Destruction levels are also encountered at other sites. For example, at the eastern site on Carn Brea, Cornwall, there is clear evidence for burning associated with the final demolition of the megalithic walling surrounding the site and high levels of charcoal readily observed in the extra-mural ditch around site J (Mercer 1981, 49). Again, the appearance of burning in the ditch is redolent of other sites, such as Crickley Hill and Hambledon Hill. These destruction levels were clearly associated with numerous leaf-shaped arrowheads (totalling 703), often clearly associated with the perimeter walls. At Hembury, Devon, there is, again, evidence for burning within the ditch, as Lidell (1935, 138) notes that the east-end of section I of the Neolithic enclosure exhibits evidence for having been burnt, with a 'layer of burnt matter, crackles, sandstone, branches and twigs which had scorched the surrounding sand red' (Lidell 1935). In addition, the rock-cut shelf of the ditch was 'fiercely burnt'. This area was covered in charred fragments of wood, burnt stone, and pottery, implying in situ burning. This burnt layer followed a layer of silting which appeared in the upper stratigraphy of most of the ditch sections excavated. In contrast with Carn Brea, only 149 arrowheads were recovered, of which 8 were unfinished (Lidell 1935, 159, 162). Arrowheads were distributed across the site and there are no particular concentrations of them.

One important point to highlight is the nature and sequence of the burning events associated with causewayed enclosures; notably—for the southwestern enclosures—the burning horizons are late in the sequence of use of the causewayed enclosures. This is particularly striking at Hembury, where a horizon of burnt material appears to follow a period of silting in the ditch. Also at Hembury, we observe the burning of deposits in the ditch, suggestive of deliberate destruction by fire. Notably, the burning at causewayed enclosures is not always the final phase at the site and, in some cases, such as Crickley

Hill, we observe construction phases that post-date the burning. This is to be expected as part of the current of activities at causewayed enclosures involves the continued re-cutting and re-working of sites. I believe these burning events are better seen as a form of deliberate closure ritual and I have previously argued that the firing of causewayed enclosures relates to the formation of memory evoked by violent or spectacular acts (Jones 2010b). While I believe this interpretation stands, I think we need to regard the formation of memory as bound up within a wider framework of ritual activity—activity defined by its performative and repetitive character.

Summary

In the above discussion, I have argued for considering the performative character of Early Neolithic causewayed enclosures. In the context of the causewayed enclosures of eastern England, I have discussed the character of the deposits within the ditches at these sites. We can consider deposits as iterations or citations, as deposits bringing to bear a series of connections, both between causewayed enclosures and other sites in the contemporary landscape, in the process fashioning fresh connections between previously distinct substances and materials. As the monument decayed and silted up, it offered a prompt for further action: the act of re-cutting the ditches. Monument and community acted in concert; the act of digging, and the shaping of the ditches were closely bound with the process of forging connections. While the placement of materials in the ditches can be considered as an act of display or revelation, we can also consider it as a process that reveals relationships and connections. A process of concealment then follows this act as the ditch silts up or is deliberately back-filled. The digging and re-cutting of ditches and, in certain contexts, the spectacular firing of causewayed enclosures was also performative in character—re-making connections between places (Harris 2009) and producing events of a memorable character.

Conventional discussions of causewayed enclosures would see them as spaces for performance (e.g. Whittle et al. 1999). Instead, I wish to emphasize the point that causewayed enclosures *are* performances; the activity of cutting ditches, punctuated by the intervals of uncut causeways are performances of intense activity followed by intervals of rest, a performance of cohesion, integration, and distinction. The performance

continues with the working of ditches and the deposition of significant materials, a process that draws together distinct connections; the performance may be repeated by re-cutting the ditches and revealing past artefacts, and re-making connections with deposits. The closing down of causewayed enclosures by fire is performative and efficacious as it produces a memorable event, thereby generating memories. The importance of physical traces is discussed by the archaeologist Oliver Harris (2009, 119) for comparable earlier Neolithic pit contexts: 'this was the physical evidence that a sense of community existed, that people put effort into the maintenance of relationships, that those relationships were what made them people in the first place'.

I want to underline the ritual character of the activities at causewayed enclosures. We have seen that the activities at sites are improvisatory and produce novel connections and narratives from previously distinct materials and substances. In addition, we have also seen that events at causewayed enclosures are repetitive in character, with the repeated re-cutting of ditches, the firing of ditches, and the repetitive revelation and concealment associated with the display and covering of artefact assemblages. Causewayed enclosures are, for a moment in time, brought to life and then shut down again. This activity is recurrent and repetitive: recurrent in that it draws on past activities and seems to produce a sense of similarity and continuity, repetitive in that the same activities are repeated over again and in the sense that repetition is efficacious and generative of a sense of order. It is particularly important to note that causewayed enclosures are not uniform entities, rather there are distinct regional differences in the character of sites (Darvill and Thomas 2001). In this account, I have emphasized deposition in relation to eastern sites, and firing and destruction in relation to western sites. While there are overlaps in activities across southern England, it is important to note that each site constitutes a unique performance or event.

CASE STUDY TWO

Barrow Building, Performance, and Memory at Snail Down, Wiltshire

The Early Bronze Age cemetery of Snail Down is situated on Salisbury Plain, Wiltshire, some eight miles from Stonehenge. It was initially

excavated by the great barrow diggers Colt-Hoare and Cunnington in the early 19th century. Excavation was completed by Charles and Nicholas Thomas in the mid-late 1950s, following serious degradation of the site by the British Army. Snail Down is one of the most completely studied barrow cemeteries in the British Isles.

Snail Down comprises 33 barrows of almost every type known in Wessex. There are several phases of activity (Fig. 7.5), of which the first five are the most significant here, dating from 2140–1810 cal BC to 1750–1440 cal BC. The site begins life as a settlement associated with Beaker and Grooved Ware pottery (Phase 1). This is followed by the construction of a bowl barrow surrounded by a post-ring in the northeast of the site. Further barrows are built in Phases 2 and 3, in close proximity to this first barrow; these appear to take the axis of the earlier Beaker settlement. The cemetery proper is associated with Phases 4 and 5 and extends in two directions (southwest and south-southeast) from the initial northeast focus of the cemetery. In Phase 4A, barrows form a line running northeast–southwest facing towards the local prominence known as Sidbury Hill; Phase 4B begins to see the emergence of a series of barrows running in a line north-north-west–south-southeast. The two 'arms' of the cemetery form a funnel arrangement, forming an open space between the barrows and framing the view of Sidbury Hill. This phase is associated with the greatest concentration of activity and dates to somewhere around 1500 BC. There is insufficient space to detail each of the barrows in the cemetery and the evolution of the cemetery.

Nevertheless, I want to discuss the nature and sequence of barrow construction at Snail Down. Evidence for the sequence is clearest at site III (Fig. 7.6). It begins with:

1. the cremation of an individual, possibly taking place close to the barrow location (as with site III), but often at some distance from the place of burial;
2. cutting of the grave to receive the burial;
3. turf being cut from the course of the proposed ditch;
4. the initial layer of turf from the ditch is then piled, turf uppermost, to form a slightly oval heap exactly over the central burial pit, and—in the case of site III—sealing the area of the pyre;
5. further digging of the ditch below the turf layer produced the underlying chalk bedrock. This is then spread over the central turf mound.
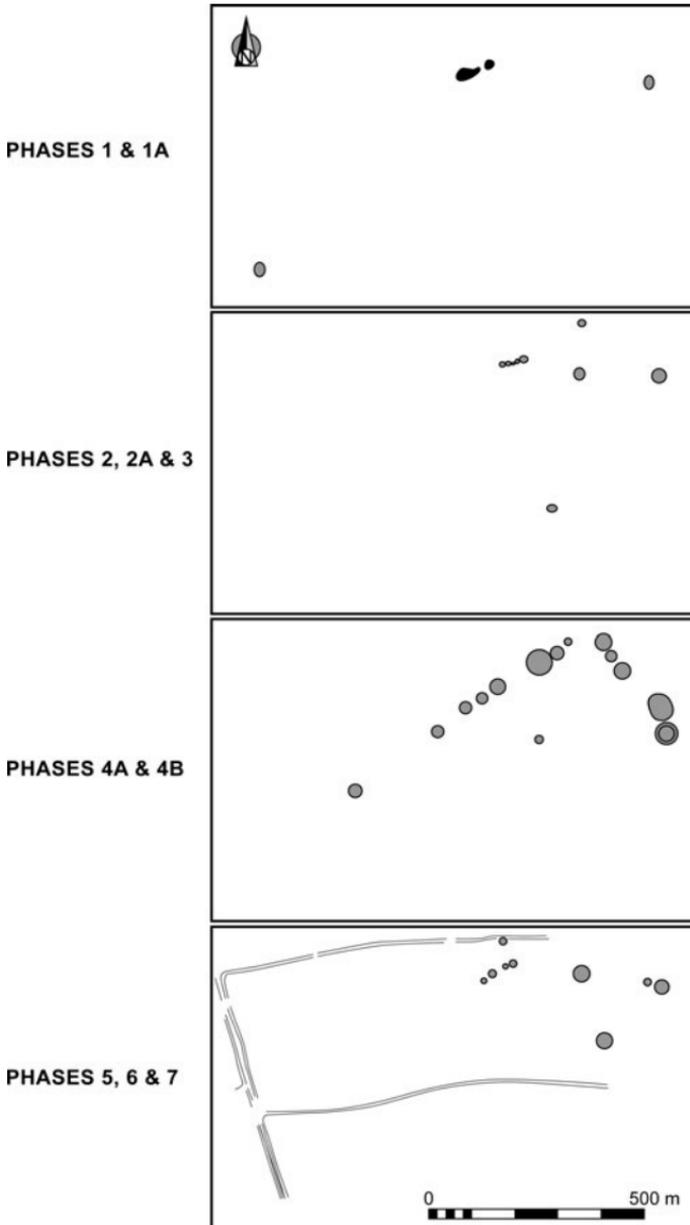
Fig. 7.5. The phasing of the Early Bronze Age barrow cemetery at Snail Down, Wiltshire (illustration by Aaron Watson from an original in Thomas 2005)
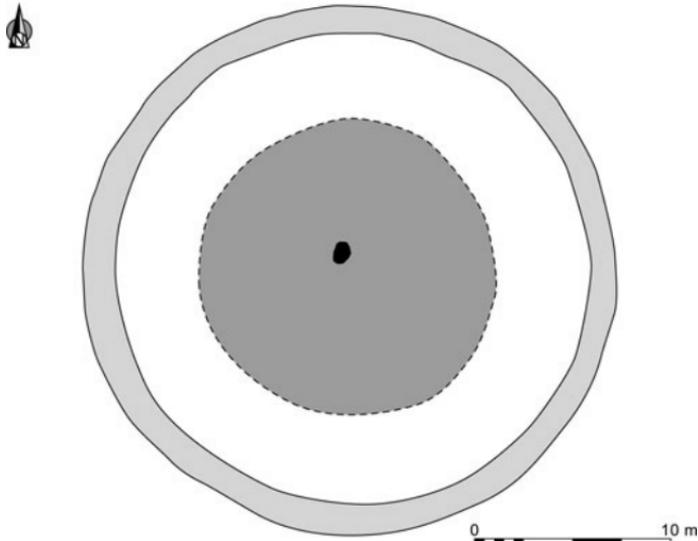
Fig. 7.6. Site III, Snail Down, Wiltshire (illustration by Aaron Watson from an original in Thomas 2005)

Thomas (2005, 302) discusses the processes involved in barrow construction: 'As ditch digging proceeded, we visualise groups of (antler) pick people and (wood or animal shoulder blade) shovellers . . . filling baskets first with subsoil, then mixed chalk and soil, and finally pure chalk, gradually heaping up the mound over the turf core until the pre-determined height and diameter were reached.'

But, to what extent is the act of barrow building predetermined? Given the evidence of barrows (such as site XIX) being covered in pure white chalk, another way of viewing the act of barrow construction is to consider it as a performance with the earth, the completion of which is affected by the geology on which it is performed. The sequence of construction appears to involve working with, and reversing, the stratigraphy of soil and bedrock. The initial acts of construction involving simply stripping and dumping the turf, followed by mixtures of soil and chalk, and completed by the excavation and dumping of chalk bedrock. The performance of barrow construction is not then an abstract contemplative exercise, rather it involves people attending to geology and being responsive to changes in geological stratigraphy. If anything 'determines' barrow construction,

it is the scale and diameter of the circular ditch, as this affects the size of the resulting barrow.

This is an idealized picture of barrow construction. The variety of barrows constructed at Snail Down portray an interest in working with the geology to produce differences in scale, texture, and appearance. For example, the site excavator Nicholas Thomas (2005, 22) discusses the appearance of site I (a disc-barrow): 'when completed, Site I would have appeared as a circular green plateau with two white chalky mounds, the whole surrounded by a blazing white ditch and bank, the latter perhaps separated by the thin green-brown line of a wall of turves'.

Barrow building is not a single event; it is important that we realize that the construction of barrows was, in some cases, a protracted process (see also Barrett 1988, 1990). This is amply demonstrated at Snail Down by the presence of pellets deposited from birds-of-prey roosting on the timber structure related to site XVII. A picture emerges, then, of a drawn-out mortuary process: a process characterized by activity and intervals or spaces in activity. If this is the case, we can, perhaps, consider monument building as an improvisatory process: a performance that—through ditch-digging and mound-building—works with the given stratigraphy of the underlying geology; a process in which certain decisions are taken and improvised upon. Further, it is performance associated with spectacle as the results of the performance produce a chalky white mound that stands proud against the grassland on which it is constructed.

Building Barrows, Remembering the Dead, and Performing Community

I have argued that the process of barrow building was characterized by improvisation with the features of the underlying geology. I now want to focus on the role of artefacts and the dead in the performance of memory in this Early Bronze Age cemetery. Importantly, the excavator Nicholas Thomas argues for a series of concordances between barrows of different phases (Fig. 7.7). These concordances relate to similarities of practice, similar burial traditions, or similarities in the types of artefacts deposited (Thomas 2005, 309–10). His analysis offers a detailed consideration of the perpetuation of tradition at the site. He regards these sets of concordances as evidence for

community practice and offers this as reasonable evidence for Snail Down as the burial ground of a single community.

In effect, Thomas (2005) suggests that each barrow-building episode cites, or references, earlier episodes of activity, or acts as a prompt or protension to future barrow building. In this sense, we can consider barrow building as components of the extended performance of remembrance of the Snail Down community in which barrows act as nodes in a spatio-temporal map. While Thomas (2005, 309–11) argues from the commonality of practices for the presence of a barrow-building community, I want to reverse this assumption and argue that it was through the repetition of practices—the burial of the dead, the building of barrows—that the community was built.

I wish to build on Thomas' insight by considering how human remains and artefacts are enrolled in the practice of remembrance and community building at Snail Down; how do these practices of commemoration help to build the community? I want to suggest that artefacts, human remains, and, indeed, the barrows themselves are active agents in the construction of memory. Snail Down has several burials with miniature cups (see also Chapter 3). A group of Early Bronze Age Collared Urns of varying size were associated with a secondary burial at site III. Here, with vessels D12 and D13, we can observe miniature vessels hastily produced, which, in decoration and form, refer to the larger vessel they accompany. At site XVII, a miniature Collared Urn was placed at the periphery of the mound, referring to the larger vessel associated with a cremation at the centre of the mound. For site II, the excavator suggests that the miniature cup was decorated to resemble a form of fossil sea urchin routinely discovered in Upper Chalk geology (Thomas 2005, 26). Here again (as with barrow construction), we observe the character of the geology affecting human affairs. The rim sherds of a further miniature cup accompanied the first. Curiously, these burials associated with a cremation are placed at the centre of the mound, while a series of other burials, including those of an unaccompanied fetus and a youth associated with a food vessel, were clustered around the central burial. In each case, the miniature vessels are rapidly produced and deposited as components of the mortuary process. The mnemonic potential of artefacts is further underlined by the dramatic destruction of the miniature vessels at site XVII—an act that simultaneously refers to the smashing and destruction of the Collared Urn deposited at the

PHASES	SITES	SITES

PHASES	SITES		SITES
1 + 1A	XV(1)		XV(1)
	CK5		CK5
?cenotaph	V(1)		V(1)
	X-XIII		X-XIII
	XIV		XIV
2, 2A + 3	XVIII		XVIII
	XXI		XXI
	CD2		CD2
	CD6b		CD6b
	II		II
	III(1)		III(1)
	III(2)		III(2)
	IV		IV
	VIII		VIII
4A + 4B	XVI		XVI
	XIX		XIX
?cenotaph	XXII		XXII
	CK4		CK4
?cenotaphs	CK7a		CK7a
	CD2		CD2
	XVII		XVII
?cenotaph	XX		XX
5, 6 + 7	I		I
?cenotaph	CK10a		CK10a
	CD6		CD6
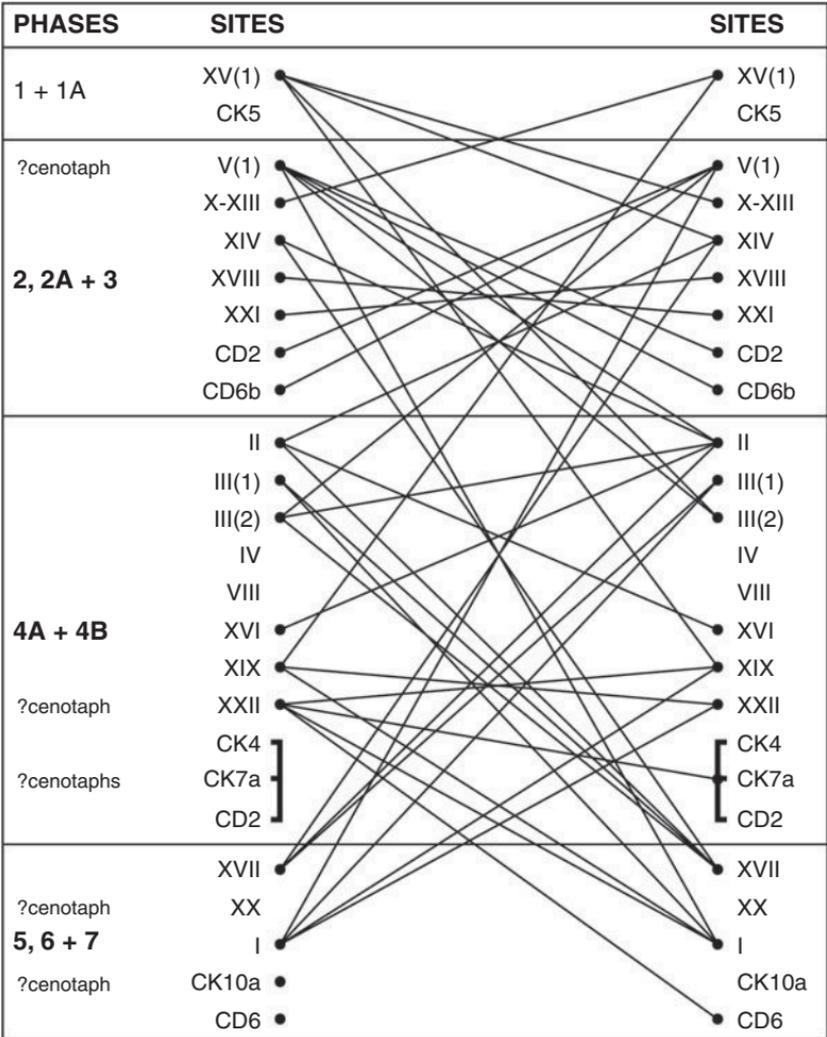
Fig. 7.7. Concordances between features and barrow architecture, Snail Down, Wiltshire (reproduced from an original in Thomas 2005)

centre of the barrow. I argue that, here, the drama of deposition and destruction is formative of memory (see also Jones 2005d).

The remains of the dead at Snail Down were also active components of the process of memory formation and community building. While most of the burials recovered at Snail Down were cremations, there is evidence for an extended mortuary process. In total, seven

barrows exhibit evidence for so-called 'cenotaph' burials, with the empty grave in site XIX containing several grave goods, including a miniature cup, an ogival dagger, ring-headed pin, grooved whetstone, and several bone pins. It seems likely that these cenotaph burials represent the remains from a mortuary practice in which the initial burials are removed, possibly cremated, and subsequently buried elsewhere. There are several pieces of supporting evidence for this interpretation. Several burials exhibit evidence for isolated fragments of human bone: sites I and XX with skull fragments, and sites III and XIX with single teeth. These suggest the initial presence and decay of the corpse before their removal. That barrows are open for considerable periods of time before the construction of the mound is attested to by the discovery of pellets disgorged from roosting birds-of-prey gathered around the post-built structure beneath site XVII. Further, the excavator suggests the pond barrow, site XVI, may have served as a mortuary for corpses awaiting final disposal (Thomas 2005, 283).

The next stage of the mortuary process is illustrated by evidence for funeral pyres beneath four sites. Nine cremation deposits also indicate that the cremations were carefully cleaned before deposition. Deposition took place in a variety of containers, including probable leather bags. In some cases, these cremation burials are sealed beneath chalk or flint caps. The sealing of the burial in this way acts as a dramatic mnemonic event, formalizing the memory of the event. Furthermore, this act echoes the sealing of the burial beneath the chalk geology of the mound at a later stage in the mortuary ritual.

The dead, and the artefacts associated with them, therefore play an active role in the performance of remembrance; the bones of the dead act as resources to be articulated in the performance of remembrance at Snail Down. Burial is not a simple process of disposal. Rather, the corpse intervenes at a series of stages in a protracted mortuary process. That the residues of past activity are incorporated into the practices of the present is witnessed by the incorporation of sherds of Beaker and Grooved Ware from the earlier settlement into the make-up of a series of mounds.

The extended mortuary practices observed at Snail Down suggests that the elements of mound architecture, the post-circles, grave pits, ditches, and berms of mounds were open for visual inspection for a considerable period of time, serving as components in the burial practices of later generations. It is the active intervention of artefacts, the dead, and funerary architecture in the ongoing mortuary practices

that help to build the complex mortuary tradition at Snail Down outlined by Thomas (2005). The artefacts, physical remains of the dead, and funerary architecture act as coordinates in a complex inter-generational cognitive map relating to the remembrance of the community at Snail Down. Remembrance here is materially improvised and performed.

Summary

My analysis has focussed on the mortuary practices at the cemetery of Snail Down, Wiltshire, as a form of mnemonic improvisatory perfor-mance. I noted the way in which burials may be protracted and punctuated events. Remembrance is enacted 'on the hoof', and a series of differing elements might be brought to bear on the enact-ment of remembrance. We can observe improvisation with the geo-logical stratigraphies that make up barrows and in the variety of uses to which those materials are deployed. In addition, relationality is foreground in the use of artefacts, the articulation of the dead, and the manipulation of funerary architecture at Snail Down. The physical intervention of fragments of the dead in mortuary practices and the way in which funerary architecture is continually drawn on in sub-sequent barrow construction, all suggests that the physical components of the past are perceived as active components in a narrative of con-tinuity—a story of the relationships thought to exist between people. The relational use of artefacts and human bone also opens up the potential for differing perspectives to be entertained: those living today may join the dead tomorrow; those cremated today were once intact corpses, etc. In this sense, the practices at Snail Down perfectly encapsulate the aspects of ritual discussed in the opening section of this chapter in that they draw on elements of the past in an improvisation that produces a sense of transformation and continuity.

CONCLUSION—PERFORMANCE AND MONUMENTALITY

I want to conclude this chapter by comparing the two case studies. In both cases, we have seen that the performance of construction was of

signal importance. In the case of causewayed enclosures, the construction of the monuments involved repeatedly digging into the earth to produce ditches and banks. In this case, the products and, indeed, the organization of labour, is performed and made manifest in their form. In the case of the barrows at Snail Down, the initial phases of activity after cremation and interment, involved cutting the surrounding ditches and heaping turves. Again, the products of the labour of the community are performed and made manifest in the final form of the monument.

We have seen that geology plays a part in the composition of deposits in causewayed enclosures. Most strikingly at Snail Down, we have noted the way in which the stratigraphy and colour of the local geology plays a significant role in the composition of barrow architecture. Significantly, we have seen that monuments are not simply ideas that are conceptually imposed, they are events that involve closely working with the materials out of which they are composed. In this sense, they are improvised with materials and geology plays an active part in making monuments. In both cases, the performance was also a spectacle, producing a result that stood out against its background. In the case of causewayed enclosures in southwestern England, a spectacle was also witnessed upon the dramatic firing of the enclosure.

Repetition of activities at sites is also of significance. Causewayed enclosures are characterized by episodes of cutting and re-cutting, and also episodes of firing and reconstruction. For the barrows of Snail Down, we also observe the re-working of barrow architecture, as barrows are constructed over a protracted period of time. The activities at the two types of sites—causewayed enclosures and barrows—also involve processes of revelation and concealment. Causewayed enclosures are dug and the deposits associated with them are assemblages that speak of a series of relational connections. These are then silted over and fresh activities and deposits take their place. Likewise, the construction of barrows involves periods in which the mortuary deposits are open to view. At other times, these are dramatically concealed with chalk plugs and they may also be associated with the drama of destroying artefacts at the graveside. Eventually, the barrow is constructed concealing the whole. Relationality is key to these activities too, as they draw on, and relate to, activities occurring in other locations at other times.

To summarize, my analysis of Neolithic causewayed enclosures and Early Bronze Age barrows has highlighted the performative character of prehistoric monuments. In both cases, the description of these sites as monuments may appear as a misnomer: neither sites have the grandiose monumentality of Egyptian pyramids or Classic Maya temples. In the case of causewayed enclosures, I argued that these are best understood simply as material performances. The same could, perhaps, be said of the barrows of Snail Down. My analysis has particularly emphasized the significance of the performance of making and the role of the various materials and substances utilized in these performances as part of the spectacle of making and re-making. These monuments can, perhaps, be considered as monumental precisely because they are performed with, and through, materials. In a sense, we can perhaps characterize monuments as articulations of material performances.

8

Presenting Three Artefacts

In Chapter 1, I introduced three artefacts, or sites, that I argued presented problems to an archaeology concerned with classification and order. Throughout this book, I have discussed the presentational and performative aspects of materials. In light of this, it is time now to return to these artefacts and sites.

LIFFS LOW

As noted in the introductory chapter, Liffs Low is a burial site—a barrow of earth. The site is located in Derbyshire, in the north of England. According to the original antiquarian report, the earthen barrow covered a stone cist made of limestone. The cist was 'about half filled with stiff clay, imbedded in which lay a fine human skeleton, whose knees were drawn up according to general custom' (Bateman and Glover 1848, 42). The male skeleton was accompanied by a series of artefacts, including two boar tusks, an antler macehead, two flint knives, two fine flint axes, and a small pottery vessel (Fig. 8.1) placed on the 'summit of the little heap, formed by this accumulation of relics' (Bateman and Glover 1848, 43). On the basis of the pottery vessel, the date of the burial is likely to be Middle Neolithic (Gibson and Kinnes 1997), while the antler macehead is likely to be of a similar date (Loveday et al. 2007). The burial is one of a number of single male inhumations often accompanied by rich grave goods dated to the Middle Neolithic; it has recently been dated to *c*.3350–3100 BC (Jay et al. in Loveday and Barclay 2010).

The deposition of artefacts at Liffs Low suggests an element of display. The artefacts were placed behind the shoulders of the

Fig. 8.1. The pottery vessel from Liffs Low, Derbyshire (reproduced with kind permission from Sheffield City Museum)

skeleton, possibly in a bag. Loveday and Barclay (2010, 120–1) note the significance of the pairing of artefacts: not only were a pair of boars tusks deposited, but also a pair of kite-shaped arrowheads, a pair of flint axes, and a pair of flint knives. On the top of this heap of artefacts was placed the unusual pottery vessel.

It is the pottery vessel that I want to focus on (Fig. 8.1). The vessel belongs to a wider category of pottery known variously as Impressed Ware or Peterborough Ware and has affinities with Rudston Ware, a local variant of this form; however, this particular vessel stands out in having a curious double-chambered form (Loveday and Barclay 2010) and could easily fit within other pottery categories. Previous researchers have assigned the pot to possible continental Trichterbecher (TRB) contexts, noting parallels with collared TRB flasks (see Loveday and Barclay 2010 for discussion). How are we to account for the curious form of this vessel? Rather than situating the vessel in a static overarching category, a performative approach to the vessel allows us to consider how this unusual form was produced.

Much British Earlier- and Middle-Neolithic pottery is based on a rounded base and the Liff's Low pot is no different. The walls of Neolithic pots are typically built up from the base with coils of clay and each successive coil is overlaid on the next and smoothed down, gradually building up the height of the vessel wall. One factor determining the thickness of the wall and the height and stability of the pot is the mechanical properties of the clay; clay is often tempered with grits of stone or some other stable substance, like bone or grog (broken pieces of re-used pottery) to ensure stability and even

temperature distribution through the pottery wall during manufacture and use. The rims of Impressed Ware pots are typically produced from thicker coils of clay, which are then overturned and smoothed off, and often decorated.

The Liffs Low potter began making the pot from a rounded base and successively built up the walls of the pot with coils of clay. Whereas conventionally a thickened coil of clay would have completed the pot at the rim, the Liffs Low potter recognized that this was but another coil of clay, like those of the body, and chose to use this thicker coil of clay as the base from which to continue building the walls of the pot. This decision created a degree of instability in the vessel walls and the walls of the pot were restricted at this juncture. The potter then continued building the walls of the pot and increased the thickness of the coils of clay so that the walls of the pot would have the same diameter as that of the lower part of the vessel. Towards the rim, rather than continuing to use thicker coils of clay, the potter reduced the thickness of the vessel walls, presumably recognizing that retaining thickened walls would produce an unstable vessel. The vessel was completed with a rim with thinner walls, producing a sharper, bevelled rim. All this was achieved, in part, because the vessel was of a small size—a fact that makes this virtuoso performance with clay all the more remarkable. Once dried to a leather hardness, the pot was then decorated all over by a repeated motif of impressed chevrons on the lower, middle, and upper part of the vessel. The pot was then fired.

The production of the Liffs Low pot was a performance with clay. The potter was presumably accomplished and aware of contemporary potting traditions. Working with the clay, the potter realized the clay had greater performative capacities, and was capable of sustaining a vessel with a greater complexity. Potter and clay improvised upon traditional techniques, extending the capabilities and appearance of the manufactured pot during the process of manufacture. The Liffs Low pot is, therefore, an improvised performance with clay. Once this virtuoso performance was completed, the result of the performance was difficult to use, as access to the interior of the pot was restricted. Indeed, its small size may suggest that it contained a precious liquid, perhaps a medicine or narcotic (Loveday and Barclay 2010, 122). We do not know how long the pot was used (or if it was used), although we do know that the final performance associated with the pot was its placement on the summit of the heap of grave goods accompanying the male inhumation at Liffs Low.

THE FOLKTON DRUMS

I now want to turn to another burial, that of Folkton, Yorkshire. This burial also consisted of a barrow of earth covering an inhumation—this time a child burial in an oval grave. The burial was situated at the outer edge of the second of two concentric ring ditches (Kinnes and Longworth 1985)—the remains of the barrow. Accompanying the child were a number of remarkable objects: three carved chalk cylinders. These were placed at the head and hips of the child. This burial, as with Liff's Low above, is part of a wider tradition of single inhumations beneath barrows, likely to date from the end of the 4th millennium or the beginning of the 3rd millennium BC.

I will focus here on the three carved chalk objects, known as the Folkton Drums (Fig. 8.2). For convenience, my discussion of the Folkton Drums will follow the numerical conventions established by Longworth (1999). The 'drums' are three solid cylinders of chalk incised with decorative patterns. Each 'drum' is decorated around its circumference (Fig. 8.3). Each of the 'drums' also has a decorated raised boss on its upper surface. The bases, or undersides, of the 'drums' are undecorated. The decorative schemes and devices carved on the 'drums' reference similar decorative schemes found on Late

Fig. 8.2. The Folkton Drums as a group (reproduced with kind permission from the British Museum)
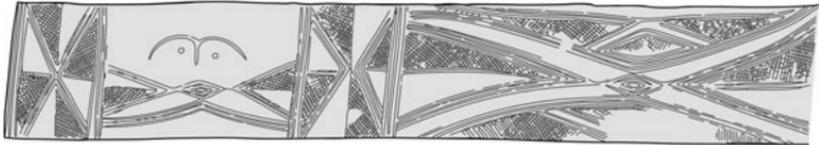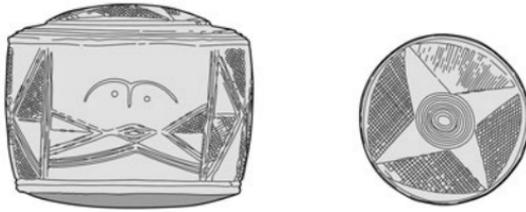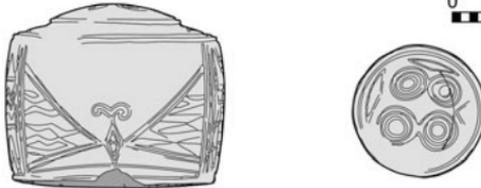
Fig. 8.3. Diagram showing decoration on all three of the Folkton Drums (illustration by Aaron Watson from originals in Longworth 1999)

Neolithic Grooved Ware pottery, carved stone balls, maceheads, Irish passage tomb art, and rock art (Longworth 1999, 86–7). At the conclusion of a detailed review of the decorative parallels for the Folkton Drums, Longworth remarks: 'unique items of material culture are not easily explicable and when, like the Drums, their uniqueness is matched by a high degree of craftsmanship and sophistication, explanation becomes further constrained'. In short, because the Drums cannot be typologically ordered, it is difficult to understand them. However, this point of view overlooks the physicality and material qualities of the Folkton Drums. I will discuss this below.

The first point worth noting is that the Drums are miniature in scale: the largest stands at no more than 12 cm from base to 'boss'. In this sense, the Drums are best appreciated through close physical contact in the hand. They do fit in a single hand, but require two hands to turn them. Turning them by hand reveals another important aspect of the Drums: they are three-dimensional objects. This point is lost in conventional depictions that lay out the decoration on the drums in a scroll-like manner so that they can be viewed synoptically (Fig. 8.3). The three-dimensional physicality of these miniature figurines is key to their appreciation because—like people—they have front faces and backs. Each Drum has four panels of decoration around its circumference: two long horizontal panels divided by two short vertical panels. The differences between the front and back of the figures is particularly obvious with Drums I and III as, in each case, one side of the figurine has 'eyebrow' and 'eye motifs' carved in the centre of the figure. This stands in contrast to the panel of abstract decoration on the opposite face of the Drum. Turning the figures also means that the decorated upper bosses are distinct from the decoration on the circumference of the figure. Turning these chalk objects therefore engages the viewer with different visual experiences.

Importantly, two of the Drums, Drums I and III, have face-like 'eyebrow' and 'eye' motifs. In addition, turning Drums II and III to look at the upper 'bosses' engages the viewer with the double multi-ring motifs on their upper surface that also have the appearance of eyes. Turning the face of the Drum away from the circumference, the viewer is confronted with the eyes on the upper surface of the Drum. Each Drum, apart from Drum II, has two faces that engage the viewer from a series of vantage points, although Drum II has two, double multi-ring eye motifs on its upper surface. There is a sense of

engagement and sentience involved in handling these figurines, and of entering into a relationship with them.

There are three Drums and they are very obviously a set, assemblage, or family of objects. Interestingly, while each Drum is miniature in scale, as a set they all differ in size: the largest (Drum I) being 12 cm tall with a diameter of 15 cm; the medium size (Drum II) being 10.5 cm tall with a diameter of 12 cm; while the smallest (Drum III) is 9 cm tall with a diameter of 10.5 cm. As a set, the decoration on each drum refers to decorative motifs and schemes on the other Drums. The differences in scale are important as it suggests that the figurines are components of a set meant to be viewed together. If we imagine the Drums not as solid objects, but as hollow spaces, each Drum 'fits' into the space of the previous Drum, Russian Doll-like. They therefore form a set.

As a set of three objects, the Drums produce a play of differences. This is particularly true of the decoration of these objects. Themes of symmetry and asymmetry appear to be strongly played out in the decoration of the Drums. I will discuss this for each Drum. Drum I (Fig. 8.4): on the short vertical panels (Longworth's panels 3 and 4), the triangular shapes have a series of opposed in-filled vs non-in-filled spaces. The triangles on the front face of the Drum (panel 1) are symmetrical either side of the 'face' motif, although the in-filled decoration either side of the 'face' is asymmetrical. This is also true

Fig. 8.4. Folkton Drum I (reproduced with kind permission from the British Museum)

of the decoration on the back of this Drum (panel 2). The 'boss' on Drum I is also asymmetrically decorated.

Drum II (Fig. 8.5) is asymmetrical front and back. The triangles either side of the central 'eyebrow' motif (panel 1) contain differing types of in-filled decoration. Notably, the central lozenge 'mouth' motif is oriented vertically, which differs from the other two Drums. The in-filled decoration on the rear panel (Longworth's panel 2) all differ, creating asymmetry, while the decoration in the vertical panels (3 and 4) also differs. The 'boss' motif is incomplete, with only three triangles surrounding the central double ring motifs.

Drum III (Fig. 8.6): the symmetrical triangles either side of the 'eyebrow' and 'eye' motif (panel 1) appear to have differing in-filled decoration (although one side is damaged). On the back panel (panel 2), any attempt at symmetry has gone—the triangular motifs at the base of the Drum are crammed into the space. There is also a notable asymmetry in the size of the multi-ring motif on the 'boss' of this Drum.

There are notable differences and similarities in the decoration of the Drums (Fig. 8.3). Drums I and III appear to form a pair as they both possess the clearest 'eyebrow' and 'eye' motifs; the lozenge 'mouth' motif is also oriented horizontally on these figures. Drum II appears to stand out—the decoration is less well executed, the 'eyebrow' motif is more abstract, and the central lozenge motif is oriented vertically. However, like Drum III, it has double multi-ring motifs on

Fig. 8.5. Folkton Drum II (reproduced with kind permission from the British Museum)

Fig. 8.6. Folkton Drum III (reproduced with kind permission from the British Museum)

its boss. Each Drum therefore 'speaks' to the others, but subtly differs. While there are common decorative schemes and motifs, there is a sense that the decoration of each Drum was an improvisation—this is clearly evident with the decoration on Drum II, panel 2, where the decoration of each triangular motif differs, and the decoration on Drum III, panel 2, where the individual motifs are crammed into the overall design scheme. Notably, the decoration on Drum I also stands in relief, whereas the decoration on Drums II and III are carved into the body of the chalk. As well as creating differences in decorative schemes, the act of carving the drums also created important colour differences, as areas of cross-hatching produce regions of shadow, opposed with regions of clear uncarved chalk. Therefore, the visual appreciation of these objects also involved the play of light on their surfaces.

I have argued that decoratively and physically these objects are inter-referential: each refers to the other. However, the references of these Drums are multiple and wide, and include other contemporary carved objects, such as carved stone balls, Grooved Ware pottery, passage tomb art, and rock art. This is surely the point of these objects: they are condensing a series of significant references—a process of condensation made all the more significant by their mini-ature scale. While they refer to multiple potential reference points, the juxtaposition of a series of motifs means the Drums are inherently ambiguous—an ambiguity underlined by the face-like 'eyebrow' and

'eye' motifs on their circumferences, and the eye-like multi-ring motifs on their 'bosses'. Are these people made into artefacts, are they artefacts with animacy?

On a series of levels, we can consider the performative and presentational characteristics of these artefacts. I have argued that the viewer handling the Drums enters into a performance, or relationship, with the Drum as a result of the face and eye motifs decorated on them. Further, the decoration on the Drums is performed 'on the hoof' as the decoration changes as the viewer handles the Drums—a point highlighted by the differential colour of the Drums as they are turned. I have also argued that the decoration is referential—that it performs a series of differences. I argue, then, that the production of these figurines was an improvisatory and inter-referential performance in which the decorative schemes and their individual motifs were devised as each Drum was engraved. My discussion of the Drums has analysed their differences in detail, arguing that they engaged the viewer, and that the subtle differences in size, colour, and decoration could be appreciated at close hand. However, we should also remember the context in which these artefacts were deposited and the materials from which they are made. Chalk does not withstand repeated handling and sharp differences in temperature and humidity. Given this, it is likely that the Drums were made and fairly rapidly buried. In this sense, the Drums are performative at a number of scales: they are made as an improvisatory performance, their diminutive size condenses the series of decorative references played out on their surfaces, their human-like characteristics engages the observer, and all of this is appreciated in a rapid and condensed form as they are produced, presented, and then deposited in an oval grave alongside the body of a child, before a low barrow of earth was raised over the burial.

SILBURY HILL

I want to shift away from the discussion of artefacts to consider my last case study, the monumental structure known as Silbury Hill (Fig. 8.7). Silbury Hill is an enormous artificial mound lying at the southern edge of the Avebury monumental complex in Wiltshire, southern England.
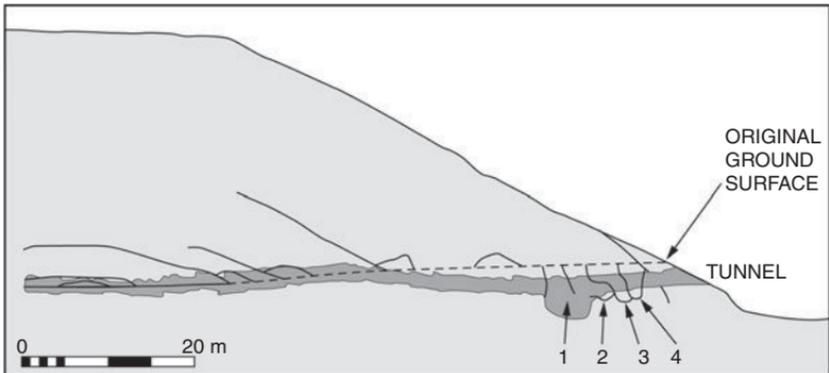
Fig. 8.7. The features excavated beneath Silbury Hill, Wiltshire. Successive phases of ditch cuts are numbered in the illustration (illustration by Aaron Watson from an original in Leary and Field 2010)

I have highlighted the unique nature of the Liffs Low pot and the Folkton Drums, and while Silbury Hill is unique in its immensity, there are a growing number of certain and potential parallels. The Droughduil mound excavated at Dunragit, Galloway, Scotland, although undated, was surmounted by a Bronze Age barrow (Thomas 2004b), making a Neolithic date probable (Brophy 2010). Like Silbury, this mound is part of a larger monument complex. In addition to this, other possible artificial mounds of Neolithic date include: the Conquer Barrow, Dorset; the Great barrow, Knowlton, Dorset; the Hatfield barrow, Marden, Wiltshire; Marlborough mound, Wiltshire (Whittle 1997; Barber et al. 2010); and, possibly, the Dragon Hill mound, Oxfordshire. Whatever the uniqueness of the Silbury Hill mound, it remains enigmatic and difficult to interpret. Rather than simply attempting to find parallels, an alternative is to consider the performance of mound-building.

Silbury Hill appears to have been built in several stages, with a fairly rapid construction between *c.*2400 and 2300 BC (Leary and Field 2010, 112). The construction of the mound was a performance that articulated people and substances, as turves, chalk, and people were coordinated in this constructional project. The evidence for the earliest phases of construction is not clear-cut, but the first clear evidence for constructional activity comprises a low gravel mound. Subsequently, layers of topsoil, subsoil, and turf were dumped over the gravel mound. There is likely to have been a circle of stakes delimiting this deposit of soil. This was not the only mound to have

been constructed; a few metres away to the south and southeast were two smaller mounds of organic mud (Leary and Field 2010, 99). After this, several pits were dug into the top of the central organic mound. Subsequently, mound-building continued and these pits, and the lower organic mound, became sealed under interleaved layers of differing materials, including topsoil and subsoil. This upper mound was then surrounded by at least five chalk banks, possibly forming rings around it—each new ring expanding the monument outwards by several metres.

The chalk rubble and clay for these banks are likely to have been quarried from a large surrounding ditch. The ditch had been back-filled and re-cut on four distinct occasions, with each successive re-cut shifting the ditch outwards by a few metres. After the fourth ditch had been backfilled the ditch was moved yet further out to its present position, and from which the chalk for the final phases of the monument was presumably quarried (Fig. 8.7).

This structure was then successively buried beneath a chalk mound of around 30 metres in diameter and some 5 metres in height. Successive phases of construction enlarged the size of the mound and the height of the monument rose to some 37 metres. There is a sense, then, of a continuous process of creation and revision, each successive phase of the project interleaving with the next. Once the stake circle surrounding the central gravel mound was in-filled with turf, it was necessary to stabilize it with chalk. Once the chalk mound began to be created, this offered the potential of yet greater sized mounds of chalk. The continuity of building practices can also be witnessed in activities on the summit, as dumps of crushed chalk were held in place by large, loose pieces of chalk rubble. The consequence of each act involved interplays of people and materials. As Bradley (2000, 107) points out, this was a constructional project that refer-enced other monumental constructions in the same landscape, in-cluding the Sanctuary on Overton Hill and the stone circles and henge at Avebury; there was a play of differences in the materials and spaces used for the construction of Silbury—the space encom-passed by the raised platform at the summit of Silbury mirrors the space enclosed by the stake circle of its earliest phase, and of one of the palisaded enclosures at West Kennet (Whittle 1997). The cutting of turves and the exposure of the underlying chalk bedrock referenced much earlier constructional projects, such as the Longstones enclosure (Gillings et al. 2008) and the construction of the contemporaneous

Avebury henge. It may have also harked back to a much more ancient tradition of mound construction exemplified by the building of long mounds, such as Beckhampton Road, Millbarrow, and South Street. The properties and constructional behaviour of chalk were well appreciated by the time that Silbury was constructed.

Silbury Hill was an assemblage that articulated a series of materials with people in a constructional project; this assemblage drew on a series of other materials and activities in the landscape, the consequences of construction shaped the project, and possibly drew on the labour of successive groups, or generations, of people. The immense material presence of the mound was one of the significant outcomes of the project, signalling the labour of the community of people involved in construction. As a white chalk mound, the monument stood proud of the surrounding landscape, even as it does today, as an immense artificial hill. At the summit of the mound was a monumental space: 'another circular enclosure cut off from its surroundings by an artificial feature of the landscape' (Bradley 2000, 107). Silbury Hill performs in a series of ways: its construction is a performative act that coordinates and articulates people and materials; the materials themselves perform or reference other activities taking place, or that took place, in the landscape. Indeed, the views over the Avebury landscape from the platform reference, or articulate, other significant places in the landscape and the mound, when viewed from other monuments in the landscape, acts as a highly visual, and striking, reference point (Barrett 1994, 31). Like the nearby henge at Avebury, Silbury Hill also draws together, or performs, the landscape (Watson 2001, 2004).

DOING THINGS WITH THINGS

The foregoing discussion of the three unique artefacts and sites demonstrates that an appreciation of artefacts and sites need not rely upon typo-chronological classificatory schemes or symbolic approaches. In many senses, typo-chronological schemes negate our understanding, as categorization or classification tends to substitute for understanding. In a related way, contextual approaches rely upon situating artefacts in context and tend to substitute an understanding of materials for an analysis of meaning. Neither approach deals well

with unique artefacts or sites. How can artefacts and sites be understood if they can be neither categorized or placed in context? However, both approaches overlook the material character of things and the presentational and performative characteristics of artefacts and sites. If we focus upon artefacts and sites as performances with a material presence, it is possible to discuss them, whether they are atypical or typical; the uniqueness of Silbury Hill does not prevent it from having a physical or material presence. Artefacts and sites do not simply signify, as presentational materials, they do things physically.

Chris Tilley (1999, 263) notes the fundamental differences between language and physical materials when he argues that:

> linguistic metaphors unfold in time and sequence (it requires time to read or utter a sentence which one follows), solid metaphors are spatial. There is no obvious starting point from which to read them.

He continues:

> Because material metaphors are solid and spatial, rather than spoken and transitory, the process of 'reading' them is immediate. There is no need to explicitly name, delimit or identify them. Material metaphors have a quality of density in that every aspect of an artefact contributes continuously to its meanings and is independently significant. (Tilley 1999, 264)

I believe this insight is important, although I find it problematic that Tilley describes artefacts as metaphors, so closely linking representation and meaning with physicality, as if artefacts are nothing more than congealed meanings. Instead, I believe we need to embrace the physicality of artefacts and sites, but emphasize their performative characteristics. Rather than conceptualizing artefacts and sites as so many congealed meanings, an alternative reading of Tilley's argument would be to see that the immediacy of physical artefacts makes them performative in a multiplicity of ways. Tilley (1999, 266) appears to realize this point when he notes: 'the metaphorical depth of any particular material form cannot be predirected in advance'. Rather than viewing artefacts as preconceived representations to be read, I, instead, argue that their power arises from their physical, presentational, or performative potential.

Another way to consider the performative power of things is to consider things as actors. The idea that artefacts or things do things is

enshrined in the concept of actor-networks (e.g. Callon 1991); actors consist of assemblages of both people and things in which actors are defined entirely by their relations and alliances. This concept is attractive in that it recognizes that things are not simply passively acted upon by people, rather things and people enter into alliance to perform activities. These alliances are performative and may produce concrete and long-lasting relationships, or momentary fleeting ones. As the philosopher Graham Harman (2009, 102) notes: 'every actor is a medium of translation able to link the most far flung of objects and equally capable of failing in that effort'. However, what status do things have in these alliances? There is a sense in which things exist as ciphers of human relations, as is evident in many of the examples offered by actor-network theorists. For example, Latour (1987, 215–37) discusses maps as technologies that enshrine knowledge, producing centres of calculation and enabling the manipulation of action at a distance. Callon (1991) analyses techno-economic networks as programmes of action that coordinate a network of roles; one example of which is money (Callon 1991, 138). The concreteness of these networks or alliances between people and things is defined by their durability and robustness (Callon 1991, 150). In these analyses of technological networks, things—while serving as actors, mediators, and intermediaries—simultaneously appear as fixed in their roles as coordinators of action. The physicality of things is only partly explained in their role as intermediaries or actants. Indeed, as the philosopher Graham Harman (2009, 105) notes: 'after all, the utter concreteness of actants actually requires that they be incarcerated in an instant'. The word 'incarcerated' resonates here. Actor-network theory, while producing a sense of the way in which people and things relate in networks of alliance, also produces a sense of stasis—things are fixed in this scenario. Above, I emphasized the importance of the performative potential of things in Chris Tilley's discussion of material metaphors. In a similar way, I want to retain the sense of alliance and network presented by actor-network theory, while also emphasizing the performative potential of things, to consider the point that things have a leading edge—a performative potential that exceeds their specific and momentary alliances and relations.

To summarize, I want to retain from Tilley's discussion the sense of physical immediacy presented by artefacts. In addition, I want to retain the notion of alliance, network, and coordination evoked by actor-network theory—the notion that things perform actions.

However, in both cases, there is a sense that things act as representations. Instead, I want to suggest that, rather than treating things as reflections of some prior order waiting to be revealed or decoded, we consider the potentialities of materials as important components of the unfolding nature of events.

In many ways, the problems with our discussion of things arise from the fact that we treat things as static entities bounded by time and space. If we treat things as representations we freeze them, defining and bounding their potentialities. However, if rather than discussing 'things' we recall that things are composed of matter or materials then we can begin to consider their potentiality more productively. We can consider the potentiality of materials both temporally and spatially. The anthropologist Tim Ingold (2010) meditates on the date of an oak desk. He points out that determining the date of manufacture of the desk overlooks the date of the oak from which the desk is made. Likewise, providing a fixed date for the oak overlooks its growth. Similarly, once made the desk has undergone repair it changes the appearance of the desk over time. He argues that, instead, we need to recognize that the desk is composed of materials in process. This example is apposite, as it underlines the point that to discuss things interacting at a specific time and date artificially defines their potentials; it holds them in artificial stasis. However, if we instead focus on materials, we begin to observe that materials unfold in time and space, possessing a potential for growth and change. While the role of things is typically predetermined and static, the presence of materials offers the potential for manifold action; materials may be drawn on for future activities in a variety of different ways. I want to emphasize the role of materials in the unfolding nature of events, and with geographers Ben Anderson and Paul Harrison (2010, 19) draw 'attention to events and the new potentialities for being, doing and thinking that events may bring forth'.

In conclusion, I want to reflect on the three artefacts, or sites, that opened this chapter. Each artefact, or site, is unique, and there is a sense that things could have been done differently. These were events that, in some ways, drew on what came before, and on materials around them, but, for a variety of reasons, their potentials were not realized in the future; the event of their manufacture did not take hold or 'stick' (see Barber 2007). In making some things present through construction or manufacture, other possibilities were made absent.

In the case of Silbury Hill, the contemporary construction of timber palisades and stone circles and henges offered other means of realizing or creating community with wider resonances and significances in the same landscape. Silbury drew on some of the material employed in these constructions, but—while its presence remained—its potentials were not realized. In the case of the Liffs Low pot, we may surmise that, while its production was an improvisatory and virtuoso performance, its form compromised its practical function. The Folkton Drums were simply one of many alternative carved and decorated artefacts, including the carved stone balls of northeast Scotland, the carved chalk plaques of southern England, and the remarkable carved block of chalk deposited at the base of the Monkton Up Wimborne shaft, Dorset (Green 2000, 82–3). The contingency of the three artefacts, or sites, discussed at the beginning of this chapter is caught nicely by a remark made by geographers Ben Anderson and Paul Harrison (2010, 21) that: 'if we are caught within a world of becomings, where events can be found everywhere, then any ordering is always volatile'.

This chapter has focussed on the volatile events encapsulated in the manufacture of three unique artefacts or sites, and I have argued that, if we are to understand these events, we need to focus on the performative potentials offered by these artefacts or sites. In the next chapter, I will reflect on the wider importance of performance and materials.

9

Mutable Archaeologies

> With good reason postmodernism has relentlessly instructed us
> that reality is artifice yet, so it seems to me, not enough surprise
> has been expressed as to how we nevertheless get on with living,
> pretending . . . that we live facts, not fictions. Custom, that ob-
> scure crossroads where the constructed and the habitual coa-
> lesce, is indeed mysterious. Some force impels us to keep the
> show on the road . . . When it was enthusiastically pointed out
> within memory of our present Academy that race or gender or
> nation . . . were so many social constructions, inventions and
> representations, a window was opened, an invitation to begin
> the critical project of analysis and cultural reconstruction was
> offered. And one still feels its power even though what was
> nothing more than an invitation, a preamble to investigation
> has, by and large, been converted instead into a conclusion—e.g.
> 'sex is a social construction', 'race is a social construction', 'the
> nation is an invention', and so forth, the tradition of invention.
> The brilliance of the pronouncement was blinding. Nobody was
> asking what's the next step? What do we do with this old
> insight? If life is constructed, how come it appears so immuta-
> ble? (Taussig 1993, xv–xvi)

If life is constructed, how come it appears so immutable? The purpose
of this chapter is to consider the next step referred to above by
Taussig in relation to archaeology. The immutable nature of archae-
ological artefacts is, of course, a construction. I want to argue that part
of the problem that archaeologists face with the question of mater-
iality and their analysis of archaeological artefacts and sites is that
they treat them as objectified *things*, as opposed to *materials*. I will
explain that distinction below.

Sites and artefacts are constructed as *things* through a double
process of objectification. In the first instance, archaeological sites

and artefacts are categorized. The project of categorization is one of the earliest intellectual impulses in archaeology. Arguably, it began in 19th century Denmark with the brilliant curatorial and typological analysis of Christian Thomsen, and was refined towards the end of the 19th and early 20th centuries by the equally brilliant systematic typo-chronological analysis of figures such as Oscar Montelius. The work of typological and chronological categorization continues to this day, and forms one of the critical foundations of the discipline. However, typological categorization also simultaneously draws conceptual boundaries around sites and artefacts. Categories also lock sites and artefacts in stasis; they 'freeze' them and bypass, or overlook, their material constituency. With political theorist Jane Bennett (2010, xv), it is wise to remember that 'if we think we already know what is out there, we almost surely miss most of it'.

Once a pot is defined as a 'Grooved Ware' vessel, the ceramic specialist then feels compelled to compare it with other 'Grooved Ware' vessels in order to understand it and seems to forget that the pot is made out of clay and may equally be compared with other typologically distinct vessels that are also made of clay. Similarly, once metalwork specialists have defined a bronze axe as 'Migdale type', they overlook the fact that the axe is produced from an alloy of copper and tin, and that this metal may have been melted down and once have constituted an axe of 'Bandon type', or even a metal artefact of a completely different form, such as a dagger, or halberd.

The point here is not that artefact specialists are unaware of the materials from which artefacts are composed. Of course, much effort is expended on the petrological and geochemical analysis of the provenance of materials such as clay, and the characterization by isotopic analysis of copper and bronze to model potential patterns of circulation; these studies have offered great insights into trade and exchange. Instead, the point I wish to make is that the construction of artefact categories creates its own imperatives and consequences. For example, once an artefact is categorized, it becomes easier for the ceramic specialist to compare 'Grooved Ware' vessels several hundred miles apart than to compare two vessels of different categories from the same site. One of the consequences of categorization is that artefacts are conceptualized as static *things* or objects; they are circumscribed by their categories and the material components of categories are equally held in stasis or circumscribed. Held in stasis,

artefacts and sites can then be compared visually in that peculiar form of document—the archaeological corpus (Jones 2001).

The categorization of artefacts and sites is the first act of object-ification produced by archaeologists. The second process of objecti-fication is the treatment of artefacts and sites as symbols. This occurs much later in the history of the discipline. As I have previously argued (Jones 2007, 14–15), symbolic analysis in archaeology assumes a distinction between material and symbol: artefacts effectively serve as vehicles for symbolic communication. I have also argued that when artefacts and sites function as symbols, the material constitution of sites and artefacts is overlooked (Jones 2004). This has serious con-sequences for materials-based archaeological science and effectively drives a wedge between the interpretative analysis of sites and arte-facts and archaeologists engaged with their material characterization (see Jones 2002 for a wider discussion of this problem).

There is a prevailing assumption that culture hovers over, sur-rounds, or envelops inert materials. This is evident in a number of recent statements on the subject of materiality. For example, in reply to Tim Ingold's (2007) appeal for a discussion of materials as opposed to materiality, Chris Tilley (2007, 17) states that 'the concept of materiality is required because it tries to consider and embrace sub-ject-object relations going beyond the brute materiality of stones and considering why certain kinds of stone and their properties become important to people.' Here, we see a clear articulation of the idea that—in Tilley's words—'brute' materials stand apart from the sig-nificance attached to them by culture. The same idea is again clearly articulated by Lynn Meskell (2005, 2) in an introduction to a volume on materiality in archaeology: 'the theoretical perspective we advocate in this volume focuses more directly on the broader interpretive connotations around and beyond the object'.

These authors therefore conceptualize the world as composed of materials distinct from human social or cultural life. Materials stand in distinction from, are surrounded by, and are made meaningful by the symbolic connotations of humans. In Meskell's words interpret-ative connotations are situated *beyond* the object, while for Tilley materiality *embraces* subject and object relations. The prior distinc-tion between subject and object are written into these definitions. Inert things simply act as vehicles, or carriers, of symbolic information. Symbols are assigned to things and meaning can only alter with a change in the context or 'interpretive connotations'. Again, in symbolic

or interpretative approaches the thing is held in stasis and the material constituents of things are overlooked at the expense of the symbols they signify. This problem with our conceptualization of material things is nicely caught by Tim Ingold's (2007, 9) point that:

> so long as our focus is on the materiality of objects, that is, on what makes things 'thingly'—it is quite impossible to follow the multiple trails of growth and transformation that converge, for instance, in the stuccoed façade of a building or the page of a manuscript. These trails are merely swept under the carpet of a generalised substrate upon which the forms of all things are said to be imposed or inscribed.

In short, things are objectified and this process of objectification stops in its tracks the processes of growth, transformation, and change that materials undergo. Instead, all that remains are fixed and stabilized things or objects upon which cultural meaning is inscribed. Importantly, this second process of objectification—the treatment of things as symbols—can only occur *because of the first process of objectification*: categorization. Because sites and artefacts exist as so many defined and static categories, they can function as stable entities for symbolic analysis. It is worth recalling Joshua Pollard's observation in his discussion of the mutability of materials that '*stability* is often considered necessary to retain any sense of fixity in *meaning* or value' (Pollard 2005, 47; my emphases). While these two processes of objectification are, in a sense, peculiar to the disciplinary history of archaeology, it goes without saying that these conceptualizations are underpinned by more fundamental ontological distinctions between inanimate objects and animate subjects enshrined in Western thought (for wider discussion see, for example, Latour 1993; Olsen 2003, 2007; Henare et al. 2007). However, this ontological distinction was actively embraced in the nascent field of material culture studies (Miller 1987) and continues to be perpetuated in archaeology, anthropology, and material culture studies to this day (Miller 2005).

I contend that the adoption and internalization of the assumed ontological distinction between objects and subjects under the guise of 'objectification' has effectively stopped the archaeological discipline in its tracks. What remains are a series of discrete units or categories of things that are mobilized only by the meanings attached to them by human subjects. The vitality and significance of materials are completely forgotten or lost in such a scenario. How could we think differently about materials?

RETHINKING MATERIALS

I argued above that we need to shift our focus from *things* to *materials*. Crudely put, while current conceptualizations of *things* emphasize stasis and fixity, a focus upon *materials* instead implies process and dynamism. I now want to consider how we might think differently about archaeology if we actively embrace an understanding of materials as mutable and changing, rather than static and fixed. We will begin by reconsidering archaeological categories. Rather than considering categories as pre-existing mental templates that are then produced in material form, categories can, instead, be considered as composed of a series of repetitions with materials (see Chapter 5): repetitious actions that are citations or iterations of previous actions. These repetitious actions are referential, they reference prior actions; categories are then condensations of these repetitious actions with materials. It is repetition and reference that makes a category recognizable as a category. If we consider categories as the embodiment of continuous repetitious activity, then, rather than perceiving categories as fixed entities, we instead realize that categories are simply moments made material in this continuous repetitious process. Categories are then dynamic and free flowing: they are composed of materials that—as materials—dynamically reference and relate to other aspects of the material environment.

My re-conceptualization of archaeological categories offers a dynamic view of materials. The notion of a dynamic material world resonates with the concept of material agency. Although I have recently published a review of this concept (Jones and Boivin 2010), I no longer feel comfortable with the term as it seems to enshrine a sense of fixity and, in its most familiar form, requires that materials are imbued with agency by external human subjects (Gell 1998), returning us precisely to the comfortable ontological distinctions I want to challenge here (see Holbraad 2009 for a more extended argument on this point). Rather than arguing that things possess agency given to them by human beings, it may be more appropriate to recognize that materials are mutable and changing and therefore intrinsically possess dynamism and movement. Notions of agency emerge in human processes of interaction with this shifting and changing material environment (Ingold 2006); a process in which agency is relationally distributed amongst people and materials (Bennett 2010).

I want to emphasize the dynamic and vital capacities of materials. This is particularly drawn out in the work of cultural theorist Jane Bennett (2001). Bennett challenges the traditional sociological view that the modern world is a place of disenchantment, detachment, and *ennui*. This view, she argues, is predicated on the ontological distinction between dead matter and lively subjects. Bennett (2001, 81) draws on Neo-Epicurean philosophies of the vitality of matter to understand how the world might be enchanted. For Epicurean philosophers, such as Lucretius, primordia (the stuff or matter of the universe) are too fine and subtle to see. For them, primordia are 'not animate with divine spirit, and yet they are quite animated—this matter is not dead at all. The Epicureans described an enchanting world in which there was no divine purpose, meaning or command,' and yet the world was alive. She continues:

> What do thinking entities, particularly humans, look like within this (meta)physics? They appear as composite entities composed of a particularly wide and rich variety of primordia. They too are nothing but matter, but matter is, remember, quite an amazing and vibrant thing. The set of capacities and experiences generally referred to as mind too is material. (Bennett 2001)

In sum, the world is composed of immanent, vibrant, and dynamic matters, each of which intersects with other matters to produce a sense of a changing, enchanted environment. In this view, people and things are simply differing forms of matter that intersect and interrelate.

A similar sense of intersection is evident in the vitalist geography of Sarah Whatmore (2002) and Beth Greenhough (2010). Vitalism does not restrict agency to humans, but rather extends this capacity to all living beings. This recognition of a lively material world, which we come to know through active experience rather than passive observation, they argue, entails a new way of doing geography. Rather than making, describing, or mapping the world it now involves paying close attention to, and engaging with, the ways in which dynamic and changing worlds are lived with and performed through the interactions of living and lively beings (Greenhough 2010, 41). Whatmore (2002) looks at the way in which, for example, animal conservation practices are a field co-produced by both human and animals. In the case of the conservation of the South American caiman (a species of crocodile), she argues that the wellbeing of these animals intersects with a plethora of concerns, including conventional conservation and

the trade in reptile leather for 'luxury' shoes and handbags. In this case, the material qualities of the caiman as an animal intersect with its potential uses as a commodity, thereby enabling its conservation. Whatmore (2002, 68) remarks that, in these cases, the world does not wait passively to be enlivened, but is already lively, active, and capable of intruding upon us.

Returning to archaeology, a renewed sense of the vitality of materials emerges with a concern with animism (Brown and Walker 2008; Alberti and Bray 2009). Typically, discussions of animism have been concerned with bending the concept to fit dominant Western ontological categories. The concept was utilized in 19th century anthropology to draw distinctions between primitive modes of reasoning and the intellectual capacities of modern peoples (Harvey 2005). Alberti and Bray (2009) are particularly concerned with shifting away from past discussions of animism and, instead, emphasize a concern with relational ontologies, and—drawing on the work of Bruno Latour—they argue for an intellectual position in which humans and other-than-human-beings are ontologically indistinguishable: all are potentially actants. Similar approaches can be discerned in what has come to be known as 'symmetrical archaeology'. The concept, developed from the work of David Bloor and Bruno Latour and other scholars in Science and Technology Studies (STS), is most clearly developed by Bjornar Olsen (2003, 2007) who argues for symmetry of both humans and things in the performance of activities, and he particularly insists upon the importance of revitalizing an interest and concern with things.

We have shifted from a symbolic or cultural approach which argues that things and people are ontologically distinct, and that things are made animate or significant only by human interaction, to a relational and performative approach in which other-than-human-things and humans interact and co-produce the world. However, there is a danger that these relational approaches continue to produce the same ontological distinctions. As Beth Greenhough (2010, 46) observes:

> even Latour, who is keen to emphasize the capacity of machines and bacteria to either co-operate with or confound the experimental process, seems at the same time to enslave those non-humans agents to a life-world of human making. In his account of Pasteur, the material needs of microbes are acknowledged, but the central role is given to

Pasteur who is the agent representing the microbes and displacing everyone else.

Instead, she argues, we need to acknowledge the constitutive vitality of the other-than-human as it intersects and interacts with human affairs.

To sum up this section, I argued that archaeological categories are composed of repetitious material performances with each category being made up of referentially related materials. I have likewise located referential approaches to materials in animate archaeologies, vitalist geographies, and the Neo-Epicureanism of the work of Jane Bennett. Each approach argues, not for a presumed ontological distinction between things and people, but for a relational engagement between people and materials. Indeed, in Jane Bennett's analysis of vibrant matter, the distinction between people and matter was blurred. Rather than treating things as materially stable, I instead argue for the instability and vitality of the materials of which things are composed. Things, being composed of materials, are relational. These approaches, in stressing the importance of relational materiality, argue that realities, and the materials that compose them, need to be enacted or performed.

How do we visualize the difference between Western metaphysics and the relational materialities advocated above? In a sense we can visualize the conventional ontological distinctions as *layered*, materials are treated as a mute and inert substrate over which the cultural values that animate them are laid. Relational ontologies differ. I have argued that activities are co-produced from a number of sources. In this sense, the agencies involved in the co-production or performance of activities might be visualized as an assemblage of intersecting planes, or lines of force. Moreover, these lines of force are not stable, instead—like a weather cloud—they are shifting and mutable and, while one assemblage of associated forces crumbles and disassociates, another is produced elsewhere with a differing set of forces and associative links. Like weather clouds, these performative associations retain their integrity while being constantly on the move. To return to the questions raised by Taussig's opening quotation in this chapter, we move to a position in which the 'show is kept on the road' by a continual process of mutually unfolding relationships, in which the world is continually fabricated from differing intersecting forces. Rather than taking for granted the idea that, for example, 'race is a cultural construction', we instead examine

the ways in which that idea is perpetuated, constructed, and reproduced from a variety of forces. In what follows, I want to consider the implications of this approach for archaeology.

ARCHAEOLOGY AND SOCIETY

To date, archaeological approaches to society can be characterized as representational. As John Barrett (1994, 155–72) noted some time ago, both processual and post-processual approaches proceed from the same assumption: that material evidence *represents* some past event or process. Instead, I argue that material evidence *enacted* past events or processes. In short, there never was an 'Indian *behind* the artefact'. Instead, the 'Indian' and the 'artefact' were, in fact, acting in concert.

For processual archaeologists, the concern is to reconstruct certain ideal types of social formation, such as tribes, chiefdoms, or states which are assumed to have left their material signatures, however partially, in the archaeological record. As Barrett (1994, 161) observes, these approaches 'discover, not a particular past but our ability to make a history which we recognize and which we are prepared to accept as the author of the material record'. We find processual explanatory accounts of past monuments or sites understandable because it describes them, not as an encounter with the historically specific and unfamiliar, but as the representational products of social processes that are comprehensible because those processes occur more generally and are part of our own experiences.

Post-processual approaches instead seek to make artefacts comprehensible and meaningful by situating them in contexts that are the products of a universal structure. This is an archaeology that seeks to identify the meaning content behind the objects that archaeologists excavate. This shifts the emphasis towards an understanding of a material universe within which patterns of association and exclusion between material categories can be recognized. These are assumed to have resulted from practices that employed conceptual categories that structured past societies. In both cases, the assumption is that societies exist prior to their material manifestation: societies and social or cultural values impress themselves upon materials. These approaches

reproduce the familiar Western ontological distinctions between society and thing that we have discussed above.

Instead, I argue that we need to reconsider the assumption that society is anterior to the material world; we need to question the existence of a priori societies. This is not to invoke some form of Thatcherite hell populated only by individuals, rather it is to argue that societies are enacted or performed, and that one of the ways in which societies are produced is through relational co-production with materials—a process in which materials are active participants in the production of the social group. Science and technology studies have argued for some time that technologies are some of the components that enable human societies to endure and perpetuate (Latour 1991, 2005; Law 2010). If, with Michel Callon (1991), we accept that technological networks help to coordinate our activities, concomitantly we also accept that 'the social' is intimately bound up with materials. However, this is not to overlook the fact that materials are lively, dynamic, and changeable. Given this, societies, through interactions with materials, are in a continuous process of production and reproduction. I do not intend to develop this complex point further here. I discussed this in Chapter 1 with the work of a number of sociologists and anthropologists (e.g. Strathern 1996; Knorr Cetina 1997; Urry 2000; Law 2004; Latour 2005) and I refer the reader to this prior discussion (for the most complete discussion of these issues see Latour 2005). Put succinctly, we might argue that we shift focus from an objectified *society* that stands apart from the material world, to instead consider *socialities* and their co-performance with materials.

Here, it is helpful to distinguish the approach I advocate from practice theory, with which it shares some concepts. Practice theory, developed from the writings of Giddens and Bourdieu, assumes the prior existence of categories or structures, these either shape action or may be challenged, and this may alter things. The approach I am developing instead argues for the central role of the event (see Chapter 2) and thereby re-inserts process into social life. It is through enactment or performance that social life is performed, not by drawing on a priori representations. It is through the tactical engagement with materials that social life is perpetuated; this process of engagement is continuous and unfolding. Moreover, tangible materials play a central role here as they help to perpetuate socialities.

In an archaeological context we need not be asking 'what kinds of societies made these monuments?' but 'how did the building of these

monuments produce certain kinds of socialities?' and 'how were these held together by the building of monuments and the manufacture of artefacts?' At this juncture, it is important to point out that I am not arguing that past peoples had no prior intentions that they brought to monument building, rather that in, and through, interactions with materials, socialities emerged; intentions were not simply imposed, they were performed. Part of the approach I advocate here is in arguing for monuments, sites, and artefacts as visible components in the architecture of past socialities, rather than as ciphers for social formations. The emphasis of the performative and relational approach advocated here is to consider how people and materials correlate and how materials might be deployed to reproduce socialities. This reconsideration of how we approach the material record leads us to also consider meaning.

MEANING, MULTIPLICITY, MATERIALS ANALYSIS

In the past, the search for meaning has been one of the signal concerns of the post-processual archaeology of the last decades of the 20th century. I wish to argue that, in the past, the search for meaning has been misguided; however, I also want to simultaneously suggest that we would be mistaken in wholly rejecting the analysis of meaning. I want to begin by noting that human beings are essentially sign users—they occupy a world of signs—and, without this, they would be ontologically and epistemologically misplaced. The approach to signs adopted in post-processual or contextual archaeology assumes that signs can be pinned down to a realm of meaning, sense, and intention, distinct from the domain of matter, substance, and materials (see Doel 2010, 125). One of the ways in which the signs associated with archaeological materials were to be pinned down was through their contextual association. I have argued above that this vision of signs is determined by an ontological framework that assumes a distinction between inanimate matter and animate subjects. This perspective is challenged by a relational materiality that views materials as active participants in the performance of meaning and significance. Instead of treating signs as disengaged from matter,

if we treat matter as an other-than-human component of the world occupied by humans, a component that then participates in the formation of its own significance, rather than viewing contexts as frames or containers of meaning, we should, instead, treat contexts as active participants in the unfolding process of meaning-making.

For these reasons, if we are to discuss signs, I believe the approach to semiotics developed by Peirce offers a more valuable contribution. Unlike Saussure, the sign, for Peirce, is intimately related to its material qualities and is efficacious and performative (see Jones 2007; Preucel 2010). To reiterate then, meaning is not simply arbitrarily associated with materials, it is enacted and performed—it undergoes change with changes in these performances. This marks a shift then from the analysis of *meaning* to the analysis of *meaning-making*.

This shift in approach also has other consequences for the way in which we approach meaning, away from an emphasis on plurivocality, or polysemy, towards an emphasis on multiplicity. The notion of plurivocality assumes a series of viewpoints from an object that the sign user is disengaged from. Multiplicities, on the other hand, are enacted—they recognize the possibility that, through material enactment, multiple meanings and multiple realities can be produced. This is well discussed by science studies scholar Annemarie Mol (2002, 2006) in her analysis of healthcare. She notes the way in which differing medical procedures or methods produce differing knowledge of the same medical conditions, such as atherosclerosis. Differing meanings are produced by differing practices and these practices relate to a common material reality. This differs from a plurivocal or polysemic position that argues for a single invariant reality that we simply take up different positions on. Instead, acknowledgement of the multiplicity of reality argues that we enact our realities and that these differing versions of reality are held together by our practices (Law 2005, 45–67).

Returning to archaeology, there is another important consequence of this shift towards a performative understanding of meaning and this concerns the disciplinary status quo of archaeology. At present, we have two alternative and disjunctive approaches to the archaeological artefact or site. On one hand, interpretative or contextual archaeologists treat artefacts as signs disengaged from their material constitution, and, on the other hand, a variety of materials-based archaeological scientists are concerned with the detailed description and characterization of materials. I have previously argued for the

treatment of material culture as a type of boundary object binding these two discordant approaches (Jones 2002). However, if we instead recognize that materials are actively engaged in the enactment or performance of meaning, then we begin to discern a way forward. Materials, in this formulation, are active participants in the performance of meaning. Therefore, the description of materials by archaeological scientists becomes an invaluable guide to the material properties and capacities of differing materials. These differing capacities and potentials are components of the relational and performative contexts in which meaning is produced. In short, the study of meaning and the study of materials are not two complementary aspects of the discipline of archaeology; rather, they are components of an intertwined multiplicity. Archaeological scientists and archaeological theorists are therefore engaged in the same inter-related activity.

Coda

In a recent paper Julian Thomas (2010, 182) observes that:

> when we work on an archaeological site, our activity forms the most recent horizon in its history of occupation. Pastness need not equate with an abstract antiquity, since the world we operate within is filled with things that are at once persisting and carrying on.

Here, Thomas recognizes our relational involvement with past materials. This is also recognized by Lesley McFadyen (2010), who argues that archaeologists and the people they encounter through their engagement with materials occupy a partly shared context—a context with a particular and conditional presence. It is this presence that I now wish to discuss.

Almost the entire history of the archaeological discipline has been concerned with what is lost, with what can be reconstructed, with what 'lies behind' the material 'residues' of the past, rather than focussing on what is present: materials. Archaeology has been overly concerned with *absences*, rather than considering the performative and material potentials of *presences* such as materials. Attempting to think through the potentials of an archaeology that acknowledges the significance of the co-present qualities of materials has been the subject of this book.

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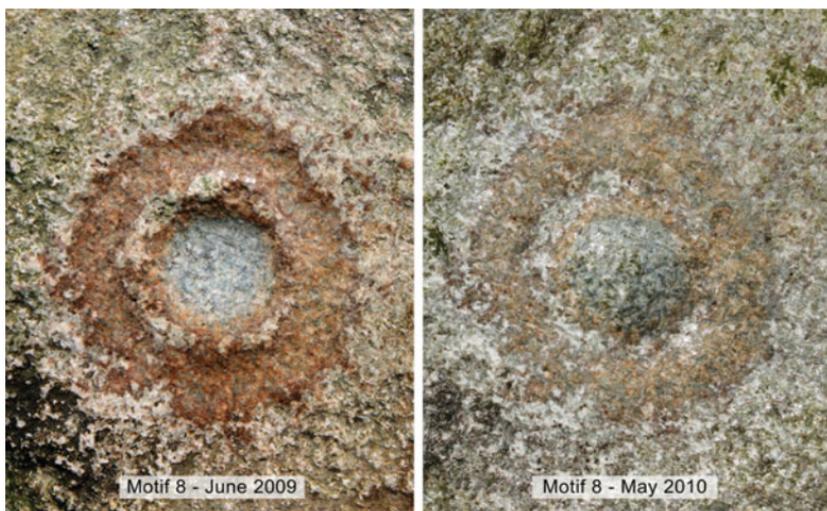
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