

christopher tilley

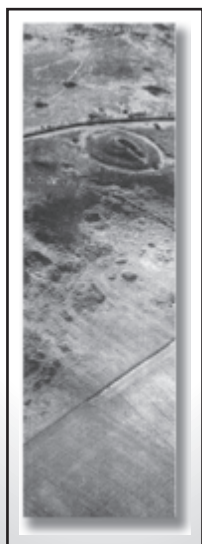


GEOLOGIES,
TOPOGRAPHIES,
IDENTITIES

interpreting landscapes

EXPLORATIONS
IN LANDSCAPE
PHENOMENOLOGY 3

INTERPRETING LANDSCAPES



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Geologies, Topographies,
Identities

Explorations in Landscape
Phenomenology 3



Christopher Tilley



Walnut Creek, California



LEFT COAST PRESS, INC.
1630 North Main Street, #400
Walnut Creek, CA 94596
<http://www.LCoastPress.com>

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ISBN 978-1-59874-374-6 hardcover

Library of Congress Cataloguing-in-Publication Data:

Tilley, Christopher Y.

Interpreting landscapes : geologies, topographies, identities / Christopher Tilley.

p. cm.

—(Explorations in landscape phenomenology ; 3) Includes bibliographical references and index.

ISBN 978-1-59874-374-6 (hardcover : alk. paper)

1. Megalithic monuments—Great Britain. 2. Land settlement patterns, Prehistoric—Great Britain. 3. Architecture, Prehistoric—Great Britain. 4. Landscape archaeology—Great Britain. 5. Great Britain—Antiquities. I. Title.

GN805.T55 2009

936.2—dc222010003710

Printed in the United States of America

☺™ The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48–1992.



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PREFACE

In this book, I bring together a series of published and unpublished interpretative essays on landscape and monuments written and researched at various times since 1994. This is the third in a trilogy of books, ‘Explorations in Landscape phenomenology’. The chapters in it also represent part of the wider development of a phenomenological approach to places and monuments in Britain and Europe undertaken in part, or in whole, in six other books: *A Phenomenology of Landscape* (Tilley 1994), *An Ethnography of the Neolithic* (Tilley 1996a), *Metaphor and Material Culture* (Tilley 1999a), *The Materiality of Stone: Explorations in Landscape Phenomenology 1* (Tilley 2004a), *Stone Worlds: Narrative and Reflexivity in Landscape Archaeology* (Bender, Hamilton, and Tilley 2007), and *Body and Image: Explorations in Landscape Phenomenology 2* (Tilley 2008).

The individual studies presented here have been included, because they are all variously concerned with the very different landscapes of southern Britain from the Mesolithic to the Iron Age and therefore may naturally give rise to some general comparative reflections with regard to both regional and temporal differences. Standard ways of writing the past have been concerned with particular periods—for example, studies of Neolithic or Bronze Age or Iron Age Britain. The past has also been written in terms of particular types of monuments—for instance, earthen long barrows, chambered tombs, stone circles or henges or hillforts. Another approach has been to discuss the past in terms of particular types of artefacts: stone axes, Grooved Ware or Beakers,

their regional differences and affiliations. This book takes a new approach: I attempt to write the past in terms of its geology and topography, discussing landscapes of chalk and granite, sandstones and slates, and pebbles. I assert the fundamental significance of the bones of the land in relation to processes of human dwelling.

Part of Chapter 1 was first published in Bruno David and Julian Thomas (Eds. 2008) *Handbook of Landscape Archaeology*, Walnut Creek, CA: Left Coast Press. Chapter 2 was first published in Alisdair Whittle and Vicki Cummings (Eds. 2007) *Going Over: The Mesolithic-Neolithic Transition in North-West Europe*, Oxford: Oxford University Press, Proceedings of the British Academy 144. These discussions in Part I, and the conclusions to the book in Chapter 10, contain the most general discussions.

Part II concerns chalk landscapes. Chapter 3 discusses the lowland chalk downland landscape of Salisbury Plain and its relationship to the construction of Stonehenge and the experience of its architecture in relation to the numerous Bronze Age barrow cemeteries that surround it. This research forms part of research collectively undertaken by the Stonehenge Riverside Project (Parker Pearson et al. 2006) of which I have been a co-director since 2004. The research discussed here forms a small part of a much wider excavation and survey project of the Stonehenge landscape and other Neolithic and Bronze Age monuments in it that will be published in the future. The fieldwork on which the discussion is based was undertaken by Wayne Bennett, David Field, Colin Richards, and me at various periods between 2004 and 2006. This chapter was first published in Mats Larsson and Mike Parker Pearson (Eds. 2007) *From Stonehenge to the Baltic: Living with Cultural Diversity in the Third Millennium B.C.*, Oxford: Archaeopress, BAR International Series 1692. I am most grateful to my co-directors, Joshua Pollard, Mike Parker-Pearson, Colin Richards, Julian Thomas, and Kate Welham, and co-authors, Colin Richards, Wayne Bennett, and David Field, to be able to republish this chapter here.

Chapter 4 considers another chalk landscape—the northern edge of Cranborne Chase in West Wiltshire and northeast Dorset—discussing relationships between Neolithic long barrows and Bronze Age round barrows, late Bronze Age and early Iron Age cross-ridge and spur dykes, hillforts and coombes (or dry valleys), and escarpment edges, spurs, and ridges. A small part of this study has previously been published in *The Cambridge Archaeological Journal* (2004). I undertook all the fieldwork for this study between 2002 and 2004 and was fortunate enough to be able to live in the landscape I was studying, an ideal situation from a phenomenological point of view. The house I lived in, Melbury Beacon, which was in a slightly elevated location to the north of Cranborne Chase, was named after a dramatic spur end visible from the living room and the garden. Out of various kitchen windows, I could see an

entire palimpsest of prehistory: to the east a long barrow on Whitesheet Hill, to the southeast Winkelbury hillfort, to the south the highest point, Win Green with its dykes, to the southwest the escarpment edge with its round barrows. These features variously became visible or invisible to me according to the seasons and the conditions of the light. It was with much regret that I left that house and the window that quite literally framed the past for me in the summer of 2004.

Chapter 5 discusses a third chalk landscape: The South Dorset Ridgeway, and the Neolithic and Bronze Age monuments constructed along it, first appeared in my book *Metaphor and Material Culture* (Tilley 1999a), which for a number of years now has been out of print. The fieldwork for this study was also undertaken during a period of two years, between 1994 and 1995, when I was living in another house at the foot of Hambledon Hill and where I was also fortunate to be able to see both a long barrow and a hillfort from my bedroom/study window. Driving to this landscape took little more than an hour, enabling me to undertake repeated visits throughout the year, walking and re-walking the great ridge and its surroundings.

Part III provides a very different geological basis for the discussions. Chapter 6 considers a landscape of East Devon, the East Devon Pebblebed heathlands, made up entirely of pebbles, which has no equivalent anywhere in Britain. The fieldwork was undertaken and written up between the autumn of 2004 and the summer of 2007 and has not previously been published. This was a landscape previously unknown to me. In terms of archaeological research, it was also pretty much a black hole. No systematic work had been undertaken for more sixty years. Again, I was fortunate to be living in the landscape I was studying—at the bottom of a valley with a stream at the end of the garden flowing over a bed of pebbles to meet the river Otter. To the east High Peak, the most significant hill in East Devon is visible from beside the stream. To the west, I can glimpse the Pebblebed heathlands on the horizon. Near to the heathland sources of the stream, there are a series of pebble cairns. The stream is an umbilical link between the place where I dwell and the cairns, between my present and the past they represent. I have followed the flow of the waters many times, moving upward to their sources and the high cairns. Subsequently, the initial field research discussed here has given rise to a new long-term research project on the Pebblebed heathlands, co-directed by Andy Jones, in which we are excavating several of these cairns (see www.pebblebed-project.org.uk).

Chapter 7 discusses the sandstone and slate landscape of Exmoor in North Devon and northwest Somerset in relation to the enigmatic and almost invisible stone monuments, stone rows, stone circles, and stone settings. The fieldwork was undertaken intermittently between 2004 and 2008, and this study has

not previously been published. I familiarised myself with this landscape during a long period, on repeated visits during 2004–2006, walking the footpaths and visiting most of the recorded monuments that I could find, eventually undertaking systematic survey work with the help of Wayne Bennett during the spring and autumn of 2007 and the spring of 2008. Mark Gillings was undertaking excavations in September 2007 at the Lancombe III stone setting and was kind enough to show me the site and send me copies of unpublished reports of other field research and fieldwork undertaken with Josh Pollard and Jeremy Taylor.

In Part IV, I discuss the granite landscapes of Bodmin Moor and West Penwith in Cornwall. The Bodmin Moor fieldwork was undertaken in the summer of 1993 and the spring of 1994. At that time, this was a landscape completely unfamiliar to me, and I initially found the terrain both difficult and daunting. This is the earliest fieldwork I undertook, published in this book, and it took place directly after I had completed the manuscript of *A Phenomenology of Landscape* (Tilley 1994). This study can be considered to be very much an extension of the general perspective presented with regard to the landscapes of southwest Wales and the Black Mountains and central Cranborne Chase, to another and very different landscape. This chapter was first published in *Cornish Archaeology* (1995) with a very abbreviated, but unfortunately in some respects far more frequently cited, version of it in *World Archaeology* (Tilley 1996b). The fieldwork largely undertaken in relation to Neolithic and Bronze Age ceremonial monuments gave rise to a major collaborative project centring on the Bronze Age settlement of Leskernick in northwest Bodmin Moor (Bender, Hamilton, and Tilley 2007). Earlier, in 1992, I had undertaken fieldwork in West Penwith but had never written up that research. This provided a preliminary basis for further field research undertaken in the spring of 2000, with Wayne Bennett, forming the basis for Chapter 9, which was first published in *The Journal of the Royal Anthropological Institute* (Tilley and Bennett 2001).

All the previously published chapters have been revised for this book, and I am grateful to the various editors and journals for giving me permission to use this material here. An alternative way of reading the case studies in this book is to read them in the order of in which they were researched and written (from earliest to latest: Chapters 8, 5, 9, 4, 3, 6, 2, 7); thus the reader may be able to discern an increasingly wider approach, bringing in different aspects of the sensory landscapes from an earlier emphasis that was primarily visual, to an attempt to consider other aspects of landscapes as soundscapes and smellscape and touchscapes, to discussions of their colours and the weather. Also, these studies attempt to go beyond primarily place-based ones, as the result of my visiting and walking between known monuments and locations and areas where nothing has been documented and to consider the former in relation to the latter. But what is more important is the manner in which different landscapes make their own

demands on a participant observer, because each landscape has its own particular identity and characteristics that affect experience and perception, prompting different kinds of narratives. In some cases, new photographs have been substituted for older ones, and all the line drawings have been standardised and re-drawn by Wayne Bennett. In some of the chapters, where subsequent research has been undertaken relevant to the account, this new research has been noted or otherwise cited in the discussions in the conclusions.

Mark Dover kindly initially prepared the figures for Chapter 3 and carried out the GIS analysis. Barbara Bender, Alan Abramson, and most especially Peter Herring made very helpful criticisms of Chapter 8. I am most grateful to Frances Griffith and Wayne Bennett for the very useful comments made on an earlier draft of Chapter 6, which helped me to improve it. The field research undertaken for Chapters 4, 5, 6, and 8 was very much a solitary affair: one man and his dog). I am indebted to Wayne Bennett (Figure P2) for undertaking much of the field research discussed in Chapter 3, together with David Field and Colin Richards, and for that forming the basis of Chapters 7 and 9, with me, at various times, contributing to, constructively challenging, and modifying many of the observations and interpretations. My thanks also to Barbara Bender for critical comments on a draft of Chapter 10 that helped me improve it.



The author and Tor working in the Stonehenge landscape.



Wayne Bennett working on Exmoor.

I am truly indebted to all my colleagues in the Department of Anthropology, University College London, for generating an immensely stimulating academic environment in which to work and facilitating the time for me to be able to complete this book. In particular, I thank the members of the Material Culture Group: Victor Buchli, Paolo Favero, Suzanne Küchler, Danny Miller, Chris Pinney, and Mike Rowlands. Last, but not least, I most grateful to Mitch Allen and the production team at Left Coast Press for their help and support for the book.

Christopher Tilley
London 2010



PART I

INTERPRETING LANDSCAPES

Chapter 1 provides a brief and general account of the phenomenological approach to the interpretation of landscape undertaken in this book. It also discusses the major themes that are addressed in the different parts of the book: geologies, topographies, and their relationship to social identities.

Chapter 2 approaches the Neolithic as a matter of mind, a triumph of the will, a new set of ideas, over matter and circumstances, a new way of organising social labour and expressing relationships to others through, for example, monument construction. My view is that the Mesolithic adoption of Neolithic elements was a highly localised selective, differential, and indigenous development.



CHAPTER ONE

OUTLINE OF A PHENOMENOLOGICAL PERSPECTIVE

From a phenomenological perspective, knowledge of landscapes, either past or present, is gained through perceptual experience of them from the point of view of the subject. (For some general theoretical and philosophical discussions, see Thomas 2006; Tilley 1994, 2004b, 2005a, 2008.) A phenomenologist attempts to describe these experiences as fully as possible. The objective is to provide a rich or ‘thick’ description, allowing others to comprehend these landscapes in their nuanced diversity and complexity and to enter into these experiences through their metaphorical textual mediation.

Embodiment is a central term. A phenomenologist’s experience of landscape is one that takes place through the medium of his or her sensing and sensed carnal body. It involves participant observation, which means being a part of what one is attempting to describe and to understand. A phenomenologist works and studies landscapes from the ‘inside.’ This may be contrasted with mediated or abstracted ‘outside’ experiences of landscapes such as those that might be gained from texts, maps, photographs, paintings, or any

computer-aided technologies, simulations, or statistical analyses. The claim is that studying landscapes through such *representations* can provide only a relatively superficial and abstracted knowledge. There is no substitute for personal experience, for being there.

It follows that for the phenomenologist his or her body is the primary research tool. He or she experiences and observes the landscape through the body. As far as is possible, landscapes are studied without 'prejudice'. In other words, the phenomenologist does not start out with a list of hypotheses to be 'tested' or a set of prior assumptions about what may, or may not, be significant or important. Rather he or she enters into the landscape and allows it to have its own effect on his or her perceptive understandings. This approach means accepting that there is a dialogic relationship between person and landscape. Experiencing the landscape allows insights to be gained through the subject-observer's immersion in that landscape—which is to claim that landscapes have *agency* in relation to persons.

Landscapes have a profound effect on our thoughts and interpretations because of the manner in which they are perceived and sensed through our bodies. We cannot therefore either represent or understand them in any way we might like. This approach stresses the *materiality* of landscapes: landscapes as real and physical rather than as simply cognised or imagined or represented. The physicality of landscapes acts as a ground for all thought and social interaction. It profoundly affects the way we think, feel, move, and act. The phenomenologist is a figure immersed within the ground of landscape. Landscape is fundamental for human existence, because it provides both a medium for and an outcome of individual and social practices. The physicality of landscapes grounds and orientates people and places within them; it is a physical and sensory resource for living and the social and symbolic construction of life-worlds.

A phenomenological study takes time. In principal, the longer one experiences a landscape the more that will be understood—first of all, because only familiarity can produce a structure of feeling for the landscape that a phenomenological account attempts to evoke. Second, landscapes, unlike their representations, are constituted in space-time. They are always changing, in the process of being and becoming, never exactly the same twice over. Places alter according to natural rhythms such as the progression of the seasons, time of day, qualities of light and shade, and so on. The weather, for which an entire archaeology might be developed, is a fundamental medium surrounding and affecting both people and their landscapes (see the discussion in Ingold 2007). Temporality is thus at the heart of a phenomenological study, in which we must learn how to see and how to experience and try to learn about the experiences of others (Bradley 2002; Jones 2007; Thomas 1996).

At their simplest and most abstract conceptualisation, human, and humanised, landscapes consist of two elements: places and their properties and paths or routes of movement between these places and their properties (Tilley 1994). There can be no non-contextual definition of either landscape or place. All depends on the scale of analysis. A place might be a rock outcrop, a hill, the point at which two streams converge, a field, a dwelling, or a settlement. A phenomenologist attempts to describe both the individual experiences of different kinds of places and the paths or routes between them. The concern is with both stasis and movement. He or she recognises that there are multiple understandings of both. Places alter with regard to how they are experienced, as do the paths or routes of movement within or between them. So, according to the manner in which one senses and experiences landscapes, one ends up with differing descriptive understandings of them.

I and you encounter places and paths from a *point of view*, in both the literal and the metaphorical sense of this term, through the medium of our bodies, and the character of this experience changes in relation to both the directionality of our movement and the postures of our bodies. The manner in which we understand places differs inevitably according to how we encounter them from within and the routes we take to reach places and the sequences of other places we experience along the way. These factors structure our perceptive experience.

My, and your, experience is 'coloured' by the manner in which we encounter landscapes, and how. Memory is thus fundamental to the nature of our experience, which is simply to accept our own embodied humanity. There can be no 'objective' (in the sense of impersonal) experience of landscape. We are infallible humans and can never aspire to the status of gods who might comprehend and understand everything from every possible point of view. In our common humanity, we share biologically similar perceptive bodies with others in both the past and the present. We also significantly differ in relation to the cross-cutting divisions of gender, age, class, ethnicity, culture, knowledges. These characteristics together with the physicality of our bodies provide both essential resources, and limitations, for our understanding of landscapes. This being the case, our interpretations must at every stage be in a very real sense both contingent and provisional.

To understand landscapes phenomenologically requires the art of walking in and through them, to touch and be touched by them. An experience of landscape mediated by trains or cars or aeroplanes is always partial or distanced. The view from the aeroplane is, of course, inhuman. We do not normally see or experience landscapes in this manner. The view from the car or train window is sensorily deprived: experience is reduced to vision. The phenomenologist acknowledges the multisensorial qualities of our human experiences of landscape, that a landscape is simultaneously a visionscape, a touchscape, a

soundscape, a smellscape, and a tastescape. These different perceptive experiences occur all at once. Thus our experience is always synaesthetic, (a mingling or blending of the senses), whether we realise or acknowledge this. Landscapes reside as much in the tastes of their wines, or the odours of their flowers, as in their visual experiences. Such a multisensory approach in archaeology, in which discussions of the visual in relation to landscape has always been dominant (Hamilakis 2001), is only just beginning to be developed (for example, Bradley 2000b; Cummings 2002b; Fowler and Cummings 2003; Goldhahn 2002; Jones 2006; Jones and MacGregor 2002; Rainbird 2008; Skeates 2008; Tilley 2004a, 2008; Watson and Keating 1999).

The phenomenologist undertakes a task that is simultaneously very simple and incredibly difficult. He or she 'resides' in places and walks between them. This is a humble, potentially subversive, and democratic project open to student or teacher alike, requiring no fancy technical equipment or expertise in using it, or money beyond that required for subsistence. Archaeological excavations, by contrast, are fertile breeding grounds for institutionalised power and the egos of their directors (Bender, Hamilton, and Tilley 2007). For the phenomenologist, technical equipment, as often as not, gets in the way, because it always mediates and limits experience. Beyond a notebook and a pencil, a still or video camera may be useful in capturing some aspects of visual experience, but little else is usually required.

A phenomenological study is always limited, and the limits are essentially the limits of your own body. Landscape studies conducted in this manner are inevitably small-scale. It would not be possible to conduct such a study of the world or even of a nation such as France. This is beyond human possibility, but we could build up a comparative global phenomenological study through comparing and contrasting the accounts of different social scientists. Phenomenological landscape studies are inevitably particularistic rather than generalist. They attempt to capture the poetics and politics of paths and places (Bender 1998; Cummings and Whittle 2004; Edmonds 2006; Edmonds and Seaborne 2001; Scarre 2002; Tilley 1996a, 1999a).

The human perceptive experience of landscape is inevitably structured in relation to basic bodily dyads: things that are to the front or the back of an observer; those that are above or below, to the left or right of the body, near or far away. These dualisms are directly related to basic body symmetries. Therefore, experiential qualities of landscape should be described and discussed in these terms. In relation to the body, vision is the most distanced of the senses: We can often see much further than we can hear or smell landscapes. For us to touch things, they must be in reach; taste (apart from sticking out the tongue) requires taking things into our bodies and is thus the most intimate of the senses.

It has been claimed that different hierarchies of the senses exist in different cultures—vision most important in Western modernity, smell or sound in other cultures. However, the very attempt to single out any particular sensory dimension and suggest that it has all-pervasive significance in one culture rather than another is an unhelpful simplification. Which of the senses is most significant depends both on context and the practices being undertaken; smells may be relatively more important in one context, sounds or sight or touch in another, and analysis needs to be sensitive to these variations rather than the scenario of one culture and one dominant sense (Tilley 2006c). For example, in Chapter 2 I argue that, in many areas of prehistoric lowland Europe, the advent of the Neolithic ushered in a sensory revolution in relation to the *perception* of landscape. The removal of forest cover allowed vision for the first time to become a distant and dominant sense in relation to the landscape. Without the trees, the contours and shapes of the land could be seen in a completely different manner, as could people, monuments, and places within the land. By contrast, in a densely forested Mesolithic landscape, smell and sound might be far more important in relation to orientation and resource exploitation, with sight being a far more intimate bodily sense.

Landscapes themselves influence forms of perception and activity, but they do not determine thought and action, and not anything can be made of them. They offer a series of affordances for living and acting in the world, and a series of constraints. We cannot determine in advance what may be of particular significance in any specific case. In one landscape, rock outcrops may be the most significant reference points; in another, river valleys and so on. One of our most common prejudices in landscape archaeology is to assume that the most important places in the landscape are those that have been humanly created, such as settlement sites and monuments. One of the most obvious phenomenological questions we try and answer is this: Why was this place chosen rather than another? However, such a question cannot be answered in isolation. We need to consider the monument or the settlement in relation to others, (searching for locational patterns) and with respect to its landscape context, which requires analysing its sensory affordances or constraints and the ways in which it might be experienced differently if approached from one direction rather than another. We cannot assume that the places for which we have no evidence of human presence were not important (Bradley 2000a). The peculiar hill or ridge without a monument may be of equal significance. A ‘natural’ stone may be as, if not more, significant than those deliberately erected, and there may exist both mimetic and contrastive relationships between humanly created and unaltered places (Rowlands and Tilley 2006; Tilley 1996a; Tilley et al. 2000). A phenomenological study of landscape thus requires a holistic approach in which we pay as much attention to the ‘natural’

as the 'cultural', to places with and without evidence of human alteration or activity.

Our experience of any unfamiliar landscape is like that of a child. Gradually we need to explore, to learn how to look, to hear, to smell, to touch, and to taste. We need to open out our bodies to all these sensory dimensions as much as is possible, to try and experience landscapes from within. In relation to past as opposed to contemporary landscapes, the task is inevitably difficult, since so much has irrevocably altered. But much also remains in the form of the geological and topographic 'bones' of the land: the character of the rocks, the mountains and hills, the valleys and the river courses, sometimes the coastline. The deafening sound of the waterfall (Goldhahn 2002) or the smell of rotting seaweed or meadowsweet, the sight of the conical hill, the way in which a stone feels to touch it and its colour, experiences of light and darkness within monuments, or the taste of honey may remain almost the same now as then: We do, in this limited sense still have a direct bodily connection with the past.

There can be no rulebook method to undertaking 'good' phenomenological research. Following is an outline of the basic stages involved in my own style of phenomenological research.

1. Familiarising oneself with the landscape through walking within and around it, developing a feeling for it, and opening up oneself to it.
2. Visiting known places of prehistoric significance and recording the sensory affordances and constraints they provide. This requires *writing* and then visually recording, through still or video photography, these experiences in the place, creating a written and visual text (rather than a series of abbreviated notes), because the very process of writing is a primary aid and stimulus to perception.
3. Revisiting the same places during different seasons or times of the day as far as is possible, experiencing them in and through the weather.
4. Approaching these places from different directions and recording the manner in which their character alters as a result.
5. Following paths of movement through the landscape and recording the manner in which this activity may change the manner in which places within it are perceived in relation to one another. Paths of movement will usually be suggested by features of the landscape itself, for example, following the lines of ridges or the courses of valleys or prehistoric monuments within it—for instance, walking along the line of a stone row, a Cursus monument, a cross-ridge dyke, a Roman road, or between nearby groups of barrows or settlements (Barclay and Harding 1999; Bradley 2002; Parker-Pearson et al. 2006; Tilley 1994, 1999a, 2004c; Witcher 1998).

6. Visiting and exploring and recording 'natural' places within the landscape for which there is little or no archaeological evidence of human activity (Bradley 2000a; Tilley et al. 2000; Tilley and Bennett 2001).
7. Drawing together all these observations and experiences in the form of a synthetic text and imaginatively interpreting them in terms of possible prehistoric life-worlds: how people in the past made sense of, lived in, and understood their landscapes (Bender, Hamilton, and Tilley 2007; Tilley 2004a).

All landscapes have profound significance and meaning for persons and groups. These are, as often as not, variable and contested, related to different interests and practices (Bender and Winer 2001). Although landscapes have meanings, whose significance we can attempt to phenomenologically make manifest and interpret, they also *do* things and have experiential effects in relation to persons, and the two are intimately linked. For example, prehistoric rock carvings or monuments undoubtedly had specific sets of meanings that we can try to decode semiotically. They also have specific somatic effects that we can describe, such as having to move in one direction or another, within and between them and in terms of light and sound and touch, and so forth (Goldhahn 2002; Jones 2006; Tilley 2004a). What these places meant and what they *do* to the body are likely to be intimately related, because meaning and doing work both through the body and through the mind. As our minds and thoughts are embodied, the manner in which we think is profoundly structured by the kinds of bodies and the sensory apparatus we possess.

GEOLOGY, TOPOGRAPHY, IDENTITY, AND LANDSCAPE

I have organised the chapters in this book in four parts. This chapter and Chapter 2, forming Part I, introduce the phenomenological study of landscape in a general way; Chapter 2, considering the Mesolithic/Neolithic 'transition', sets the scene for the other chapters in the book, which consider primarily landscapes from the Neolithic to the Iron Age, with aspects of Mesolithic settlement and land use being considered in some of them (Chapters 3, 5, 6, 8). Part II considers three contrasting chalk landscapes, the area around Stonehenge, the northern edge of Cranborne Chase, and the South Dorset Ridgeway. Part III considers the extraordinary pebble landscape of the East Devon Pebblebeds and the sandstone and slate landscape of Exmoor in Northeast Devon and Northwest Somerset. In Part IV, the discussion turns to the inland granite landscape of Bodmin Moor and the coastal granite landscape of West Penwith,

or the Land's End peninsula, both in Cornwall. All these landscapes form a sequence from west-east or from east-west, the manner in which they are organised in the book, and from particular places—the high points—in these landscapes it is possible to see the next one. From this perspective, at least, they form a chain of interconnected worlds (Figure 1.1).

Some general comparative conclusions are drawn out in Chapter 10.

The sheer geological diversity of the British Isles in such a small series of islands has often been noted. Geological contrasts in terms of the rocks forming, quite literally, the backbones of these landscapes and thus having a profound influence on the topography, or the lie of the land, could not be greater. We move from the smooth contours of the soft white chalk, largely without running water, cut through with coombes, with dramatic escarpment edges, to a multicoloured landscape of smooth rounded pebbles to the rounded sandstone and slate uplands with their numerous swift running waters, to the hard granite uplands with their dramatic rock outcrops or tors. All these landscapes are visually distinct; they look and feel utterly different, and there is also considerable local variation within each geological formation. They also have different soundscapes, from the crunching sound of walking on pebbles, to the howling of the winds through the granite tors, to the booming and crashing of waves on rock or shingle, to the sheltered quietness of the enclosed chalk

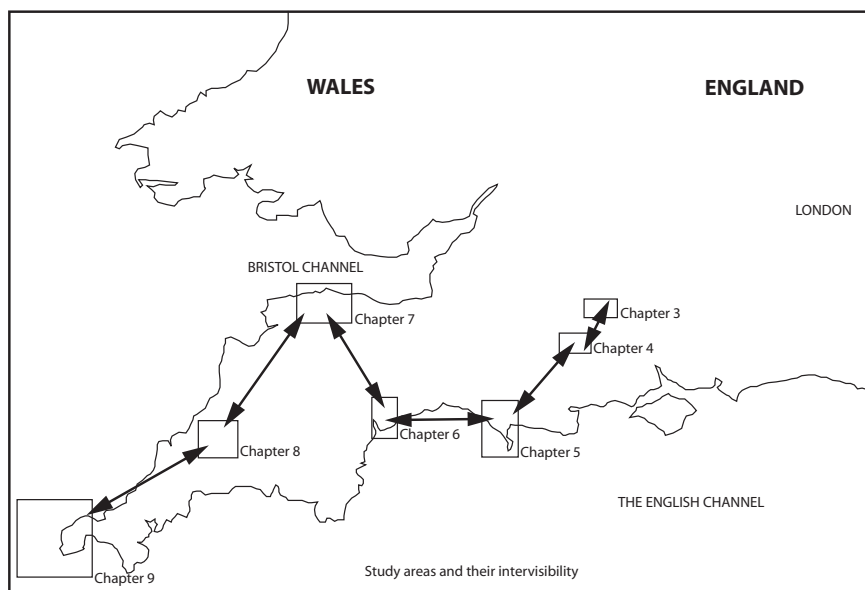


FIGURE 1.1 The study areas discussed in the text and their intervisibility.

coombes without running water, to the noisy tumbling of streams and rivers running across sandstone and slate.

The basic point is that the prehistory of the British Isles, and elsewhere, can be written through a consideration of its rocks, within which both past and present are contained. Each of these very different landscapes presented different possibilities, or material and sensuous resources, intimately related to settlement and monument construction. These landscapes formed part and parcel of the social identities of the populations who inhabited and dwelled within them. These people's lives and their monuments were embedded in the land and intimately related to it. Chalk, pebbles, sandstones, and granite afforded different sensory possibilities for the creation of cosmologies and the structuring of social relationships. They both constrained and provided affordances for the living; they were bound up with structures of power and required different kinds of beliefs and myths to explain them, to make sense of these very different material worlds of human inhabitation, which became objectified in the kinds of monuments that were constructed and the manner in which they were integrated into the landscape. This is not to suggest any simple determinism, since different choices or alternatives with regard to what to build and how to build it were always possible and are manifested in the locations and the forms of the monuments, their relationship to one another, and the topography. The rocks and their topographies created part of the character or identity of the populations who lived in, on, and among them, and these populations constructed their life-worlds and systems of meaning and significance in relation to them. To be a man or a woman inhabiting a landscape of granite was to have a very different identity from a man or a woman of the chalk, or of the pebbles. In turn, to live in West Penwith with its distinctive topography was a very different thing than to live on Bodmin Moor, just as the chalk landscapes of Cranborne Chase provided very different affordances and possibilities from those around Stonehenge or West Dorset. The specificity of place and placial (rather than spatial) relationships was fundamental, because it grounded and formed the embodied identities of the populations.

The word 'topography' combines the ancient Greek word for place, *topos*, with another, *graphein*, to write. Topographic description is the writing of place, and its purpose is through that act of writing to develop an understanding of how that place comes to have human significance—the layering of event, myths, memories, and associations. The kind of writing undertaken in this book might be described as writing landscape and place through the body, attempting to imaginatively reconstruct how landscapes were embodied in prehistoric lives.

A consistent theme of phenomenological philosophy, of anthropology (Tilley 1994, 2004a), and of a huge body of literature (Hillis-Miller 1995)

supports the basic point that the identities of persons are significantly related to the topographies and the geologies of the landscapes that they inhabit—they become part of people's characterful existence, as fundamental as the languages that they speak, the occupations that they pursue, and the material things that they create and use. Social life and social reproduction are creative responses to the landscape, entanglements among the materiality of bodily flesh, the mineral nature of the bedrock, and the land forms to which the landscape gives rise. They do not take place somehow on top of it or outside it, which would make that landscape irrelevant, but are rooted within it. A universal part of human experience, I believe, is the existential need to make sense of and find meaning in one's experience through a specific mode of inhabitation. The material traces of human history are accretions in the geologies and the topographies of landscape. The rocks may provide both vertical depth and surface pattern to which human dwelling is related. Through time, traces of humanity, such as a cairn, become as fundamental to that landscape and the manner in which it is understood as do the rocks and the hills, the littoral cliffs, and the inland valleys: in place, of the place, manifestations of a placial identity, of the earth in which people dwell. There is no human narrative or plot to an unaltered geological or topographic landscape. The process of human inhabitation and its layered material traces secreted and developing through time creates the narrative that anthropologists and archaeologists, geographers and historians, must unravel.

Every narrative that has ever been written, even the most abstract, necessarily has to trace out the arrangements and the relationships of places and dwellings and the manner and sequences in which they are connected by paths of movements—the lines and trajectories of social being and encounter. Both novels and non-fictional accounts thus ground themselves in landscapes that form a primary and an existential basis for cultural Being in the world. Places and monuments are always a form of presencing of the past in the present and in their mute way objectify a story of the generations who have used and inhabited them. Landscape research is of necessity a retelling of the stories latent in these places and monuments. It cannot be an 'original' or a 'true' story, insofar as there is no single or originary story to tell. It is rather a process of attempting to weave narratives around those sensuous aspects of prehistoric or historic landscapes that may still be experienced today, a reconstruction of the past in the present. Dwelling in a place inevitably alters the character of that place: It changes it, and therefore each generation has had a different story and a different history to tell. Landscape acts as both figure and ground to the people who inhabit it. It is ground in the sense that it is the geological and topographic face of the earth that they inhabit and move across. It becomes figure in a process whereby it becomes part of one's self-understanding and

self-knowledge, part of the way in which one's identity is mediated and constructed (Tilley 2006b).

Earth, sky, divinities, or ancestors and mortals, albeit conceptualized in radically different ways, form common elements of mythological systems and cosmologies; they are conceptual building blocks that, articulated in different ways, make sense of life and living. In a Heideggerian sense, people dwell through building on the earth, existing under the sky, and in relation to the divine. Different mythologies and cosmologies do not arise as an untrammelled product of the human mind. They are constructed from available material resources in the landscape and the skyscape with their different sensuous qualities in just the same sense as a building is constructed. Both are equally material productions. Building a monument, or a house, is a social act in which the relationship between earth and sky, people and the divine, becomes presented at a particular place or is brought into coexistence in a performative act.

Cosmologies explaining the origins and the place of people in the world are derived from the embodied sensory exploration of that same world. They do not arise from the untrammelled ramifications of an abstracted human mind that could make any sense out of anything in any way it likes. Rather they are a product of human immersion in the world, of a concrete living, borne out of material practice. Cosmologies make sense and bring order to the minutiae of similarities and differences observed and encountered through the necessity and practice of dwelling and movement through the medium of landscapes.

Thus cosmological thought is a holistic practical consciousness of the world in the sense that Marx intended this term to mean. It is metaphorical or analogical in nature, a primary and originary mode of human reasoning, whose basis is connecting often disparate experiences through chains of material resemblances, establishing order out of apparent chaos and drawing on the past and the historical tradition as a means conceptualize the present (Tilley 1999a). Our modern rationalist stories about 'natural' places and landscapes, rocks and rain and water, hills and valleys, plants and animals, are variously geological, geographical, and ecological in character. They aim to explain to us, more or less satisfactorily, how the landscape came into being. Archaeology and history aim to complete such a narrative about landscape with regard to its human alteration. However, unlike natural scientists, archaeologists necessarily have to grapple with the question of significance—what might the landscape have meant to those people who lived in it and altered it to suit their purposes? Although we have geology and ecology, prehistoric populations depended on cosmology to provide an explanation of their world. What we call *geology* and *ecology* was woven into their belief and value systems—their embodied consciousness.

The individual chapters in this book all attempt to imaginatively reconstruct aspects of prehistoric cosmologies from the starting point of view of a putative prehistoric 'geological' inquiry: What's under my feet?

Nature and Culture

A conceptual distinction between nature and culture lies at the heart of modernist epistemologies. Since its inception, archaeology has been, above all, about artifice: identifying, classifying, and recording cultural work and distinguishing between material culture and natural forms that are not the product of human agency. Thunderbolts became recognized as axes; long mounds and cairns were recorded as cultural work as opposed to natural undulations in the landscape. Recording and recognizing culture, as opposed to nature, provides the conceptual basis for all field archaeology. The Sites and Monuments records of England, or the Historic Environment Resource as it has been renamed, documents culture: sites, monuments, and artefact finds. It ignores nature, which only becomes a worry: Might this mound be an unaltered feature of the landscape? In the past, discussions of archaeological sites and excavations may sometimes have had a few introductory paragraphs describing their settings or contexts, but these were usually little more than scene settings, or backdrops to a description of the details of monuments, finds made in excavation trenches, and so on. Nature tends to be ignored precisely because it is not culture and is therefore considered to be relatively unimportant in interpretation, except perhaps as being considered in terms of providing economic resources.

The argument throughout this book is that, in thinking about, describing, and interpreting cultural landscapes, we need to spend as much time and effort considering 'natural' form as 'cultural' form. Nature provides a fundamental resource through which we can attempt to understand culture. If we ignore the former, we cannot provide an adequate understanding of the latter. Meaning is created through dialectic between the two. Nature and culture are two sides of a coin that cannot be separated, part of a complex system of signification.

Richard Bradley's book *An Archaeology of Natural Places* (Bradley 2000a) is an important text, because he has been the first scholar to discuss in detail 'natural' places that lack monuments but nevertheless have cultural deposits indicating their symbolic and social significance: bogs, rivers, axe production sites, rocks with carvings. I would prefer to term these 'super-natural places', to emphasize the fact that to the prehistoric populations they would have been regarded as anything but natural. Landscapes are, to use Latour's terminology, 'quasi-artefacts' existing *between* 'nature' and 'culture' and impossible to place on either side of this dualism (Latour 1993: 3ff).

The ‘natural’ places discussed in this book, in no particular order of importance, are these:

- Prominent hills
- Hill ‘islands’
- Escarpment edges
- Ridges and spurs
- Rock outcrops and tors on hilltops
- Rock spreads, or ‘clitter’
- Rock overhangs, caves, and runnells
- Rock outcrops on valley sides
- Unusually shaped stones, hills, spurs, or ridges
- River valleys and the direction of water flow
- The sea
- Lagoons
- Coombes, or dry valleys
- Coastal promontories
- Sea cliffs and river cliffs
- Gaps in ridges
- Solution basins
- Logan, or rocking stones
- Confluences, or valley and coombe systems
- Dolines, or solution hollows
- Springs
- Bogs and marshy areas
- Beaches
- Cracks, fissures, and quartz inclusions in rocks
- Pebbles and their qualities and colours

These ‘natural places’ constitute just some of a much wider range of ‘natural’ features found in the chalk, pebble, sandstone, and slate and granite landscapes discussed in the book. The list is by no means exhaustive. There are many other different kinds of ‘natural’ features to be found in other landscapes with geologically very different kinds of bedrock—for example, limestone landscapes or basalt landscapes or clay landscapes not discussed in the book. They are discussed in relation to different types of cultural places and monuments: Mesolithic settlements and flint scatters; early and middle Neolithic earthen long barrows; bank barrows; causewayed enclosures and megalithic monuments; Late Neolithic/Bronze Age stone rows; stone circles; stone settings and holed stones; Bronze Age barrows and cairns; Late Bronze Age/Early Iron Age cross-ridge and spur dykes; and Iron Age hillforts, settlements, and promontory forts.

In discussing these features of the landscape and their relationships to places and monuments, one may hold any or all of the following eleven basic associations, made in various ways throughout this book and elsewhere (Bender, Hamilton, and Tilley 2007; Tilley 1994, 1996a, 1999a, 2004a, 2008), to dialectically relate a monument or a place to its surroundings:

- *Marking*: The monument or place is significant, because it affords a particular sensory perspective in relation to its surroundings: a particular view toward a significant hill, rock outcrop, coombe head, or coombe bottom, the sound of a waterfall, the smell of the sea, and so on.
- *Mimetic*: The monument imitates aspects of its surroundings in various ways—for example, its morphology or aspects of its morphology duplicates in some ways aspects of its surroundings so, for instance, the long axis of a long barrow runs along the long axis of a ridge or runs parallel to that of a river valley, or the morphology of a stone monument mimics the form of unaltered rock outcrops.
- *Referencing*: The monument itself or aspects of it: Doorways, entrances, views along its long axis point toward or direct one's attention to particular features of the landscape beyond it, looking either toward or from it.
- *Clustering*: The grouping together of places or monuments around, on, or in relationship to particular landscape features, such as a particular hill or gap through a ridge.
- *Perspectival effects*: The manner in which one's sensory experience of landscape changes as one walks along, around, or through a monument—for example, how one's experience changes, or does not, as one walks along a bank barrow or a stone row within or outside a stone circle or henge or settlement.
- *Sequencing*: The manner in which one's experience of landscape changes as one walks between one monument and the next from a particular direction following a particular path, from one barrow or rock carving or settlement to the next; the manner in which experience is structured and framed—monuments or hills or rocks or valleys come into or out of view, different elements of the landscape have to be crossed, for instance, streams, boggy areas, spreads of stones.
- *Directionality*: The relationship between monuments and particular sensory effects such as the view of a hill or another monument in the landscape: Where is it best experienced for maximum sensory effect and in relationship to what?
- *Temporality*: The manner in which earlier monuments relate to later ones and how their relationship to wider features of the landscape might change or remain the same.

- *Origins:* The sources of the raw materials—stone and wood and soil and sand, and so forth—used to construct a monument, and those artefacts and other things deposited within them: where they derive from in the surrounding landscape, the manner in which they are structured and brought together in the architectural form. Monuments and places are within landscapes, but these landscapes are also part of them.
- *Substitution:* The monument occupies a place where elsewhere one might find a ‘natural’ feature—for example, a stone cairn on a hilltop without rock outcrops resembling a tor.
- *Incorporation:* ‘Natural’ features of the landscape are incorporated within the monument itself—for instance, tors, solution basins, dolines or solution hollows or holed stones.

The interpretative position put forward in this book depends on four basic principles:

1. *Landscape* is a holistic term. It may be defined as a set of relationships between named locales (Tilley 1994: 34). These locales are specific physical settings for social interaction (for example, forest glades, rocks, monuments, rooms, dwellings, settlements) that present material and symbolic potentialities on which actors draw in the conduct of their activities. Locales have individual and particular embedded meanings and are of vital significance in the formation of the existential self. A concept of landscape, by contrast, transcends the particular meanings of locales signifying a set of conventional and normative understandings through which people construct and make sense of their cultural world. Locales stand, then, in relation to landscapes as parts to wholes.
2. Landscapes are relationally constituted as embedded sets of space-time relations. They are experienced and known through the movement of the human body in space and through time. The meaningful spaces of landscapes are constructed through the temporalities of historical acts, forming both the medium for, and outcome of, movement and memory. Past actions, events, myths, and stories are embedded in landscapes. An important aspect of the experience of landscape is the directness or the indirectness of experience—locales that are close at hand or far away, those that are familiar or unfamiliar, visited daily or only on special occasions, those that have been seen and those that exist in the imagination. Knowledges of particular locales previously encountered set up structures of expectation and feeling affecting the interpretation and ‘reading’ of others.
3. Particularly in small-scale non-industrialised societies, learning about the landscape acts as a primary medium of socialization. Knowledge

of it is intimately bound up with knowledge of the relational self. Knowing 'how to go on' in a landscape involves a practical mastery of space that is simultaneously a process of finding oneself and one's social world. Landscapes *empower*; they may form part of the personal biographical understandings of an agent. Although people create their landscapes, these landscapes recursively act back so as to create the people who belong to them. Consciousness works on an always already socially objectified landscape that in turn affects it. As a shared set of socially mediated conventional understandings, landscapes can be claimed to be an extension of the social self, providing a series of principles and norms for living, relating to others, and the past. An attempt is made to interpret the sensual relationships encountered in landscapes to elemental processes such as metaphorical relationships between water and fire, stone, sea, the passage of the sun. Throughout the book, I argue that the mineral bedrock and topographic features of the landscape constitute a series of metaphorical resources of essential significance both in the formation of personal biographies and the creation and reproduction of structures of power.

4. Precisely because the landscape plays such an important role in the constitution of self-identity, controlling knowledge of it may become a primary resource in the creation and the reproduction of repressive power or structures of social dominance. Landscapes both *have meanings* that may be objectified or represented in various ways and *do things* to people; they have physical and sensory effects, and, through the process of constructing monuments and living in places, people both produce and construct themselves. Since landscapes are experienced by the individual as pre-existing external social realities, they cannot be understood just by introspection. Their meanings and significance must be taught by some and learned by others. The paradox of landscape, the double bind, is that although they are produced culturally they may be typically experienced as something other than a human product. And thus networks of power may be legitimised, appear natural, and be beyond challenge.



CHAPTER TWO

THE NEOLITHIC SENSORY REVOLUTION

Recent research has stressed the fundamental role of monuments and material culture as objectifications of new modes of thought and the changing character of social relations during the Neolithic. The Mesolithic/Neolithic 'transition' in Europe has been argued to have been primarily neither technological nor economic in character but a matter of changing ideologies or modes of thought mediated through material forms (for example, Hodder 1990; Thomas 1991, 1996; Tilley 1996a). Thus if we are to talk about causality, the Neolithic was a matter of mind, a triumph of the will, a new set of ideas, over matter and circumstances, a new way of organising social labour and expressing relationships to others through monument construction, the symbolism of pottery and polished stone axes, of herding domesticates and tilling the soil. In northwest Europe the debate has focused on whether a Neolithic way of life was adopted as a kind of package by final Mesolithic hunter-fisher-gatherers, inspired from the outside through the expansion of farming populations across Europe, or whether the adoption of Neolithic elements was a highly localised selective, differential, and indigenous development, which is

my own view (Tilley 1996a). Looked at on a broad scale, multiple transitions were taking place at different times and in different places, so much so that the very conceptual veracity of the terms Mesolithic and Neolithic may inevitably be questioned. What we term the Mesolithic and the Neolithic had hundreds, if not thousands of different manifestations. Are there any common themes?

If Neolithic communities did feel and think differently about the world than did those in the Mesolithic, what caused the change? In this paper, I argue that a fundamental part of a new Neolithic 'mode of thought' was directly stimulated by fresh forms of sensory experience of place and landscape. If there was a Neolithic 'revolution', it entailed a *sensory* revolution in which through altering the earth people transformed their own experiential conditions of existence in a fundamental way. A new sensory experience of place and landscape and new modes of dwelling led directly to new ways of thinking and new sets of cosmological ideas explaining the place of people in the world.

FOREST CLEARANCE AND ITS SIGNIFICANCE

A fundamental feature of the Neolithic everywhere is woodland clearance, whether it was to construct monuments, clear the land for settlements and fields, provide grazing for animals, quarry flint or stone, or obtain other raw materials. The character and extent of the forests that clothed much of low-land Europe at the time of the Mesolithic/Neolithic transition has been the subject of much debate. Rackham (1986) argues that the forest was virtually continuous, dark and dense, whereas others such as Moore (2003) suggest that this view is an exaggeration and that there was much local variation in the character of woodland stands, from those that were more dense and clothed to those that were more light and open with glades and clear patches in association with the varying character of soils, rocky areas, streams, marshes, and so on. Like most 'Neolithic' traits, woodland clearance was nothing new but was a tradition going back to the late Mesolithic, when areas might be burnt off and opened out to manipulate the forest flora and fauna and stimulate browse for ungulates (Mellars 1976; Moore 1996, 2003; Simmons 1975). The primary difference appears to be the extent of this woodland clearance—far greater and more extensive during the Neolithic—and its far more permanent character, with many of these woodland clearances being variously maintained by grazing domesticates and the presence of permanent settlements, and marked by monuments. Irrespective of whether the forested world of the Mesolithic was uniformly dense and dark, or more open and light, woodland clearance on a fairly massive scale in some areas during the early Neolithic irrevocably altered

the environment, and with this event new conditions for sensory perception were created.

Let us try to imagine, for a moment, the great climax deciduous forests in which the final Mesolithic hunter-gatherer communities of northwest Europe lived: a network of tracks, of small clearings, fire-burnt areas, streams and river valleys, lakes and marshy areas, deep layers of leaf mould in places, different hues of green, fallen trees and tree holes, strong contrasts between shadows and bright shafts of sunlight penetrating the denser areas of the forest canopy, huge sometimes monumental trees of individual character that might be named and significant in themselves. Even if this was a landscape in which open areas existed, it was still one in which people were primarily forest dwellers: people who lived with trees and understood them—the manner in which they grew and the resources that they could provide. The collective use and management of trees was probably central to sustenance, cosmologies, and the ordering of social life. Activities such as fire clearance thus carried a heavy symbolic load during the Mesolithic and was not just simply a matter of ‘economic’ manipulation (Brown 2000; Edmonds 1999; Moore 2003). For the late Mesolithic forest people, social relations were structured in relation to the complex woodland mosaic itself, connecting social groups, game, the individual trees, grassland, and clearances. The forest constituted an entire field of meaning wrapped around old trees, fallen trees and tree holes, clearings, regenerating areas, trees connected in memory with specific events, trees providing shelter, firewood, a safe place to sleep, and a sense of home. Trees were intimately connected with the passage of the seasons, the reckoning of time and human lifecycles: an extension of the lives of those who lived among them. Some forest areas would be drier and lighter and more open, others wetter and close to impenetrable. A great cosmic web would probably link persons and animals, trees and water, fish and birds (for ethnographic examples see Garner 2004; Jones and Cloke 2002; Rival 1998). These people were of and in the forest in just the same sense as fish are immersed in the sea.

For the most part, living in such a forest world meant that vision was subdued and limited to tens of metres or so, varying somewhat with the seasons (Figure 2.1). Even being able to see as far as 50 m would for the most part have been a long distance. The only long vistas that might be obtained would have been either from forest edge areas or from the tops of high hills across the forest canopy to the tops of other high hills. Or, alternatively, looking out from the coast across the sea or from the shore across inland lake and marsh areas or paddling along straight stretches of river and stream channels. It is precisely in such locations that we tend to find later Mesolithic settlements throughout lowland northwest Europe: on the tops of high hills, on coastal cliffs, and by lakes and rivers.



FIGURE 2.1 'Mesolithic' pathway through the forest.

However, for the most part, vision, while one was moving through the forest, was drastically curtailed. To the Mesolithic hunter-fisher-gatherer, sound and smell and touch would have been as important, if not more important, than vision, in obtaining food and orientating oneself and symbolically relating to the forest world. To hunt and gather food in such a world required the fusion of all the senses, a co-mingling of the audible, the tangible, the visual, the olfactory. The experience of the world was thus in a primary sense syn-aesthetic: One's very survival might depend as much on sound, or smell as sight. Being able to hear a waterfall in the distance, or bird song, or to smell the

presence of an animal would have been fundamental. In many ways, this world could be characterised as an intimate one in that most of that which could be experienced always had to be, quite literally, close to hand. The forest world was a place of sensuous embodied intimacy.

If we consider the human senses in terms of their perceptive possibilities, vision provides the greatest spatial reach: One can see much farther than one can hear or smell. To be able to touch requires things to be in reach of the body. What might be heard or smelt might often not be visible. To the Mesolithic hunter, an animal that could be heard or smelt would not be hidden. This contrasts with our modernist sensibilities, in which a hidden thing is almost always associated with that which we cannot see. In the forest world, sight could rarely be a distanciated gaze. The sense of vision would have been associated with things that were close to the body and that in many cases needed to be closer than things that could be heard, such as the sound of water, of bird song, of people chopping wood.

The perceptive possibilities for experiencing the forest would have had important consequences for cognition, for the way people dwelled and thought about their world and their place in it. The forest would have been a smellscape, a soundscape, a visionscape, and the tactile qualities of the vegetation would have been fundamental. Landscapes formed from sounds and smells and touch would always have had a sense of dynamism and movement: transitory and always changing but linked to memory and meaning. Only a more distanciated spatial gaze from a hilltop across the trees might momentarily have frozen such a world below and made it appear static.

In a forested landscape, the forms and shapes of hills, ridges, spurs, escarpment edges, valleys, and coombes can hardly be perceived (Figures 2.2 and 2.3). In southern England, for example, the presence of steep escarpment edges in the chalk downlands, so visually powerful today in the landscape, would be lost (Figure 2.4). In the upland areas of southwest England, such as Dartmoor and Bodmin Moor, only the tips of the granite tors would be exposed among the trees, invisible from below. Trees camouflage and reduce the sense of scale and visual character of the landscape. From a boat one might see the shape of a lake; in the forest there would be no such equivalent experience of the contours of the land—the shapes of the hills could not be seen.

Neolithic forest clearance on a large scale, in some areas, such as on the chalk downlands of southern England (Allen 1995, 1997), permitted vision to become, for the first time, the dominant sense in terms of spatial orientation. The Neolithic ushered in a culture in which the visual became more and more important in relation to the perception of the environment and, in particular, the contours and forms of the land. This is not to suggest that Neolithic sensory experience was not equally synaesthetic at the hearth and in the home but



FIGURE 2.2 Deforested area of the East Hill ridge, East Devon, revealing the contours of the land.



FIGURE 2.3 Forested area of the East Hill ridge, East Devon. Note how the form of the ridge is completely obscured.



FIGURE 2.4 View across the northern edge of the chalk downlands of Cranborne Chase, southwest Wiltshire. Note the contrast between the form of the spur without trees in the foreground and the tree-clothed escarpment edge in the background concealing its form.

that visual experience became dominant over all the other senses for the first time in relation to what we can call landscape or the wider environment. Let us consider this further.

Clearing the land of trees allowed its profiles and contours to be revealed and in the process permitted a new visual perception of landscape that was simply not possible before. Thus forest clearance, whatever the intention, had the unintended effect of creating a new perceptual experience of the world. It permitted for the first time the spatial fixity of the distanciated gaze over greater and greater areas.

A characteristic feature of the early Neolithic in southern England is the construction of monumental enclosures on hilltops: causewayed enclosures such as Windmill Hill (Smith 1965; Whittle, Pollard, and Grigson 1999), Robin Hood's Ball (Thomas 1964), Hambledon Hill (Mercer 1980), Hambury (Liddell 1936; Todd 1984; also see Edmonds 1993 and Oswald, Dyer, and Barber 2001 for general reviews), and Maiden Castle and stone enclosures such as Carn Brea and Helman Tor (Mercer 1981, 1986a) in the far southwest. The causewayed enclosures required the hilltops to be cleared of trees and extensive digging into the earth to form the banks and ditches. The stone

hilltop enclosures of the southwest needed both tree clearance and the construction of encircling stone walls. In both cases, the processes involved were dual: removing the mantle of surface vegetation and altering the surface of the earth through moving and accumulating materials. From the cleared high hilltops with enclosures, it was often possible to see other such enclosures. It was not just the enclosure banks or walls that became visible in the surrounding landscape but the form, contours, and topographic character of the hills on which they were constructed.

Building these enclosures thus revealed not just the monument itself but the form of the hills and landscape in which they were constructed. The experience of the hill, cleared of trees, was as fundamental as the experience of the monument itself. Each complemented the other in a dialectical relationship. Indeed, it can be suggested that hill and monument were in a relationship of mimesis. The experience of the monument was simultaneously the experience of the hill, and vice versa. For example, Hembury (Figure 2.5) was revealed as a dramatic spur of the Blackdown Hills in Devon, Hambledon Hill was revealed as a clover-shaped hill island separated from chalk downlands of



FIGURE 2.5 Hembury Hill, East Devon, seen from the south. Trees now obscure the upper slopes of the end of a dramatic spur on which the early Neolithic causewayed enclosure is situated.

Cranborne Chase to the east, Maiden Castle, in South Dorset, as another hill island, and so on.

A visual widening and opening out of the world thus went in tandem with monument construction during the early Neolithic. We know that many early Neolithic long barrows were constructed on grassland that had already been cleared of trees before these monuments were constructed (for example, Allen 1995: 56; Thomas 1991; Whittle 1993). Many, situated high up on ridge tops, were meant to be seen from considerable distances away. That they should be intervisible was an important factor in their location and cannot purely be a matter of coincidence (Griffith 2001; Tilley 1994). During the Mesolithic, the same hilltops were undoubtedly significant. Rather predictably, flint scatters are frequently found in these locations, but monuments were not constructed and forest clearance still remained limited or insignificant.

During the Mesolithic, the landscape and its elements—huge trees, rocks, waterfalls, caves, lakes, valleys—were in effect the monument. By contrast, during the Neolithic, the monument became part and parcel of the visible landscape, which happened and could have happened only in a culture in which visual perception had become extended and widened. For example, early Neolithic long barrows and cursus monuments are often deliberately built in places so as to appear to be skylined from other barrows on Salisbury Plain and elsewhere (Tilley, fieldwork in progress). This way of building would make no sense if such monuments were constructed in small and limited woodland clearances. During the earlier Neolithic, the landscape itself, now at least partially cleared of trees, was no longer enough. It had to be permanently altered and marked by the presence of monuments. This was accomplished in three main ways:

1. **Mimetic relationships:** The monument was designed to draw out and emphasise fundamental features of the contours of the land that had been revealed through forest clearance—which is why, for example, long barrows characteristically run along, rather than across, the spines of ridges (McComish, Field, and Brown 2002: 22; Tilley 1994; Chapters 4 and 5 this volume).
2. **Visually referencing significant hills and/or mimicking the forms of nearby rock outcrops or other landscape features** (see Chapters 5, 8, and 9). Pre-existing and enduring templates of experience are thus incorporated into the temporal event of monument construction, which through time becomes part of a durable, unchanging, and timeless world.
3. **Marking relationships:** The monument rather than directly referencing pre-existing features of significance in the landscape creates its own place as a symbolic reference point.

The last appears to be the case for many of the small—and significantly not very monumental or large—long barrows in southern England that frequently occur in landscapes that are not dramatically defined by striking hills, ridges, rock outcrops, and so on (see Field 2006: 99ff. for a general discussion). These monuments created a new set of cultural reference points in the landscape, adding to what was already there. Monuments became the new vivid symbols of cosmic order, and the landscape became structured and perceived in relation to them: cultural representations of order.

Whether the monument bears a mimetic or a marking relationship to landscape, its construction always involves the creation of a new sense of place that later may provide a reference point for the construction of others. So, in some cases, the primary relationship of the monument is to pre-existing landscape features. In others, the primary relationship is to other pre-existing monuments. Overall, in the Neolithic there appears to be no grand scheme or set of invariant principles at work. The significance of individual monuments was localised, improvised, and site specific.

The act of constructing monuments was, however, clearly an attempt to integrate and incorporate the world and to transcend the fragility of corporeal existence into an enduring form that became as much an embedded part of the landscape as the hills and rocks and valleys themselves. In the Mesolithic, the relationship of people to landscape was generalised, and knowledge was acquired through movement and drawing together knowledges of what one experienced as one moved around: rocks, trees, hills, and so forth. In the Neolithic, this knowledge of landscape became much more site specific and embodied in monuments that gathered these experiences together (see below). During the Mesolithic, social identities were embodied in landscapes as a whole rather than in terms of particular constructed monuments within those landscapes: generalised rather than specific.

Forest clearance and monument construction resulted in both a difference experience of the world and a different kind of knowledge of that world. This different kind of knowledge and experience went hand in hand with an increasing social and material interconnectivity: exchanges of ideas, stone and flint axes (themselves iconic of forest clearance), pots, and other raw materials from numerous sources on a diversity and material scale in the Neolithic that represents a quantum leap compared with the Mesolithic. A world that was visually opening out became a world that was increasingly interconnected.

It is worth pointing out that from the Hembury Hill causewayed enclosure in southeast Devon, it would have been possible to see another such enclosure on the Raddon hills to the west. From the Raddon Hill causewayed enclosure, the enclosures on both Hembury Hill and High Peak and another hilltop settlement and probable enclosure at Haldon Belvedere were visible (see Figures 6.1

and 6.2). Looking farther afield from Hembury, one can see to Dartmoor and Exmoor. From Exmoor, one can see South Wales, the Mendip Hills, and Dartmoor. From Dartmoor, one can see Bodmin Moor, with its probable Neolithic hilltop enclosures, Rough Tor and Stowe's Pound. From these hills, you can see to Carn Brea, from there to West Penwith and Land's End. Vision is the only of the senses capable of directly connecting distant places, and my suggestion is that, as the experiential importance of the visual increased in relation to the perception and the understanding of the landscape, so did flows of people, ideas, and raw materials in the Neolithic world (Figure 2.6).

In the final Mesolithic, populations lived in and were part of a forest world that was not substantially altered. The Neolithic ushered in a new era in which the world became substantially modified and controlled through forest clearance and monument construction, discussed above. Monument construction, quarrying activities, flint mining, pottery making and a host of other projects all involved digging into the earth. This also involved, probably unintentionally, a process of discovery. The large-scale construction of monuments during the Neolithic provided new ways to answer a basic set of questions: What's underneath our feet? How do we find out about that which lies beneath the mantle of soil and vegetation that covers the earth? How can we understand distinctive changes in the patterns of plant life that we see around us as we move around? Why do oak and lime and ash grow here? Why do pine and birch and gorse grow there? What happens to the rain when it falls from the sky? Why do bogs and springs occur, and where does the water flow to? Why are the hills and the ridges situated where they are in the landscape? Why the flat landscapes, why the valleys? What might the different rocks and stones in the landscape that we encounter mean? In the Mesolithic world, the only places that rocks (what we call geological features) would be revealed would be (1) along coastal cliffs; (2) inland on exposed points (cliffs along river valleys); and (3) high up in areas without trees, soil, and vegetation, such as the tors of southwest England or mountains or hilltops elsewhere. Across vast swathes of lowland England, or Europe, there would be no rock exposures whatsoever. By digging, quarrying, mining, and revealing a hidden landscape through forest clearance, Neolithic populations importantly discovered the rocks beneath their feet and the morphologies of the land across which they moved. Tree clearance also had the effect of intensifying surface water run-off, exposing rocks, particularly on hilltops. Herding cattle similarly disturbed the ground, creating exposed hollow ways across such areas as the chalk downlands. Tilling the soil brought to the surface stones hidden in it. All these processes and activities created new sensory experiences of place that were not just visual but also tactile and embodied through all the other senses. As an example, I consider flint.

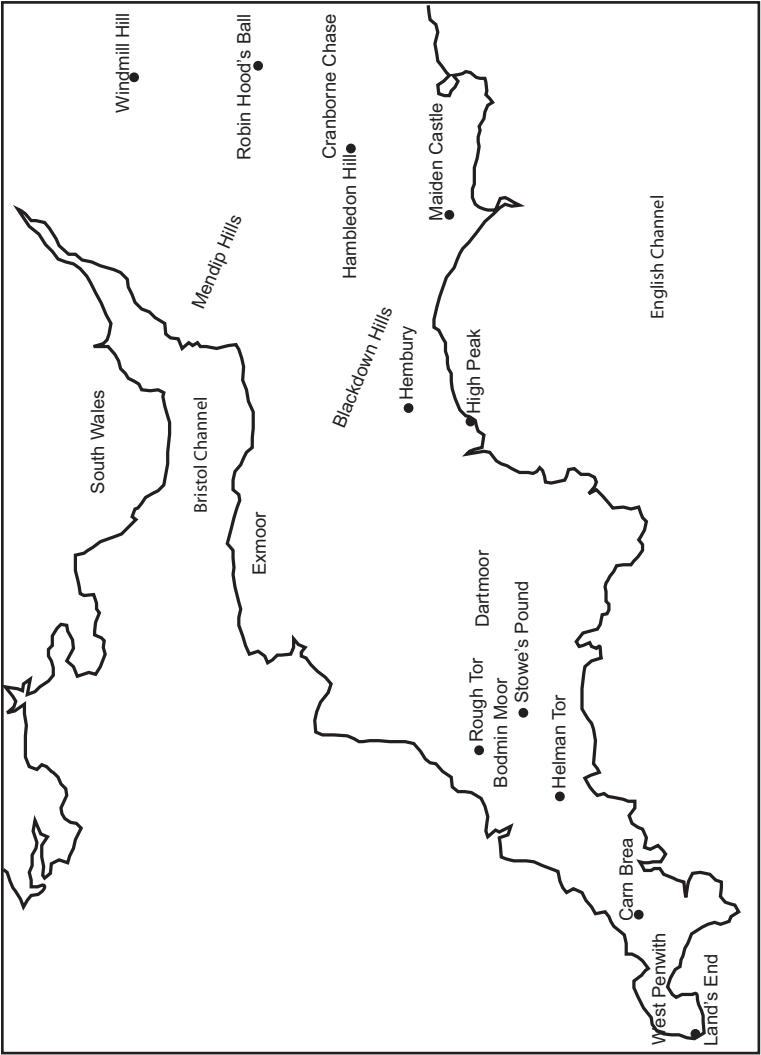


FIGURE 2.6 Places mentioned in the text.

THE SYMBOLISM OF FLINT

The presence of fertility symbols in the Neolithic has long been recognised in the form of flint phalluses and rounded chalk and flint balls that have been recovered and recorded in excavations. But these represent only one small part of a whole repertoire of naturally occurring flint forms that occur on the chalk downlands. In ploughed fields, on areas of disturbed ground, and in other exposures there is an extraordinary variety of naturally occurring forms of flint. These vary locally and between different areas of the chalk downlands. Some of them bear an uncanny resemblance to human bones in their shape, colour, and texture. The outer cortex is the off-white colour of old bone, and flints of this colour may almost perfectly resemble bone in their form and size. They include flints that resemble human long bones with the ball joint attached, thin curved pieces resembling ribs, flat and curved bits looking like skull or scapula fragments. Others resemble vertebrae or broken pieces of long bones (Figures 2.7 and 2.8). Some flints in size and dimensions look extraordinarily like fleshy fingers. There also occurs a wide variety of other sculptural forms that in their shape and profile are suggestive of birds and animals.

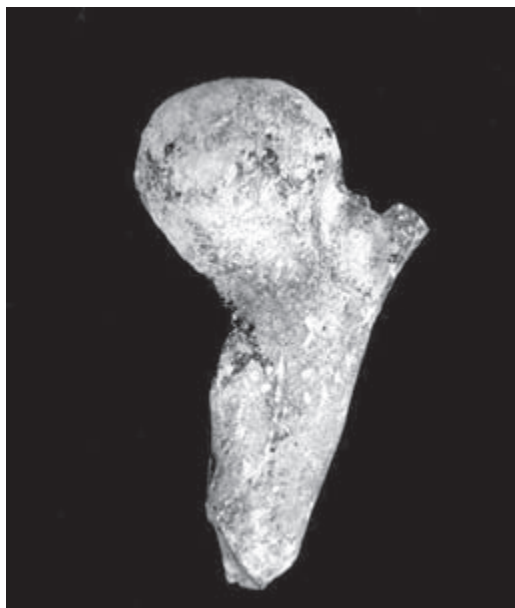


FIGURE 2.7 Flint 'femur' end found in a rabbit hole in a long barrow on Salisbury Plain, Wiltshire.



FIGURE 2.8 Collection of broken and disarticulated flint 'bones' from a ploughed field at Lyscombe Bottom, central South Dorset.

Today such flints are invariably found in ploughed fields, or they are thrown up from rabbit and badger holes dug into Neolithic and Bronze Age barrows. Flints of these forms are rare in or absent from the only naturally occurring flint exposures that occur on the river beds. Such material is, however, also found in the top-most layers of tree holes revealed when trees have blown over.

The Neolithic involved an opening up of the land and its first cultivation. Such flints would have been revealed in the normal course of digging ditches, constructing monuments, and tilling the fields. The strong resemblance of these flints to the bones and some of the fleshy parts of the human body would not have gone unnoticed. Such stones that looked like bones would have had to have been incorporated into a social and cosmological understanding of the earth, its contents, its fecundity, and the landscape. Constructing new monuments in the early Neolithic would have constantly revealed old bones, thrown up after having been concealed in the ground. Tilling the ground would also have constantly revealed such stone 'bones'.

We know that early Neolithic mortuary practices involved the disarticulation and rearrangement of bones within monuments (Shanks and Tilley 1982; Thomas 1988; Thomas and Whittle 1986). This treatment of bones had its counterpart in the fragmentary and scattered 'bones' that people found while constructing these very monuments and that were also dispersed across cultivated areas. If the bones that were manipulated within the monuments represented

the human ancestors of local social groups, then the stone bones may well have represented the fragmentary remains of pre-ancestral beings who lived before people occupied the earth.

Thus the activity of transforming the earth had its unintended outcome in revealing the bones of beings who had come before. In field survey work on barrows within the landscape around Stonehenge, the frequency with which these 'bones' are thrown up from animal burrows and scrapes is quite striking. Some of these 'bones' might very well have been deliberately incorporated or deposited within barrows, which would therefore contain both human ancestral bones and stone bones from pre-ancestral beings. However, we do not know this from excavations, because such stones, apart from the obvious phalluses, have rarely been recorded or mentioned by archaeologists. Being 'natural' rather than fashioned artefacts, they have ended up discarded on excavation spoil heaps.

It is worth noting that these quite extraordinary 'bones' and sculptural forms are unique to the chalk and occur nowhere else in southern Britain. Where the chalk occurs, the stone bones are found. This fact surely made the chalk downlands landscape and the monuments erected within it of great significance. The concentration of early Neolithic causewayed enclosures and long barrows on the chalk downlands of southern England has long been noted by archaeologists, and it is from this area that we have the earliest radiocarbon dates (Whittle 2007). Perhaps it is no coincidence that the earliest monuments were erected in areas containing old 'bones'.

Neolithic flint mining is an activity that began in the Neolithic and that has been almost universally regarded as a search for fine material for making tools. Such an activity may in part have also been motivated by a desire to explore what lay beneath the surface of the ground, and it, too, would have revealed extraordinary flint material of the same character as discussed here.

GATHERING AND INCORPORATING

Two general processes seem to be fundamental in the Neolithic in a way not apparent in the Mesolithic: (1) integrating or gathering processes; (2) incorporating processes. Both brought together people, ideas, raw materials, places, and landscapes and provided the foundations for cosmological systems. Monuments such as causewayed enclosures, long barrows, and chambered tombs provided focal points for integrative and incorporative processes. At these places, raw materials and discrete sensory experiences of other places in surrounding or more distant landscape were brought together through the collection, exchange, and deposition of artefacts: stone axes from faraway places; pottery such as Hembury Ware, incorporating distinctive stone as temper

from the Lizard; flints from various local and more distant sources with different qualities of colour, patina, texture, and so on. In other words, monuments gathered together places and landscape. Often in the case of stone-built monuments, an extraordinary range of stones was used from distant and local places in the landscape. The megalithic tombs of the Boyne valley, eastern Ireland, are an excellent example of such use, incorporating a wide variety of local rocks—sandstones, schists, limestones in their kerb stones, and rocks from far more distant sources: quartz from the Wicklow mountains and mudstones from the Carlingford mountains to the north (Cooney 2000; Mitchell 1992; Tilley 2008). We might surmise that the wood used to construct the mortuary chambers of earthen long barrows of southern England or Neolithic timber circles might well have come from forest trees with more than local origins. Monuments integrated and, through their very construction, incorporated the world surrounding them. They themselves created new types of sensory experience through these processes.

ANIMALS

Acts of monument construction and raw material extraction and processes changed the Neolithic sensory world. There was also a fundamental change in the relationship between people and animals. In the Mesolithic, although it was interdependent, the relationship between people and animals to a certain extent always involved distance. With the exception of the domestic dog, people did not live with animals. During the Neolithic, people did live with their stock and, in particular, with cattle. Living with animals, identifying with animals and their welfare, created a very different, more intimate and enduring, and personalised set of relationships that one does not imagine could have existed between Mesolithic populations and red deer. The cattle keeper would have identified his or her life with the animals that she or he kept. Individual animals would have become objectifications of human beings in a way that was not possible in relation to game animals that looked after themselves.

I have already argued that the relationship between people and landscape changed from being generalised (or 'smooth') to much more differentiated (or 'broken') and site specific between the Mesolithic and the Neolithic. This change is directly paralleled by a change in the relationship between people and animals—generalised and more distant in the Mesolithic, individual and personalized in the Neolithic. During the Neolithic, social identities became attached to *particular* monuments and *particular* domestic animals. The burial of the bones of domestic cattle in monuments together with people effectively entangles their identities.

CONCLUSIONS

My argument in this chapter has been that cosmologies explaining the origins and the place of people in the world are ultimately derived from the embodied sensory exploration of that world. Cosmologies make sense and bring order to the minutiae of similarities and differences observed and encountered through dwelling in and moving through landscapes. Thus cosmological thought is metaphorical in nature, a primary and originary mode of human reasoning, whose basis is connecting often disparate experiences through chains of resemblances (Tilley 1999a; also see Chapter 10 this volume). The Neolithic ushered in a sensory revolution that became integrated into cosmologies that were in turn objectified in monuments and material culture. The Neolithic is all about the attempt to incorporate the 'wild' into a cultural frame. However, this is not a significant break from the Mesolithic, in that we can always identify a number of Neolithic trends already present—limited forest clearance, limited exchange, a close relationship with some animals, such as the dog.

The Mesolithic/Neolithic transition is best expressed as a negotiation of long-term cultural trends that became crystallised in what we term the Neolithic, when they became clearly articulated and durably expressed. Perhaps the key to understanding the Neolithic is the recognition that it was the first attempt to totalise disparate sensory experiences, some new, some old, into a coherent cosmological model of the world, objectified in monuments and artefacts, rather than accepting its inherent diversity and fragmentation. Neolithic thought was grounded in new sensory experiences of landscapes and monuments, rocks and stones, animals and plants. The world became much more human-centred and personalised: situated, controlled, constructed, transformed, integrated, incorporated, connected in relation to place, time, and landscape. Through fundamentally altering the earth, clearing trees, and constructing monuments, people revealed the bones of the land in a double sense. First, its contours and forms previously masked and hidden by surface vegetation were revealed. Clearing a hill or a spur simultaneously revealed its form in the landscape. Second, digging into the earth threw up new materials for experience, such as flint bones. These processes of revelation created new sensory experiences that led to a revolution in thought. By altering the land, people created new conditions for experiencing it and new materials that provided food for thought. Activities such as forest clearance and flint mining and keeping domesticates were far from being just economic transformations, because they had profound social and ideological consequences. People created new sensory experiences of the earth and through this process altered themselves, a theme further explored in Parts II–IV.



PART II

CHALK COUNTRY



FIGURE II.1 Chalk country: Melbury Beacon at the western end of the Ox-Drove ridge, Cranborne Chase, seen from the south.

I still investigate that chain of majestic mountains with fresh admiration year by year. . . . I think that there is something peculiarly sweet and amusing in the shapely figured aspect of the chalk hills in preference to those of stone, which are rugged, broken, abrupt and shapeless. . . something analogous to growth in their gentle swellings and smooth fungus-like protuberances, their fluted sides and regular hollows and slopes. . . as they swell and heave their broad backs into the sky, so much above the less animated clay of the wild below. (Gilbert White cited in H. J. Massingham 1936: 1)

H. J. Massingham still remains unsurpassed as *the* topographic writer of the English chalk downlands. It appears almost preposterous to want to exalt these hills, rarely rising above 250 metres, to the status of mountains, as he and Gilbert White wish to do. But, as he explains, there is something very special about the chalk downlands of southern England. The general outlines and configurations of the chalk downlands are more or less uniform. The effect is ‘to create an illusion of infinite distance by the repetition of like forms’ (*ibid.*: 7), giving an illusion of a landscape without limits. However, it

is 'the variation of detail within the general law of the downlands shapes that perennially refreshes the eye. Obedience to this law allows within its folds for a multiform diversity in the patterns of the hills as they pass' (*ibid.*: 8). The boldness of the landscape is one of its principal characteristics in which the lines of the land and its contours are far more significant than its shades, colours, or local details. For Massingham, this boldness gives the downlands, like the sea, elemental and eternal qualities manifest in 'the protruded spur, the fluted hollow, the giant but unstrained buttress, the flowing lateral ribbing, the sinuous curve, the blunted promontory, the unbroken passage of the ridge, the dipping and soaring of the range. . . it is this absence of harsh and abrupt conformation which gives to the chalk downs the appearance of perpetual movement' (*ibid.*: 8).

The sharp breaks at the tops and bottoms of the scarp slopes create very well-defined ridges, forming a dramatic backdrop to the lowland landscapes, and from the top of the escarpments there are extensive panoramas across the plains below. The various hills and ridges along the escarpment, with their distinctive profiles, are obvious landmarks from the vales below. The analogy of a coastline with its headlands and bays, dissected by streams with its precipitous cliffs, seems peculiarly appropriate in some respects (Burden and Le Pard 1996: 64).

In chalk country, there is little or no surface water and, as a consequence, few rock exposures except in coastal or river cliffs (see colour plate 1). But everywhere where the ground is disturbed, or dug into, the striking whiteness of the rock is exposed. When freshly built, monuments in Chalk country—white against a background of green—would have been highly visible places in the landscape. For the most part, they have only a subdued presence today. Being a sedimentary rock, chalk does not naturally erode into blocks to provide a source of building material, and, being soft, it remains unsuitable anyway. In chalk country, one generally builds with wood and clay rather than stones. The only available and exposed stone that occurs in some areas is not the chalk but blocks of sarsen stone. This is extremely hard sandstone, grey and gnarled, with many irregular erosion hollows; it is made up almost entirely of silica. It contrasts utterly with the chalk. Sarsen blocks, some small in size, others huge boulders, generally litter the coombes but only in rather restricted and localised areas, principally the Marlborough Downs 20 km to the north of Stonehenge. None or very little occurs on the chalk downlands farther to the south and west. Chalk is far more famous for another rock—flint—occurring in veins or seams running through it—extracted and fashioned into implements and exchanged throughout prehistory. It is also a stone that sometimes occurs in forms that have a striking resemblance to human bones, as discussed in Chapter 2.

In some areas, the Chalk ridges are frequently intersected with deep and dramatic coombes or dry valleys. The characteristics of the ridges and the coombes are strikingly different, and both were of great significance for monument location (see discussions in Chapters 4 and 5). These aspects of the chalk landscape together with the escarpment edges give the landscape its special qualities and character.

It is the contrasting qualities of the landscape that are now discussed, in relation to the construction of monuments in three very different downlands landscapes: the landscape around Stonehenge, the northern edge of nearby Cranborne Chase, and the South Dorset Ridgeway (see Figure 1.1 for locations). Of these, the landscape around Stonehenge (Chapter 3) is by far the gentlest and most muted, lacking much of the topographic drama of the northern edge of Cranborne Chase (Chapter 4) or the South Dorset Ridgeway (Chapter 5).



CHAPTER THREE

STONEHENGE'S ARCHITECTURE AND LANDSCAPE¹

Almost all twentieth-century considerations of Stonehenge have, perhaps understandably, ignored the fact that Stonehenge exists in, is related to, and is embedded in a landscape. The focus of attention has always been the stones themselves and the chronology and structural development of the monument. Thus Gowland (1902), Hawley (1921–1928), and Atkinson (1956) make no reference to the landscape setting of Stonehenge at all, and only Atkinson mentions and provides a map of monuments in its vicinity (*ibid.*: 146). The Royal Commission of Historical Monuments usefully puts Stonehenge into a wider spatial context in terms of an inventory of other sites in the Stonehenge ‘environs’ (RCHME 1979), while *The Stonehenge Environs Project* (Richards 1990) reports on the results of fieldwalking and excavations within a 33-km-square box centred on Stonehenge. However, in both of these studies the landscape contexts and interrelationships of monuments are not considered either from the perspective of Stonehenge or from anywhere else.

¹Written together with Colin Richards, Wayne Bennett, and David Field.

The landscape, in both cases, is simply a more or less blank spatial field for analysis. Previous generations of archaeologists have diligently worked in the Stonehenge landscape while simultaneously ignoring it!

The first publication to actually start to seriously consider the landscape around Stonehenge was published little more than a decade ago (Cleal, Walker, and Montague 1995). In an excellent discussion, Mike Allen considers, in some detail, the geographical and topographical setting of the monument in relation to Bronze Age barrow cemeteries, and Julie Gardiner the view to it from the Avenue (Allen in Cleal, Walker, and Montague 1995: 34–40 and Gardiner in Cleal, Walker, and Montague 1995: 40), research that is discussed in some detail below. Elsewhere in the book, other monuments in more or less the same spatial box used by the RCHME (1979) and Richards (1990) are briefly considered in relation to various proposed phases of Stonehenge. The title of this book, *Stonehenge in Its Landscape*, promises a great deal, but the subtitle, *Twentieth-Century Excavations*, indicates what is, in fact, its main concern. Exon, Gaffney, Woodward, and Yorston (2000), in contrast, devote a short book to a discussion of the landscape around Stonehenge. However, their study is almost exclusively concerned with monument inter-visibility, combining primarily the use of GIS data with some ‘phenomenological’ fieldwork. Although they discuss the approach to Stonehenge along the Avenue and from elsewhere in some detail (see below), they do not consider Stonehenge itself, presumably because of Allen’s pre-existing work on the visual field from the monument itself. Both of these studies very usefully concern themselves with issues of monument visibility, providing important insights that inform the discussion here. But other aspects of the landscape around Stonehenge, principally the form and the topographic character of the hills and ridges, the river valleys and coombes, or dry valleys, are scarcely considered at all. Discussion of such landscape features around Stonehenge is confined by Allen to mentioning which near or more distant ridges or hills can be seen. Exon and associates throughout their book rarely consider any other aspect of the landscape beyond monument visibility and intervisibility. In both these studies, the Stonehenge landscape and its topography tend to be considered only in terms of a series of monuments that at various times are visible or not. In other words, ‘culture’ is writ large in these studies, but ‘nature’ has been virtually excluded. A much more holistic approach is adopted here, paying as much attention to the ‘natural environment’ of Stonehenge as to the positioning and visibility of monuments within it.

The first part of this chapter aims to address, and attempts to answer, one simple question: Why is Stonehenge located where it is in the landscape? Why here? Why *this* place? In all the voluminous literature on Stonehenge, this question never appears to have been directly addressed. In attempting to

provide an answer to this question, we show the manner in which a consideration of the monument in its landscape context provides the basis for a novel interpretation of the architecture of Stonehenge itself and the locations of the Bronze Age barrow cemeteries around it, which forms the second part of the discussion.

In relation to the question raised above, this chapter presents a few of the preliminary results of a phenomenological landscape survey forming part of the Stonehenge Riverside Project (see Parker-Pearson et al. 2006). This survey involves the description and analysis of a 180-sq.-km area of land with the henge monument of Durrington Walls at its centre (Figure 3.1). The area covered in this survey includes the entire landscape area covered in the 'Stonehenge environs' project (Richards 1990; Figure 3.2), that in Cleal and associates (1995), and the far wider area considered by Exon and colleagues (2000) (except to the south of their 'enlarged study area'). It extends considerably farther to the east of the Avon and to the north in the Salisbury Plain army training ranges than does the Exon landscape study. Research has involved walking this entire landscape and studying in the field all known barrows and the locations of ring ditch sites recorded from aerial photographs.

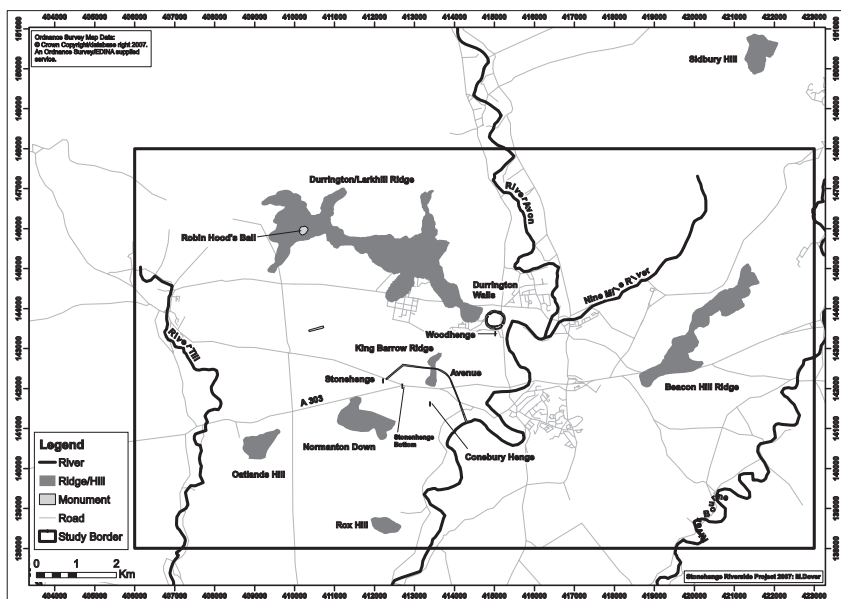


FIGURE 3.1 Stonehenge Riverside Project landscape survey area showing some of the places mentioned in the text.

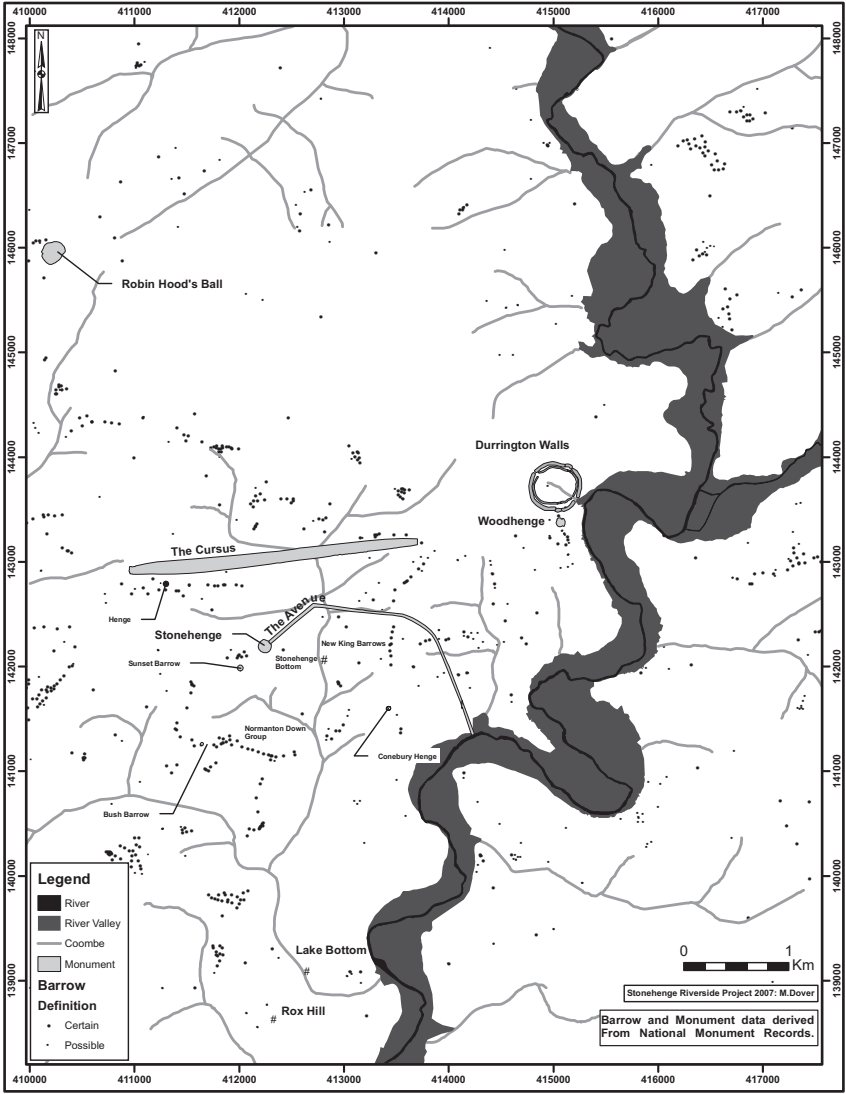


FIGURE 3.2 Landscape and barrow distribution in the vicinity of Stonehenge showing the Avon valley and coombe systems.

STONEHENGE IN ITS LANDSCAPE

What is remarkable about the location of Stonehenge in its immediate landscape is that it appears to be absolutely unremarkable. Allen rightly notes that

when looking toward Stonehenge from any direction, one sees that the location is undistinguished: 'without the monument in place it would not easily be distinguished from the gently undulating surrounding countryside, and it cannot be said to form an obviously important landscape feature from any direction' (Allen in Cleal, Walker, and Montague 1995: 37). The monument is located on virtually flat ground on a very gentle west-east slope that steepens markedly as it approaches the dry valley system of Stonehenge Bottom some 400 m distant to the east. Immediately to the north and the south of the enclosing bank and ditch, the land dips away toward shallow coombes running down to Stonehenge Bottom. The drop in height to the bottoms of these coombes is about 10 m in about 300 m to the north and 500 m to the south. To the west, the land rises by a similar amount. The area in the immediate vicinity of Stonehenge is ambiguously delimited. It is not located on a well-defined ridge or spur, of which there are many in the surrounding landscape. The land on which it is built is only 100 m high. There is absolutely no drama with regard to its location. The drama and theatrical power of the monument seem to derive entirely from the sheer size and height of the stones, and without these the place would long since have been forgotten.

In essence, Stonehenge confounds the perhaps all too contemporary expectation that such an impressive monument might be located elsewhere in the landscape, for example on the top of the Beacon Hill Ridge 7 km to the east or perhaps on the Sidbury Hill summit 12 km to the northeast or, nearer, on the Durrington/Larkhill ridge 2 km to the north (see Figure 3.1). However, monuments and barrows of any kind seldom occupy the very highest hill and ridge summits in the 180 sq km considered in the landscape survey, and even some more localised high points and ridges are often entirely avoided. Similarly, very few barrows are located in the 'depths' of this landscape, at or near the bottom of coombes or river valleys. The vast majority occur in intermediate locations, often on the mid-points of gently sloping ridges and spurs. The location of Stonehenge is thus quite typical of those occupied by the many and somewhat later Bronze Age barrow cemeteries in the area. It is absolutely ordinary in this respect. Perhaps this fact is not so surprising in the light of the location's use as a major cremation cemetery in Phase 2, before the erection of the stones (*ibid.*: 115). In many respects, the location might be regarded as conforming to an expected norm. But although it conforms to the position of many later Bronze Age barrows, it was actually built 500–1,000 years earlier.

Allen (in Cleal, Walker, and Montague 1995) discusses Stonehenge in relation to a 'visual envelope' around it and considers both views out from Stonehenge and views into the monument in relation to a 'foreground', the nearest ground to the ditched enclosure, a 'near horizon' created by slight ridges, and a 'far' and a 'distant' horizon. Such horizons at different distances

from the monument frequently merge, and, in practice, it is very difficult to distinguish them. Furthermore, even within parts of the immediate 'visual envelope' around Stonehenge, there are lower lying areas along Stonehenge Bottom, to the north and the east, that cannot be seen from the monument, nor is it visible from them. The interior of the visible field is thus more complex than that represented and gives a misleading impression that everything within it is visible (see Figure 3.3). Allen shows how important Bronze Age barrow cemeteries—principally those to the south on Normanton Down; to the east; those running along King Barrow ridge (the New and Old King Barrows); and the Cursus group of barrows to the northwest—run along the edges of his 'near' or 'far' horizons, indicating that they were deliberately located so as to be visible, running along the skyline, from Stonehenge itself.

Some, but by no means all, of these barrows are indeed monumental and dominant landmarks when seen from the perspective of the Stonehenge enclosure. Beyond this horizon barrows cannot be seen, but other topographic features are visible in the far distance, notably the Beacon Hill Ridge to the east and Rox Hill to the south.

This is a rolling chalk downlands landscape in which topographic distinctions are subtle. It has been, and still is, primarily shaped by the agency of water. Throughout the study area, these seven main topographic elements may be distinguished:

1. The Avon river valley, the only perennial water source.
2. The winterbourne river valleys of the Till and the Bourne River and the Nine Mile River to the west and the east.
3. The coombes or dry valley systems that run into these perennial or seasonal watercourses.
4. Well-defined and smoothly sloping ridges and spurs of various forms running between these valleys and coombes.
5. More rounded localised high points such as Rox Hill, Oatlands Hill, and Robin Hood's Ball.
6. More amorphous and ambiguously defined sloping areas of slightly higher ground dissected by coombes.
7. The Beacon Hill Ridge, with a pronounced northern scarp slope and a much gentler and more irregular and dissected southern dip slope.

Stonehenge is located in a position in the landscape that can be classified as category 6 above. It is directly linked to the Avon by the ceremonial pathway of the Avenue. The Avon itself is directly or indirectly linked to all the other winterbournes and coombes in the study area or beyond it to the south. The Till is linked to it via the Wylfe to the west; the Bourne joins it to the east, as does the Nine Mile River. All the coombe systems link in to the same overall

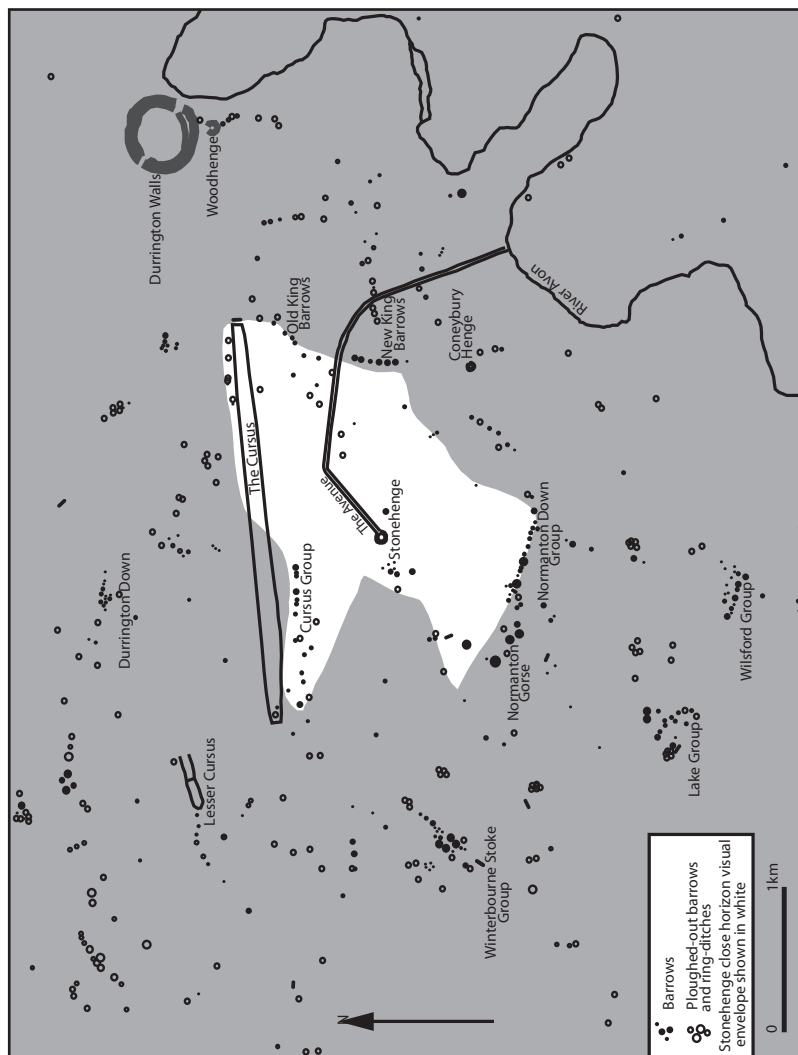


FIGURE 3.3 Visual envelope in the immediate vicinity of Stonehenge. The area bounded by the near horizon is unshaded.

dendritic system. Thus the Avon effectively articulates and joins the entire immediate and larger landscape around Stonehenge. The link created between Stonehenge and the Avon thus positions (see below) the monument at the centre of a localised world defined by water, the source of all life.

Stonehenge is also directly linked to the Avon by a 'natural' route: the course of the Stonehenge Bottom/Spring Bottom coombe system, across which the Avenue passes to the northeast. Looking out from the Stonehenge enclosure, one can see the line of Stonehenge Bottom quite clearly—in particular, the eastern side. This coombe system is by far the longest and most reticulated in the study area. It runs from Lake, on the Avon, for over 5 km, twisting and turning and branching to the west and the east (Figures 3. 1 and 3. 2). (The place name 'Lake' or 'Lac', adopted during the early Medieval period or before, signifies the presence of a large sheet of water distinct from the river itself.) Not only is it the longest coombe, it is also the most complex and is also unusual in taking a north-south course for much of its length. (Most other coombes run from the NW to the SE or the NE to the SW.) Its shorter western branches run to the south and the north of Stonehenge, whose immediate landscape is thus contained or enclosed on three sides, to the east, north, and south, by this coombe. By the river Avon, the 'entrance' to this coombe system is marked by a large and prominent barrow to the south situated high up on the edge of the coombe and by three further barrows (now ring ditch sites) to the north, a point also cogently noted by Exon and colleagues (2000: 91), who suggest that this barrow represents a portal into the Stonehenge landscape from the south. It is one of a very few in the entire landscape visible from the river Avon on a canoe journey down the river from the north to the south. It appears to mark a turning point toward Stonehenge and away from the river.

Morphological research has demonstrated that Stonehenge Bottom has virtually no colluvium within it, whereas thick colluvial deposits do occur in the coombe around which Durrington Walls was constructed (Richards 1990: 210–211). The reasons for this situation remain uncertain, but one of the possibilities is the removal of colluvium by running water. It is interesting to note that water has been observed by the present landowners flowing in Stonehenge Bottom south of the A303 road, and flooding has occurred at Lake near to the Avon; at times of heavy rainfall, there is often standing water. Stonehenge Bottom differs from other coombes and river valleys in the area in that it is neither truly a dry valley nor a seasonal winterbourne. Stonehenge is thus directly linked with both the only perennial source of water in the area, the Avon, and an exceptional coombe system of unpredictable character. In general, our knowledge of the Neolithic water table is inadequate, and water extraction has drastically reduced the water table, affecting river and stream levels throughout the area. The Nine Mile River, which the military started

tapping in the early twentieth century is now completely dry in the summer for most of its course, as is the Bourne.

The river valleys and coombe systems both define and divide this landscape. Their courses delimit areas of higher ground and provide well-defined routes of movement through it. They can be conceptualised in terms of boundaries, transition points from the lowest to the highest ground, and as providing pathways to follow through the landscape. They are also the places where sarsen stones are typically exposed and 'congregate', as we know from the few dramatic sarsen-filled coombes that still exist (having survived quarrying) in the Marlborough Downs to the north of the Stonehenge landscape. The coombes, mythologically understood, give birth to sarsen stones. They may also give birth to water, either seasonally or unpredictably. The association of coombes with water in various ways would have been noticed by prehistoric populations, as would their resemblance to river valleys with water, such as the Avon. A problem that might have required a mythological explanation could have been: Why did these rivers of the past run dry?

Another important factor in the location of Stonehenge was its visual relationship to the Beacon Hill Ridge to the east and Sidbury Hill to the northeast. Both the Beacon Hill Ridge and Sidbury Hill punctuate the skyline in a distinctive manner in this landscape. They are, relatively speaking, 'jagged' compared with the rest of the Stonehenge Landscape, where the localised topography of the rises and ridges and coombe systems winding their way through the chalk downlands is either slight and indistinct, or if higher, rounded and smoothly rolling. These are by far the highest hills in the area, and indeed some of the highest in Wiltshire, with the Beacon Hill Ridge reaching a maximum height of 204 m at its western end and Sidbury Hill rising to 223 m.

The Beacon Hill Ridge (Figure 3.4) is by far the most dramatic in the study area. At the end of their landscape study, Exon and associates state that 'we became overpowered by the influence of Beacon Hill. Lying toward the eastern margin of our study area, its high and jagged profile forms a visual focus for many monuments' (Exon et al. 2000: 108). This is indeed the case. The ridge extends for about 4 km on an approximate southwest to northeast alignment. Stonehenge is located in the landscape so that most of the northern scarp slope of this ridge with its distinctive summit areas is visible. Had it been sited farther to the south, only the far western edge of the ridge would be visible, and the effect of seeing different summit areas would be lost. This ridge comprises five distinctive summit areas with lower ground in between; because of its orientation, most of this ridge can be seen from Stonehenge. Three of these summit areas (Jukes Brown 1905 notes only two) and Sidbury Hill have a thin but nevertheless distinctive capping of smooth and rounded flint and quartz pebbles in a clayey soil overlying the chalk, known geologically as the Reading



FIGURE 3.4 Beacon Hill Ridge seen from the west.

Beds (Jukes Brown 1905: 40). These pebbles are round or oval in form, the largest being 5–6 cm in diameter, the smallest 2 cm. They are water-worn and perfectly smooth and rounded. They vary considerably in colour from white to black, to red, yellow, and brown (Figure 3.5). Their presence explains the unusual stepped form of the Beacon Hill Ridge contrasting with all other chalk ridges in the Stonehenge area, which have much more rounded and even contours, lacking distinctive and discrete summit areas.

Now, the final section of the Avenue, after it dramatically bends to turn and run up directly to Stonehenge, is orientated on a direct northeast line toward Sidbury Hill (the highest point in this landscape). The rising midsummer sun striking the Heel Stone before shining into the interior of Stonehenge emerges from behind Sidbury Hill in the distance, thus emphasising the symbolic significance of this pebble-capped summit (Figure 3.6). Today Sidbury Hill cannot be seen from Stonehenge, because trees and buildings on the Larkhill/Durrington ridge to the northeast block the view. GIS-generated viewsheds produced by Mark Dover of the Stonehenge Riverside Project team show that the summit area of Sidbury Hill would probably have just been visible in the Neolithic if one had been standing on the western or northern sectors of the

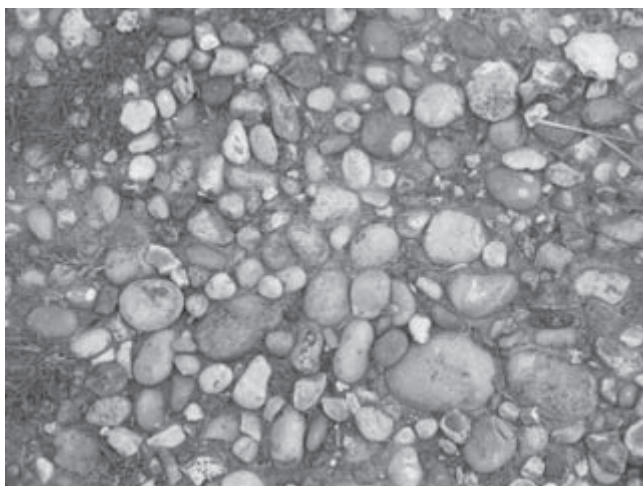


FIGURE 3.5 Pebbles on the Beacon Hill Ridge.



FIGURE 3.6 Sidbury Hill seen looking out from the entrance to Woodhenge.

bank of the Stonehenge Phase 1 monument (assuming a relatively open and treeless landscape, as demonstrated by Allen 1997).

In view of the visual and symbolic significance of the Beacon Hill Ridge and Sidbury Hill, a number of the architectural features of Stonehenge itself in its final phase, seen today, can be understood in a new manner. First of all, the internal space framed by the trilithons and taller bluestones is orientated on the same NE-SW axis as the Beacon Hill Ridge. This emphasis on a NE-SW axis is shared with a number of other approximately contemporary later Neolithic monuments. The oval timber rings at Woodhenge (Cunningham 1929) are arranged on a NE-SW axis, and the single entrance faces to the northeast, as did the single entrance to the Coneybury henge (Richards 1990: 123). From both these monuments, Sidbury Hill is visible today (see Figure 3. 6) if one looks out through the entrances, and the midsummer sun can be seen rising up from behind it.

The significance of the Beacon Hill Ridge may have been important both much earlier and before the construction of Stonehenge, and after the final phase of its construction. It is intriguing to note that the line of earlier Mesolithic pine timber posts discovered in the Stonehenge car park (Cleal, Walker, and Montague 1995: 43–47) is orientated toward it. The ridge is visible from almost all the *c.* 25 Neolithic long barrows and *c.* 450 round barrows in the study region. By far the greatest concentration of Bronze Age barrows in the study region flanks the Nine Mile River, a winterbourne stream running roughly NE-SW. This river arises to the east in the same part of the landscape as Sidbury Hill and flows along the foot of the north-facing scarp of the Beacon Hill Ridge. Its confluence with the Avon is just to the east of the Durrington Walls henge. By comparison, the Avon, Till, and Bourne rivers, which flow approximately north-south, have far fewer barrows and barrow cemeteries associated with them. Thus a general NE-SW axis appears to have become the auspicious directional axis in the entire landscape after the final phase of the construction of Stonehenge and throughout the early Bronze Age (see also Darvill 1997: 180–181). At Stonehenge this orientation is present during the initial erection of the bluestones around 2600 B.C.E.

THE APPROACH FROM THE AVENUE

Stonehenge as a locale in the landscape cannot be understood simply in terms of constituting a fixed place, that is, in terms of its specific location. Part of its meaning and significance was created through the process of the experience of moving toward it in the right way, and from the most propitious direction following the path of the rising sun. At least in the final phase of the construction of the monument, we know this to have been by walking along the Avenue.

This is by no means the shortest or easiest or 'least cost' route to Stonehenge, whether dragging bluestones along it or not, as Exon and associates (2000: 72) have shown. In brief, the approach involves ascending from the Avon to the top of the King Barrow ridge, from which Stonehenge can be seen for the first time from the east, descending into and across Stonehenge Bottom, where it disappears from sight—and then a dramatic change of direction to approach the monument again when it is very near indeed. Here we analyse in detail the final part of this journey to the stones and into the interior of the monument.

As one approaches Stonehenge walking along the final part of the Avenue from the northeast, arrival at the monument takes the form of an ascending pathway that flattens off as one approaches and enters the sarsen ring. The internal arrangement of trilithons gradually disappears, becoming concealed by the lintel stones of the outer sarsen stone ring. It becomes visible again as trilithons only after one has finally entered the outer ring. The tallest and most impressive part of the monument thus goes out of sight while the outer ring of stones dominates the visual perspective. In effect, this external ring of stones, becoming more and more dominant and higher and higher in relation to a person approaching the monument, continues the ascending path of the Avenue in a most dramatic and outrageous way. Passing the Heel stone and the Slaughter stone, to the left, one has only limited glimpses into the interior of the monument. The details of its internal structures are almost entirely concealed from view. From the outside there is no obvious entrance into the sarsen ring, but rather a series of slots to pass through, which one might choose. The two stones through which one should pass remain unmarked. One is confronted with a massive structure of strong verticals and bold horizontals (Figure 3.7). The landscape beyond the monument to the southwest is entirely blocked out. The only other monuments visible in the landscape are a few of the most monumental and massive barrows at the eastern end of the Normanton Down group to the south. These also disappear from sight as one walks up to the stones. It is clear that anyone entering the monument for the first time in the correct way would need to be led, or provided with guidance, from someone with knowledge of the internal structure.

INSIDE THE STONES

Passing through the outer circle of sarsen stones, one encounters a ring of bluestones, the two highest of which (stones 49 and 31: see Figure 3.8), concealed from the outside, flank the entrance way through this circle. Only after having passed through the outer sarsen ring can one see the horseshoe-shaped



FIGURE 3.7 Stonehenge seen from the northeast as one approaches the monument along the final stretch of the Avenue.

internal arrangement of trilithons and bluestones, as well as the outer circle of bluestones surrounding it. The concealment of this inner structural arrangement from the outside world and a view of almost all the blue stones from whatever direction one approaches the monument creates a crucial distinction between the internal and the external spaces of the monument, establishing a fundamental distinction between Stonehenge as viewed from the outside and as seen from the inside.

The inner space of the monument is effectively graded, both by the increasing height of the sarsen trilithons and bluestones from front to back (or to the southwest) and the enclosing architecture of the horseshoe (Figure 3.9). The permeability of the outer sarsen ring thus contrasts with the terminal space of the horseshoe arrangements of stones beyond which one should not pass. There was only one correct way into the inner part of the monument and only one way out. Such an architectural arrangement of stones, it might be noted, is typical of Neolithic passage graves, which similarly have only one entrance and exit from the internal space of the structure and in which the internal arrangements of stones and corbelling rise to the back. All this suggests that the central interior space of Stonehenge was an unroofed temple constructed using

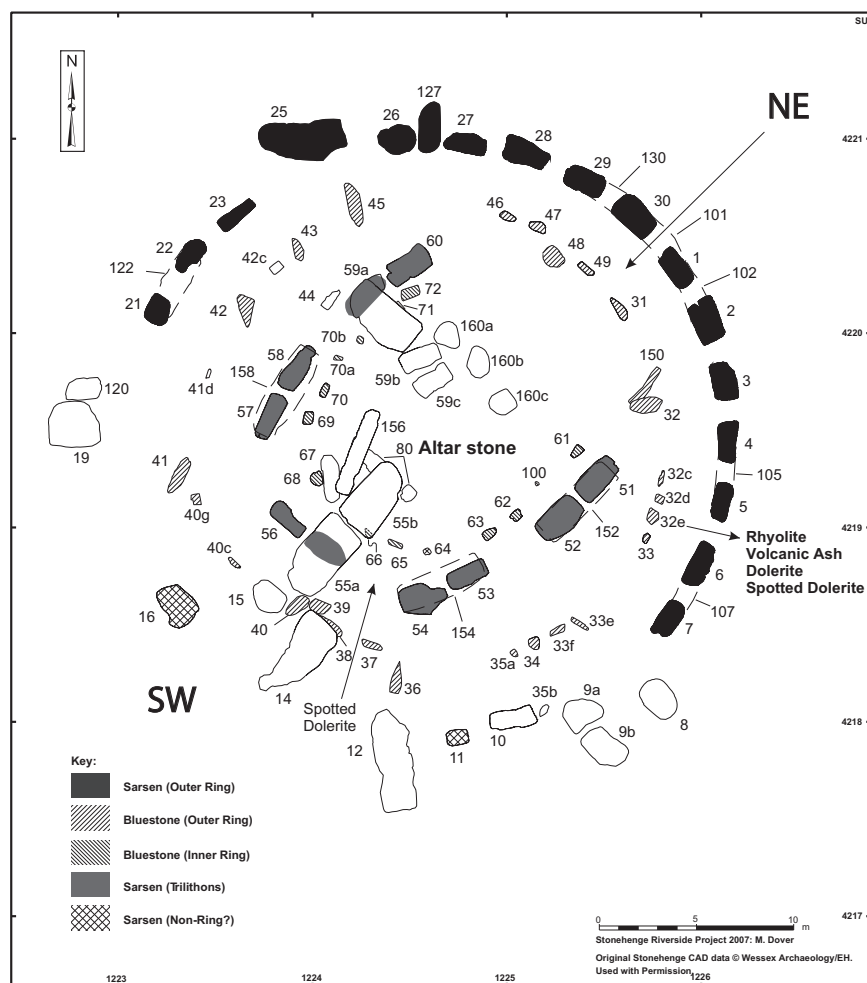


FIGURE 3.8 Plan of Stonehenge showing the arrangements of sarsens and bluestones.

the same general design principles as used in earlier megalithic tombs. Such an observation strengthens an interpretation that this monument was associated with the ancestral dead (see Parker-Pearson et al. 2006; Parker-Pearson and Ramilisonina 1998; Whittle 1997: 163).

Although we acknowledge the graded nature of the central bluestone horseshoe, and the overpowering grandeur of the similarly graded encasing sarsen trilithons, we note that it was to the pale sandstone Altar Stone that this entire architectural edifice referred. Today, the Alter Stone lies little noticed, embedded in the turf and partially covered by the lintel (156) and



FIGURE 3.9 View across the central area of Stonehenge showing the grading of height of the bluestones in the inner 'horseshoe'.

fallen eastern upright (55) of the tallest sarsen trilithon. Indeed, its upper face is worn and polished through generations of visitors walking over its surface to gaze at the collapsed great sarsen trilithon. At one time, however, this stone stood proudly in a central position enclosed by the inner bluestone horseshoe (Atkinson 1956: 45) and providing a striking focal point (Stone 1924: 1). When erect, it stood to *c.* 4 m in height, and, although dwarfed by the great trilithon, it towered above the surrounding bluestones.

The hidden presence of the bluestones within the monument, situated both inside the outer sarsen ring and inside the trilithon setting, strongly suggests that the whole building project was designed to guard, shield, and conceal the exotic bluestones from the outside world. The bluestones were also of great antiquity, having formed the first stone architecture at Stonehenge (cf. Bradley 2000a: 94). Consequently, they may have needed to be surrounded by the sarsen stones to protect their magical powers and symbolic connotations.

Furthermore, there are important distinctions among the outer ring of bluestones, the internal horseshoe-shaped arrangement, and the central Altar Stone. All but two now-fallen stones (Nos. 36 and 42), which once formed lintels for trilithons, in the outer ring of bluestones, are unshaped and retain their

natural forms and individual character. The size and shapes of these stones vary greatly, resembling those that may be observed on the Preseli mountains today. These stones are of mixed local origin but may all come from nearby sources at the eastern end of the Preseli mountains (Thorpe et al. 1991). Rhyolite, spotted and unspotted dolerite, and volcanic ash are all used. The inner bluestones are much taller; all are skilfully dressed and of spotted dolerite except for one (Atkinson 1956: 42). The uniformity of the material used for the stones in the inner horseshoe thus contrasts with the diversity of types of stone employed to construct the outer bluestone ring. Atkinson notes that 'in every case where the upper part of the pillar survives intact, its top surface has been dressed flat and level. . . two pillars at least once terminated in a tenon' (*ibid.*: 43). At least six, possibly seven, of these stones formed part of a previous structure that included at least two trilithons (*ibid.*: 44).

Of great consequence is that this megalithic architecture was of a form unlike that of any other stone monument in late Neolithic Britain. Its complexity is demonstrated not only by shaped components of trilithons but also by the presence of more complex forms of stone 'joinery'. Bluestone 68 has the beautiful groove running down its western side. Atkinson identifies the presence of the broken bluestone stump 66 with the remains of a tongue in a corresponding position: 'it may be accepted that at one time these stones stood side by side, the tongue of one fitting into the groove on the other' (*ibid.*: 44). But, in employing at least two pairs of 'tongue and groove' jointed stones, the previous bluestone structure was of even greater complexity than envisaged by Atkinson. This complexity is revealed in J. F. S. Stone's observation that of the remaining tongue and groove stones (bluestones 66 and 68) none actually fitted another (1953: 13). Hence, the bluestones that form the inner horseshoe were exotic not only in being derived from South Wales but also in being components of a unique and incredible megalithic monumental architecture.

Again, apart from its enhanced stature, the central Altar Stone stands out in its difference. While the inner bluestone horseshoe comprises the remnants of an earlier monument, presumably mainly formed of spotted and unspotted dolerite, the Altar Stone is a pale, fine-grained calcareous sandstone. Previously identified as originating from the Cosheston Beds that outcrop around Milford Haven (Atkinson 1956: 46; Thomas 1923: 244–245), the 6-tonne stone has now been recently suggested to derive from the Senni Beds, possibly from a more eastern location near the Brecon Beacons (Kellaway 2002: 59). A more cautious approach to provenance is adopted by Ixer and Turner (2006: 7), who suggest that the important issue is not the exact source location within the Senni Beds but rather that such stones outcrop in locations far removed from either the Preseli Hills or Milford Haven. In this respect, the nearly 5-m-long

Altar Stone assumes even greater significance in being ‘exotic’ in comparison to the commonality of the Preseli dolerites of the inner horseshoe (and earlier bluestone monument).

Many of the bluestones forming the inner horseshoe were reshaped so as to resemble ground stone axe blades thrust into the ground with their blades facing down (Figure 3.10). None of the bluestones in the outer circle look like axes at all. These differences between dressed and undressed bluestones, taller and thinner stones, stones that resemble axes and those that do not are further accentuated by the contrast between the outer circular space formed by the bluestones and the inner oval space, open to the northeast.

The axe-shaped forms of the bluestones is particularly interesting to note in relation to the occurrence of copper axe engravings on some of the sarsens and the presence of functionally useless but symbolically powerful chalk axes deposited at Woodhenge (Pollard 1995: 149). No carvings are known on any of the bluestones themselves. These carvings occur on the outer faces of stones 3 and 4 and on the inner face of stone 53, one of the trilithons. Another may occur on stone 5, but its position is unknown (Lawson and Walker in Cleal, Walker, and Montague 1995: 30–32). These carvings all occur on the



FIGURE 3.10 Axe-blade-shaped bluestones forming the inner ‘horseshoe’.

lower parts of the stones, with the lowest immediately above ground level. The majority resemble flanged axes of early Bronze Age date (Figure 3.11). All are unhafted axe blades with the blades pointing vertically up the stones. These, and the axe-blade-shaped bluestones, clearly indicate the continuing

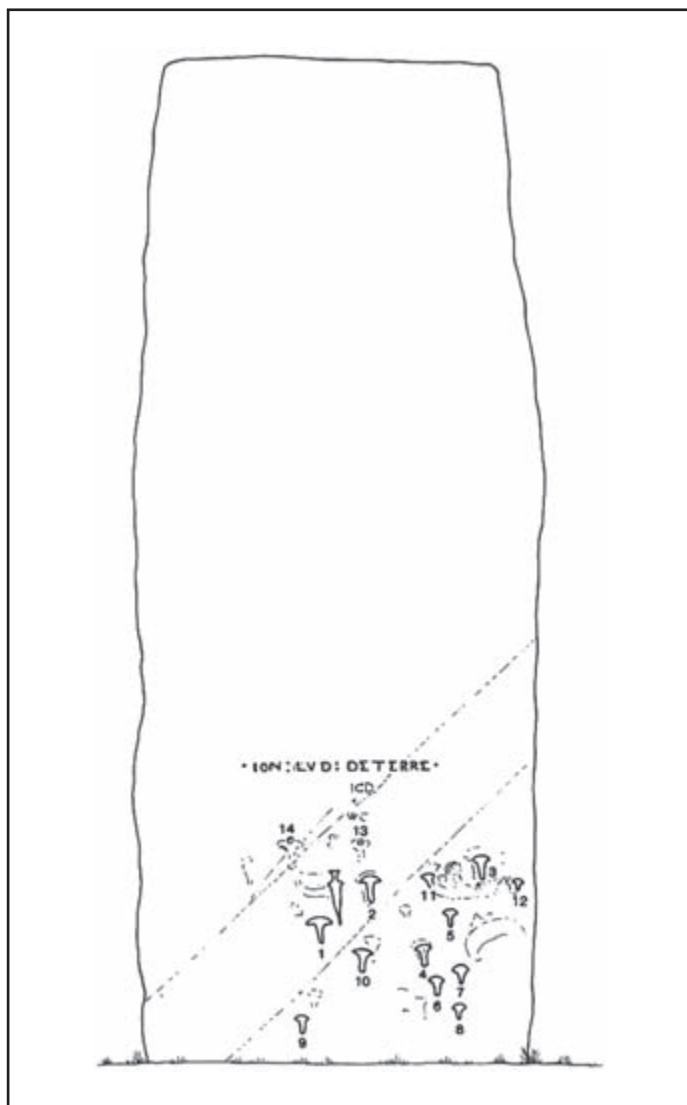


FIGURE 3.11 Axe carvings on the inner face of stone 53 (source: Cleal, Walker, and Montague 1995: Fig. 20).

significance of axe symbolism from the Neolithic into the Bronze Age. However, there is a significant difference insofar as the bluestones are shaped in the form of Neolithic axe blades that are located at the inner core of the monument. The axe carvings on the sarsens thus indicate both symbolic continuity with the past, and difference, and only some, unlike the bluestone axes, are hidden within the inner sanctum of the monument. Those on the external faces of stones 3 and 4 would be dramatically illuminated and highlighted by the equinoxal sunrise and do not relate at all to movement toward the monument along the Avenue.

The shaped bluestones forming the inner arrangement are hidden within the horseshoe trilithon arrangement, also consisting of dressed stones with both the outer sarsen ring and the inner trilithons being furnished with lintels. The bluestones that never supported lintels form a permeable ring, alluding perhaps to a yet earlier bluestone circle never elaborated with trilithons. Its presence and that of the bluestones in the inner oval arrangement thus served to objectify the presence of earlier structures at Stonehenge and the past in its present and final form, in which the exotic bluestones once visible from the landscape and the outside became hidden inside. At the same time, it was only the more local sarsen stones that had lintels or were used for trilithons. They were clearly chosen for their brute monumentality, dwarfing a person, and their presence would clearly make any attempt to retain a bluestone trilithon structure appear like the work of lesser beings in comparison.

The trilithons forming the inner part of the structure were carefully chosen pairs of stones with capping lintels. The fact that these and all the other extant sarsen stones in the monument were dressed does not mean that their surfaces are smooth and uniform. Whittle has made the important observation that the surfaces and the dressing of the trilithon uprights are very different and differ between the external and internal faces from stone to stone (Whittle 1997: 155). Examining the internal broad faces of these stones seen from within the innermost oval space of the structure, one sees that there is a striking series of repetitive contrasts between each pair of stones. Many are riddled with hollows and holes and have a very uneven surface. In each of the surviving three pairs of stones still standing, one of the stones has a comparatively rough surface with many surface depressions, holes, and irregularities. The other, by contrast, is almost perfectly smooth and regular in form all over its surface. So, in each stone pair, one of the stones retains a surface, or parts of a surface, that uniquely individuates it, whereas the other is artificially shaped in such a manner as to remove all traces of its individual and original identity as a 'natural' or unworked stone (Figures 3.12 and 3.13). In each case, it is the monolith on the left-hand side of the pair that is smooth and regular in form



FIGURE 3.12 Inner faces of stones 51 and 52 (*left*) and 53 and 54 (*right*).

and the one to the right that is much more irregular. This pattern of pairing stones with smooth and rough internal surfaces is likely to have been repeated in the cases of the two trilithons where today one of the stones (55 and 59) has collapsed with only the outer faces visible and both irregular.

This consistent contrast between comparatively smooth and comparatively rough broad faces of the stones seen from the inside is, however, not repeated when the same stones are seen from the outside. The external faces of stones 51 and 52 are both quite uniform and smooth. Stones 53 and 54 and 55 and 56 have external faces that are both smooth and rough. Stones 57 and 58 possess smooth external faces, whereas stones 59 and 60 both have rough external faces. So, while all combinations of smooth and rough or smooth and smooth or smooth and rough faces occur on the outside of the trilithon oval, a deliberate choice was made to choose stones with a rough and a smooth surface to erect on the inside, a deliberate pairing of stones with very different and contrasting surface characteristics creating an internal architectural space that was very different when seen from the inside. Here it is worthwhile noting that from a human perspective all the broad surfaces of the stones of the inner trilithon can be seen only when one is standing and



FIGURE 3.13 Inner faces of stones 53 and 54.

looking around in the inner space. As one walks around and outside the same stones as the broad face of one comes into view, the previous stone disappears out of view. Thus a consistent pairing of stones with rough and smooth surfaces would not be likely to be appreciated or be so visually striking when seen from the outside.

Stone 54 and the fallen stone 55 (see Figure 3.8) in the arrangement of trilithons contrast significantly with all the others. The other stones are all grey in colour. These two stones are unusually brown. This strongly suggests that at least two different sources of sarsens were utilised to construct the inner arrangement of trilithons and that in two out of the five trilithons, including the highest of all, stones from these different sources were deliberately paired together. This replicates the use of different kinds of bluestones from different sources in the outer ring.

The inner arrangement of sarsen trilithons differs substantially from the outer ring of sarsens, not only in terms of their height and dimensions but also in terms of the gaps between the pairs of uprights through which nothing of the outside landscape can be seen. For a person standing in the central space of the monument, the outside world is completely screened off, and no barrows

are visible. This outside world is only partially visible when one moves and looks through the gaps between the trilithons. Stonehenge, from the inside, is very much a monument that focuses attention on its internal architecture. Unlike with every other stone circle in Britain, the intention seems to have been to exclude the outside world. Although many of the locations of the numerous Bronze Age barrows in the surrounding landscape appear to have been deliberately chosen in relation to Stonehenge, they were not visible from the central part of the interior (Figure 3.14).

Only two massive bell barrows are visible when one moves around in the central space and looks out through the gaps between the trilithons: the bell barrow to the southwest of Stonehenge behind which the sun sets on the shortest day of the year (the so-called sunset barrow) and the Bush Barrow, with its fabulously rich grave goods (Ashbee 1960: 76–78) (see Figure 3.2). This strongly suggests that these two barrows were located in a very specific relationship to the central space of the monument following its construction in the form that we see today. The locations of many of the other Bronze Age barrows indicate that although a view to Stonehenge from them was important they were not located so as to be seen from the centre of the



FIGURE 3.14 View out from the centre of Stonehenge looking east.

monument. In other words, views to Stonehenge from outside it and the surrounding landscape were far more significant than views of that landscape from the central space of the monument defined by the internal trilithons and bluestones. Thus part of the significance of Stonehenge in its final phase of construction was that it was deliberately designed so as to be seen from a distance rather than being a place from which to view the world beyond. There is often a substantial difference between the distance from which one can see looking out from the monument and from which one can see to it from the surrounding landscape. This difference is, of course, because the outer sarsen ring, and particularly the trilithons, are substantially taller than the height of an observer standing in the circle—in fact, more than three or four times the height of a person (6 m to over 7 m high). Thus it is possible to see the tops of the trilithons from some parts of Stonehenge Bottom to the east but not the bottom of this coombe from Stonehenge itself. Similarly, the tips of the trilithons of Stonehenge can be seen from the eastern end of the Winterbourne Stoke barrow cemetery to the east, but none of these barrows are visible from the monument. Stonehenge can be seen from Oatlands Hill 3 km to the southwest, but Oatlands Hill cannot be seen from Stonehenge. From the barrow cemetery at Durrington Down to the north, Stonehenge can be seen, but not vice versa (see further discussion of these landscape views into the monument below).

A more substantial view of the landscape beyond the monument is possible when one walks a circuit between the outer bluestone and sarsen rings. The sarsens, with their lintels, continually frame and break up this perception of the landscape. It has to be experienced in terms of a series of windows breaking up the continuity of the topographic forms of the ridges, groups of barrows, and the line of Stonehenge Bottom. By far the most dramatic view is to the east to the King Barrow ridge, forming the near horizon, and the Beacon Hill Ridge beyond, forming the distant horizon (Figure 3.15). Walking out from Stonehenge through the tallest bluestones in the outer ring and sarsens 30 and 1, one notes that this is the last gap between the five pairs of sarsens on the northeast side (stones 5–29) through which the Beacon Hill Ridge can be seen directly in front, when one is looking out.

On the western side, the view is curtailed by gently rising land to only about 250 m. To the southwest, the horizon is considerably longer, whereas to the south, Rox Hill, 3.5 km away, is on the distant horizon, but it is prominent today only because of the distinctive clump of trees on its summit. By far the most prominent Bronze Age barrows seen from the monument, apart from the Bush barrow and the Sunset barrow and the nearby bell barrow immediately to the east of it, are the six massive New King Barrows running along a ridge 1 km distant to the east.



FIGURE 3.15 New King Barrows seen from the Stonehenge enclosure looking east.

ARCHITECTURAL ORDER AND THE ORDERING OF THE LANDSCAPE

Whittle notes that the stepped character of the sarsen settings is an important aspect of the architecture of Stonehenge (Whittle 1997: 150). He suggests that in some way this might be linked symbolically with a hierarchy of spirits or beings, the most powerful being high up and associated with the air. Going beyond this some more precise observations with regard to the stepped character of the stone settings can be made in relation to its landscape. There are five trilithons at Stonehenge, precisely matching the number of summits on the Beacon Hill Ridge. The Beacon Hill summits are graduated in height, with the highest at the southwest end. The tallest trilithon at Stonehenge is similarly located at the southwest end of the central space, thus suggesting a mimetic relationship between the orientation and graded height of the trilithons and the sequence of ridge summits. The inner horseshoe-shaped arrangement of blue-stones is similarly graduated in height to the southwest. So, the cultural form of the interior of the monument is the landscape in microcosm. Furthermore, the materials of the summit areas of the pebble-capped Beacon Hill Ridge and the Sidbury summit are alien to the area. Water-worn pebbles are found nowhere else in this landscape. In contrast to the pebbles on these hilltops,

the stones encountered in the beds of the Avon, Nine Mile River, Bourne and Till rivers in the vicinity of Stonehenge and along Stonehenge Bottom itself are all jagged, angular, and irregular (Figure 3.16). So, pebbles do not occur in the river valleys directly associated with water, where we might perhaps most expect to find them, but on the very highest points in the landscape, where they might be least expected. This appears to be an inverted world!

The six New King Barrows on the nearby ridge to the east of Stonehenge stand out from all the others in the Stonehenge landscape in a number of important respects. They are all huge and monumental bowl barrows more or less equally spaced along the ridge top with significant gaps between each barrow. Nowhere else in the study area is such a large number of huge and regularly spaced barrows found in such close proximity. In other places, and in other barrow cemeteries, in the study region there are barrows of similar or even greater dimensions, but they occur only singly or in pairs, and their spacing is often irregular, or they may be conjoined as on Normanton Down and in the Cursus group. Clearly these barrows, which we know to have been built of stripped turves with a chalk cap obtained from digging the surrounding ditch (Cleal and Allen 1994), were constructed so as to be as prominent as possible from Stonehenge. Seen from Stonehenge, these six massive mounds punctuate the skyline, breaking up the otherwise smooth and rounded contours of the ridge in a manner that simply does not occur in relation to the barrows elsewhere running along the edge of its 'visibility envelope' (Figures 3.15 and 3.17). Our interpretation is that their relationship to the five summits of the Beacon Hill Ridge and to the summit of Sidbury Hill is again mimetic (six mounds and six summits). The monumental New King Barrows thus reiterate the symbolic significance of these pebble-capped hills to their east in relation to Stonehenge itself. These barrows have an inversed stratigraphy, chalk covering the soil, just as the presence of pebbles on the hill summits to the east is an inversion of a norm. Rather than beach pebbles being found low down by the sea, they are instead encountered far inland and next to the sky. The upside down King Barrows mimic the inversion of the wider world found on the ridgetop.



FIGURE 3.16 Gravels in the bed of the Nine Mile River.



FIGURE 3.17 One of the New King Barrows seen from the west.

Pebbles may have signified the sea and the connectedness of communities travelling by water and its buoyant potency. Pebbles from the summit areas of either the Beacon Hill Ridge and/or Sidbury Hill have been recorded from the recent excavations at Woodhenge in 2006 directed by Joshua Pollard. A substantial hollow was found directly underneath the bank of the late Neolithic henge on the southeast quadrant of the monument. This hollow was created by a fallen tree. In it, early Neolithic pottery (the remains of a carinated bowl) was found, together with bones and flint in the upper fill. These were directly associated with a deposit of pebbles brought from the Beacon Hill Ridge. At Stonehenge, Hawley records the presence of pebbles in two of the Y holes (Hawley 1925: 37–38); however, because they, unlike the sarsen and the bluestone chippings, were unlikely to have been of any interest to him, how many were left unrecorded remains uncertain. In this respect, Green remarks, in the context of a general review of stones found in the ‘Stonehenge layer’, that well-rounded flint pebbles occur at Stonehenge ‘over the whole period of its construction’ (Green 1997a: 5).

While the bluestones were an alien material from an exotic and distant source, the pebbles on the hill summits were an exotic local material. Excavations

at Stonehenge have revealed that the entire interior of the monument was covered with sarsen and bluestone chippings. The bluestone chippings outnumber those of sarsen in a ratio of 1:3 (*ibid*). This is surprising in view of the fact that the dressing of the huge sarsen blocks would create much more waste material. It seems likely that during the construction of the final phase of the monument at least the bluestones were being dressed in situ, whereas the sarsen blocks were largely dressed away from the monument in the landscape and then brought to the site and erected. Or, alternatively, many bluestone chippings were collected to be deliberately deposited within the circle. Although it is very easy to appreciate the significance of the imported bluestones themselves, what is perhaps more surprising is the fact that bluestone mauls were brought from southwest Wales, too, further emphasising the magical significance and power of these stones.

AN UNFINISHED STRUCTURE?

The existing arrangement of sarsens, with or without lintels, in the outer circle of Stonehenge covers only about three-quarters of the circumference of the circle. There are many stones absent on the southwest side, where the visual field from the monument is shortest and directly opposite the most significant axis of approach to Stonehenge along the Avenue. The outer sarsen ring of Stonehenge was, we think, never completed, and the reason may well be either that there simply were no stones of sufficient size to finish the building project or that a complete ring of sarsens with lintels was never intended or required on the southwest side of the monument where the horizon line is restricted and from which Stonehenge was never meant to be approached.

The internal trilithons, somewhat reduced in height, would have been sufficient in number to complete the perfect outer ring in the absence of any other stones of suitable size. Precisely where in the landscape surrounding Stonehenge the sarsens were obtained still remains a mystery, since today there are none of a similar size either in the immediate vicinity of Stonehenge or anywhere on the Marlborough Downs (cf. Ashbee 1988; also see Bowen and Smith 1977; Green 1997a: 5–7, 1997b: 260–263; Stone 1924: 44–57, 1926).

The idea of an external perfect sarsen ring was fully realised only on the northeast side of the monument facing toward the important approach from the Avenue. When one approaches from this direction, Stonehenge appears as relatively ‘open’. Seen from the southern side through the entrance through the outer bank and ditch, the visual perspective is totally different, with the interior oval space defined by the trilithons and the tall bluestones being completely concealed (Figure 3.18). A smaller monolith (stone 11) and an adjacent sarsen stone (No. 10) completely block any view into the inner space. This side



FIGURE 3.18 View toward Stonehenge from the south.

of the circle acts as a screen, effectively blocking off movement into the circle itself from this direction. Stone 11 is both much shorter in height and significantly different in shape from the other sarsens in the outer ring (Figure 3.19). Although in the correct position to continue the outer ring on the southern side, it could never have supported a lintel. Atkinson suggests that the upper part may have been broken off and removed (Atkinson 1956: 24), but there is absolutely no evidence for this. Not only is this stone much shorter than the others, it is also significantly smaller in breadth and thickness. Hence, although there exist the collapsed upright (stone 12) and socket for missing stone 13 in the southwest, even if these once constituted a standing trilithon arrangement, they were never connected to the outer circuit of sarsens. This lack of conjoining stones reveals that Stonehenge was built in a piecemeal and probably different manner at the 'rear' of the monument.

Similarly, stone 16, again, in the correct position to continue the outer sarsen ring on the southwest circuit of Stonehenge, is completely anomalous in shape (Figure 3.20). Its sinuous form, thick base and sides, and tapering shape bear far more resemblance to a menhir, and its thin top is unlikely to have supported a lintel. Indeed, this stone is famous for its clear tool-marked surface (for example, Atkinson 1956: Fig. 8; Cleal, Walker, and Montague 1995, Plate 7.1); however, careful examination allows these marks to be re-interpreted as the results of extensive episodes of axe polishing subsequently pecked over. Overall, there is no evidence for a continuation of the outer sarsen circle beyond the socket for stone 13 in the southwest and the socket for stone 20 in the northwest.

In suggesting that the rear (southwest) area of the final Stonehenge monument was open and incorporated special and anomalous stones, we recall the initial bluestone architecture of Stonehenge. Here, too, a semi-circular arrangement was present, with an entrance having a NE-SW axis (Cleal, Walker, and Montague 1995: Fig. 80). Significantly, Cleal suggests that at this early time



FIGURE 3.19 Stone 11 (*left*).

the focus of the semi-circular bluestone arrangement may have been the Altar Stone then standing in socket WA3639, C17 (*ibid.*: 188).

The huge stones used for the five internal trilithons were used to mark out the auspicious NE-SW axis of the internal space of the monument to which the Avenue leads. It seems to have been far more important to mark out this axis rather than to complete the external sarsen ring, whose integrity was either sacrificed or never intended. In this respect, we can note that, of all the surviving upstanding stones in the outer sarsen ring, stones 29, 30, and 1 are the most uniform and perfectly shaped on both their inner and outer faces. The inner faces of stones 27, 28, and 2—seen when exiting the circle



FIGURE 3.20 Stone 16.

toward the Avenue—are also very uniform in character, whereas their outer faces are much more irregular, with bulbous areas and/or hollows. Elsewhere in the ring, stone faces that are irregular in form may be facing either toward the inside or outside the ring, and there appears to be no coherent pattern with regard to whether the ‘best’ (that is, most uniform and regular face of the stone) faces outside or inside. This situation contrasts with the consistent pairing of stones with smooth or rough surfaces, seen from the inside, within the central arrangement of trilithons discussed above.

Stonehenge, in its final megalithic form, as in its earliest, was never a circular stage set for ceremonies and performances. It was an oval stage open to the northeast. From the very beginning, discussion, analysis, and representations of Stonehenge have always assumed that Stonehenge originally was constructed in terms of a Platonic and perfect circular geometry (see illustrations in Chippendale 2004), despite the presence of stones 11 and 16, which contradict such a view entirely. Throughout his book Atkinson (1956) works with the idea of completed bluestone and sarsen circles for successive stages of the monument while also admitting that ‘there is no compelling reason for insisting that all the sarsen stones are components of a single and united plan, conceived and executed as a whole’ (*ibid.*: 69). Perhaps we have all been misled by the plan of the monument and assumed that the imperfections in it are the result of the ruinous state of Stonehenge and the removal of some stones, for which, it should be noted, there are no documentary accounts whatsoever, contrasting with the accounts we have of the fire burning and the breaking-up of the stones at Avebury. Stones could have been cleared for agricultural purposes, but there is no evidence for cultivation at the monument itself, and in any case the monument provides a ready made site for a clearance cairn. One might expect other stones to be cleared to it rather than taken away. Furthermore, there is little evidence for the use of sarsen as a building stone in the nearest settlement, Amesbury. It seems somewhat peculiar that this destruction should have taken place solely on one sector of the circle perimeter, which in terms of the landscape setting of the monument is the most insignificant. What we have attempted to demonstrate here is that a phenomenological interpretation of the monument in its landscape setting provides an altogether different view. Our suggestion is that the final appearance of the monument in its latest phase was in fact rather similar to that encountered today.

CONCLUSIONS: STONEHENGE THROUGH TIME

Concerning the seemingly continual process of the construction and reconstruction of Stonehenge, some dramatic changes can be outlined of the relationship of the monument to the landscape. In the earliest Phase 1 (phases after Cleal, Walker, and Montague 1995) of the monument, when it consisted of a bank and ditch with the 56 internal Aubrey holes with its single entrance facing northeast, Stonehenge would not have been highly visible in the landscape irrespective of how much tree cover there remained, and by this time most of the landscape appears to have been open grassland (Allen in Cleal, Walker, and Montague 1995: 65; Allen 1997). The possible presence of

timber posts in the Aubrey Holes, estimated by Cleal and associates to have been as much as 4 m high (Cleal, Walker, and Montague 1995: 112), would have increased its visibility, but it might have appeared to be a significant place only from Normanton Down to the south or, from farther away, the top of the King Barrow ridge to the east. It was a place from which, perhaps, one looked out to the landscape, but it would never have been a very prominent landscape marker within it. In Phase 2, when internal timber structures were built—perhaps mortuary houses associated with its use as a cremation cemetery—the entrance became blocked by a palisade. The visual focus of the monument remained externally directed. In Phases 3a and 3b, the erection of the bluestones significantly altered the place irrevocably. Now these arrangements of bluestones, of whatever form, would not have effectively blocked out the landscape beyond. They would have formed a permeable membrane to the world that, while defining and screening the central activities, still permitted the inside to be connected to the outside. With the exception of the Altar Stone, the tallest of these stones would not have been all that much higher than a person. One could see out from Stonehenge and see to Stonehenge from the surrounding landscape from pretty much the same distance corresponding to Allen's 'visual envelope'. The bluestones, particularly the pale gleaming Altar Stone, so obviously exotic, would have constituted an incredible spectacle. In Phase 3c, the sarsens and trilithons were erected, and the bluestones were now hidden within them and no longer visible from the landscape beyond. Stonehenge would have appeared to be a local monument made of local stone. The erection of the sarsens, as discussed above, not only hid the bluestones but also had the intended or unintended effect of blocking most views of the landscape out from within the centre of the monument, except on the uncompleted side. The erection of the huge sarsens now further monumentalised the place. For the first time, one could now see the monument from a far greater distance away in the landscape than one could look out to that landscape from anywhere in the Stonehenge enclosure itself, a very significant change in visual perspective. The significance of this in relation to the location of Bronze Age barrow cemeteries around Stonehenge has been entirely overlooked previously (cf. Allen in Cleal, Walker, and Montague 1995; Darvill 2006: 164ff; Exon et al. 2000; Woodward and Woodward 1996). In relation to the monument itself, the visual focus changed again to being a monument that was more to be looked at from the outside than to look out from. After this final stone construction phase, Bronze Age barrow cemeteries were located both in relation to the margins of the 'visibility envelope' and intervisible with Stonehenge, but also much farther afield from Stonehenge but still within visual 'reach' of it while themselves not being visible from the monument. This explains why there is an inner and outer arc of barrow cemeteries around Stonehenge to the west,

north, and south. No such arc of large and important barrow cemeteries exists to the east, because the King Barrow ridge blocks all views beyond it when one looks from either side of it, apart from the view to the Beacon Hill summit from Stonehenge and vice versa. Thus from the Durrington Down barrow cemetery to the north, from the eastern end of the Winterbourne Stoke barrow cemetery to the west, from the Lake and Wilsford groups to the southwest and south, respectively, one can see to Stonehenge, whereas from Stonehenge itself these barrow cemeteries remain invisible (see Figure 3.21).

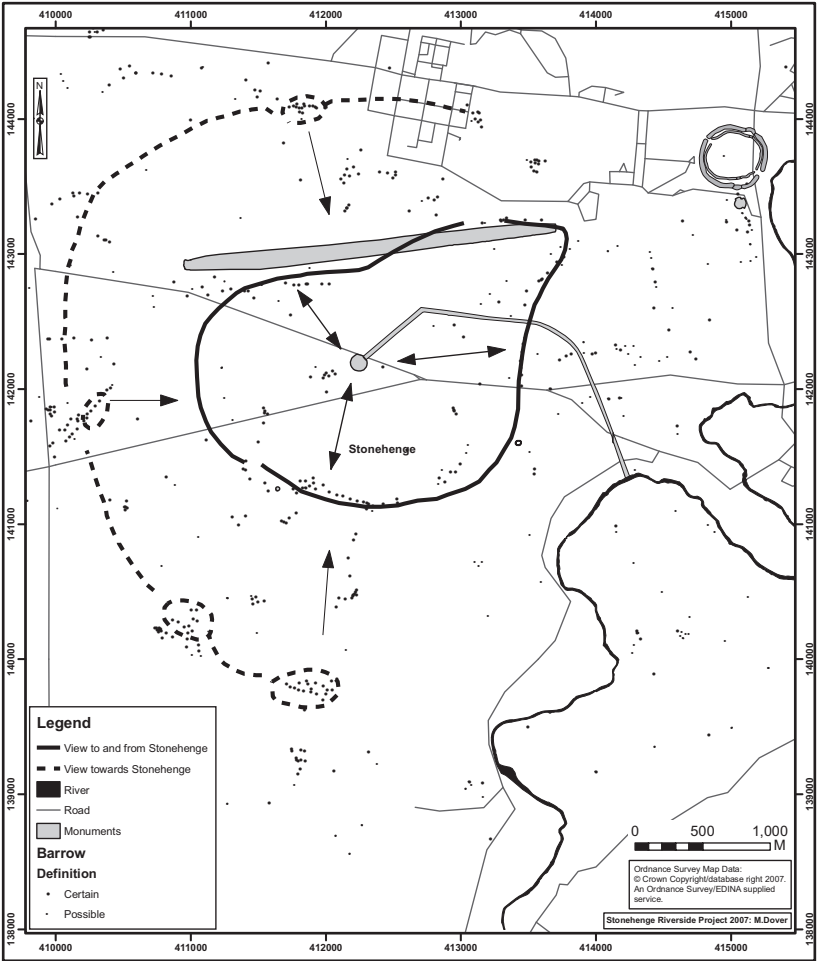


FIGURE 3.21 Arcs of barrows around Stonehenge showing their visual relationship to the monument looking out and looking in.

If in the final phase of the construction of the monument, that which we see today, the landscape was effectively shut out from the interior; this does not imply that it was forgotten. The approach to Stonehenge down the Avenue was highly structured, producing specific experiential effects of the monument in the landscape while moving toward it. We have also argued that the internal space of the monument bore a mimetic relationship to the landscape and the Beacon Hill Ridge in particular. The midsummer sun rising over the sacred and pebble-capped Sidbury summit would have been highly symbolically charged. Both it and the western end of Beacon Hill were far too significant for any monuments or barrows to be built on them. The interior of Stonehenge would have provided the perfect symbolic and ritual space for telling mythological stories about the origins of the lived-world, the landscape, and everything in it. We will never know the content of these stories, but we can surmise some of the problems they tried to address and answer: Why were most of the rivers in the Stonehenge landscape dead? Why was it that only the Avon flowed throughout the year? Why were beach pebbles on the hilltops next to the sky? Why did huge sarsen blocks litter the coombes? If such matters were understood in terms of the mythical exploits and activities of ancestral beings, then such exploits might be emulated to confer power and prestige on the monument building group. Hence the extraordinary feats of transporting the bluestones from south Wales and the sarsen stones from elsewhere in the landscape.



CHAPTER FOUR

ROUND BARROWS AND CROSS DYKES AS LANDSCAPE METAPHORS

On the northern edge of Cranborne Chase (Figures 1.1 and 4.1), there are two striking and dramatic chalk ridges separated by the Ebble valley, termed here the Ebble-Nadder ridge, to the north, and the Ox-Drove ridge, to the south. Overall, this landscape comprises four very different topographic worlds: (1) the flat and relatively undifferentiated lowlands to the north and the west of the ridges; (2) the winding Ebble valley that divides the two ridges; (3) the ridgetops themselves (narrow and irregular with striking and often panoramic views); and (4) the secret and interiorised world of the coombes (dry river valleys). The study that follows is a detailed account of the locations of round barrows and spur and cross-ridge dykes in the landscape. It is based on fieldwork undertaken over a period of eighteen months and has involved repeated and regular visits to the places discussed, as well as walks between them and up and over the ridge, along its steep northern escarpment and the coombes that cut into it. The interpretative framework put forward could never have arisen without this personal physical experience and knowledge of place; creating this framework would be absolutely impossible just using a map. The

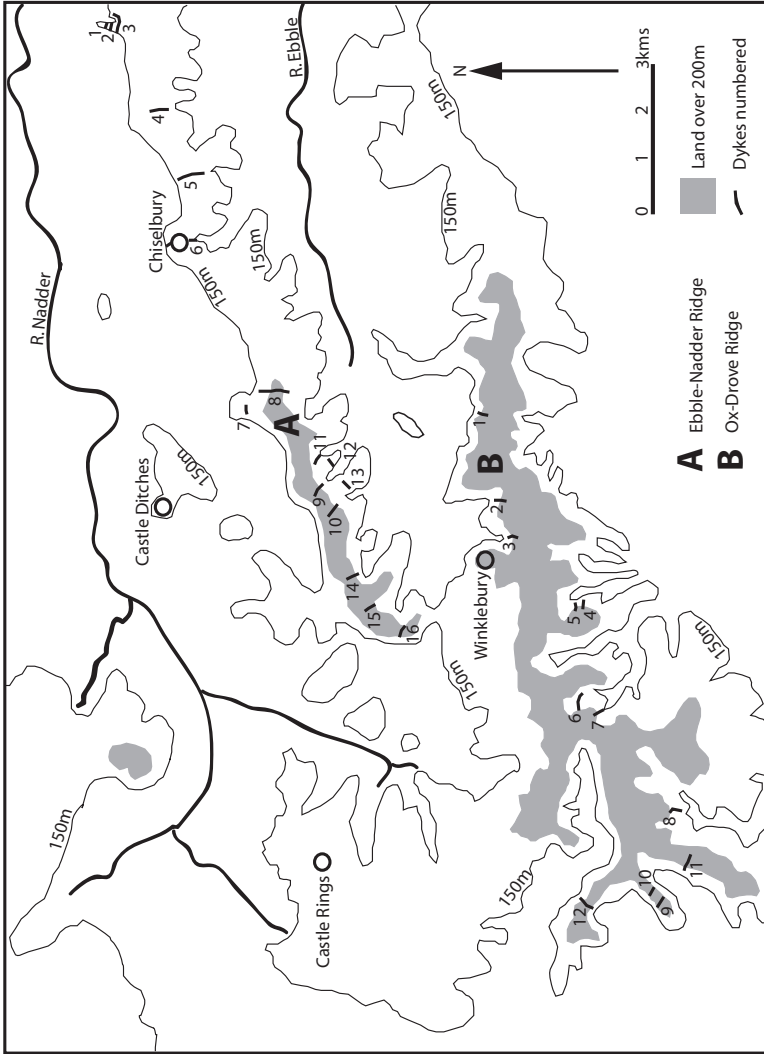


FIGURE 4.1 Location of the study area in southwest Wiltshire and northeast Dorset and the Ebbel-Nadder and Ox-Drove ridges, showing some of the places mentioned in the text.

landscape itself and the barrows and dykes in it exerted their own agency, or effects, in my experience and perception of them. I would like to claim that they both influenced and constrained what became possible to write. In this sense, they are the mute co-authors of this and the other chapters in this book.

I argue that both the barrows and the dykes acted as material metaphors for the wider landscape. In other words, their locations were significant not just in themselves, as markers of specific places in the landscape, but also in the manner in which they were dialectically related both to their immediate and more distant surroundings in the landscape as a whole.

THE EBBLE-NADDER RIDGE

The Ebble-Nadder ridge, forming the northern edge of Cranborne Chase in southwest Wiltshire, is a dramatic stretch of chalk downland bounded by the river Nadder and the undulating greensands and clays of the Vale of Wardour to the north and the more narrow and incised valley of the river Ebble to the south (Figure 4.1). The ridge forms a bold scarp on its northern side, an unbroken barrier extending from Hoop Side Hill (181 m) in the east to Whitesheet Hill in the west (242 m), a distance of 14 km (Figure 4.2). The ridge gradually descends in height from west to east along its length, and the land dips gently away from the ridgetop to the south and the Ebble valley. The crest of the entire ridge is narrow, usually only about 180 to 270 m wide. Along it, usually just to the south of the very highest ground, runs the former Shaftesbury to Salisbury turnpike road. Arable land is now characteristic along the ridgetop but with the steep scarp slopes remaining unploughed and under pasture. Below the northern scarps, small woods or copses, sometimes called Ivers, still remain. The southern side of the ridgetop is broken up with a series of steep-sided coombes running into it from the south, dissecting the otherwise fairly gentle slopes running down to the Ebble valley. Altogether two long barrows, fifty certain or probable round barrows, and sixteen cross-ridge and spur dykes are recorded along the ridge as a whole.

THE OX-DROVE RIDGE

This ridge to the south of the Ebble valley, running approximately east to west, is far less regular in form. Along part of it runs the ancient Ox-Drove ridgeway from Woodminton Down in the east to Win Green in the west. The ridge, but not the ridgeway, continues to Melbury Beacon and Fontmell Down in the west, a stretch of 14 km (Figure 4.3). Along the ridge there are

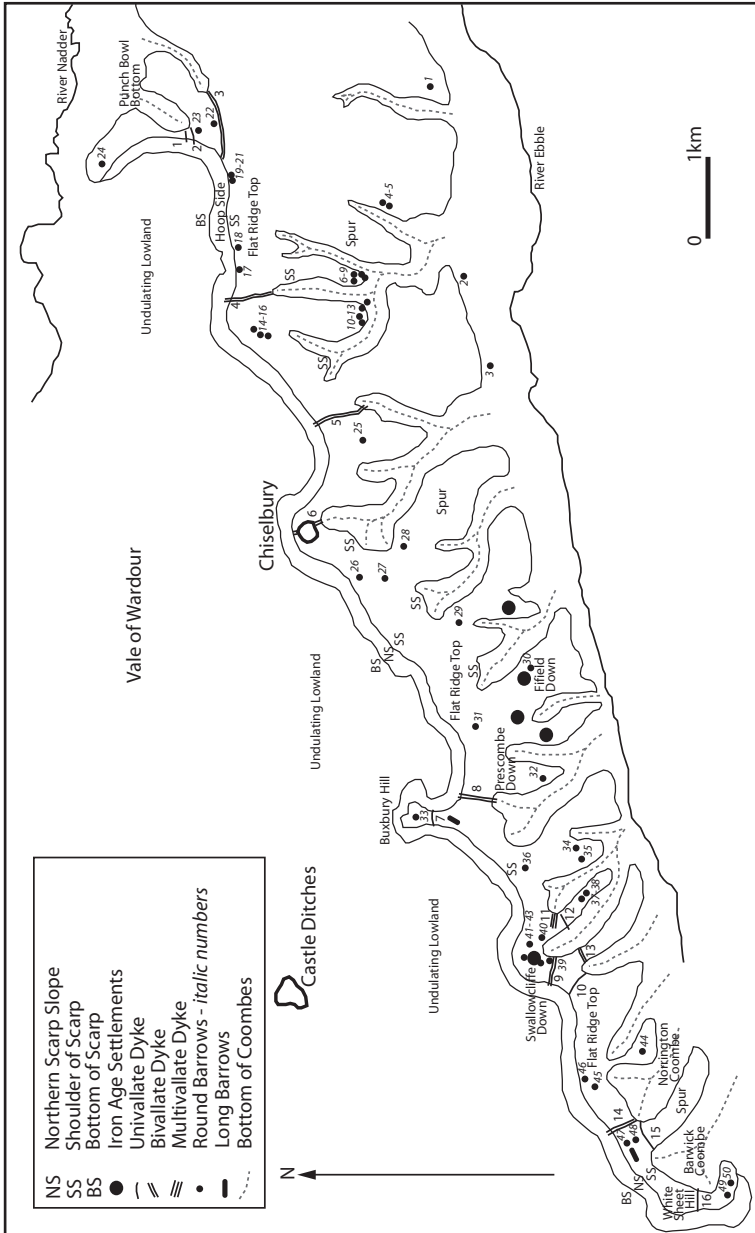


FIGURE 4.2 Ebbles-Nadder ridge showing the distribution of long barrows, round barrows, cross-ridge and spur dykes, and places mentioned in the text.

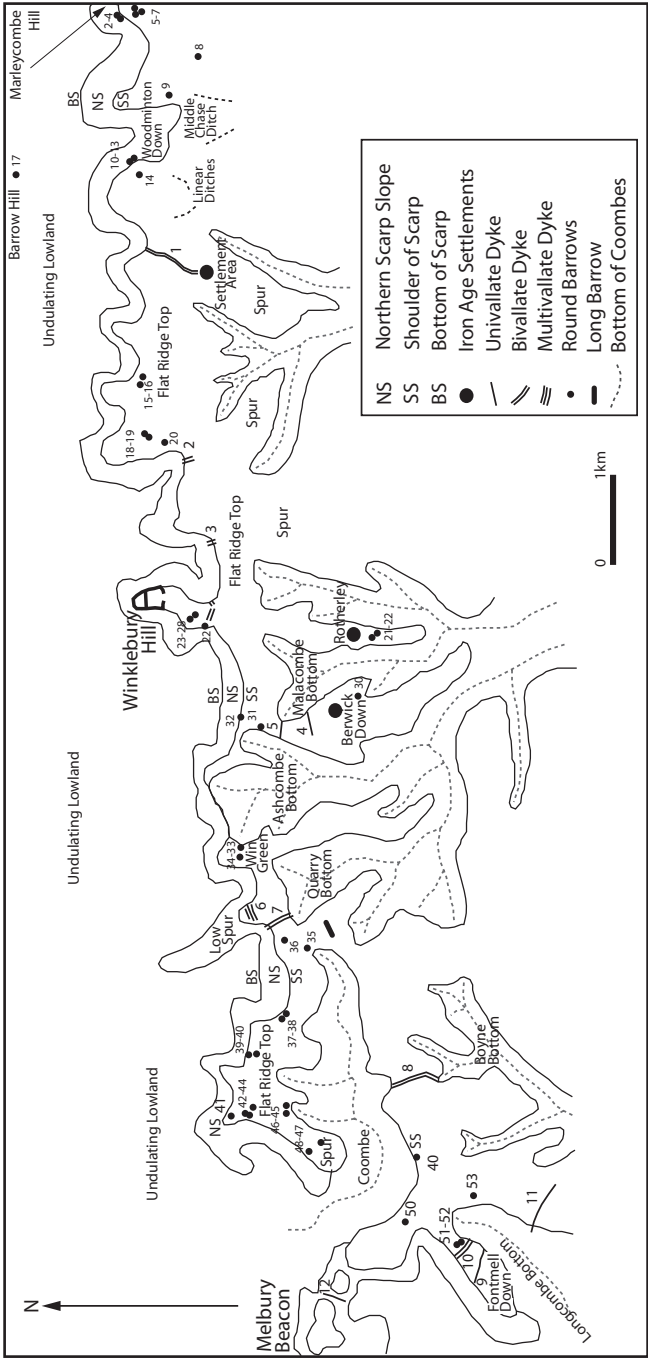


FIGURE 4.3 Ox-Drove ridge showing the distribution of long barrows, round barrows, cross-ridge and spur dykes, and places mentioned in the text.

two long barrows, at least 53 certain or probable round barrows and at least twelve well or partially preserved cross dykes running dramatically for greater or shorter distances across the chalk downland. Win Green (277 m) is the highest point and most significant landmark on the ridgeway and indeed the highest point on Cranborne Chase. Melbury Beacon, a dramatic rounded hill marking the terminal point of the chalk ridge before the heavy clay lowlands of the Blackmore Vale at 263 m, is the second-highest point; the impressive spur at Winkelbury (260 m) just to the east of Win Green is only slightly lower. To the east and south of Win Green the land gently falls away along the ridgeway and off it to the south. To the north there is a very steep and indented scarp falling away to the valley of the Ebble. The top of the ridgeway itself is almost flat or rises and falls only gently from west to east and is quite narrow, about 250 m or less. There is an enormous contrast between the dramatic northern escarpment and the manner in which the land dips away almost imperceptibly to the south. However, these gentle southern slopes are cut into at regular intervals by long steep-sided and meandering coombes. None manage to cut across the chalk ridge, but some to the south and east of Win Green come close to doing so. At the eastern end of the ridgeway, the slope down from the summit is dissected by far shallower valleys, creating a far simpler and less bold relief.

The northern escarpment is far from uniform, having a series of short fretted spurs jutting out from it, Winkelbury Hill being the most significant and well-defined. A series of rounded concave hollows, all unique in form, cut into the scarp, creating bowl-like forms or more irregularly shaped declivities. The drop in relief may be up to 100 m and the slopes truly precipitous. Their dizzying steepness, together with views from the ridgetop down the scarp slopes and across the lowlands below, are quite breathtaking.

The deeply incised coombes are equally dramatic but in an utterly different way. The eye tends to follow and run along their contours and down into their hidden depths. The flat base of these coombes may be as little as 5 or 10 metres with their side profiles being wider or narrower and more or less meandering and contorted. At the western end of the ridge, Melbury Beacon (colour plate 2) and Fontmell Down are the two most striking topographic features on the western escarpment of Cranborne Chase. Here two narrow coombes do cut into the escarpment edge in a manner equivalent to those to its south but run from west to east. Melbury Bottom meanders for 4 km through the chalk and almost all the way up to Win Green. Longcombe Bottom is deeply incised, flanking the southern side of Fontmell Down. There are no equivalents on the northern scarp edge, which lacks coombes, except at the far eastern end, where they terminate the scarp edge, reducing it to a series of steep-sided rounded hills. East of Longcombe Bottom a series of coombes cut into the

chalk ridge from the south and southeast. The most complex narrow and deep series of meandering coombes occurs immediately to the south and west of Win Green and between it and Winkelbury Hill, almost, but not quite, cutting right through the ridgetop. These coombes meander through the chalk for 3–4 km or more, steep sided and V-shaped in profile, with numerous arms and side branches. East of Winkelbury Hill, the coombes to the south of the scarp are no longer dramatic but form shallower valleys situated much farther away from the ridgetop.

The remainder of this chapter is divided into two main sections. The first section discusses the relationship between long barrows and round barrows and the escarpment edges, ridgetops and coombes. Section II extends the analysis to cross-ridge and spur dykes. The concluding paragraphs pull the observations together to provide a new interpretation of their relationship both to one another and to the landscape as a whole.

LONG BARROWS AND ROUND BARROWS

Long Barrows in the Landscape

There are four recorded long barrows on the two ridges (Table 4.1). All are of standard form, with side ditches running parallel to the mound whose highest and/or broadest end faces to the east or southeast. On each ridge there is a smaller barrow situated toward the middle, or the eastern end, and a much larger and higher barrow, twice as big, situated at or toward the western end of the ridge. The length and the height of the mounds directly relate to their elevation in the landscape. The barrows on the Ebbles-Nadder ridge are placed 4.7 km apart; those on the Ox-Drove ridge, 9 km apart, and none are intervisible. The locations of these monuments and their relationship to the landscape are

Table 4.1 The dimensions and elevation of the long barrows along the Ebbles-Nadder and Ox-Drove ridges.

Barrow Name	Orientation	Length	Width	Height	Ridge Height
<i>Ebbles-Nadder Ridge:</i>					
Buxbury Hill	NE-SW	22	14	1.2	205
White Sheet Hill	ENE-WSW	43	19	2.3	240
<i>Ox-Drove Ridge:</i>					
Vernditch Chase	E-W	23	16	1.0	150
Ashmore Down	NE-SW	42	21	2.5	250

highly individualised. They do not form a coherent group except in terms of their shared morphology.

The small barrow on Buxbury Hill is located across the neck of the only true spur to jut north from the Ebbles-Nadder ridge (Figure 4.4). It is situated on a gentle slope rising up to the top of the ridgeway, and hence visibility is restricted due south. It is more extensive along the ridge top about 4 km to the east as far as Chiselbury Hill and about 2 km to the west as far as Swallowcliffe Down. To the north one looks out across the lowlands of the plain of Wardour. The southwest end of the mound is orientated toward Win Green, the highest point on the Ox-Drove ridge to the south some 8.2 km distant. The barrow is precisely located so as to afford a window to this hill otherwise hidden along this part of the ridge. The barrow marks the first point at which Win Green can be seen along the Ebbles-Nadder ridge when approached from the north or east, and this would appear to be the significance of its location. It references a distant and very significant hill on the Ox-Drove ridge.

The much larger barrow on White Sheet Hill is situated on the highest part of the Ebbles-Nadder ridge at its far western end. From here there are panoramic views along the entire Ox-Drove ridge to the south, north across the plain of Wardour, and east along the ridgetop. The long axis of the barrow duplicates that of the ridgetop in mimetic fashion. The southwest end of this barrow is orientated toward another very significant hill on the Ox-Drove ridge, Melbury Beacon, the second-highest point and the hill that marks the western end of the ridge. It is behind this hill that the sun sets on the mid-winter solstice from the barrow. Although this barrow cannot be seen from off the ridge to its north, its western end is just visible on the ridgetop from a considerable distance away when seen from the lowlands to the west. Because of the manner in which the ridge itself gently rises from east to west, the eastern end of the barrow comes into view only about 300 m away when approached from the east. It is located to be highly visible in the landscape from the south and the west. The barrow is situated only 250 m to the north of the head of Berwick Coombe, but its presence is virtually hidden from the



FIGURE 4.4 The long barrow on Buxbury Hill.

barrow site itself—nor can one look down to the bottom of the plummeting scarp slopes of the ridge a short distance to the north and west. Similarly, no coombes or scarp slope edges are visible from the Buxbury Hill barrow. Both barrows are instead related through their directional orientation to the two most prominent and significant points on the Ox-Drove ridge, which in both cases are to the southwest. The visibility of both along the ridgetop is restricted and limited, and they are invisible from off the ridge to the north despite being located relatively near to the scarp edge. Both mark significant points along the Ebbles-Nadder ridge—the highest western end and the only true northern spur.

The locations of the two barrows along the Ox-Drove ridge, by contrast, appear to be much more ambiguous and muted. The small barrow in Vernditch Chase is located on the mid-point of a gentle north-south slope with extensive vistas to the south across Cranborne Chase but restricted visibility up to the ridgetop to the north. Its west-east long axis respects the axis of the ridge itself and runs parallel to the course of a small west-east coombe, Chickengrove Bottom, 750 m to the north. This coombe is unusual, because it is one of only two to cut into the Ox-Drove ridge in a west-east direction, and it is situated at its eastern end but is not visible from the barrow, and its long axis does not relate to any significant landscape feature.

The barrow on Ashcombe Down contrasts considerably. Situated just beneath the top of the ridge, it straddles a north-south slope only 1 km to the southwest of the Win Green summit, which is visible from it. Approached from the south, it marks the point at which Win Green can first be seen in the distance. The long axis of the mound is not, however, orientated so as to reference Win Green but to the very head of Berwick Coombe 2.2 km to the northeast. In terms of the local topography, this is a very significant point, indeed, because the head of Berwick coombe almost cuts right across the top of the ridge and is the only coombe to do so. It falls short of cutting completely through the ridge top by only a few metres. There are other prominent coombes cutting into the ridge in the vicinity of this barrow—Melbury Coombe only 250 m to the northwest and Quarry Bottom and its branches to the south and west—and the barrow is roughly equidistant from the heads of Melbury Coombe and the western branch of Quarry Bottom. Melbury Coombe up-slope cuts deeply and unusually into the ridge running west to east but is invisible from the barrow itself. From the barrow site, one can look along and down to the bottom of the western branch of Quarry Bottom to the southeast. The location and the orientation of the long axis of this barrow seem to be intimately connected to the coombes in the barrow's vicinity rather than to significant points along the ridgetop itself, and this barrow is the only one of the four long barrows from which coombes and their bottoms are both visible and directly referenced in terms of its landscape setting.

SUMMARY A number of significant themes can be drawn from the discussion of the long barrow locations:

1. The significance of the two most prominent and highest points along the Ox-Drove ridge: Win Green and Melbury Beacon.
2. The referencing of these hills from the barrows on the neighbouring ridge.
3. The significance of barrow location in relation to dramatic coombes at the western end of the Ox-Drove ridge but not at its eastern end.
4. The insignificance of scarp edges in relation to barrow sites. The sites are not positioned so as to afford the possibility of looking down the scarp edges to their bottoms or to the bottoms of coombe heads in their immediate vicinity.
5. The significance of ridge ends and also of north-running spurs along the Ebbles-Nadder ridge.
6. The general significance of the ridge orientation itself in relation to long-barrow orientation.
7. The lack of any intimate relationship or clustering of the barrows. They do not reference one another but rather their localities in particular ways.
8. The association of the larger barrows with the western and higher ends of the ridges—their invisibility from off the ridgetops to the north and that all would be visible from the greatest distances away to the south and the west. When one moves along the ridgetops on which they are situated, they are visible only from relatively short distances.

These barrows thus on the one hand relate strongly to their immediate localities and on the other to much more distant worlds—although not to one another. The only long barrow from which other long barrows are visible is that on Ashcombe Down. It is intervisible with two long barrows associated with the cursus in central Cranborne Chase, Thickthorn Down, and Gussage Cow Down, some 10 km away to the southeast and forming a very different Neolithic landscape and world (see the discussion in Tilley 1994: 147ff).

Round Barrows

The character of these great chalk ridges changed dramatically during the early Bronze Age. Numerous round barrows were constructed along the ridgetops and their spurs. The landscape became filled by barrows. Fifty certain or probable barrows were constructed along the Ebbles-Nadder ridge and approximately the same number along the Ox-Drove ridge (Figures 4.2 and 4.3). Distances between individual barrows or barrow groups along both ridges

rarely exceed 1 km and are often less. They are not closely related to the locations of the long barrows, none of which have round barrows in their immediate vicinity. The nearest round barrows to the White Sheet Hill long barrow are about 250 m distant. They are up to 500 m distant from the Sutton Down and Ashmore long barrows and more than 1 km distant from the Vernditch Chase long barrow. It is as if these places were being deliberately avoided, contrasting with the situation elsewhere in southern England, where round barrows are quite frequently aligned in the landscape in relation to the earlier long barrows, notable examples being in the great barrow concentrations along the South Dorset Ridgeway (see Chapter 5) and around Stonehenge (Chapter 3).

ROUND BARROWS AT THE EASTERN END OF THE EBBLE-NADDER RIDGE In this section I discuss in detail the locations of twenty four round barrows and four dykes toward the eastern end of this great ridge. Here (see Figure 4.5) a reticulated series of branching coombes cut deeply into the ridge from the south. Three V-shaped coombes with narrow flat bottoms, only about 5–10 m or so wide, meander through the chalk approximately north-south. That to the west and that to the east fork at their terminal ends. The central coombe is more linear and regular in form, lacking a bifurcated end and it cuts farthest into the ridge to the north. There is thus a rough symmetry in their form, with the forking coombes to the east and west of the central simpler straight coombe. The deepest and widest of these coombes is that to the west, which, from its southern end, at first runs approximately west to east before swinging round to the northwest and then to the north. These three coombes run roughly parallel to one another, north-south, for 1.3 km before joining where the coombe bottom becomes comparatively wide (see Figure 4.6), about 200 m across. Here it runs east to west before curving round to run north-south and then north-west to south-east, where another narrow coombe joins the system before it eventually opens out into the Ebble valley. These three parallel coombes are unique along the Ebble-Nadder ridge, giving them an added significance. Elsewhere along the ridge the coombes are more widely separated and usually constitute a single irregular series of bifurcating and meandering dry valleys.

The walking distance, following the overall course of the coombe system, between the river Ebble and the terminal ends of the coombes is about 5.6 km. The journey from the river leads from a comparatively wide and open river valley, up to the narrow twisting and turning of the coombes into valleys that become at first successively narrower, deeper, and steeper. They then become more and more narrow and shallow toward the points at which they terminate on the ridge. To the east of this there are a further series of coombes, but these are considerably shallower and far less distinctive.

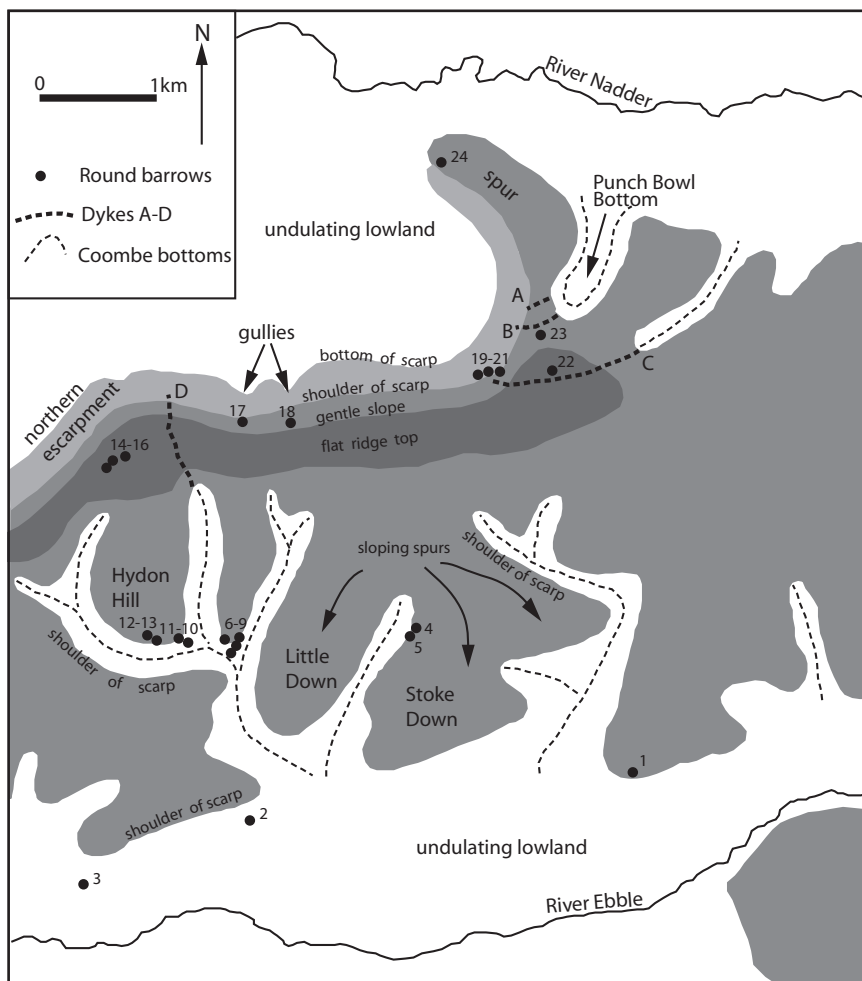


FIGURE 4.5 Distribution of round barrows and dykes at the eastern end of the Ebbles-Nadder ridge in relation to topographic features.

On the northern side of the Ebbles-Nadder ridge there are only two coombes along the entire 14-km stretch of the northern escarpment that cuts into it (see Figures 4.3 and 4.5). Both of these occur in the area under discussion, at the far eastern end, just before the ridge itself dips away to the east and is lost altogether. The most easterly coombe is rather shallowly incised and is V-shaped. It lacks any clearly defined flat bottom and meanders into the ridge from the northeast. Just 250 m to the west, Punch Bowl Bottom (Figure 4.10) is utterly different and absolutely unique in form in a number of respects. It cuts into the ridge from the Nadder valley at first running south and then swinging around to the southwest.

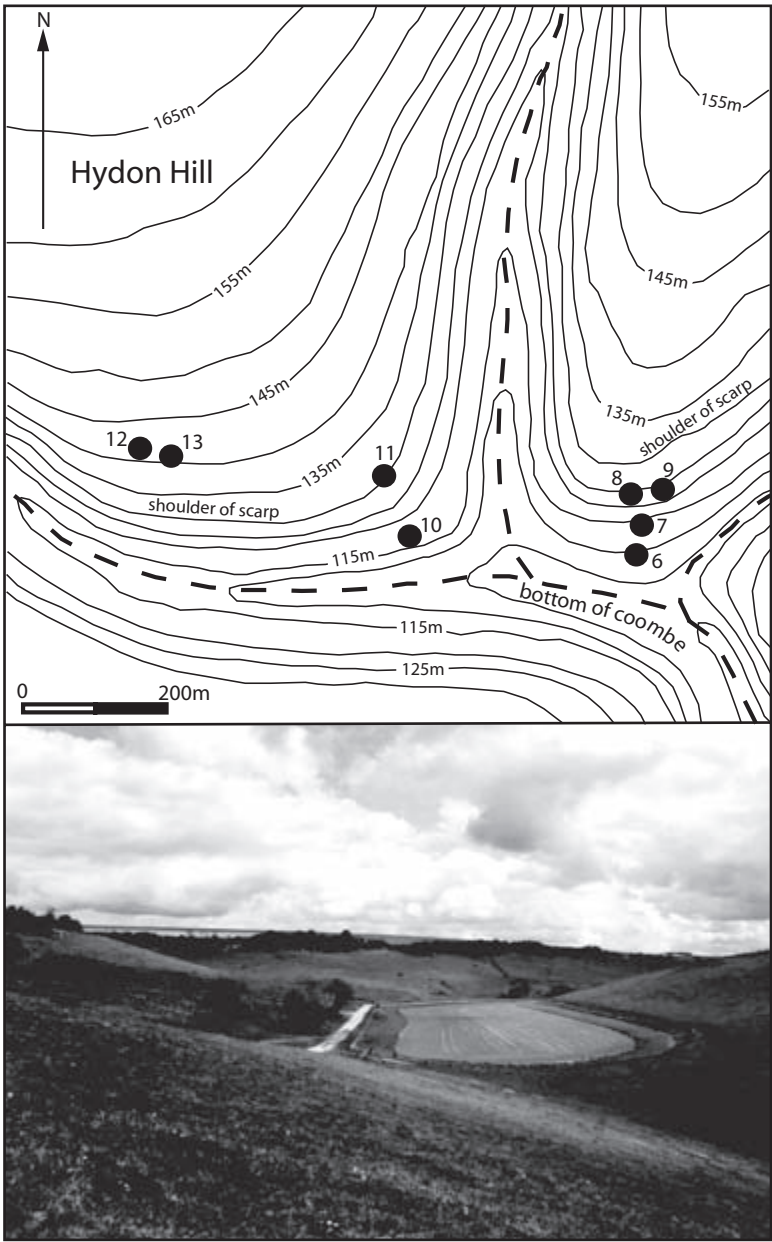


FIGURE 4.6 (Top) Locations of barrows 6–13 on the Ebbles-Nadder ridge at the point at which three coombes join. (Bottom) Photo taken from the top of Barrow 10 looking east along the coombe bottom. The spur end on which Barrows 6–9 are located is to the left of the photo above the white track.

It is bold, very steep sided, and has a comparatively wide tongue-shaped flat bottom that widens out, rather than narrows, which is otherwise always the norm, toward the coombe end. It converges with a long spur running north out from the ridge. This leaves only a narrow sliver of high land between the coombe end and the northern escarpment edge to the west. This dramatic convergence of coombe, steep escarpment edge, and jutting spur is an elemental clash of distinctive topographic forms that are separated everywhere else along the ridge.

Overall, five topographically distinctive features of the landscape at the eastern end of the Ebbles-Nadder ridge can be defined:

1. The reticulated and linked steep-sided coombe systems with their steep scarp slopes to the south of the ridgetop.
2. The individual coombes cutting into the ridge at its eastern end to the north.
3. The steep, unbroken, and precipitous northern escarpment that runs approximately west-east before swinging round to the north forming the spur above Burcombe at its eastern end. The continuous and bold line of this steep scarp slope is broken only by shallow but nevertheless distinctive gullies.
4. Gently sloping and slightly domed wide spurs running south from the ridgetop.
5. The narrow flat ridgetop itself.

These are shown in Figure 4.5.

ROUND BARROWS LOCATIONS Approximately twenty-four round barrows are known from the eastern end of the Ebbles-Nadder ridge. These are all round barrows of simple form and generally small in size, 7–15 m in diameter. Eight have traces of a surrounding ditch. Some, with pits in their tops, have obviously been plundered. None have any known recorded artefacts or excavation records. Eleven, or nearly 50%, have now been destroyed by ploughing, and their location is known only from aerial photographs.

In this section I describe the individual relationships of these barrows to the major topographic features of the landscape noted above based on observations taken from the barrows themselves, or from former barrow sites, in the case of those destroyed.

Bishopstone (Figure 4.5: 1) A barrow, now destroyed, was situated on the southern tip of a gentle spur sloping south. It was situated on flat ground on the eastern side of the spur top just above the point at which the land dips at first gently, then more steeply, south to the Ebbles valley. From the barrow site there are surprisingly extensive views to the west and east along the Ebbles valley. To the north the visual field is over 2 km to the ridgetop and

extends south for over 1 km to the hills marking the other side of the Ebble valley.

Broad Chalke (Figure 4.5: 2–3) To the west, two additional probable barrow sites (2–3) are recorded on the mid-points of gentle southern slopes running down to the Ebble valley. That farthest west is only about 100 m north of a spring line on the eastern side of a coombe system running down into the Ebble valley. Views are extensive along the Ebble valley to the east and west, limited by rising ground to the north and across the valley to the south. The eastern barrow is on a gentle southeast slope, again overlooking the Ebble valley but with restricted views to the north because of rising land. These barrow sites are not intervisible, also not with the site at Bishopstone.

Poor Patch, Stoke Down (Figure 4.5: 4–5) Here, two small adjoining barrows in a north-south alignment are situated above the shoulder of the scarp slope on gently sloping ground, dropping down to the west, about 400 m to the south of the head of a coombe that meanders south to join the valley linking the Hydon Hill and Little Down coombe systems. The bottom of the coombe is not visible from immediately below the barrows to the west, although one can look along the course of the coombe to its head to the north and along it for a short stretch to the south. Views to the east are very restricted by the gently rising ground of the spur top. To the west they are limited by another rising spur. No other barrows are visible.

Hydon Hill/Little Down (Figure 4.5: 6–13; Figure 4.6) A dispersed group of eight round barrows are located around the area at which three coombes merge. These are all relatively small, between 7 and 15 m in diameter and less than 0.8 m high. At least four appear to have had a surrounding ditch. Four barrows cluster at each of the southern ends of the two spurs, Hydon Hill and Little Down, separating the three coombes. In each case the southernmost barrow is located low down the scarp slope, falling away to the coombe bottom. One of these, Barrow 6, is located exceptionally low down in the landscape, only about 30 m to the north of the very bottom of the coombe system. Three others, 7, 8, and 9, less than 100 m to its north, are situated on much more steeply sloping ground below the shoulder of the scarp, thus making them invisible from the spur top to the north but effectively skylined and prominent from the coombe bottom below to the south. From all these four barrows, which are intervisible, one can look down to the bottom of the coombe to the south, but any view to the north is blocked out by the steep slope. They were thus positioned so as to be seen from the bottom of the coombe and occur on the terminal point of a narrow spur less than 200 m wide separating parallel coombes. Because of the manner in which the coombes curve, meander, and branch, it is impossible either to see up to the end of any of them or beyond their terminal points up to the top of the chalk ridge to the north.

The western group of barrows is structured slightly differently in the landscape. Barrow 10 is intervisible with Barrows 6–9, but among the others closer to it, it can be seen only from Barrow 11 situated about 100 m to its north, exactly on the shoulder of the scarp. Barrows 12 and 13 are situated higher up the slope, above the shoulder of the scarp on the far southern end of the spur of Hydon hill, and are invisible. Although Barrow 10 is situated only 250 m due west of Barrow 6, it is situated far higher up the slope of its respective spur, approximately halfway up the slope from the base of the coombe to the scarp shoulder above. This is the only barrow in the western group (Nos. 10–13) that can be seen from the coombe bottom below to the south or from which the coombe bottom itself is visible immediately below it.

The barrows are thus structured in relation to the landscape in the following way:

1. Two groups of four barrows are located at the extreme southern ends of south running spurs around the point at which three parallel coombe systems converge. All have restricted views to the north because of rising ground.
2. The barrow lowest down in the landscape is situated almost at the bottom of the coombe farthest to the east. The highest two barrows are situated above the scarp shoulder farthest to the west, and from them the bottom of the coombe to the south below is invisible.
3. The other five barrows are situated in intermediate positions as follows: half way up the scarp slope (two barrows, one in each group of four), just below the scarp shoulder (two barrows in the eastern group), and on the scarp shoulder (one barrow in the western group).
4. Barrows 6 and 10, although opposite each other on an east-west axis, mark very different points of transition between the coombe bottom and the top of the scarp slope: near the very bottom and halfway up the slope.
5. Considered together, all the eight barrows mark every transitional space between the coombe bottoms and the top of the spurs:
 - a. Virtually, but not quite, at the bottom of the coombe (Barrow 6)
 - b. Halfway up the scarp slope (Barrows 7 and 10)
 - c. Just below the shoulder of the scarp (Barrows 8 and 9)
 - d. On the shoulder of the scarp (Barrow 11)
 - e. Above the shoulder of the scarp (Barrows 12 and 13)

Walking between the barrows, from east to west and from the lowest to the highest, one moves from the coombe bottom to mid-points on the scarp slope to the shoulder of the scarp to the higher flat spur tops beyond. Taken together, and in relationship to one another, the barrows thus mark all the significant

transition points in the landscape between the coombe bottom and the ridge spurs to the north and beyond.

Burcombe Ridgetop Barrows (Figure 4.5: Nos.14–16; 22) Stretched out along the ridgetop there are an additional six barrows. Four of these are situated on the very highest points to the east and the west, the distance between them being 2.5 km. These barrows on the flat ridge summit, all but one now destroyed, would all have been intervisible along the ridge top. Barrows 14–16 mark the limits of the visual field looking west along the ridge top from Barrow 22, and Barrow 22 similarly marks the limits of the field of vision looking east from Barrows 14–16. None of the coombes cutting into the ridge from the south or north are visible from them. Similarly, the presence of a steep escarpment edge to the north is hidden from the barrow locations, but views are extensive in this direction.

Burcombe Ivers Barrows (Figure 4.5: 17–18) Two additional barrows, now destroyed, were also situated near to the top of the ridge but below the flat ridge summit on gently sloping ground a little distance below it, but well above the sharp shoulder of the scarp. Each barrow is situated near to the south of a distinct gully in the northern escarpment edge that runs due west-east at this point. Views to the south are restricted by the rising ridgetop. They are extensive off the ridge to the north. The scarp slope beyond to the north can be seen from these barrow sites but not its bottom immediately below them. To the west, the visual field is again limited by the rising land of the ridgetop, and the barrows would not be intervisible with the summit barrows (Nos. 14–16) in this direction. These two barrows are situated in a transitional zone between the flat ridge summit and the shoulder of the scarp slope. They, and the other ridgetop barrows, are all highly visible from off the ridgetop in the Nadder valley below to the north.

Hoop Side (Figure 4.5: 19–21) Here a unique cluster of three adjoining barrows are situated just below the shoulder of the scarp where it drops away precipitously to the north. These are aligned in a staggered west-east row on sloping ground. There is a distinct gradation in size. The largest and highest barrow, about 16 m in diameter and 2.6 m high, is situated at the eastern end of the group highest up the slope; the smallest, 1.3 m high and 10 m in diameter, is situated lowest down the slope at the western end. Visibility to the south is very restricted by the rising land of the ridgetop. To the north, it is extensive off the ridge; to the east it is limited again by rising ground. To the west, it extends to the Burcombe summit top barrows (Nos. 14–16) that would be skylined in this direction. The three Hoop Side barrows are situated at the point of the escarpment edge just where it begins to swing round to the north to form the spur cut into by the Punch Bowl coombe to the east. From the two westerly barrows, the base of the northern scarp slope immediately below is

visible; from the third higher barrow to the east it is not. The barrow on the flat summit area (No. 22) only 400 m to the east is invisible. This contrasts with the view 2 km west to the summit barrows (Nos. 14–16), which would have been visible in this direction. From the barrows the Burcombe Punch Bowl barrow (No. 23) is also visible 500 m away to the northeast and another on the end of the north running spur below 1.5 km to the north (No. 24).

Burcombe Punch Bowl (Figure 4.5: 23; Figure 4.7) This barrow is dramatically situated at the head of Burcombe Punch Bowl coombe (see Figure 4.10). It is situated on land gently sloping to the south well above the shoulder of scarp slopes to the west and north. This is the largest and most impressive surviving barrow in the area, 18–20 m in diameter and 2 m high. From the barrow, one can look down the lower part of the coombe. However, the base of the coombe immediately below the barrow is concealed by the slope. The summit barrow just 300 m to the north (No. 22) is concealed by rising ground, while all those to the west along the ridgetop are visible, as is the barrow marking the end of the spur below to the south (No. 24).

Burcombe Spur (Figure 4.5: 24) This barrow is situated on flat land on the far northern end of a spur on the western side before the land dips down sharply to the Nadder valley. From the barrow site (now destroyed), there are extensive views to the west and east along the Nadder valley, to the



FIGURE 4.7 The round barrow marking the head of Punch Bowl Bottom, the largest barrow at the eastern end of the Ebble-Nadder ridge.

north up to the top of the Grovely ridge beyond and south up the ridgetop to the Punch Bowl barrow. To the southwest, the Burcombe summit top barrows (Nos. 14–16) would have been sky-lined. This most northerly barrow and its relationship to the topography is almost a mirror image of the most southerly barrow (No. 1) on the low spur above Bishopstone.

SUMMARY A number of points can be drawn from these brief descriptions of the twenty-four barrow locations:

1. Barrows are situated in almost the full range of possible topographic locations in the landscape:
 - a. On flat summit areas of the ridge top (N = 4)
 - b. In transitional areas between the ridgetop and the steep scarp slope to the north above gullies in the scarp edge (N = 2)
 - c. Just below the shoulder of the northern escarpment edge at the point at which it changes direction (N = 3)
 - d. At the head of a distinctive coombe cutting into the scarp edge from the north (N = 1)
 - e. At the flat end of a northern spur low down in the landscape (N = 1)
 - f. At the flat end of southern spurs and slopes low down in the landscape (N = 3)
 - g. Alongside and near to the head of a coombe running south (N = 2)
 - h. Toward the southern ends of spurs where three parallel coombe systems running south join (N = 7)
 - i. Almost at the bottom of a coombe where three parallel coombes join (N = 1)

The only major topographic locations in the landscape where barrows are absent is the middle of the spurs running south from the flat ridgetop where the land slopes only gently and is relatively undifferentiated.

2. Eleven of the twenty-four barrows are directly related to coombes (46%) being located at or near to the head of the coombe or where coombes join. These are situated in a full range of possible locations in relation to scarp slopes: above the shoulder (N = 5), on the shoulder (N = 1), just below the shoulder (N = 2), halfway down the slope (N = 2), and at the bottom of the slope (N = 1). The largest clustering of barrows occurs around the point at which coombes join. The largest barrow (No. 23) is sited at the head of a highly unusual and distinctive coombe cutting into the northern scarp edge, one of only two that does so.
3. Seven of the barrows are related to changes in the character of the northern escarpment edge. Two mark a northern spur; two are related to gullies indenting its otherwise smooth profile; a unique cluster

of three barrows, differentiated in size, mark the point at which the escarpment edge changes direction.

4. Coombe bottoms *immediately below* the barrows are visible from only five of the eight barrows located south of Little Down/Hydon Hill (Nos. 6–9 and 10). Otherwise, views are along and across the coombes from the barrow locations. Similarly, the base of the northern escarpment edge is visible only from two barrows on Hoop Side (Nos. 19–20).
5. Some barrows, or pairs of barrows, have a visually discrete visual field in their own landscapes, and other barrows are not visible from them. These are located along the coombes and the Ebbles valley to the south. Barrows along the flat ridge top are by contrast visible for long distances along it, but here nearby barrows may be invisible, while more distant ones are prominent and skylined. Only four of the barrows, all located on flat summit areas of the ridgetop, seem to be located for maximum visibility along it. Six others along the ridgetop seem to be sited for maximum visibility from off the ridgetop, from the lowlands of the Nadder valley to the north. None of the barrows related to the southern coombes are intervisible with those along the ridgetop to the north. In general, barrow intervisibility does not appear to be as important in relation to the siting of most barrows as their relationship to highly localised topographic features of the landscape.

ROUND BARROWS ON THE CENTRAL AND WESTERN END OF THE RIDGE Here there are an additional twenty-six certain or probable barrows. As a result of massive arable destruction since the 1940s, only six of these (23%) survive today as visible monuments. They are all relatively small bowl barrows, some with traces of surrounding ditches varying in diameter from 10–20 m, and none is more than 1 m high. Most appear to be of soil and turf construction. A few smaller examples are mounds comprising mainly flints. Eleven (42%) are single monuments without others in the immediate vicinity. Eight barrows (31%) appear paired with distances of 1–200 m between them (Figure 4.2: 49–50; 46–45; 47–48; 34–35). An additional two barrows (Figure 4.2: 37–38) were directly adjacent to each other in a west-east alignment (Clay 1926a: 434). There is only one cluster of five barrows (Figure 4.2: 39–43) on Swallowcliffe Down.

Of the single monuments, six occupy the ridgetop, three spurs running out from it, and one is situated directly at the head of a narrow coombe (Figure 4.2: No. 29). The barrow pairs similarly occupy the ridgetops and spurs, and the largest concentration of barrows occurs in a rough arc around the head of one of the most dramatic coombes along this part of the ridge. Coombes are partly visible from fourteen (54%) of the barrow sites, from which there are

views along or across parts of them either looking up or across the coombes in the case of those barrows situated on spurs or down and along them in the case of the barrows on the ridgetop. However, from only a couple of barrow locations (Nos. 29 and 32) can the bottom of the coombe be seen immediately below the barrow site. Thus the relationship with the coombes is more distanced and generalised than that encountered along the eastern end of the ridge. What differs here is the major cluster of barrows around the coombe head on Swallowcliffe Down, emphasising its significance in a direct way, and the location of No. 29 at the very terminal end of the coombe whose sides run up to and terminate at the barrow itself. This barrow does not overlook the deep coombe below. It is placed at the point at which a shallow coombe terminates fading away into the chalk.

The ridgetop barrows are all situated either on flat or gently sloping ground well above the shoulder of the northern escarpment edge, which is not visible from them, and it is not possible to see down to the bottom of the scarp slope from any of them. Almost all are sited on the flat ridgetop itself or on gently sloping ground dipping away from it. This, together with the presence of large numbers of barrows on southern spurs with coombes on either side, indicates the importance of the southern side of the ridge as opposed to its northern escarpment edge, and only two barrows (Figure 4.2, Nos. 45 and 33) would have been visible from off the ridge to the north. They are sited instead so as to be visible from the top of neighbouring Ox-Drove ridge to the south.

The barrows on the southern spurs (with the exception of No. 32) all occupy central areas of these spurs rather than their sides, hence the lack of direct views down into the coombes below them. Coombes occur to the west and east of them, defining the edges of the spurs that they occupy, but the relationship is not an intimate one. None occur at the bottoms of these coombes or mark points at which they turn or join.

Patterns of intervisibility between these barrows are shown on Figure 4.8. Again, the pattern is very similar to that encountered along the eastern end of the ridge. Some barrows in close proximity to others on the ridge top are not intervisible, but there may be views of distant barrows along it. Barrows situated on southern spurs often have restricted views up to the ridgetop because of rising ground but have very extensive views south to the Ebble valley and up to the Ox-Drove ridge.

A number of these barrows were excavated by Clay in the 1920s, but the results are meager and not all that well reported. Barrow 26 contained the partial remains of a primary, possibly crouched skeleton of a young man lying on the left-hand side with the head facing southwest and the legs northeast in an oak coffin made from a hollowed and split tree trunk in a grave orientated NE-SW cut into the chalk. A large red deer antler was found in front of the

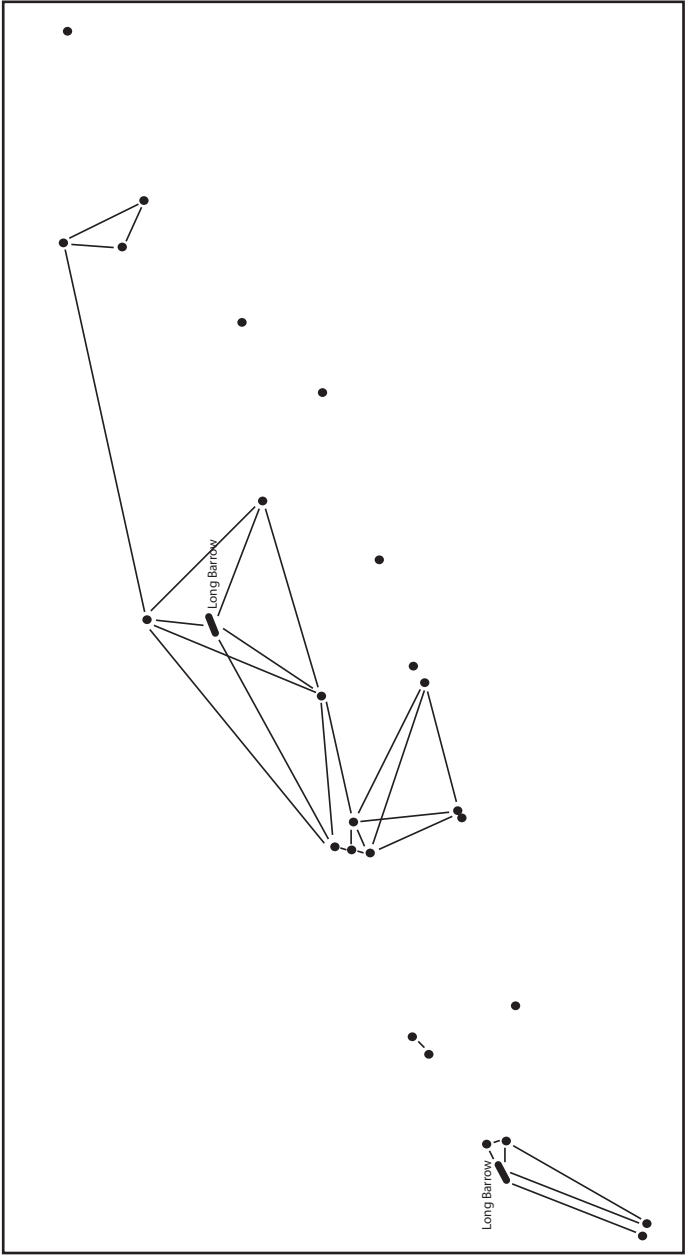


FIGURE 4.8 Intervisibility of round barrows in the central part and at the western end of the Ebble-Nadder ridge.

skull and another, possibly a pick, by the hips; a calcined flint was also found. The orientation of the coffin and the skeleton was thus the same as the ridge. The skeletal remains consisted unusually of frontal and temporal bones, a molar, a 12th rib, and a pisiform. This skeleton appears to have been disturbed and disarticulated either before or after being placed in the coffin (Clay 1926a: 102). In Barrow 30, Clay found remains of a cremation in a late Bronze Age urn, possibly remains of a secondary burial. In Barrow 33, Clay discovered traces of a cremation with an urn and fragmentary skeletal remains of a child and a woman. Beaker sherds were discovered nearby, and the finds may represent the remains of a primary Beaker inhumation with a secondary cremation urn burial (*ibid.*: 250; Grinsell 1957: 192). In Barrows 37 and 38, Clay inferred the presence of primary contracted adult Beaker burials. A pit was cut into the chalk in Barrow 37. Barrow 38 had no burial pit but remains of a crouched adult skeleton with the head to the west and the feet to the east. Remains of a collared urn were found in the ditch, possibly indicating a secondary burial (Clay 1926a: 432–434). Barrows 40 and 42 contained remains of a primary cremation burials in a central cist (*ibid.*: 435). Barrow 44 contained pieces of bone and Bronze Age sherds (*ibid.*: 432).

THE OX-DROVE RIDGE There are fifty-three certain or probable round barrows along the Ox-Drove ridge, that is, an almost identical number to those along the Ebble-Nadder ridge. Their distribution is similarly virtually continuous along the ridgetop, with short distances usually of 1 km or less separating individual barrows or barrow groups (Figure 4.3). Just less than half survive today. All except one, a saucer barrow, are standard bowl barrows, some with surrounding ditches and occasionally berms and banks. Dimensions vary from smaller examples 5–6 m in diameter to larger ones 16–20 m. Their height rarely exceeds 2 m and is usually considerably less, 0.5–1 m, even in the cases of barrows that have never been ploughed or disturbed. Most are discrete rather than monumental landscape markers. Twenty-one (40%) occur on their own, but often distances between them amount to no more than 200–300 metres. Eight occur in pairs (15%). There is one group of three barrows, one group of four conjoined barrows, and two clusters of six barrows. The groups and pairs of barrows are all aligned exactly or approximately west-east or northwest to southeast or northeast to southwest following the general alignment of the ridgetop, except the large group of six on Winkelbury Hill, which instead are dispersed along the axis of this north-south spur, the only prominent northern spur to occur along the ridgetop. Almost all are situated in close proximity to the northern scarp of the ridgetop. The maximum distance between these barrows and the northern scarp edge is 250 m, and the majority are considerably closer. The feature that is most remarkable about their distribution is that so few are situated at

any distance from the scarp edge to the south. Only three are sited on southern spurs (Figure 4.3: 21–22 and 30) and an additional pair (Figure 4.3: 51–52) on the extreme western spur of Fontmell Down where the ridge ends. Their location thus contrasts with many of the barrows along the Ebble-Nadder ridge, which quite frequently occupy southern spurs. This locational difference may be related to a fundamental difference in topographic boundaries. Although the Ebble-Nadder ridge is well defined to the south by the valley of the river Ebble toward which the spurs and coombes run, the Ox-Drove ridge has no similar topographic boundary on its southern side. The land here dips gently away to the south, except in places where it is broken up by deep and dramatic coombes and spurs at the western end, toward the rolling downland of central areas of Cranborne Chase. There is no southern edge to the ridge. For a distance of 6 km or more from the northern ridge scarp edge to the south, there are no long barrows and only a few isolated round barrows until the next major concentration occurs associated with the Dorset cursus: a cultural rather than a natural topographic marker of the downland landscape. Thus the barrows along the Ox-Drove ridge are intimately related, in this general sense, to the presence of the dramatic scarp edge that defines it to the north.

The majority are localised in relation to the highest points along the ridge summit. The group of six barrows on Marleycombe Hill at the eastern end of the ridge occupy the centre of a localised summit 200 m high, which is almost a hill being cut into and defined to the west and east by deep coombes. Similarly, the three barrows on Trow Down occupy the summit area, rising here to 243 m. The group of six on Winkelbury Hill occupy the highest part of this northern spur. Win Green, the highest point of all, is surmounted by a barrow, and to the west barrows are strung out along the top of Charlton Down and Breeze Hill, where the ridgetop sweeps round to run toward the southwest. Most of these ridgetop barrows are situated on flat or only gently sloping ground well above the shoulder of the northern scarp. It is not possible to look down to the bottom of the scarp slope to the north, and from some (for example, Figure 4.3: 15–16; 18–20) even the presence of such a dramatic slope is hidden, because they are set well back from it. From these barrows, there are extensive views to the north across the Ebble valley and up to the top of the Ebble-Nadder ridge. They were placed to see, and be seen, from the barrows occupying the ridgetop and southern spurs of the Ebble-Nadder ridge. They were not located to be seen from the sloping ground to the south, and intervisibility between individual barrows and barrow groups along the ridgetop itself does not appear to have been as significant (see Figure 4.9). As along the Ebble-Nadder ridge, some nearby barrows are not intervisible, whereas more distant ones along the ridgetop may be. The primary visual reference points were to the barrows on the neighbouring ridge rather than to

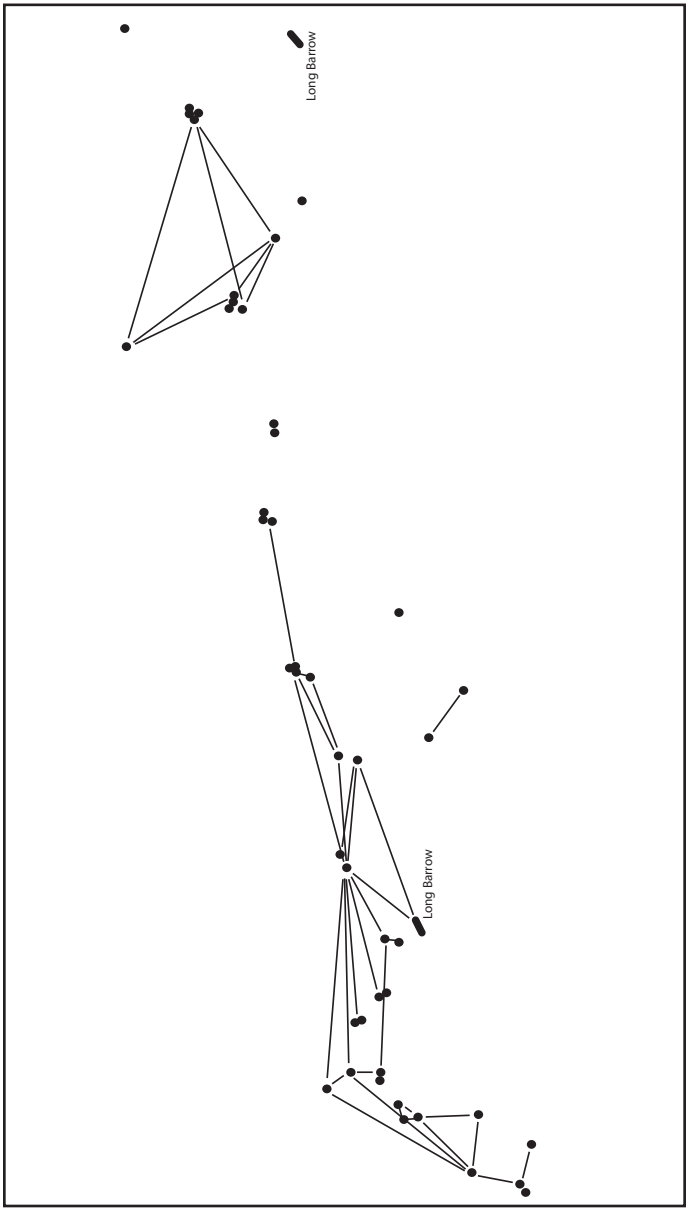


FIGURE 4.9 Intervisibility of round barrows along the Ox-Drove ridge.

one another along the same ridge, which appear to have been of secondary significance. It was possible to see not only the barrows on the Ebble-Nadder ridge but also the deep coombes cutting into it and breaking it up. The mystery of these coombes may have been of deep significance. When one walks along the Ox-Drove ridgetop between the barrow groups and looks north to the Ebble-Nadder ridge, the character and forms of these coombes constantly change. At some points, one can see directly up to their heads. Where they twist and turn, the coombe ends may appear as huge hollows or bowls in the side of the ridge rather than sinuous dry valleys. In days with scattered clouds and sunlight, the coombes and, hollows' are sometimes darkened, while the rest of the ridge is bathed in sunlight, or vice versa. They are thus mobile and ever changing in character rather than static fixed forms. They change in tandem with the movements of the body and the character of the light.

Along the northern scarp edge, there is one unique and unusual group of barrows on Woodminton Down. These, unlike all the other barrow groups, are conjoined in a west-east line rather than being separate, closely spaced mounds. Conjoined mounds occur elsewhere only among a couple of the group of six, which are arranged in two parallel rows on Marleycombe Hill. Unlike the other barrows, those on Woodminton Down are placed well below the shoulder of the scarp, about halfway down the slope, and from these barrows the scarp bottom immediately below them is visible. From a few of the other barrows one may be able to see some way down the scarp slope but not to its very bottom. These barrows thus reference the scarp base in a manner similar to the group at Hoop side at the eastern end of the Ebble-Nadder ridge and would not themselves be visible from it.

From thirty-five of the barrows, coombes are visible cutting into the Ox-Drove ridge (66%), but usually this is a distant rather than intimate relationship, since one can rarely see down into or along the coombes themselves. Only the upper edges of one or the other of their scarp slopes can be seen in the distance. Coombe bottoms are visible from only seven of the barrows (13%). As along the Ebble-Nadder ridge, some barrows are, however, intimately related to the presence of the coombes in various ways. These are all located toward the western end of the ridge, where the coombes dramatically cut into it from the south and west, and it is only here where barrows occupy southern spurs, as mentioned above.

Barrow 31 (see Figure 4.3) is located immediately below the shoulder of the scarp slope plunging dramatically down to the bottom of Berwick Coombe to the west on the eastern side of the coombe, only 250 m from its head. While the land drops down sharply to the west, it also dips from north-south, which means that this barrow is invisible except when approached from either the east or the north, but it can be seen from up to 2 km away to the

west and about 1 km to the south. It is intervisible with the long barrow on Ashmore Down, whose northwest orientational axis references the head of the same coombe that, as discussed above, uniquely almost breaches through the ridgetop. From the barrow site, one looks down into the depths of the heavily wooded coombe below.

Barrow 33 is located at the very head of a western branch of the same coombe system with views down and along the coombe bottom. Just to its east and above the head of the same coombe, another barrow on Win Green occupies the highest point of the ridge. It is thus associated with the spiritual power associated with the height of the ridge and that related to the depths of the coombes. Barrow 35 (now destroyed) was sited at the head of Melbury Coombe, cutting into the ridgetop and splitting it into two. Barrows 45 and 46 are situated near to the head of a northern side branch of Melbury Coombe. Barrow 49 is placed in a similar position to Barrow 31 just below the shoulder of the steep scarp slope plunging down into Melbury Coombe. This barrow, until reached, is invisible from the ridgetop from the south. From it, one can look along the coombe bottom and up toward the barrows to the north at the southern end of Breeze Hill. This is one of the largest barrows along the ridge, 17 m in diameter and 1 m high, with traces of an external ditch and outer bank. These barrows referencing the coombes and relating to their depths replicate the pattern of relationships that occur along central parts of the Ebbles-Nadder ridge and particularly toward its eastern end, but with the difference here that no barrows are found actually in the coombe bottoms or at various points down the scarp slopes, way beyond their shoulders, dropping to them.

Excavation of the six barrows on Marleycombe Hill by Clay revealed some interesting evidence about the continuity of barrow placement along the ridgetop. Here there are two parallel lines of barrows (Figure 4.3: 2–7). The northernmost three form a staggered line, with the largest and most easterly barrow situated slightly to the south of the other two. These are the barrows closest to the northern scarp edge situated on a gentle south-north slope and are probably earlier in date, with Beaker material being recorded from the old turf lines below the barrows (Clay 1927b: 548–551). The presence of three humeri in the largest barrow indicates two inhumation burials (later destroyed by barrow diggers). Barrows 2 and 3 covered large central cairns of heaped flints. Three pits in barrow 2 probably contained a primary Beaker inhumation burial and two secondary urn cremation burials. Clay discovered no primary burial in barrow 3 but a secondary deposit of an inverted barrel-shaped urn that contained no ashes or bones. The southern group, on the skyline when seen from those below, to the south, are in a dead straight line and are of later Bronze Age date. They contained primary and secondary cremations in Deverel-Rimbury urns (*ibid.*: 551–556).

The four barrows also excavated by Clay on Woodminton Down also seem to date back to the earlier Bronze Age, with secondary burial taking place in the later Bronze Age. In Barrow 1, farthest to the east, Clay discovered a central heap of flints mixed with turf, which he concluded may have originally have contained a primary inhumation burial. Twenty-one cremations in urns were discovered in the northwest segment of this barrow (according to Clay's plan, stated as being in the southwest in his text) (Clay 1926b: Plate IV). These globular and barrel-shaped urns had been dug into the barrow surface and did not penetrate into the old ground surface below it, indicating their intrusive nature. Flat stone slabs of non-local material, sandstone or Purbeck stone, were placed over the tops of the urns and would have been visible on the barrow surface. Barrow 2 appears to have been built later with a primary cremation in an urn in a pit at the centre and three secondary cremation burials in urns. Barrow 3 probably contained a primary inhumation, which was later disturbed, and barrow four a primary inurned cremation (*ibid.*: 313–315). One possible interpretation is that there were originally two barrows here constructed in the earlier Bronze Age, with two more barrows being built immediately to the west of each of them—all four becoming conjoined—followed by another period of cremation burials in the barrow mounds.

Situated on the ridgetop above the four barrows on Woodminton Down, Clay excavated an additional barrow (Figure 4.3: 14). This one is less than 500 m away but out of sight of the four below and situated well above the shoulder of the scarp slope, rather than halfway down it. It contained an inverted urn with the cremated bones of a woman and a bronze awl. The urn rested on the ground surface rather than being buried in a pit (*ibid.*: 322).

Apart from these barrows, the only barrows for which there are any excavation records are from the isolated barrow on Barrow Hill situated just to the north of the ridge (Figure 17) and from those along the northern spur of Winkelbury Hill. On Barrow Hill, Clay found a primary cremation in a Late Bronze Age barrel urn with charcoal, ashes, and burnt bones in and around it. A small hole dug into the old ground surface contained the urn. (*ibid.*: 325–326). In one of the barrows on Winkelbury Hill excavated by Pitt Rivers, a Late Bronze age urn was found filled and surrounded by flint chippings but without any evidence of a cremation. In two others, primary earlier Bronze Age inhumation burials were discovered, one together with pot sherds and a bronze awl (Pitt Rivers 1888: 258–259).

All this evidence points toward a strong continuity in the use of the same places for barrow construction and burial along the ridge top, and well down the scarp in the case of the Woodminton Down barrows from the early Bronze Age onward. Such continuity in barrow location from Beaker burials to later Bronze Age burials is also evident from Clay's excavations of the barrows along

the Ebble-Nadder ridge, discussed above. Once barrows had been built, they attracted other barrows, and when barrows ceased to be built, they were reused over and over again as places of secondary burial, presenting the dead forever in the landscape and connecting past and present and future.

CROSS DYKES IN THE LANDSCAPE

This area of Cranborne Chase has been a classic area for the study of cross dykes from their first recognition as a particular class of monuments in the landscape. In total there are twenty-eight dykes on these two ridges (see Tables 4.2–4.7 and Figures 4.2 and 4.3). In the following section, I first discuss their general distribution, then briefly review the literature on cross dykes and linear ditch systems and then consider their landscape locations in detail.

On the chalk downlands of southern England, cross-ridge and spur dykes frequently link coombes (dry valleys) to escarpment edges or, less frequently, coombes to coombes or cut across spurs between opposing scarp slopes. They are principally concentrated in particular areas, sometimes together with other types of linear ditch systems, on the Wessex chalk downlands of Dorset, Wiltshire, and Hampshire, along the chalk ridges of the South Downs of southern England and the Yorkshire Wolds, and along the unusual limestone Tabular Hills of northeast Yorkshire. Even within specific regions, they are both very unevenly distributed and peculiarly concentrated. For example, within south and west Wiltshire twenty-eight are concentrated along two short chalk ridges forming the northern edge of Cranborne Chase. Two additional concentrations occur on White Sheet Hill near to Mere and around Cold Kitchen Hill, Kingston Deverill, over 12 km distant to the north. By contrast, none occur along the topographically indistinct Grovely Ridge in-between, and they are absent over almost all the rest of Cranborne Chase to the south and on Salisbury Plain to the north and east, where extensive linear ditch systems occur. In central Dorset, eleven cross dykes are densely concentrated around Lyscombe Bottom in an area of chalk ridge extending for only a few kilometres, and ten more are located along a short stretch of chalk escarpment, bordering the Blackmore Vale, northeast of Ibberton. By contrast, in south Dorset only two examples occur along the entire 23-km-long great chalk ridge running from Lulworth Cove in the west to the Ballard Down in the east. Similarly, along the 16-km-long south Dorset Ridgeway, near to Dorchester, with its major linear Bronze Age barrow cemeteries, only a few are recorded.

Their overall distribution immediately suggests three things: (1) that cross dykes are usually clustered together as more or less integrated systems

Table 4.2 Forms of cross-ridge and spur dykes in the study region.

Map No.	Type	Form	Ditch	Approx Orientation
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>				
1	Spur	Univallate	Upslope to south	West-East
2	Spur	Univallate	Upslope to south	West-East
3	Spur	Bivallate	Medial	West-East
4	Cross ridge	Bivallate	Medial	North-South
5	Cross ridge?	Bivallate	Medial	North-South
7	Spur	Univallate	Upslope to south	West-East
8	Cross ridge	Bivallate	Medial	North-South
9	Cross ridge	Bivallate	Medial	West-East
10	Cross ridge	Univallate	To west	Northwest-Southeast
11	Spur	Multiple	Medial	West-East
12	Spur	Univallate	To north	West-East
13	Spur	Bivallate	Medial	West-East
14	Cross ridge	Bivallate	Medial	North-South
15	Cross ridge?	Univallate	To west	North-South
16	Spur	Univallate	Upslope to north	West-East
<i>Ox-Drove Ridge (Fig. 4.3)</i>				
1	Cross ridge	Bivallate	Medial	North-South
2	Cross ridge	Bivallate	Medial	Northwest-Southeast
3	Cross ridge?	Univallate	To east	North-South
4	Spur	Univallate	Upslope to south	West-East
5	Spur	Univallate	To north in dip	West-East
6	Spur	Multiple	Upslope to south	West-East
7	Cross ridge	Bivallate	Medial	Northwest-Southeast
8	Cross ridge	Univallate	To east	North-South
9	Spur	Univallate	To north	Northwest-Southeast
10	Spur	Bivallate	Medial	Northwest-Southeast
11	Cross ridge	Univallate	To south	Northwest-Southeast
12	Spur	Univallate	Upslope to west	North-South

Table 4.3 The approximate present-day dimensions of the cross-ridge and spur dykes (metres) in best preserved sections.

Map No.	Length	Overall width	Ht. of bank	Depth of ditch
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>				
1	110	12	0.6	0.6
2	220	12	0.6	0.9
3	900?	?	?	?
4	650?	11	0.15	1.2
5	720	15	0.4	0.2
6	500?	13	0.3	0.6
7	200	12	1.2	0.9
8	500	14	0.6	0.6
9	400	15	0.6	0.6
10	500?	?	?	?
11	250?	19	0.4	0.6
12	210	8	0.3	0.6
13	190	14	0.6	0.6
14	430	21	1.2	1.5
15	160	9	0.3	0.3
16	390	9	0.6	0.6
<i>Ox-Drove Ridge (Fig. 4.3)</i>				
1	700	14	0.8	0.6
2	?	12	0.6	0.6
3	?	?	?	0.6
4	170	11	1.0	0.8
5	250	14	1.1	1.1
6	120	18	0.9	1.4
7	370	19	1.4	2.5
8	530	18	0.7	0.6
9	440	14	0.9	0.6
10	280	18	1.0	1.0
11	720	11	0.4	0.7
12	270	12	1.2	0.6

of earthworks on ridgetops; (2) they occur only in areas where differences in topography are very marked and distinctive: they are found in very special and dramatic landscapes; (3) their high frequency in southwest Wiltshire and northeast Dorset and certain areas of central Dorset is paralleled only in a few cases elsewhere on the Chalk downlands of southern England. This in itself suggests, perhaps, that there must have been something especially significant

Table 4.4 Characteristics of the courses of the cross-ridge and spur dykes.

Map No.	Straight	Curved	'Meandering'	Directional shift in orientation
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>				
1	+	-	-	-
2	-	+	-	-
3	-	-	+	-
4	-	-	+	-
5	-	-	?	+
6	-	-	?	-
7	-	+	-	-
8	+	-	-	-
9	+	?	?	?
10	?	?	?	?
11	-	+	-	-
12	+	-	-	-
13	+	-	-	-
14	+	-	-	-
15	?	?	?	?
16	-	+	-	-
<i>Ox-Drove Ridge (Fig. 4.3)</i>				
1	-	-	+	-
2	?	?	?	?
3	?	?	?	?
4	+	-	-	-
5	-	-	-	+
6	+	-	-	-
7	+	-	-	-
8	-	-	-	-
9	+	-	-	-
10	-	-	-	+
11	-	-	+	-
12	+	-	-	-

about the particular character of the landscapes in which they occurred that stimulated the embellishment of the ridgetops with such earthworks.

A characteristic feature of both the earlier and more recent literature on linear bank and ditch systems in general and cross-dykes and spur dykes, in particular, is a concentration on describing the forms of the monuments themselves and discussing their relationship to others. The specific relationship of

Table 4.5 The relationship of the cross-ridge and spur dykes to escarpment edges, coombes, and ridge slopes.

Map No.	Scarp to Scarp	Scarp to Coombe	Coombe to Coombe	Scarp to Slope	Coombe to Slope
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>					
1	-	+	-	-	-
2	-	+	-	-	-
3	-	+?	-	-	-
4	-	+	-	-	-
5	-	+	-	-	-
6	-	+	-	-	-
7	+	-	-	-	-
8	-	+	-	-	-
9	-	+	-	-	-
10	-	+?	-	-	-
11	-	-	+	-	-
12	-	-	+	-	-
13	+	-	+	-	-
14	-	+	-	-	-
15	?	?	?	-	-
16	-	+	-	-	-
<i>Ox-Drove Ridge (Fig. 4.3)</i>					
1	-	-	-	+	-
2	?	?	?	?	-
3	?	?	?	?	-
4	-	-	+	-	-
5	-	-	+	-	-
6	+	-	-	-	-
7	-	+	-	-	-
8	-	-	+	-	-
9	-	+	-	-	-
10	-	+	-	-	-
11	-	-	-	-	+?
12	+	-	-	-	-

these earthworks to the topography has been hardly discussed at all. What has barely been mentioned is the form and character of the ridges and spurs that are cut across by these bank and ditch systems. Are they distinctive in any way? Similarly, the form and character of the coombe systems linked to escarpment edges by cross dykes have not been discussed. Are they irrelevant? Would any

Table 4.6 Relationships of dyke ends to scarp edges of coombe and escarpment sides.

Map No.	Dyke End Bottom Visible Below	Dyke End Bottom Visible Below	Ends on Shoulder of Steep Scarp	Drops Just Over Shoulder	Continues Down Precipitous Slope	Ends Short of Shoulder
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>						
1	W: no	E: no	W end: yes	E end: yes	No	No
2	W: yes	E: yes	No	No	Yes: both ends	No
3	?	?	?	?	?	?
4	N: yes	S: ?	?	?	Yes: N end	?
5	N: yes	S: yes	No	No	Yes: both ends	No
6	N: yes	S: yes	No	No	Yes: both ends	No
7	W: yes	E: yes	E end: yes	Yes: both ends	No	No
8	N: yes	S: yes	No	No	Yes: both ends	No
9	W: yes	E: yes	E end: yes	W end: yes	No	No
10	N: yes	S: ?	?	?	Yes: N end	?
11	W: yes	E: yes	Yes: both ends	No	No	No
12	W: yes	E: no	Yes: W end	No	No	Yes: E end
13	W: yes	E: yes	Yes: E end	Yes: W end	No	No
14	N: yes	S: yes	No	No	Yes: both ends	No
15	S: yes	N: ?	?	?	Yes: S end	?
16	W: yes	E: ?	Yes: W end	?	?	?
<i>Ox-Drove Ridge (Fig. 4.3)</i>						
1	N: yes	S: na	No	No	Yes: N end	No
2	N: yes	S: ?	?	?	?	?
3	N: yes	S: ?	?	?	?	?
4	E: yes	W; ?	Yes: E end	?	?	?

(Continued)

Table 4.6 Continued.

Map No.	Dyke End Bottom Visible Below	Dyke End Bottom Visible Below	Ends on Shoulder of Steep Scarp	Drops Just Over Shoulder	Continues Down Precipitous Slope	Ends Short of Shoulder
5	W: yes	E: yes	Yes: E end	No	Yes: W end	No
6	W: no	E: ?	?	?	?	?
7	N: yes	S: yes	No	Yes: both ends	No	No
8	N: ?	S: yes	Yes: S end	?	?	?
9	W: no	E: no	Yes: W end	No	No	Yes: E end
10	W: yes	E: yes	No	Yes: W end	Yes: W end	No
11	W: yes	E: na	No	No	Yes: W end	No
12	N: yes	S: yes	No	No	Yes: both ends	No

The table records whether the bottom of the scarp edge of the coombe or the escarpment is visible *immediately below* from the bottom of the dyke (as opposed to being visible in the distance), whether the dyke drops just over the shoulder of the scarp where slopes are becoming steep, continues well down precipitous slopes, or ends short of the shoulder where slopes become very steep. (na = not applicable).

coombe or part of an escarpment edge be equally suitable for the addition of a cross dyke? Or might their shapes and forms and other characteristics be important in influencing their siting? Similarly, specific structural relationships between the dykes and the scarps and coombes have not been addressed in the literature. The dykes are invariably described simply as running to the 'head of a coombe', but this is an oversimplification covering a wide variety of structural relationships, as the account below hopes to demonstrate, both in terms of where the dyke is located in relation to the coombe or escarpment edge and how far down the scarp, or coombe edge, it continues.

This chapter shows that a detailed consideration of the relationship between cross dykes and their topographic settings leads directly to a different kind of interpretation of their meaning and significance than has been commonplace. In some of the older literature, dykes were somewhat romantically referred to as 'wandering' or 'travelling' earthworks because of the manner in which they weave their way across and through the landscape. To provide a novel interpretation of their meaning and significance, in the conclusions to this chapter I take up and explore further this metaphor of earthworks that in some sense 'travel'.

Table 4.7 The relationship of cross dykes and spur dykes to escarpment edges.

Map No.	Relationship to Escarpment Edge
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>	
1	On curving NE section of scarp
2	On curving NE section of scarp
3	Change of direction of scarp from NE- SW to W-E?
4	Middle of straight W-E section of scarp jutting out to north
5	Middle of indented straight section of scarp running NE-SW
6	Middle of straight W-E section of scarp jutting out to north
7	Middle of straight N-S scarp on East, Curving NE- SW scarp on West
8	Change of direction of scarp from W-E to N-S
9	On curving N-S section of scarp
10	Change of direction of scarp from N-S to W-E
11	Not applicable
12	Not applicable
13	Not applicable
14	Slight change of direction of scarp From NE-SW to ENE-WNW
15	Not applicable
16	Middle of straight section of N-S scarp
<i>Ox-Drove Ridge (Fig. 4.3)</i>	
1	Head of hollow in escarpment edge
2	Head of hollow in escarpment edge
3	Head of hollow in escarpment edge
4	Not applicable
5	Not applicable
6	Side of hollow in escarpment edge to east, curving to west
7	Head of hollow in escarpment edge
8	Not applicable
9	Middle of straight NE-SW section of escarpment edge
10	Middle of straight NE-SW section of escarpment edge
11	Not applicable
12	Head of hollow to head of hollow in escarpment edge

What Do Cross Dykes Mean?

It is extremely difficult to picture the purpose of these dykes. . . . They seem crazy meaningless things—monuments of apparently purposeless energy. (Curwen 1951: 100)

Curwen's evident frustration with being able to understand cross dykes at all has probably been shared by most archaeologists, including me, attempting to interpret cross-ridge and spur dykes and, more generally, linear ditch systems. Cross dykes and spur dykes run across ridges and spurs from scarp to scarp, and their length is more or less determined by the width of the ridge or spur that is crossed. It is interesting, in this respect, to note that these earthworks are exceptional in the literature insofar as they are actually *defined* by their relationship to the local topography.

Excavations and careful fieldwork have demonstrated that most cross dykes and linear ditch systems are of late Bronze Age to early or final Iron Age (for example, Bradley, Entwistle, and Raymond 1994; Ford 1982; Fowler 1964; Rahtz 1990; Spratt 1982; 1989; Stone 1934; Wachter 1957). In some areas, where they occur, there is a clear association between clusters of cross dykes and hillforts, with the former perhaps serving as outer earthworks. In other areas, this direct association is much weaker or absent altogether. Some dykes are associated with later Iron Age and Romano-British settlement complexes. Some seem to have continued in use over a considerable period until the early Roman period. In a general review, Bradley and colleagues (1994) have noted the relative dearth of settlement evidence on the chalk downlands of southern England in the Late Bronze Age apart from metalwork. However, there is ample evidence for early Bronze Age activity in the form of barrows. Middle Bronze Age settlement appears to be limited to certain specific areas such as central Cranborne Chase, and the chalk uplands as a whole were occupied on a limited scale. The construction of the cross dykes may thus be associated with a new intensive occupation of the downlands during the final Bronze Age and early Iron Age.

Colt Hoare was one of the earliest antiquarians to systematically record linear ditch systems and cross dykes. He suggests that 'some were designed for boundaries, and others for lines of communication between the British villages' (Colt Hoare 1812: 244). He distinguishes between two classes:

1. 'Those which have a high *vallum* on one side and were indubitably constructed as boundaries' (*ibid.*: 19). The specific examples he refers to are the Wansdyke and the Bokerley Dyke.
2. 'Covered ways, or lines of communication from one British town to another; their function is totally different from the former, and evidently not raised for barriers or defence; the bank being of equal height on each side and the area of the ditch broader and flatter' (*ibid.*: 19).

Colt Hoare effectively set the intellectual agenda for much of the research well into the twentieth century. For Cranborne Chase in southwest Wiltshire, he records most of the cross dykes and ditch systems known today along the

Ebble-Nadder and the Ox-Drove ridgeways (*ibid.*: map of Fovant Station VIII and Hindon Station IX, some of which have since been totally or partially destroyed). Working almost one hundred years later, Sumner (1913) provides the earliest detailed descriptions and plans of the cross dykes, again working in Cranborne Chase. He suggests that their purpose was military in nature. Those at Burcombe and on Buxbury Hill were to 'guard against an enemy coming down the ridge toward the valley', because the banks are positioned on the northern side (Sumner 1913: 63). The dyke on Buxbury Hill is suggested to be far-flung outer defences of the Castle Ditches hillfort near to Tisbury, 2.5 km away to the northwest (*ibid.*: 64). One of the dykes on Swallowcliffe Down is suggested to be a defence connected with the Iron Age settlement. Others are argued to be later in date 'thrown up by the Romano-British as a barrier to stop the oncoming West Saxon' proceeding along the ridgeways from the east (*ibid.*: 64). The dyke crossing White Sheet Hill is instead interpreted as a boundary ditch or cattle stop rather than having a defensive purpose. Sumner thus provides two different explanations—the more massive cross dykes were for defensive purposes; the smaller ones served as boundary markers—and he dates these types to two different periods.

Curwen and Curwen (1917) were the first to identify and describe cross dykes on the Sussex Downs, terming them 'covered ways', the same term originally used by Colt Hoare (1812: 244) for those in south Wiltshire. Cross dykes are defined as consisting of either a single ditch with a bank on each side or a series of such banks and ditches running parallel with each other, passing from scarp to scarp. Of the sixteen they discuss, fourteen run directly across the chalk ridge, two across outlying spurs. Curwen and Curwen thus distinguish between cross dykes that cut across the main chalk ridge and 'spur dykes' that cut across spurs of higher land projecting out from the main ridge. They note that although 'some of the earthworks keep a direct course, others bend for a reason unconnected with the surface of the ground' (Curwen and Curwen 1917: 66). They suggest that most may date to the late Bronze Age, and they list a number of suggested interpretations:

1. Tribal or other boundaries.
2. As lines of defence.
3. Barriers to prevent cattle from straying on to fields, or to protect them.
4. Tracks sunk below the level of the ground to conceal the presence of travellers across the chalk ridges and protect them across exposed parts of their way.
5. An earthwork constructed for one of these purposes might, at a later date, be used for another (*ibid.*: 65–66).

Curwen and Curwen point out that most of these earthworks would have provided a very inefficient means of defence as compared with a single bank and ditch with one high bank thrown up on the inner side and that such an explanation cannot account for bends and deviations in most instances. Since they end on steep scarps, rather than continue down them, that the dykes might be tribal boundaries is also questionable (*ibid.*: 68). As barriers to prevent cattle straying they would have been fairly useless, because they do not form enclosures, and the more natural place for cattle enclosures to be found would be in the valleys. The authors conclude, following Colt Hoare, that the dykes must have acted as covered ways or roads of communication: 'the fact that there is a bank on *both* sides suggests a desire to screen the ditch that lies between them, as if the fosse was the most important element and the centre of activity' (*ibid.*: 69). That these earthworks were used as ways of communication across the downland ridges is suggested by the existence of tracks leading up the sides of the escarpment to some of them. The authors point out from excavation evidence that the earthworks were carefully and purposefully dug with even and regular banks on both sides, with the floors of the ditches cut into the chalk. They could not be the result of a haphazard cleaning of puddled mud from a track. The narrowness of the floor of the ditches, usually between 0.5–1 m, suggested the single-file passage of people and animals along them (*ibid.*: 72). These bank and ditch systems, the authors also note, cut across the downland ridges in areas presumed to be free of woodland between heavily wooded escarpments and coombes. They would thus provide protection and concealment in open areas where it would be most needed. Why travellers along the ditches should need to hide 'cannot be answered satisfactorily' (*ibid.*: 75).

But directly in contradiction to this interpretation of the dykes as track-ways, Curwen and Curwen also note that 'the extraordinary steepness of the slopes on or near which the Covered Ways of Sussex and Dorset terminate, and the further fact that they so often pass over the highest portions of the Downs rather than across the dips, tell against the theory that the earthworks were thrown up as Ways' (*ibid.*: 74). However, they suggest, the cross-dyke builders were tough and hardy people, 'exceedingly muscular without the physical limitations of ourselves', so they would not necessarily have taken the easiest solution for the siting of a road!

Clay (1927a) distinguished between hollow ways, or sunken roads, and cattle ways. The former are bounded by slight banks and lead in a slanting direction along the easiest gradient to the ridgetops, sometimes leading to inhabited settlements, possibly Saxon in origin (*ibid.*: 61). Cattle ways are 'earthworks consisting of a ditch between two banks that usually run a perfectly straight course and connect the heads of two coombes by passing over the dividing

ridge of down' (*ibid.*). In relation to the dykes on Cranborne Chase, Clay argues that these ways are grouped within areas closely connected with early Iron Age habitations. He incorrectly claims that the numbers of such cattle ways 'coincides with the number of opposing coombes that can be connected up; thus they are found together where there are numerous coombes and widely separated where coombes are scanty. The extent of an area is roughly four miles, the width of an area being the width of the downland' (*ibid.*). He argues that they had no defensive purpose, could not be boundaries of tribal areas because of the close proximity of many. The presence of smooth faces and hard trodden floors, revealed by sections, suggested that they were worn smooth by their use as cattle ways along which cattle were driven in single file between grazing grounds, preventing the cattle from running over and damaging the crops growing in fields covering the chalk ridges (*ibid.*: 64).

Williams-Freeman (1932) distinguishes between 'univallate' cross dykes with a single bank and ditch and 'bivallate' forms with a single ditch between two banks, either of which may be large (over 3 m high from the crest of the bank to the bottom of the ditch), medium (between 3 m and 1 m in height), or small (*ibid.*: 24). Such cross-ridge dykes may be single, double, treble, or a multiple series of univallate or bivallate forms or form groups of similar or different types:

Their essential characteristics are well marked: their ends rest on the steepest slopes often at the heads of coombes, or upon large or small patches of thick impenetrable wood, and they all cross an old track, often the main ridgeway where one or two spurs with their secondary ridgeways have converged upon it. The track may pass through a simple gap—in no case defended—which may or may not be the original way through; or it may pass the end of the cross dyke; in some cases uncomfortably near the steep edge of the scarp. There can be no doubt that the position of nearly all cross dykes is eminently suitable for obstruction of the road. (*ibid.*: 25)

Williams-Freeman further suggests that single univallate forms were 'defensive', or, if small, merely 'obstructive' or 'protective' in function. Larger ones may have been designed to hold up travellers going along the ridges and for the purpose of demanding tolls for free passage. Single bivallate forms, he suggests, cannot have been roads intended for the passage of either humans or cattle because of their position between the steepest scarps. Instead, they may have functioned as seasonal or overnight cattle pens. In the cases of those examples with multiple ditches and banks, they might have been used for collecting and sorting the cattle, in which case they would have been provided with wattle fences, gates, bars, and posts. (*ibid.*: 33–34)

In a later paper, again discussing dykes on the South Downs, Curwen (1951) distinguished between (1) cross-ridge and (2) spur dykes. The former is described as an earthwork running across the downland between two opposing valleys. The latter crosses a spur between the edges of two valleys. Cross-ridge dykes may be univallate, bivallate, or single, multiple or spaced. Spur dykes are univallate with the bank on the downhill side. These can occur singly or as two or more parallel earthworks. Curwen still regarded the cross-ridge dykes as being sunken drove ways connecting pasture on both sides of a ridge of downland. By contrast, he understood the cross-spur dykes as 'barriers' or 'toll bars', since, he argued, it would be unnecessary to build a dyke to connect converging valleys.

According to Curwen, the only possible clue to the use of any of the dykes is the fact that paths or terraces are *occasionally* found emerging from the ends of their ditches. However, that such dykes might be actually constructed to screen, contain, or conceal a path running over a hill from one valley to another, he admitted, seemed crazy (*ibid.*: 101). He notes that the majority of the cross dykes run over the main chalk ridge, probably covered with scrub at the time of their construction, and away from areas with fields usually located on the spurs off the main ridge. So, for want of any other alternative explanation, he continues to regard them as being cattle (or even pig!) ways. Spur dykes did not act as covered ways but instead were intended 'to control traffic ascending the escarpment by means of terraced tracks climbing the flanks of the spurs' (*ibid.*: 107). In other words, they acted as barriers protecting the spurs and diverted traffic around them. But why this might be required is not explained.

Thus much early twentieth-century research came to be dominated by the idea that these earthworks were roads rather than boundaries or military works. They were primarily associated with controlling and managing the movement of livestock.

A more neutral and 'scientific' generic terminology of 'linear ditches' or 'linear earthworks', sometimes used to describe and link cross dykes to other forms of bank and ditch systems in the landscape, becomes commonplace in the literature only from the 1940s onward, and these terms were invented only in the early part of the twentieth century (Crawford 1953: 107). In much subsequent discussion, the study and understanding of cross dykes becomes linked to that of more extensive linear ditch systems, usually located off the steep chalk ridges. The relationship of some of these linear ditch systems with hillforts led to an alternative view that they may have acted as 'ranch boundaries' involving the large-scale enclosure of livestock during the early Iron Age (Bowen 1978; Crawford 1953: 107–111; Piggott 1942; see discussion in Bradley, Entwistle, and Raymond 1994).

Fowler (1964) provides the most recent discussion of cross dykes in Cranborne Chase, reviewing the evidence for the Ebbles-Nadder ridge. His argument is essentially 'transitional' in character between the older and the newer literature on the subject in so far as he suggests that some of the dykes functioned as territorial boundaries; others were for controlling the movements of people and animals. He argues that the bivallate cross-ridge dykes are primarily land boundaries, not tracks. However, he does not rule out a secondary purpose for them as protective earthworks or tracks. He argues that univallate dykes are in some cases parts of track systems. In other cases, they diverted and controlled tracks leading to and from the ridge (*ibid.*: 46). He notes that all the dykes that cross from one side of the ridge to another, apart from three on White Sheet Hill at the western end, which is effectively a spur, are bivallate in form. All but one of the dykes crossing spurs are univallate and associated with tracks or 'terraced ways'. Fowler notes that the south ends of the six bivallate cross-ridge dykes are related to the end of a coombe and that the dykes therefore occur at points where the ridgetop is narrowest. However, not every coombe that runs up to the foot of the ridge has a cross dyke associated with it. Therefore, Fowler argues, that there must be an 'artificial' factor determining the position of these dykes, namely, distance (*ibid.*: 48). He argues that the bivallate dykes divide the ridgetop into distinct units of land and thus constitute boundaries between them, suggesting that the entire ridgetop was divided into four major units, each with subdivisions, giving a total of six or seven discrete downland units.

Although Fowler suggests that the bivallate earthworks had a single function as land divisions, he has much more difficulty in interpreting the univallate dykes and suggests a variety of purposes. Three possible examples at the west end of the ridge (two of which do not appear to be dykes at all) form part of a track system with 'terrace ways' issuing out of the ends of the ditch. These trackways, as elsewhere, on the ridge run obliquely up to these dykes. None connect with the bivallate dykes whose ends, where they continue, drop straight down the scarps. Three others, cutting across spurs, are suggested to have had the function of diverting and controlling traffic to and from the ridgetop. The others remain, to Fowler, inexplicable (*ibid.*: 50).

Influenced by Fowler's work on Cranborne Chase, in a new study of dykes on the South Downs, Bradley (1971) called into question Curwen's general distinction between cross-ridge and spur dykes, pointing out that several sites show earthworks of both kinds. He questions the functional association of cross dykes with pastoralism and spur dykes with blocking human traffic (*ibid.*: 9). Curwen's argument suggests that the valleys should have been used as grazing land and the intervening ridges as arable or wasteland, but Bradley points out that there is no evidence for this. The supposed downland valleys, which

should be pasture, nearly all contain field lynchets. On the South Downs, there are at least twelve cross dykes that do not communicate between valleys. In seven cases, they are linked to hillforts or enclosures, and an additional five turn through a distinctive double bend and are interrupted by an entrance (*ibid.*: 9).

Few trackways emerge from the end of Curwen's 'covered ways', and most are probably not contemporary. Bradley goes on to point out that the toll bar theory is also unsatisfactory, since trackways flanking the ends of these dykes may well have been used after the dykes were constructed: 'this establishes a sequence of events rather than a motive' (*ibid.*: 10). Bradley instead argues for an affinity between the cross dykes on the chalk ridges and linear 'ranch boundary' ditches found elsewhere. Boundary ditches occur in plateau conditions, for example, on Salisbury Plain and in more low-lying areas of Hampshire and Berkshire, whereas cross dykes occur where the ground is steeper: 'tracts of unploughed land on the ridges now seem to be divided not by roads but by land boundaries, which are linking the heads of valleys simply from economy of effort. These are the ranch boundaries of a hilly terrain' (*ibid.*: 11). Bradley's interpretation of the pattern is effectively the reverse of Curwen's. The ridges of the South Downs probably acted as areas of pasture, while the land below was cultivated. The ridges are those areas where the soil is thinnest and most unsuitable for cultivation. He argues that enclosures associated with some of the Sussex dykes were pastoral in nature and associated with stock raising. Some early Iron Age 'hillforts'—often with demonstrably slight 'defences' and few traces of domestic activity within them—may also have functioned as pastoral enclosures. Bradley suggests that the pattern on the South Downs suggests 'an enclosed landscape of independent and self-sufficient communities' (*ibid.*: 14).

From the 1970s onward, cross-ridge and spur dykes, as a separate category of earthworks, have been little discussed, and most of the literature has concentrated on linear ditch systems whose distribution is far more extensive. Either explicitly or implicitly, cross-ridge and spur dykes have been unhelpfully assimilated into a wider category of linear monuments or linear ditches. In tandem with the dominance of functionalist or 'processual' explanations in archaeology, both cross dykes in particular and other linear earthworks in general become regarded as having a primary economic significance. They are now variously described as being used to define or bound tracts of arable land, divide arable land from pasture, enclose tracts of uncultivated land, or act as territorial boundaries. Some particularly long and/or more massive linear bank and ditch systems are understood as major sociopolitical or tribal boundaries (see Bowen 1978, 1990; Bradley 1978; Ford 1982; Fowler 1981, 1983; Spratt 1982).

Fowler refers to Ebble-Nadder ridge of Cranborne Chase in terms of settlements existing in a context of ditches, field systems, and access networks, although lacking in cemeteries: 'the landscape appears to be thoroughly under control while intensively exploited' (Fowler 1983: 63). The cross dykes subdivide the land into agricultural units and acted to control cattle:

Cross-ridge dykes, traversing ridges and cutting off spurs in Sussex, Hampshire, and south Wiltshire seem to be best explained in terms of both territorial divisions and control of stock movement, in particular to keep livestock off arable fields. . . . Most seem to be related to the filling up of the landscape. . . . Sometimes they appear to block off one area from another; in many other cases they wind for considerable distances across country, and could have served as either or both barriers or trackways. (*ibid.*: 192–193)

Following Bradley (1971), Fowler argues that many of the large univallate enclosures in southern England (hillforts) may have originated as cattle enclosures. He singles out four different situations, all related to stock management and potentially leading to the local preeminence of a local hilltop:

1. A small enclosure initially beginning as a small stock-gathering location and getting successively larger—for example, Thundersbarrow on the South Downs, Sussex.
2. An area of high ground being separated off and internally divided for special grazing, breeding, or rearing of stock—for instance, Little Butser Hill, Hants.
3. Prominent hills such as Quarley and Whitsbury, Hants and Sidbury, and Wilts, each being a focal point for a linear ditch system and subsequently developed into a multi-ramparted hillfort.
4. A hilltop separated from its spurs, and the whole being segregated from the surrounding lower land by a series of cross dykes facing up toward a later temple site—for example, Cold Kitchen Hill, Wiltshire. He concludes that 'we seem to see, perhaps deriving from a pastoral background, the recognition and development of a focal point in the landscape' (Fowler 1983: 194–195). Cross dykes and linear ditches in a context of hillforts, conceived as pastoral enclosures, all now represent 'an attempt to divide the land up for practical purposes rather than to designate properties. The impression that this zoning was for controlled grazing is increased by the fact that in numerous cases ditches cut through preexisting arable field systems, apparently putting them out of action, at least for a time, and superficially representing a deliberate change from arable to pasture' (*ibid.*: 190–191).

Bowen similarly argues that large areas of the landscape were subject to orderly arrangement in association with large-scale pastoral management or 'ranching' (Bowen 1978: 120). Some linear ditches were ways permitting passage through arable fields to be channelled. Others were built over and not around fields, putting them out of use (*ibid.*: 122). Longer ones are suggested to be major land boundaries. He points out that some Banjo enclosures of the later pre-Roman Iron Age almost always have long ditches extending away from their entrances, making large enclosures directly related to the banjo.

In his extended discussion of linear bank and ditch systems in southern and central parts of Cranborne Chase, where it should be noted, cross-ridge and spur dykes do not occur, Bowen defines three main types:

1. *Spinal linears*. These run between distinct points at least 5 km apart. Their ends may or may not be intervisible. Some may be more or less straight. Others may deviate in a variety of ways, curving, winding, and bending. Some may be accreted from shorter earthworks. These divide up large tracts of the landscape.
2. *Local linears*. These are ditched arrangements that are considerably shorter and frequently occur in self-contained blocks.
3. *Multiple lines of shorter ditches and banks*.

Some of the linears are closely associated with local settlements and fields. A few with looped ends may suggest containment or penning (Bowen 1990: 11). Bowen argues that 'the fields traversed were almost certainly put out of use at the time [or]... their arable use must have been seen as less important than the function performed by the new linear' (*ibid.*: 12). The major spinal linears are not closely connected with the hillforts and appear to represent an organisation of the landscape predating them (*ibid.*: 13).

This massive change in emphasis on land use from arable to pasture, associated with the construction of cross dykes on the chalk ridges and linear ditch systems elsewhere, has been recently challenged by Bradley and associates (1994), who did not find much evidence in their study region to show that the 'boundary' works cut across existing fields. The first linear ditches on Salisbury Plain enclosed a pattern of open settlements, not tracts of empty grassland. There is no indication that the Late Bronze Age economies differed substantially from those in the Middle Bronze Age, and it is only in the early to middle Iron Age that linear ditches seem to define areas of grassland—but this definition occurred in the context of an intensively farmed arable landscape (Bradley, Entwistle, and Raymond 1994: 150). There were clearly distinctive phases in the ditch system.

Molluscan and stratigraphic evidence for the Wessex chalk downlands suggests a common history of woodland clearance giving rise to largely open

grassland conditions during the early Bronze Age (for example, Allen 2000; Entwistle and Bowden 1991; Evans 1972). The landscape of Salisbury Plain also seems to have been largely cleared of woodland by the time the linear ditches were established in the Late Bronze Age (Entwistle 1994). The evidence for Berkshire suggests an open grassland environment immediately after the earthworks were built, with later land use being more varied (Ford 1982: 17).

For Berkshire, Ford suggests that linear ditches define a series of valley-based territories whose boundaries follow the ridges overlooking the steepest ground. For the Tabular Hills of northeast Yorkshire, Spratt has argued that major territories are defined initially by a series of round barrows located along watersheds, later supplemented by linear earthworks. Major early dykes run off the northern scarp toward the valleys, and together with scarps and watercourses divide the land into 'estates'. These he suggests date to around 1000 B.C.E. and are associated with, but are later in date, than round barrows. Each 'estate' integrated a number of different ecological zones with upland grazing, lowland fields, access to water, and meadow grazing (Spratt 1989). Cross-ridge dykes, some of which may date to the end of the first millennium B.C.E. subdivide the 'estates' (*ibid.*: 12). Dykes are absent where there are valleys suitable for boundaries without the subdivision of dykes or where dykes have been converted into tracks and roads. Many of the dykes run from the northern scarp into the heads, or along the sides of valleys opening southward to the Vale of Pickering. In some areas where the valleys are dry, the dykes run along the crests of the valley sides, so there were no boundaries along valley bottoms. This situation is paralleled in some parts of the Berkshire Downs, where long linears are more or less aligned along ridges or the edges of steep slopes (Ford 1982). It has been suggested by both Ford and Spratt that in some cases cross dykes represent continuations of, or link to, 'natural' boundaries in the landscape such as coombes, valleys, and streams across higher land. Thus when natural boundaries were not present, cultural ones might be created instead. This work more or less represents the limits of the discussion of the significance of the natural topography in the entire literature on the subject.

Cunliffe (1990) draws attention, as does Bradley (1971) and Fowler (1983), among others, to the association of some linear ditches and cross dykes with hillforts. He suggests that the overall pattern in Hampshire is one in which early hillforts constructed in the sixth and fifth centuries B.C.E. were frequently preceded by earlier phases of enclosure related to existing systems of linear boundaries (*ibid.*: 329). Certain focal points located on systems of linear boundaries were chosen for enhancement by the creation of enclosures in the Late Bronze Age, and some later were developed into hillforts. He distinguishes between hillforts placed at the end of major linears (for example, Danebury) and those at nodes where major spinal linears were joined by

subsidiary linears (for instance, Quarley Hill). Cunliffe develops a narrative for the period in which around 1000–800 B.C.E. a major programme of land division was begun involving the digging of a massive system of linear ditches across the chalk landscape. The land was divided and controlled in a radically new way. Enclosures associated with the linears were probably related to communal stock raising and control. From 800–550 B.C.E., strongly defended forts were constructed often on ridge ends and associated with artefacts, suggesting an elite occupation along with enclosures on the linear ditch systems and the emergence of new settlements, some defined by ditches at previously unoccupied locations. In a final stage between 550 and 350 B.C.E., some of the focal locations chosen for enclosure were heavily fortified in a new phase of construction (*ibid.*: 333–334). Cunliffe interprets this process as involving a radical re-organisation in land ownership from communal to ‘private’ ownership. The early linear ditch systems were primarily associated with stock control with the animals held or run in common along with a need to define territories. The colonisation of focal points was an attempt to establish authority over the land by individuals and/or lineage groups. Prestige moved from the acquisition and control of rare goods such as gold, amber, faience, and so on to control of the land and its productive capacity. Bradley (1994) points out that Cunliffe’s argument is in fact not based on a consideration of the boundary system itself but on its assumed relationship to ‘defended’ sites (hillforts) that Cunliffe regards primarily as being high-status settlements. This clearly runs counter to the interpretation that some hillforts were only temporarily occupied or had other probable functions associated with cattle management. On Salisbury Plain, the settlements associated with the linear ditches are open sites showing no evidence of hierarchy (*ibid.*: 150).

In their discussion of linear ditches on Salisbury Plain, Bradley, Entwistle, and Raymond (1994) argue that the use of these earthworks took place over such a long period of time that no single interpretation for their function is possible. They demonstrate these earthworks’ establishment in the Late Bronze Age in an area with a long history of settlement. The construction of the ditches, they argue, formalised land boundaries that may have already have been present from the middle Bronze Age or earlier. Larger territorial divisions evolved before the foundation of hillforts, reflecting the emergence of the social and economic structures out of which hillforts and ditched enclosures developed (*ibid.*: 137). They suggest that in the final stages of this process much of the ditch systems seems to have become redundant, and during the Iron Age some ditch systems were incorporated into a closely integrated system of organised fields.

Despite Bradley and associates stressing the need for multiple interpretations of the ditch systems on Salisbury Plain, however, this position only

appears to be the case, in the accounts that they give, through time. At the period of their initial establishment, *all* ditch systems appear to have been attributed the same function: they acted as boundaries. Bradley and associates argue that the linear ditches defined areas of settlement, including pasture and arable fields. These ditches emphasised the alignment of the main ridges and watersheds, as did the distribution of earlier Bronze Age round barrows clustering on high ground and along watersheds. Some linear ditches are aligned on prominent barrows or barrow cemeteries (*ibid.*: 141). These, Bradley and colleagues argue, may have been part of an already existing but far less formalised territorial system that became supplemented and extended by the physical presence of a continuous boundary. Such a boundary had sociopolitical significance. It was not a barrier to movement or cultural interaction and was not related to the creation of large areas of grazing ground or an economy with a greater emphasis on pasture. The boundary earthworks enclosed a pattern of large open settlements rather than empty areas of grassland. It is only later in the early to middle Iron Age that parts of the boundary system define pasture areas, but only in an intensively farmed arable landscape (*ibid.*: 150).

Two very significant general points seem to arise from this review. First, there is a strong tendency in the literature to try to seek a single explanation, or set of explanations, for all cross dykes and linear ditch systems wherever they might be found in England. Instead, with Bradley and colleagues (1994), I think there is a need to acknowledge that cross dykes and spur dykes are very different types of monuments and do not really fit into a broader category of linear monuments at all. Both they and linear ditch systems meant different things in different areas and at different times. There can be no overall explanation. What these monuments meant, I argue, depends very much on their relationship to the surrounding landscape. Consequently, what happened on Salisbury Plain is not necessarily relevant to anywhere else. We need highly specific interpretations.

Second, cross dykes have always been understood in the most general sense as either dividing the land, acting as a marker or a barrier, or funneling movement across it from one place to another as specific kinds of pathways. If the latter was the case, where did these pathways lead; what did they link together, and why?

Studying the Dykes in the Landscape

A few of the dykes in the study area of northern Cranborne Chase have been excavated. Four bivallate dykes were sectioned by Clay (1927) along the Ebbles-Nadder ridge. On the floor of the ditch of the dyke running diagonally across

Swallowcliffe Down, he recovered a fragment of pottery of early Iron Age date (*ibid.*: 63; Figure 4.2: No. 9). He concludes that the dyke was constructed at the same time as the nearby Iron Age palisaded settlement. This dyke was also either earlier than or contemporary with 'Celtic' fields immediately to the southwest. Two short dykes, one to the north and one to the south, are linked with the early Iron Age hillfort of Chiselbury (Figure 4.2: No. 6). From surface inspection, because of plough damage and disturbance, it is impossible to tell whether they are contemporary with this dyke or perhaps earlier in date with the eastern rampart of the hillfort following the line of an earlier single cross-ridge dyke. Fowler suggests that this dyke (or dykes) is either contemporary with or later than the hillfort on the basis that the original line of the dyke would have had a considerable bend or kink in it if it had been built earlier (Fowler 1964: 53). However, bends and kinks are not an uncommon feature of cross dykes (see Table 4.4). Fowler's excavation of a section across the dyke running across Buxbury Hill provided no direct dating evidence, but the presence of sherds of 'Romano-British' type in an upper level of the ditch section late in the sequence of ditch deposits provides a *terminus ante quem*, perhaps again suggesting an early Iron Age date (Fowler 1965: 49).

Along the Ox-Drove ridge, the bivallate cross dyke to the west of Win Green is clearly cut through by the Roman road and is earlier in date. Sections cut through Great Ditch Banks and Middle Chase Ditch at the far eastern end of the ridge have dated them to the late pre-Roman Iron Age just before the conquest (Rahtz 1990). But these are not true cross dykes, because they do not extend to the ridge scarp to the north. However, they do seem to form a coherent system, being approximately equidistantly spaced, with a cross dyke immediately to their west that has not been excavated.

Dimensions and Profiles

The dykes are quite consistent in size. The univallate dykes are about 10 m–12 m in overall width, and bivallate dykes are 12 m–15 m wide. The largest bivallate dyke on the Ebbles-Nadder ridge is 22 m in overall width (Figure 4.2: No. 14). Their length is highly variable and partly determined by the relief. None have any original breaks unless the old turnpike roads running along the Ebbles-Nadder and Ox-Drove ridges pass through an original break in every case, which seems unlikely. Both these ridges do not appear to have been used as long ridgetop trackways at the time when the dykes were constructed and used. Movement seems rather to have been up and over the ridges.

Today banks are about 0.5 m–1.2 m high, and ditches are of a similar depth (see Table 4.3), but most are considerably denuded or entirely destroyed in long sections where they cross the ridgetops. Sometimes they survive only as

'tails' on the steep scarps, which are impossible to plough. Overall widths range from 10 m to 20 m. The best preserved examples to the east of White Sheet hill on the Ebbles-Nadder ridge (Figure 4.2: No. 14) and on the western side of Win Green on the Ox-Drove ridge (Figure 4.3: No. 7) are still fairly formidable monuments with a drop between the top of the banks and the bottom of the ditches of about 3 m and very real barriers to movement along the ridgetops.

One important distinction between the bivallate and the univallate dykes is in their profile and dimensions. All the four bivallate dykes on the Ebbles-Nadder ridge sectioned by Clay (Chiselbury Figure 4.2: No. 6; Row Ditch Fig 4.2: No. 8; and at Swallowcliffe Figure 4.2: No. 9 and No. 13) were less than 1.5 m deep and had a distinctive V profile (Clay 1927: 62–63). Fowler's section through the univallate cross dyke running across the spur of Buxbury Hill (Figure 4.2: No. 7) showed that the ditch was 5.4 m wide at the mouth, 1.8 m deep, with a 1.2-m-wide flat bottom (Fowler 1965: 49). Excavations at Great Ditch Banks, a univallate bank and ditch system at the eastern end of the Ox-Drove ridgeway, revealed that it had a ditch as much as 3.5 m deep with a V-shaped profile with a bank on one side that might originally have been 3 m or more high, giving a total in excess of 7 m, which would have been a formidable barrier (Rahtz 1990: 11). The nearby Middle Chase Ditch was of similar profile and dimensions (*ibid.*: 22). Hence it would be unwise to conclude, as Fowler seems to suggest (Fowler 1965), that the ditches of univallate cross dykes had flat bottoms and were more massive. In the present discussion, what seems to be more significant is that the V- and U-shaped profiles of the ditches are mirrored in the V- and U-shaped profiles of the coombe 'ditches', some with distinctive but always narrow flat bottoms, others without. The bivallate cross dykes, which most closely resemble the coombes, almost always run between the heads of the coombes, thus continuing their lines over the ridgetop to the escarpment edges. By contrast, the univallate cross dykes, which with only a single bank and ditch do not resemble the forms of the coombes, link escarpment edge to escarpment edge or cut across spurs or at right angles to the coombes rather than continuing their lines over the ridgetops. Both their form and positioning in the landscape contrast with the coombes rather than mirroring them. There is only one exception to this general distinction, where a bivallate cross dyke cuts across a spur on Swallowcliffe Down, linking two coombes.

DYKES ALONG THE EBBLES-NADDER RIDGE **Burcombe** (Figure 4.2: Nos. 1–3: Figure 4.10) The first two dykes at the eastern end of the ridge run parallel to each other, only 58 m apart, cutting across a low spur projecting from the northern escarpment. The northern dyke is 64 m long with a 1-m-high bank situated on the northern downhill side. The southern dyke is 160 m



FIGURE 4.10 Punch Bowl Bottom Coombe at the eastern end of the Ebbel-Nadder ridge. Dykes Nos. 1 and 2 (see Figure 4.2) cut across the spur to the right of the coombe end below the clump of trees, which marks the position of a large round barrow terminating where the scarp slope to the coombe bottom becomes precipitous.

long and similarly has a single bank situated on the downhill side of the ditch. The dykes are situated on the mid-point of a fairly gentle slope with the land rising above them. The shorter northern dyke is almost straight, terminating at its western and eastern ends at the lip of much steeper slopes cut into by trackways and holloways. The southern dyke is markedly more curved and terminates farther down the lip of the slope at its western end.

Both dykes cut across a north-running spur. This spur is dramatically defined by a tongue-shaped coombe, Punch Bowl Bottom, widening rather than narrowing at its end (the latter being characteristic) on the eastern side and by the escarpment edge, which swings round to the north on the western side (see Figures 4.2 and 4.5). This narrows the spur at first, hence the much shorter length of the northern dyke, before it widens out and flattens to form a low plateau to the south of the river Nadder. From the end of the southern dyke, which terminates below the lip of the very steep slope running down into the coombe, the base of the coombe below is visible. The northern dyke ends farther up the slope, and the base of the coombe immediately below it is not visible from its end. Punch Bowl Bottom, together with another slighter and much narrower coombe just to the east, is the only coombe to cut into the

northern escarpment of the Ebble-Nadder ridge. All other coombes cut into the ridge on the southern side.

The eastern ends of both dykes are visible along almost the entire length of Punch Bowl Bottom, from where it begins just to the south of the river Nadder, and they appear to have been positioned so as to be seen in the distance while one was moving along the course of the coombe toward them. The southern dyke runs down to the very head of the coombe, so as to give an impression of being a natural continuation of it, whereas the northern dyke is positioned on the western (right) side of it. Both dykes link the head of the coombe with the escarpment edge to the west. From their western terminal ends, one looks out across the plain below and along the impressive and unbroken line of the northern escarpment. From the western end of the southern dyke, one can look down to the base of the escarpment below. This is not the case from the northern dyke, which terminates higher up the slope.

About 300 m to the south of these two cross dykes, there was probably a third much longer dyke running west-east for about 750 m across the crest of the ridge. This earthwork was marked by Colt Hoare (1812) on his Station VIII map, but he did not describe it. The western end began on or near to the shoulder of the scarp but does not appear to have run down it just to the south of three round barrows unusually sited on a marked incline just above the steep scarp slope. There is no trace of this earthwork on the ground now, but Fowler was able to note its presence in the early 1960s (Fowler 1964: 54). It then ran across the ridge summit just to the south of another round barrow on the highest point and then descended, turning somewhat to the north to terminate at the head of a shallow meandering coombe cutting into the scarp adjacent to the coombe to which Burcombe 1 and 2 are linked at their eastern ends. Here there are slight visible traces in woodland that may be the remains of this dyke. The two adjacent coombes are not visible from their heads at the scarp shoulders; neither are the three cross dykes, except at their western ends. The two coombes are markedly different in form. That to the east is sinuous, shallow, and meandering, that to the west much wider, deeper, and flat bottomed and far more striking topographically. The southern end of the eastern coombe, into which Burcombe 3 probably ran, narrows to effectively the dimensions of a dyke itself so that the eastern end of Burcombe 3 would have created the impression of the coombe itself continuing on and out of sight across the hilltop to the west. In this case, the experiential effect of the dyke simply extended the coombe onward.

Compton Hut (Figure 4.2: No. 4) This cross dyke is shown by Colt Hoare (Station VIII map) as running in a meandering line between the head of Hut Bottom coombe to the south and the escarpment edge to the north. Today it is obliterated apart from a short length on the northern scarp where

it runs down into Burcombe Ivers wood. Here it is cut diagonally by a hollow way running northwest to southeast up the slope. The preserved section is univallate with a bank on the eastern side, although Sumner (1913: 63) records the dyke as being bivallate in form. The bank runs out, and the ditch continues well down the steep escarpment beyond the point at which one can see the base below. The ditch line is virtually indistinguishable from a natural depression or gully in the escarpment edge. The ditch line's precise relationship with the head of Hut Bottom Coombe cannot be verified, but at its northern end the coombe is shallow, straight-sided, and narrow (Figure 4.11). Again, as with Burcombe 3, the end of this coombe and its dimensions resemble a bivallate cross dyke, and the dyke would have run down a gentle incline to join it.

Compton Ivers (Figure 4.2: No. 5) Two short stretches of a dyke remain today that originally cut right across the ridgeway, linking the northern escarpment edge with a narrow coombe to the south. The northern end runs steeply down over the lip of the escarpment to terminate about halfway down the slope and way beyond the point at which one can first see the base of the scarp below. This position, of course, would make the dyke highly visible from off and below the escarpment edge to the north. From this end, there are extensive views across the plain below. The southern end is unusual in that it



FIGURE 4.11 Northern end of Hut Bottom Coombe on the Ebble-Nadder ridge. The southern end of dyke No. 4 terminated at the head of this coombe, running over the ridgetop beyond.

at first runs diagonally down the side of a coombe on its western side before swinging round to the east to terminate just to the south of the head of the coombe at its side and almost down to the coombe bottom (Figure 4.12). This is a narrow, meandering, steep sided V-shaped coombe, thus contrasting significantly with Punch Bowl Bottom.

Chiselbury (Figure 4.2: No. 6) Immediately to the north and the south of Chiselbury hillfort two dykes extend out. The southern dyke runs to the head of a coombe; the northern dyke extends down the northern escarpment edge (Figure 4.13). These dykes may originally have been linked together under the line now followed by the eastern rampart and ditch of the hillfort or, alternatively, as Fowler suggests (1964: 53), have been contemporary with it, drawing a continuous line across the ridge. The northern end extends some way over the lip and down the precipitous slope of the escarpment, thus making it highly visible from the plain below to the north. At the southern end, the banks run out, but the ditch extends almost to the bottom of a very steep slope at the head of a relatively large and regular V-shaped coombe, its axis continuing the N-S orientational axis of the coombe (Figure 4.14).

Buxbury Hill (Figure 4.2: No. 7) Buxbury Hill is the only real prominent and significant steep-sided spur defined by steep escarpment edges on both sides (rather than a coombe scarp and escarpment edge as at Burcombe)



FIGURE 4.12 View south from the head of the coombe down to which the Compton Ivers cross dyke (Figure 4. 2: No. 5) runs. The dyke is visible to the right of the photograph, running down almost to the base of the coombe.



FIGURE 4.13 View of the northern escarpment edge of the Ebbles-Nadder ridge seen from the north. The rampart of the Chiselbury hillfort is skylined, and dyke No. 6 can be seen dropping over the escarpment edge to the left of the photograph, terminating just above the line of the Fovant military badges.



FIGURE 4.14 View south from the southern end of dyke No. 6 down the coombe south of Chiselbury.

jutting out along the northern escarpment of the Ebbles-Nadder ridge. Other parts of the scarp, such as Chiselbury, appear to be spurs when seen from the eastern side only, an impression created by the manner in which the ridge itself is orientated NE-SW. From the west, they appear merely as rounded jutting protrusions of the ridge rather than true spurs. The hill is cut across by a curved single bank and ditch at almost its lowest and narrowest point, with the land rising and widening toward the north to the end of the spur and also rising along the ridge to the south. The bank is on the south (downhill) side. From the western end, one can see down to the base of the scarp, and this end is orientated so as to look out along the line of the escarpment edge to the west. Much of the eastern end is much mutilated by a (later?) field system. The ditch continues some way down and just over the lip of the precipitous slope of the escarpment edge to the point at which the base is visible.

Row Ditch, Sutton Ivers (Figure 4.2: No. 8) This dyke, just to the southeast of the Buxbury spur, cuts across the ridge joining the northern escarpment to the head of a coombe to the south. The southern end of the dyke continues the north-south orientational axis of the coombe, which has a very narrow bottom and is steep-sided. Unusually, the dyke runs down the precipitous slope almost to the very bottom of the coombe (Figure 4.15). It thus appears to be a 'natural' continuation of the coombe. The dyke's northern end runs over the lip of the scarp and roughly a third of the way down the precipitous slope before terminating, way beyond the point at which one can first see the base of the scarp (Figure 4.16). It runs to the northern scarp edge just before it turns to run out to the north forming the spur of Buxbury Hill.

Swallowcliffe Down (Figure 4.2: Nos. 9–13) Here the greatest concentration of cross dykes occurs on the ridgeway. Two dykes traverse the ridgetop. Another three cut across spurs jutting out from it between coombes to the south. The only comparable situation where this occurs in the study area is on Berwick Down along the Ox-Drove ridgeway. The longest of these dykes (No. 9) is bivallate. It cuts across the ridge, at right angles to it, running roughly west to east for c. 360 m. The western end descends over the shoulder of the scarp and terminates just below the point at which it descends precipitously, from which the bottom of the scarp is visible below (Figure 4.17). The eastern end similarly terminates on the lip of an extremely steep scarp on the side of the head of a deep, wide-topped and shallow bottomed coombe (Figure 4.18) at the very head of which, on the ridgetop, the late Iron Age Swallowcliffe Down open settlement is situated (Clay 1925, 1927). The dyke terminates at precisely the point at which the base of the coombe is visible directly below it. Before this point, the coombe base, running away farther to the south, is visible. The terminal is clearly visible from the base of the coombe.



FIGURE 4.15 View toward the head of the coombe at which the southern end of the Row Ditch cross dyke (Figure 4.2. No. 8) terminates. This dyke runs down the scarp slope almost to the bottom of the coombe.



FIGURE 4.16 Northern end of the Row Ditch (Figure 4.2. No. 8) cross dyke seen from spur dyke No. 7 crossing Buxbury Hill to the northwest.



FIGURE 4.17 Western end of the Swallowcliffe Down (Figure 4.2. No. 9) cross dyke running down and just over the lip of the northern escarpment edge of the Ebbles-Nadder ridge.



FIGURE 4.18 View down the coombe, looking toward the south, from the eastern terminal end of cross dyke 9 on the Ebbles-Nadder ridge.

No. 10 is univallate with the bank to the east. It runs across the ridge from the NW-SE. Its northern terminal ends on the steep scarp below the shoulder, and one can see the scarp bottom below. To the south, Colt Hoare (1812: Station IX map) depicts it running to the side of the head of a coombe, but there is no trace of this today.

No. 11 is unusual in that here a bivallate and a univallate dyke run side by side to the head of a wide, deep, V-sided coombe with a narrow flat bottom. They run down the slope and terminate just at the point at which the scarp becomes very steep. The bivallate dyke, situated immediately to the north of the univallate dyke, ends at precisely the point at which one can see directly down into the coombe bottom below it. The univallate dyke terminates a little farther up the slope, and from its end the coombe bottom immediately below is not visible. Both dykes are visible from the base of the coombe to the south and continue its line up and over the ridgetop, where all traces have been obliterated. The western terminal of one of these dykes is visible on the side of another coombe to the west, where it runs just over the shoulder of the steep scarp to the point at which the base of the coombe is visible below.

No. 12, a short distance to the south, is a univallate dyke with its bank on the south side. It runs west-east across a spur connecting two coombes. Its western end runs just over the shoulder of the scarp, and from it the coombe bottom below is visible. Opposite it, on the other side of the coombe, No. 13 continues the line across another spur to another coombe. The eastern end terminates just short of the shoulder of the scarp. From it the coombe bottom is not visible, nor is this dyke visible from the bottom of the coombe.

No. 13 is a bivallate dyke crossing a spur and linking two coombes. Its eastern end terminates at the side of a coombe opposite No. 12, well past the point at which one can see the coombe bottom on precipitous slopes (Figure 4.19). Both it and No. 12 can be seen from the bottom of the coombe below. The western end terminates at the side of the head of another coombe. The banks stop, but the ditch continues over the shoulder of the slope to terminate on the steep scarp from which the coombe bottom below is visible running into a natural gully that continues the ditch line down to the coombe bottom.

Half-Mile Ditch (Figure 4.2: No. 14) A few hundred meters to the east of the highest point of White Sheet Hill there is another dyke, which is the largest of all the cross dykes on this ridge. It runs north to south at right angles to the ridge connecting the northern escarpment edge, with a wide coombe to the south. The dyke runs down the precipitous escarpment edges at both ends some considerable way. The southern end running down the head of the coombe is particularly dramatic (Figure 4.20). Here there are views across a wide coombe, the Ox-Drove ridge to the south, and



FIGURE 4.19 Western terminal end of cross dyke 9 crossing over the top of Swallowcliffe Down on the Ebbles-Nadder ridge and terminating just beyond the shoulder of the scarp.



FIGURE 4.20 Looking down Norrington coombe from the southern end of Half Mile Ditch (dyke 14) on the Ebbles-Nadder ridge.

to Winkelbury Hill. Walking along the line of the ditch, one sees that the entire landscape along the ridge to the west and east is entirely blotted out. From the eastern end, Castle Ditches and Castle Ring hillforts are visible and roughly equidistant from a line drawn outward across the landscape from the end of the dyke.

Berwick Down (Figure 4.2: No. 15) The length and form of the dyke at the head of Berwick Coombe remain uncertain. This dyke occurs just below the highest point on White Sheet Hill, and its southern end terminates dramatically at the very head of Berwick Coombe, extending some way down the precipitous escarpment edge. This cross dyke is aligned with the head of the coombe rather than joining one side of it, and from it one can see down to the base of the coombe.

White Sheet Hill (Figure 4.2: No. 16) White Sheet Hill forms the higher western end of the Ebbles-Nadder ridge. Here the escarpment edge swings prominently to form a spur running approximately north-south before terminating 500 m to the northwest of Berwick St. John. To the west, the greensand plain extends toward Shaftesbury, while Berwick Coombe cutting in to the ridge from the south forms its eastern side. Across the middle of this spur runs a prominent univallate cross dyke, with its ditch to the north, linking the escarpment edge with the western side of Berwick Coombe. The eastern end is mutilated but appears to run down the gentle higher parts of the scarp. The base of the coombe is not visible. The western end terminates as a ditch high up the slope, and again the base of the escarpment is not visible. Neither end of this dyke ends dramatically, and Berwick Coombe itself is shallow and wide and very different in character from some of the coombes at the western end of the Ox-Drove ridge to the south.

DISCUSSION Of the sixteen cross dykes, five cut across spurs but in very different ways. The dyke on White Sheet Hill cuts straight across the most prominent southern spur of the entire ridge, dividing it in two. That on Buxbury Hill cuts and marks off the only well-defined northern spur of the ridge. The three Burcombe dykes link the only two coombes to cut into the northern escarpment, with the scarp farther to the west. All these dykes, with the exception of the southernmost at Burcombe, are univallate. The greatest concentration of dykes is those on Swallowcliffe Down. Three cut across spurs to the south and link two parallel coombes, and two other link coombes to the northern escarpment. Their concentration here seems to be directly related to the presence of the Swallowcliffe Down Iron Age settlement. Dyke No. 9, unusually orientated northwest to southeast, seems to run in this direction across the ridgetop in order to avoid cutting through the settlement area adjoining the left-hand or western side of the head of the coombe obliquely. None of these dykes, except

possibly No. 10, continues directly the line of the coombe over the ridgetop. All the other major bivallate cross dykes (14, 8, 6, 5, and 4) do so. No. 5 is unusual in running down the side of the head of the coombe to the left (west). None, apart from No. 8 appears to have had a particularly straight course, but instead they meander, a little like the courses of many of the coombes themselves.

From White Sheet Hill to Burcombe, ten coombes and interlinked coombe systems cut into the chalk ridge from the south, subdividing the southern slopes of the ridge into a series of spurs. As noted, the coombes running in to the ridges from the south have a hidden character, and when one walks along the centre of the ridge one is scarcely aware of their presence and certainly not of their depth and extent, form, and character. This becomes apparent only when one is standing on the coombe lips. Each of these coombes is distinctive, with its own individual character. The two most westerly of these, Berwick Coombe and the coombe to the west of Norrington (Figure 4.20), are relatively broad, simple in form, and open, being as much as 750 m wide from shoulder to shoulder on either side and with a fall of height of about 100 m from the ridgetop to the coombe bottom. They are comparatively short. The other coombes to the east are considerably more complex, with numerous meandering side branches, and they tend to become progressively shallower, narrower, and longer from west to east. They provide natural and ready-made divisions of the chalk downlands. Two of these coombes, in particular, stand out from the others—the one immediately to the south of Swallowcliffe Down (Figure 4.18) and the coombe to the south of Chiselbury (Figure 4.14). These two coombes are distinguished by the sheer steepness of their sides and their regularity in form. Both have almost flat bottoms about 10–15 m in diameter and are about 300 m wide from shoulder to shoulder, with a drop in height of about 100 m from the ridgetop to the lowest part of the coombe floor. The line of Swallowcliffe coombe curves away gently, in an almost perfectly smooth line from the northwest to the southeast. The northern part of Chiselbury coombe is straighter and more V-shaped in side profile. These two particularly dramatic coombes come closest to cutting right through the ridge to the northern scarp. It is perhaps not surprising that the only two known settlements to occur along the ridgetop, the open settlement on Swallowcliffe Down and the enclosure, or ‘hillfort’, at Chiselbury, are situated immediately above the heads of these coombes and are associated with cross dykes.

Only particular coombe systems and branches of coombes have cross dykes at, or toward, their ends. Three out of the ten coombes have no cross dykes. These are all relatively narrow and shallow and end farthest away from the northern scarp. What determines the spacing of the dykes appears to be that they should be approximately the same distance apart, together with their relationship with a coombe or a coombe system of distinctive form and character.

The relationship of these cross and spur dykes to the escarpment edge is summarised in Table 4.7. The majority occur either in places where the scarp edge changes in direction or in the middle of more or less straight sections of the scarp, but there appears to be no overall pattern to this relationship, and the relationship of particular dykes to particular coombes appears to be of far greater significance. There is a much stronger association between the locations of the dykes and topographic features of the escarpment edge along the Ox-Drove ridge (see below). The majority of the dykes are visible from the land below to the north, because they extend beyond the shoulder of the escarpment and part of the way or well down the slope (see Table 4.6). The pair of cross-spur dykes running across Burcombe Hill cannot be seen from the north because of a projecting spur. However, they are clearly visible from the NW and the NE. From the NE, the end of No. 3 would have been visible, as are the three round barrows situated close to its probable western end today. They were meant to be seen and when newly constructed would have stood out as gleaming white. A problem here, though, is to what extent the scarp slope was heavily wooded. Some areas, generally the lower slopes, of the scarp are still heavily wooded today. We might expect woodland coverage to be far greater in the past, but building the dykes would have required removing the trees, and their removal would still be likely to stand out as gaps on the upper slopes.

DYKES ALONG THE OX-DROVE RIDGE

South Down (Figure 4.3: No. 1) On South Down, remnants of what was once a very substantial bivallate dyke cross the ridgeway in a meandering NE-SW course. The dyke runs from the head of a well-defined hollow in the northern escarpment, continues over the top of the ridge, and ends on a gentle slope to the south. Its northern end joins the hollow on its left-hand (western) side rather than at its centre and runs down the escarpment edge to the point at which it becomes extremely precipitous and the base of the slope is visible.

Pincombe Down (Figure 4.3: No. 2) Two kilometres west, another bivallate dyke cuts across the ridge in a similar manner, terminating on gently sloping land to the south and at the head of a steep hollow in the escarpment to the north. Again the northern end runs down the escarpment edge, whose base is visible from the end of the dyke. Here the dyke is in the approximate centre of the head of the hollow. Another 1 km to the west, another dyke (Figure 4.3: No. 3) runs down to the head of a hollow to the north, terminating on precipitous slopes, with its southern end terminating on gently sloping land to the east. The relationship of these three dykes to the ridge and the landscape is more or less the same. A very different situation occurs on Berwick Down an additional 2 km to the west.

Berwick Down (Figure 4.3: Nos. 4 and 5) Two univallate cross dykes, situated only 300 m apart, straddle the ridge of Berwick Down. Immediately to the south of the southern dyke, an Iron Age and Romano-British settlement occupies the highest part of the ridge, bounded on the western side by Ashcombe Bottom and by Malacombe Bottom on the eastern side (see Colour Plate 2). These are two narrow steep-sided coombes between which both cross dykes run roughly E-W across the ridge, connecting them. The southern dyke can be traced today only for about 80 m but can be seen terminating on the lip of the precipitous slopes of Malacombe bottom, an additional 90 m to the east. This is a particularly dramatic narrow and deep-sided, V- shaped coombe with a flat bottom little wider than a track (see Figure 4.21 and Colour Plate 2). The western end of the dyke extending toward Ashcombe Coombe ends much less dramatically on the gentle upper slopes leading down to the coombe, which is less narrow and confined in form.

The northern dyke (Figures 4.21 and 4.22) contrasts considerably insofar as its eastern end (now mutilated) terminates at the head of the coombe on its western side, and its western end extends much farther down the slope into Ashcombe Bottom, below the point at which it becomes precipitous. Here it is possible to see down into the very bottom of the coombes at both ends of the dyke, which is possible only at the eastern end of the southern cross dyke.

Both dykes are intervisible and invert each other in form, the southern dyke having its ditch on the southern side and the northern dyke having its



FIGURE 4.21 Looking along Malacombe Bottom from the eastern terminal end of cross dyke 5 on the Ox-Drove ridge.



FIGURE 4.22 Eastern terminal of cross dyke 5 on the Ox-Drove ridge on the left (west) side of the head of Malacombe Bottom.

ditch to its north. The northern dyke cuts across a saddle of lower ground at the lowest point on Berwick Down, whereas the southern dyke traverses land gently rising to its south. When one walks along the best preserved stretches of the ditch of the northern dyke, one notes that the landscape is completely blotted out except at its terminal ends, where views are directed down toward the interiorised and secret world of the coombes (Figure 4.21).

Win Green (Figure 4.3: Nos. 6 and 7) On the eastern side of Win Green, 2 km to the west of the cross dykes on Berwick Down, another two dykes with a markedly different relationship to the topography occur. Win Green is the highest point of Cranborne Chase. Two dykes traverse the escarpment edge, the northernmost laterally and parallel with the main line of the ridge, the southernmost running between a deeply incised coombe to the south, across the main line of the ridge and dipping down the northern side of the escarpment. This is the most dramatic and better preserved of the two today.

The northernmost dyke, orientated approximately NE-SW, is badly mutilated at both ends, but it may originally have terminated shortly below the lip of a steep slope on the eastern side running down to a deep hollow in the northern escarpment edge NW of Win Green. From this point, it runs across a low spur extending to the NW of the main escarpment line to possibly terminate toward the end of another hollow on the western side. It consists of

twin ditches with downhill banks and simultaneously links two hollows in the northern escarpment and cuts off a low spur running out from it. Situated approximately halfway down the hill slope, its positioning in the landscape is rather unusual, as is its form. It is asymmetrically sited, its eastern end pointing down toward the terminal point of the coombe, its western end terminating some way down the side of the coombe. The bottom of the escarpment edge was probably visible at the original eastern terminus; however, this was not the case at the western terminus, now variously destroyed by a chalk pit, the course of the Roman and modern road, and a sunken trackway.

The southern cross dyke is well preserved and in some respects inverts the features of the northern one. It consists of two banks with a medial ditch and runs approximately NW-SE, although the line of the dyke is markedly curved toward both ends. This dyke runs across the ridge and drops steeply down the slopes of the ridge at both ends to terminate around the 225 m contour at both ends, a drop of 35 m from the ridgetop. The dyke terminates at precisely the points at which the bottom of the escarpment edge and coombe to the north and south, respectively, become visible for the first time, strongly suggesting that a view to the bottom of both was important. This dyke links the end of a deep, narrow coombe, Quarry Bottom, to the end of a large hollow in the northern escarpment bounded by the ridge of Charlton Down to the west and the spur across the northern Win Green cross-dyke runs (Figure 4.23).

From the terminal point on the northern escarpment edge, there are wide and panoramic views across the plains below toward the ridge of high land to the northeast of Shaftesbury occupied by the Castle Rings hillfort 5 km away—to and from which we can suggest a probable line of movement to and from the escarpment edge. The view from the southeast end of the dyke is very different, being dominated by the sinuous lines of the coombes breaking up this part of Cranborne Chase, with only limited views to the distance. Both the NW and SE ends terminate next to well-defined ‘natural’ dykes or gullies breaking up the chalk escarpments and terminate on their sides toward the top on the west. In many respects, these natural dykes afford much easier paths of movement up and down the chalk escarpment than does the course of the cross dyke, which is extremely steep and difficult to climb at both ends. From the southeast end, no other prehistoric monuments are visible, whereas from the northwest end, the other Win Green cross dyke can be seen and possibly two round barrows in the distance.

When one walks along the ditch from one end of the dyke to the other, one notes that the wider landscape on both sides is dramatically blotted out. All that is visible is the landscape at the terminal ends. So, the dyke channels vision, and one cannot see across the chalk ridge at all. It is only at the terminal points of the dyke that the vistas widen out at all, and the contrast between



FIGURE 4.23 Northern terminal end of the Win Green South (cross dyke No. 7) on the Ox-Drove ridge running to a gully on the northern escarpment edge.

the wide, expansive, and open views at the northwest end and the enclosed interiorised world of coombes at the southeast end could not be more marked, and one must, of course, pass over the top of the ridge before the landscape at either end becomes visible.

The whole of the northern dyke is visible from long distances away to the north of the chalk escarpment and when new would have created a dramatic sinuous line across it. Only the very top of the southern dyke where it crosses over the ridge is visible from off the scarp to the north, the rest being concealed by the spur. It is clearly visible from Castle Rings hillfort off the ridge to the northwest.

Hatt's Barn (Figure 4.3: No. 8) The dyke at Hatt's Barn, consisting of a ditch with one or more banks on its western side, runs in a staggered course from the edge of a deep meandering coombe to the north (Figure 4.24) to the side of the end of a very shallow coombe at its southeast end. This shallow coombe in turn runs down into the depths of Boyne Bottom, which runs roughly parallel with part of the southern course of the dyke. This change in orientation of this dyke from NNW-SSE to NNE to SSW may be explicable as an alteration to an original intention for the dyke to run down a steepening



FIGURE 4.24 View along the coombe cutting into the chalk ridge from the west, at which the northern end of the Hatt's Barn cross dyke (No. 8) terminates along the middle of its course to the right of the photograph.

slope to end at the side of Boyne Bottom, and it is of interest to note that the coombe that the dyke links to resembles a wide shallow dyke in many respects, so that the dyke in effect becomes a continuation of the natural 'dyke' running down to the coombe.

Fontmell Down (Figure 4.3: Nos. 9–11) Another 2 km to the west is found the first of two dykes cutting across the ridge of Fontmell Down, a dramatic terminal spur on the line of the chalk escarpment to the west. These two dykes are only 250 m apart but of markedly different character. The easternmost dyke forms a virtually straight line running obliquely across the spur from WNW to ESE. It consists of a single bank with the ditch on the northern side. The southern end runs to the middle of the upper slopes of Longcombe Bottom, a dramatic narrow coombe to the south, and the northern end terminates on the far gentler slopes of the northern escarpment. Here there are extensive views across the Blackmore Vale. At neither the southern or the northern end is it possible to see down to the bottom of the scarp edge.

The eastern dyke is bivallate in form. Its northern end runs to the middle of the scarp edge to the point at which one can look down to the base of the scarp. Here the slopes are quite gentle (Figure 4.25). By contrast, the southern end of the dyke terminates some way down the side of the precipitous slopes leading down to the head of Longcombe Bottom considerably below the point at which one can see down to the base of the slope (Figure 4.26). From the northern end, the view is out across the lowland plain to Melbury



FIGURE 4.25 Northern end of the Fontmell Down east cross dyke (No. 10) on the Ox-Drove ridge.



FIGURE 4.26 Southern end of the Fontmell Down east cross dyke on the Ox-Drove ridge.

Beacon beyond with its dramatic cross dyke clearly visible. From the southern end, the view seems to be directed toward the depths of the coombe bottom. When one walks along well-preserved sections of the ditch, one's view of the wider landscape is blotted out except toward the terminal ends. This dyke

changes direction in the middle as it crosses over the top of the ridge from running NW-SE to ESE-WSW. Walking north along the ditch, one notes that this change in direction coincides with the point at which Melbury Beacon can first be seen in the distance.

To the south of these dykes, another dyke known as the Tennerley Ditch runs NW-SE from the side of Longcombe Bottom, across the brow of the chalk escarpment, to end somewhat indeterminately on a gentle slope to the south. Its northern end contrasts by ending some considerable way down the lip of the coombe looking down to the depths of the coombe. Were it not for woods, it would be intervisible with the southern end of both the dykes crossing Fontmell Down on the other side of the coombe.

Melbury Beacon (Figure 4.3: No. 12) The final dyke is 1.5 km to the north of those crossing Fontmell Down. Running NNE to SSW, it cuts dramatically across a ridge of land rising to the west joining Melbury Beacon to Compton Down. Univallate in form, it constitutes a ditch with a bank on the uphill side. In places where the ditch is well preserved, an observer's view of the landscape on both sides of it is again blotted out, with the observer's vision being directed along the course of the dyke. The eastern end stops abruptly some way down the lip of an extremely steep slope dropping down to the bottom of Dukum hollow, a deeply incised declivity in the escarpment edge (Figure 4.27). At this end of the dyke, one's eye is directed down to the base of the escarpment and across the plain below. The dyke ends at precisely the point down the slope at which the base of the escarpment can be seen. The western end runs much farther down the slope of the hill. It is much less steep on this side, and it stops just to the northwest of a small natural 'dyke' or gully in the escarpment edge, at the point of which its base is visible (Figure 4.28). This linkage of the dyke to a 'natural' dyke in the chalk scarp is reminiscent of the southern terminus of the Hatt's Barn cross dyke. The dykes both cut across the chalk downlands and are closely related to pre-existing features.

DISCUSSION The cross dykes along the Ox-Drove ridge are clearly a diverse set of structures varying considerably in original length from examples 300 m or less in length to others, such as Tennerby Ditch, running for over 700 m. Four are bivallate with a medial ditch flanked by banks, seven appear to be univallate, and to the northwest of Win Green one badly mutilated example has two parallel banks and ditches. The earthworks are located at regular 2-km intervals along the ridge but do not divide up the ridgetop in any readily comprehensible pattern. If their purpose was simply to divide up the ridgetop into blocks of land of roughly equal size, we might expect those on Berwick Down to run north-south rather than west to east and cut across the ridgeway rather than cutting across a spur to the south between two coombes. The bivallate



FIGURE 4.27 Northern end of the Melbury Beacon cross dyke (No. 12) on the Ox-Drove ridge dropping over the ridge top and down toward the declivity in the escarpment edge of Dukum Bottom.



FIGURE 4.28 Southern end of the Melbury Beacon cross dyke (No. 12) on the Ox-Drove ridge terminating just above and beside a distinctive gully in the escarpment edge.

examples do not appear to be more important or strategically sited than those with a single bank and ditch, and this distinction may be unimportant in terms of their purpose.

In terms of their topographic locations, the following three cross-dyke groups can be distinguished:

1. Those that run from the escarpment edge and cut across the chalk ridge and fizzle out on gently sloping terrain. These dykes divide up the ridgeway. There are four examples (Nos. 1, 2, 3, 11).
2. Those that cut off significant hills and spurs. Again there are four examples (Nos. 6, 9, 10, 12). The hills Win Green, Melbury Beacon, and the Fontmell Down spur, on which these dykes occur, are, respectively, the two highest points along the ridgeway and the most dramatic spur on the western escarpment of Cranborne Chase. The purpose of these dykes may have been to emphasise the symbolic power and significance of these places.
3. Those that run between the coombes and the escarpment edges cutting across the chalk ridge and/or spurs running out from it. Again there are four examples (Nos. 4, 5, 7, 12). The significance of these dykes seems to be to link the coombes and the lowlands while simultaneously dividing the ridge and spurs.

In virtually all cases it seems to have been of great importance that an observer be able to see from the end of the dykes down to the very base of the escarpment edge or the bottom of the coombes below. The escarpment or coombe bottom is visible immediately below the dyke end from at least one end of eleven out of twelve of the dykes. In four cases (4, 7, 9, 12), these features are visible from both ends. For this to be the case requires sometimes that the dyke descend over the lip of the escarpment and some way down the escarpment edge. Some, resembling a slide, descend the steep lip of the escarpment or coombe for anything up to 50 m or more in an exaggerated fashion, and far beyond the point at which the base first becomes visible. Others, such as the northern end of Win Green South (No. 7) or the eastern end of the dyke cutting across Melbury Beacon (No. 12), terminate more or less exactly at the point at which the base of the coombe or escarpment first becomes visible when one is walking along them. All this suggests the importance of one's vision becoming directed *downward* at the end of the dykes rather than simply to look out and across the wider landscape beyond. These dykes make use of and serve to emphasise the precipitous slopes to which they are intimately related. Only one dyke (No. 7) plunges down precipitous slopes at both ends. This dyke also has another unique feature. Both ends terminate adjacent to natural 'dykes' or linear depressions cutting into the chalk escarpment. This

characteristic occurs at one end of two other dykes (Nos. 8 and 12). In these cases, a metaphorical or analogical relationship between coombes and dykes appears to be made explicit: that is, that they resemble one another in many respects. This resemblance enables one to suggest that some of the cross dykes were considered to be continuations of the coombes and vice versa and that the linkage created between dyke and coombe was of deep symbolic significance. In this respect, it is interesting to note the sinuous and meandering nature of most of the dykes and their often sudden change in direction and orientation. Straight dykes such as the western of the two cutting across the spur of Fontmell Down appear to be the exception rather than the rule.

The manner in which the dykes relate to the microtopography of the escarpment edge and that of the coombes is also of interest. In relation to the coombes, four of the cross dykes (4, 7, 8, and 9) terminate at the head of a coombe. In three cases, they end at the side of the coombe, and in only one case (No. 7) does the dyke continue along the line or directional orientation of the coombe. Other dykes (10, 5, 11) terminate along the side of the coombe edge some distance from its end. When the dykes terminate on escarpment edges that are indented or scalloped, they are much more likely to run to the head of these edges (Nos. 1, 2, 3, 5, 7, 8, 9, 12)—but rarely in a symmetrical fashion, that is, in their middle but generally on one side or the other.

Relationships of the Dykes to Tracks, Settlements, and Field Systems

ROADS AND TRACKS All the paths and tracks on the sides of the ridges have one thing in common, irrespective of their antiquity: they run obliquely up and down the scarps. In some cases, they cut diagonally across the lower ends of the cross dykes. There are no cases where trackways lead up to the bases of the bivalent cross dykes, suggesting their possible use as ‘cattle ways’. These dykes plunge directly down the sides of the scarps and coombes, making their use as regularly used roadways highly unlikely, if not downright impossible. Trackways do pass the ends, or cut through the spur dykes at Burcombe, on Buxbury Hill, and on White Sheet Hill along the Ebble-Nadder ridge, and on Win Green and Melbury Hill along the Ox-Drove ridge, but the association cannot be described, since these trackways leading to the dykes and the fact that some pass around the end of the dykes may be purely fortuitous—that is, these trackways were later in date and avoided having to pass over the dykes. The argument that the spur dykes were constructed purely to divert traffic along trackways away from the spurs seems again unlikely.

HILLFORTS AND SETTLEMENTS (FIGURES 4.1, 4.2, 4.3) Along both the Ebble-Nadder ridge and the Ox-Drove ridges there are two enclosed

settlements or univallate 'hillforts'—respectively, Chiselbury and Winkelbury. Chiselbury was built directly to the north of one of the deepest and most dramatic coombes to cut into the Ebble-Nadder ridge, Winkelbury on the only true northern spur of the Ebble-Nadder ridge. There are no Bronze Age barrows in the immediate vicinity of Chiselbury, which occupies one of the few places along the ridgetop without them. By contrast, Winkelbury Hill has one of the largest clusters of barrows along the Ox-Drove ridge. Here the hillfort was constructed below them on quite steeply sloping ground at the northern end of the spur rather than around its flat top with its ramparts slung low around the western, eastern, and northern spur slopes. When one walks from the south to the north through the middle of the enclosure, neither the western or eastern banks are visible, providing uninterrupted views up and down the Ebble valley. For much of the way, the northern rampart is similarly invisible. So, one has the impression of being in an unenclosed space open to the world beyond. By contrast, when one stands in the middle of the Chiselbury enclosure, which slopes much more gently from south to north, the view west along the ridge and south off the ridge is completely blocked by the bank, and it is partially blocked to the east. It appears completely open only when one looks north.

Standing on the northern bank of Chiselbury, one can look out across the plain of Wardour but not down to the bottom of the scarp slope to the north, because the bank is set some way back from it. Again, this situation contrasts with Winkelbury, where the bottom of the scarp slope is visible along much of the western side. Chiselbury is a circular enclosure that is designed to cut out much of the world beyond; Winkelbury opens itself to the depths surrounding it. The single entrance to Chiselbury facing southeast is not orientated toward any significant landmark. It just looks out across the flat ridgetop, which runs southeast at this point. By contrast, the staggered southwest entrance of Winkelbury is orientated toward Win Green and its summit barrow is the highest point along the Ox-Drove ridge.

The earthwork associated with Chiselbury is a cross-ridge dyke linking the dramatic coombe to its south, with the northern scarp of the ridge the enclosure itself being set between the two. At Winkelbury, there is also a possible outwork or unfinished cross-ridge dyke situated 500 m to the south and out of sight from the hillfort. This is a bank up to 6 m wide and 150 m long running from east-west across the eastern side of the spur top. It has a staggered entrance way through it that, as Pitt-Rivers noted, resembles the southern entrance of the hillfort (Pitt Rivers 1888: 236). Just as Winkelbury remained unfinished, this earthwork may be an unfinished spur dyke originally intended to run right across the spur from scarp slope to scarp slope. It is in the area of land between this bank and the hillfort that the Bronze Age barrows are situated.

Two further hillforts, Castle Ditches, Tisbury, and Castle Rings, near to Shaftesbury, are located on hills a short distance away to the north (see Figure 4.1). Castle Ditches is by far the most massive and elaborate, with multiple ramparts defining its southeast entrance. These hillforts may be linked downland and lowland settlements. From Castle Ditches, the entire Ebbles-Nadder ridge is visible from its western end at Whitesheet Hill as far east as Chiselbury, which marks the limit of the visual field to the east. None of the cross dykes are visible from it. From Castle Rings, the visual field is from Melbury Beacon in the west, marking the end of the Ox-Drove ridge, to Winkelbury and beyond. Part of the Ebbles-Nadder ridge is also visible as far as Ansty Down. It is interesting that the visual field of both these hillforts off the ridges more or less ends with the two hillforts, to the east, situated on the ridges. Neither of the hillforts on the ridges is intervisible nor are the hillforts situated to the north off the ridges. From Castle Rings, the cross dykes on Win Green and White Sheet Hill are visible. The earliest ramparts of Winkelbury Hill, situated on the summit, are particularly prominent from Castle Rings and resemble a particularly massive cross dyke cutting across the hilltop. These pairs of hillforts may have been interconnected by patterns of upland and lowland movement incorporating both upland pasture and lowland grazing.

Both Castle Rings and Winkelbury have outworks, to the west and south respectively, that run across the ridge. Those at Winkelbury run across the spur on which the hillfort is situated from west to east about 500 m to the south. Those at Winkelbury may have been intended to be a true cross dyke, but like the hillfort itself it may be unfinished (Feacham 1971). To the east, a bank extends to the shoulder of the scarp but does not run down it. To the west, there is no trace of the bank beyond the top of the hill. This earthwork was described by Pitt-Rivers as an outer defence of the hillfort. He noted that it has a staggered entrance mirroring that of the main southern hillfort banks and ditches to the north across the spur.

The Chiselbury enclosure has been dug into twice but produced no evidence of occupation (Colt Hoare 1812; Crawford and Keiller 1928: 76). One or two cross dykes are directly linked to it. Excavations at Winkelbury hillfort (Pitt Rivers 1888) do not provide much indication of anything other than temporary occupation, and the hillfort itself is unfinished. The hillfort occupies the only really prominent northern spur along the ridge jutting out from the escarpment line.

The Swallowcliffe Down settlement (Clay 1925, 1927) is situated on the ridge top at the head of a particularly dramatic and deep coombe. There is a dramatic view from this place down the coombe and across the Ebbles valley to Winkelbury and along the ridgetop east to Chiselbury and west to White Sheet Hill. A ditch surrounds the southern part of the settlement area and curves

round to the north terminating by and just avoiding a Bronze Age barrow to its east, which therefore still seems to have been a significant landscape marker to be both used and avoided. Extending over about 1.5 ha, it is bounded on the north, northwest, and northeast by the steep escarpment of the downs and on the south, southwest, and southeast by a semicircular ditch. There is about 150 m of level downland between the northern extent of the c. 100 storage pits and areas with hearths, excavated by Clay, and the northern scarp. Post holes suggest that the enclosure may have been palisaded. To the south and separated from it by the Ridgeway track is a semicircular 'amphitheatre' of uncertain use, open to the north, where an original entrance to a possibly circular enclosure may have been. The settlement area is located less than 200 m to the north of a dramatic coombe (see Figure 4.18) and seems to be directly associated with the coombe and a cluster of five cross dykes (30% of those on the ridge) linked to it and parallel coombes to the west and east. Clay reports that at the head of the coombe are signs of a dam and a catchment pond, probably the water supply for the village (Clay 1925: 59). Clay considers that the cross dyke flanking the settlement area to the southwest (Figure 2: No. 9) was constructed when the settlement was extant (Clay 1927: 51), and indeed this explains its unusual orientation in relation to the ridge. This dyke is flanked by 'Celtic' fields to its southwest that were earlier or contemporary with it. Field lynchets also adjoin the village area to the north and northwest.

Only three other settlements are known along the Ebbles-Nadder ridge on Prescombe Down and Fyfield Bavant Down (Clay 1924; Fowler 1964: 56). These all occur on the tops of spurs running south from the ridge and at a distance of 1 km from the ridgetop and are approximately contemporary with the Swallowcliffe Down settlement (Figure 4.1). None are associated with cross dykes. The spurs are separated by comparatively small and shallow coombes that lack cross dykes linking them to the northern escarpment. No other enclosed or unenclosed settlements are known, despite extensive aerial photography of an area most of which has been ploughed.

Along the Ox-Drove ridgeway, dense settlement areas are known from transcription of aerial photographs, at the far eastern end of the ridge. Here the cross dykes and linear ditches clearly form one element within a complex of settlements, enclosures, and associated field systems and drove ways dated to the late Iron Age and continuing in use during the Roman period (Corney 1990; Rahtz 1990). The cross dyke (Figure 4.3: No. 1) at the eastern end of a series of linear ditches and banks runs from the northern escarpment up and over the slope, terminating to the south in an area with extensive fields but lacking any clearly defined enclosures. The two other dykes (Figure 4.3: Nos. 2 and 3) along this eastern part of the ridgeway may have terminated in a similar manner in areas with fields and enclosures on land gently sloping to the south.

Their course and extent across the ridge are uncertain, and none seem to be linked to coombes to the south, which are relatively shallow and insignificant along this part of the ridge.

Elsewhere, late Iron Age settlements are known from Berwick Down (Wainwright 1968) and Rotherley Down (Pitt Rivers 1888). On Berwick Down there are at least two Iron Age settlements. The smaller, to the south, excavated by Wainwright, is of late Iron Age date, founded perhaps a generation before the Roman invasion of c.e. 43. It consisted of a kite-shaped enclosure containing one round house, four granaries, and thirty-four pits and working hollows. This was a small farmstead, perhaps occupied by a single family. The settlement area to the north is much more extensive and comparable in size to that of Rotherley. Here Pitt Rivers's excavations revealed a complex of enclosures, storage pits, granaries, working hollows, foundations of a corn-drying furnace, one or two house foundations, and a small rectangular building.

Both settlements are situated on spurs projecting south from the ridge bounded by deeply incised coombes to the west and the east in an area with the deepest and most complex coombe systems in the study area. Both settlements, which are intervisible, are situated almost opposite each other about 750 m apart on the southern ends of spurs gently sloping to the south, 1 km from the ridgetop. The occurrence of two contemporary settlements on southern spurs, separated by an intervening coombe, mirrors the location of the Fyfield Bavant settlements on the Ebble-Nadder ridge. The Berwick Down and Rotherley settlements are located only 2 km to the south of Winkelbury hill-fort, which is due north of the Rotherley Down settlement, and both occupy the same area of higher ground. Two univallate cross dykes cut across Berwick Down to the north of the settlement area and seem to bound it off. By contrast, none are known on Rotherley Down.

FIELD SYSTEMS The relationship of the dykes to the pattern of ancient fields in the study area is difficult to assess, since there has been such widespread arable destruction of the chalk ridges. For the Ebble-Nadder ridge, Fowler's map (1964) shows that with only a few exceptions the distribution of cross dykes and field systems are separate. The only known association between field systems and a bivallate cross dyke is on Swallowcliffe Down. Celtic fields are largely confined to scarps south of the ridge but almost certainly continued to run across the spurs between coombes. Aerial photographs show that the bivallate and univallate dykes to the south of the Swallowcliffe Down settlement (Figure 4.2: No. 11) may originally have curved in their course to form some form of irregular enclosure (Fowler 1964: 52). Celtic fields on the west and north scarps of the spur, across which the Buxbury univallate cross dyke runs (Figure 4.2: No. 7), suggest a close association, and the dyke may mark the southern limits of these

fields that did not extend across the main ridgetop. Along the Ox-Drove ridge, aerial photography has shown the presence of complex field systems across and to the south of the ridgeway (Corney 1990: Figure 4.3). Elsewhere they occur on scarps and spurs, as along the Ebble-Nadder ridge. Interestingly, the only evidence of settlement we have along the Ox-Drove ridge is on southern spurs running away from the ridgetop, the enclosed site of Winkelbury Hill being the exception. A similar pattern occurs along the Ebble-Nadder ridge, the two exceptions being the ridgetop settlements of Swallowcliffe and Chiselbury hillfort. The former is surrounded by fields, the latter is not.

The picture that seems to emerge is that the ridgetops across which the cross dykes run may have been largely open and used predominantly for pasture, whereas lower spurs and ridges were settled with a dense pattern of arable fields. The cross-ridge dykes were therefore built across areas of open downland used for pasture and for the most part separate from areas with settlement and arable land. The blocks of downland defined by these dykes along the ridgetop were highly variable in size: a few to no more than 500 metres wide across the ridgetop and between 1.1 and 3.5 km long along the Ebble-Nadder ridge and 0.75 and 4 km along the Ox-Drove ridge. On the Ebble-Nadder ridge, the longest block includes Chiselbury hillfort, which is at the far eastern end. Again along the Ox-Drove ridge, the longest block includes Winkelbury hillfort, which is situated toward the eastern end.

CONCLUSIONS: TOPOGRAPHY AND ITS METAPHORIC SIGNIFICANCE

The clustering of many of the round barrows in relation to the coombes indicates the significance of these places. Other round barrows also seem to be related to significant points along the northern escarpment edge—places where it is indented by gullies or changes direction. The construction of the cross-ridge and spur dykes appears to involve both a continued recognition of the significance of these places and that of some of the earlier Bronze Age barrows. Both the cross-ridge and spur dykes link coombes and escarpment edges. Significantly, it is the central coombe of the Hydon Hill/Little Down system on the Ebble-Nadder ridge, around the southern end of which the barrows cluster at the point at which these coombes join, that is later linked to the escarpment edge to the north by the Compton Hut dyke D, which effectively continues the line of the coombe up and over the ridge and down the other side. Both of the only two coombes to cut into the northern escarpment edge are linked by dykes to the northern scarp. The course of the longer dyke, Burcombe C, is obviously related to the existence

of pre-existing barrows in the landscape. Burcombe A and B cut across and mark out the same spur as the Punch Bowl barrow (No. 23). They run up to the coombe head, whose importance is already marked by the barrow. The southern dyke, situated only about 30 m north of the barrow, continues down the precipitous scarp slopes leading down to the coombe bottom and the bottom of the escarpment edge, ending about where the bottom becomes visible below. The Compton Hut dyke D continues far down the precipitous slope of the northern scarp well beyond the point at which the base of the scarp slope becomes visible. All the dykes link with the heads of coombes, either continuing their lines across the landscape or establishing a change of direction.

The characteristics of the chalk ridges and spurs and the coombes are strikingly different. These aspects of the chalk landscape, together with the bold and indented escarpment edges, give it its special qualities and character. Some of the contrasts are summarised here:

<i>Ridgetops</i>	<i>Coombes</i>
Wide views	Restricted views
Exterior	Interior
Windswept	Sheltered
Light	Shade
Dry	Wet
Treeless	Wooded
Looking down	Looking up
Visible	Secret/Hidden
Sound dulled	Sound amplified (echoes)

The interiorised worlds of the coombes, each with its own individual qualities and character, are utterly different from the ridgetops and spurs that separate the coombes. The coombes wend and wind their way, join and bifurcate, open out and close in on themselves as they pass through the chalk. They have their own microtopographies, climate, and vegetation. They are hidden places, visible at all only from short distances away. All are invisible from central areas of the ridge and spur tops. These are, by contrast, relatively undifferentiated and uniform in character. It is only the escarpment edge that differentiates different parts of the ridgetops. The coombes amplify sound and have different qualities of light and shade. They invite one to follow and explore their courses, both dividing the landscape and establishing different natural paths of movement up and through it. The world of the ridgetop is, by contrast, a big wide and open landscape, a macro world of the extensive vista as opposed to the small enfolded world of the coombe. Atmospheric

effects and temperature inversions may fill the coombes with mist and cloud or alternatively blanket the ridgetops above. When the mists fill the coombes, they are magically transformed into lakes. In exceptionally wet periods, water may begin to appear in the base of the coombes only to sink away again after a few hours or days.

Some of the barrows obviously mark out places of especial significance along the courses of the coombes—places where they join, or open out, and places where they end, perhaps conceived as doorways to a world below. These low, wet, mysterious, and hidden incisions in the landscape, with their inner depths, were probably associated with particular spirits, mythical forces, and the underworld. Such places could be conceived as dangerous; hence from some barrow sites one looks across rather than down into the depths of the coombe. The association of other barrows with transitional places in the landscape on the way down to the coombe bottoms may be indicative metaphorically of the passage from life to death, the sky and the heavens to a watery underworld; hence their siting on the shoulder of slopes, below the shoulder, halfway down the slope, and so on. There is an important changing visual perspective in all this. From only a few barrows, the coombe bottom or the escarpment edge immediately below them is visible: from them the depths can be seen. Because the barrows are sited progressively higher up in the landscape, this visual perspective of looking directly down into a different world below becomes successively diminished. Instead, one has only partial views along or across coombe bottoms and escarpment edges. From the ridgetop summit barrows, such a view of the landscape is entirely removed. Here one is in contact only with the sky. The relationship of other barrows to gullies and places where scarp slopes change direction indicate the symbolic significance of these aspects of the topography, too, as places of transition, perhaps again of a metaphoric journey from life to death, high to low. The barrows on the flat ridgetop summits, at the very highest points in the landscape, must obviously be associated with the sky, and they emphasise that height as well as watery depths was of great ritual significance.

It can thus be suggested that the entire barrow distribution, when considered as a whole, networks or links every distinctive topographic element in the landscape into a coherent whole with possible cosmological significance in terms of a life journey. It also obviously marks out the entire landscape and lays claim to it. The patterns of movement of people from coombe to ridgetop to escarpment edge would always be marked out by these barrows. Now, monuments to the dead can, of course, also be used to highlight significant differences between the status and the power of those in the world of the living. Each coombe is unique in various ways. Some are strong and

dramatic incisions in the landscape; others are weak. Those who could symbolically control the 'strong' coombes and their spirit powers could enhance their authority in the world of the living. It is then, perhaps, not so surprising that the largest barrow at the eastern end of the Ebbles-Nadder ridge (No. 23) is directly associated with the most prominent coombe, Punch Bowl Bottom, and is located at its head. Patterns of intervisibility between barrows might be related to social connections between particular lineage groups and coombes. A barrow could be linked to a particular coombe in such a way without having to be sited near it.

The detailed study of dykes has shown that in virtually all cases it seems to have been of great importance that an observer be able to see from the ends of the dykes down to the very base of the escarpment edge or the bottom of the coombes immediately below. For this to be the case requires sometimes that the dyke descend over the shoulder of the escarpment and some way down the escarpment edge. Some, resembling a slide, descend down the steep slope of the escarpment or coombe for anything up to 50 m or more in an exaggerated fashion, and far beyond the point at which the base first becomes visible below the dyke end. Others terminate more or less exactly at the point at which the base of the coombe or escarpment first becomes visible when one walks along them. As mentioned earlier, all this suggests the importance of one's vision being directed *downward* at the end of the dykes rather than simply to look out and across the wider landscape beyond.

A direct metaphorical relationship between coombes and dykes appears to be made explicit in the case of bivallate forms with a medial ditch in that the forms of the dykes and the coombes closely resemble one another in many respects. This enables one to suggest that some of the cross-ridge dykes were considered to be continuations of the coombes and vice versa, and that the linkage created between dyke and coombe was of deep symbolic significance. The dykes as artificial coombes continued the lines of the coombes up into the sky and over the ridgetop and down the northern scarps to the lowland bottoms beyond. In this respect, it is interesting to note the sinuous and meandering nature of many of the dykes and their often sudden change in direction and orientation—and in this respect again they resemble the coombes. Straight dykes appear to be the exception rather than the rule. If the dykes were coombes in the sky, what implications would this have for our understanding of them?

It may have been that their function of *linking* both the coombes and the lowlands was of equal or of greater importance to the manner in which they *divided* the ridges. Those dykes that cut across the ridgetops *ipso facto* divided them, but this division cannot necessarily be assumed to be their primary purpose. The alternative argument is that they served to link and network

the topographies of coombes and lowlands. The dykes then were expressions of sociocultural norms investing the landscape with meaning, a coding of space in relation to socially significant ridges, spurs, and coombes. Their construction, use, and meaning may have been part of a ritual practice seeking to maintain harmonious relationships with a complex pantheon of invisible beings and forces associated with wet places such as the coombes, river valleys, and the lowlands, significant places for the deposition of votive deposits from the Bronze Age onward (Bradley 1990, 2000). Thus the dykes were ritual works, perhaps processional routes or travelling ways, either in reality or in the imagination, between the coombes to the south and the lowlands to the north, from one coombe to another and from scarp to scarp. They were part of the manner in which cultural meanings in the landscape became materialised. As such, they may have formed part of a ritualised order of space, time, and movement linked to the seasons, the significance of different cardinal directions, height and elevation, the juxtaposition of ridges and valleys, rivers, spurs, and significant hills. Particular hills and spurs were clearly marked out and emphasised by the spur dykes, whereas the cross-ridge dykes linked significant coombes, each with its own particular identities and associations, with the lowland. Yet other dykes joined one coombe to another. In sum, they connected important elements of the topography into a reticulated system, improving on what nature had already done. They thus completed the link that 'nature,' or the ancestral forces, had not made between the coombes and the lowlands beyond.

I have argued that both the long and the round barrows were located to create connections and establish relationships both between themselves and other barrows and to refer to, or connect, significant 'natural' places in the landscape far beyond their specific location. In other words, the significance of the location of a barrow in one place was linked to that of another in a quite different place. The location of one barrow was understood in terms of that of another. They thus both marked specific places as meaningful and simultaneously acted as material metaphors for the wider landscape as a whole. And so they also served to codify important topographic features of the landscape both in relation to themselves and through their links to other barrows in different places in it. Through the process of constructing round barrows in different places, people networked that landscape into a coherent whole. Through these connections, metaphorically an individual barrow became the wider landscape, and in turn the landscape was the barrow location. So people made themselves and their social relations and constructed their identities in relation to both the specificity of place and the totality of the wider landscape conceived as a network of relationships among different places within it.

It was the relationships among the barrows and in turn their relationships with their landscape settings that empowered people to identify with the landscape as a whole rather than just specific places (individual barrow locations) within it. The construction of dykes represented an alternative way of thinking through, understanding, and relating to landscape. Interconnections among different places in the landscape previously marked out as significant through the scattered individual locations of groups of round barrows in it now became physically joined in the form of one large and continuous monument sweeping across it. Linkages that had previously been only conceptually implicit in the overall patterning of the individually very different locations of round barrows were now made explicit and objectified in a material form through the process of dyke construction. What had previously been a non-material resource in which the social and cosmological significance of the contrasts in the different landscape locations of barrows had to be connected through experience and talk was now made materially explicit through the network of dykes inscribed across it.

Although we have no direct evidence for Bronze Age settlement anywhere along either the Ebble-Nadder ridge or the Ox-Drove ridge, the early and later Iron Age enclosures and associated field systems discussed above may indicate a much more intensive and permanent pattern of occupation and use than is suggested by the earlier Bronze Age barrow distribution.

The construction of the dykes may therefore have related to an increasing social and political need to physically control and lay claim to the land itself and the material and symbolic resources that it provided. The dykes' morphology and direct relationships to the coombes would effectively serve to *naturalise* them in the landscape. They might be perceived to be more a part of an order of nature, rather than an order of culture, and therefore had added social and political power when there was a desire to control the land. The argument here is that to control the land involved physically networking different elements of the topography of the ridge as opposed to dividing it up and erecting boundaries across it.

The cross-ridge and cross-spur dykes are clearly not closely linked to the distribution of Bronze Age round barrows, which seems to rule out any possibility that they might have been related to any possible marking out of 'territories' or land divisions supposedly marked out by these barrows, which has sometimes been claimed. Nor do they seem to be closely related to trackways up or down the scarps and into the coombes. They make improbable boundaries for field systems, and they do not appear to cut across fields, putting them out of use. The direct link with hillforts in the case of Chiselbury is much stronger, and those on Swallowcliffe Down and Berwick Down are clearly associated with settlement areas that were either earlier or that were associated with their

construction and use. Now these two settlements and the Chiselbury hillfort, the Fyfield Down, Rotherley, and Prescombe Down settlements are all closely associated with coombes. They are situated either on spurs between coombes or at the head of particularly dramatic coombes. Coombes seem therefore to be a common factor relating to both the locations of the settlements and many of the dykes.

Although the coombes separated the settlements on the spurs, some dykes joined the coombes. Here I wish to re-emphasise that it was their function of *linking* both the coombes and the lowlands that was of equal or of greater importance to the manner in which they *divided* the ridges. Those dykes that cut across the ridges *ipso facto* divided them, but this cannot be assumed to be their primary purpose, which may have been instead to link and network the lowland topographies of coombes and plains and the Ebble valley between the Ebble-Nadder and Ox-Drove ridges. The major bivallate cross dykes in profile most resemble coombes, and, in effect, they are artificial coombes that continue the lines of the coombes up into the sky and over the ridgetop and down the northern scarps to the coombe bottoms. The bivallate forms clearly bore a close analogical or metaphorical relation with the coombes, cultural constructions resembling natural forms. Their form and relationship to the coombes would effectively have served to *naturalise* them in the landscape. They would have been perceived to be part of an order of nature, rather than an order of culture, and therefore they had added power.

The dykes were expressions of sociocultural norms investing the landscape with meaning, a coding of space in relation to socially significant hills, ridges, spurs, and coombes. Their construction, use, and meaning may have been part of a ritual practice seeking to maintain harmonious relationships with a complex pantheon of invisible beings and forces associated with wet places such as the coombes, river valleys, and the lowlands, significant places for the deposition of votive deposits from the Bronze Age onward (Bradley 1990, 2000). Thus the dykes were ritual works not 'practical' tracks or cattleways. Instead, they were perhaps processional routes, travelling ways, between the coombes to the south and the lowlands to the north, from one coombe to another and from scarp to scarp. They were part of the manner in which cultural meanings in the landscape became materialised. As such, they may have formed part of a ritualised order of space, time, and movement linked to the seasons, the significance of different cardinal directions, height and elevation, the juxtaposition of ridges and valleys, rivers, spurs, and significant hills. Particular hills and spurs were also clearly marked out and emphasised by the spur dykes, whereas the cross-ridge dykes linked significant coombes, each with its own particular identities and associations, with the lowland, while yet other dykes joined one coombe to another. It was clearly the heads or terminal points of the coombe

systems that were of particular significance, more so than the character of the escarpment edges to which the dykes run, in many cases, and the very head of the coombe, if it ran into the ridges from the southern side, and its west or left, rather than its east or right side, was emphasised by the positioning of the dyke (see Table 4.8 and Figure 4. 29).

Table 4.8 The relationship of cross dykes to coombes (see Fig. 4.23).

Map No.	Relationship of Dyke to Coombe	Characteristics of Coombe
<i>Ebble-Nadder Ridge (Fig. 4.2)</i>		
1	Left (west) side of head of coombe	Deep, regular sides, wide, flat bottom
2	Left (west) side of head of coombe	Deep, regular sides, wide, flat bottom
3	Head of coombe?	Shallow, meandering, narrow, V-shaped
4	Head of coombe?	Shallow, regular, narrow, V-shaped
5	Left (west) side of head of coombe	Shallow, meandering, narrow, V-shaped
6	Head of coombe	Deep, regular sides, wide, flat bottom
7	Not applicable	
8	Head of coombe	Deep, regular sides, wide, V-shaped
9	Left (west) side of head of coombe	Very deep, regular sides, wide, flat bottom
10	Head of coombe?	Deep, regular sides, wide, flat bottom
11	Head of coombe	Deep, narrow, branching at end, flat bottom
12	Left (west) side of head of coombe to side of coombe	Deep, narrow, branching at end, flat bottom to very deep, regular sides, wide, flat bottom
13	Side of coombe to right (east) side of head of coombe	Very deep, regular sides, wide, flat bottom to deep, regular sides, wide, flat bottom
14	Head of coombe	Wide and open

(Continued)

Table 4.8 Continued.

Map No.	Relationship of Dyke to Coombe	Characteristics of Coombe
15	Head of coombe	Narrow steep-sided, V-shaped hollow
16	Left (west) side of coombe	Wide and open
<i>Ox- Drove Ridge (Fig. 4.3)</i>		
1	Not applicable	
2	Not applicable	
3	Not applicable	
4	Left (west) side of coombe to right (east) side of coombe	Narrow, meandering, very deep, V-shaped
5	Head of coombe to right (east) side of coombe	Narrow, meandering, very deep, V-shaped to narrow, meandering, very deep, V-shaped
6	Not applicable	
7	Head of coombe	Narrow, meandering, very deep, V-shaped
8	Right (south) side of coombe to right (north) side of head of coombe	Narrow, meandering with spurs, very deep, V-shaped to very shallow, flat-bottomed side branch of deeper meandering coombe
9	Left (west) side of coombe	Regular sides, wide, very deep, flat bottom
10	Left (west) side of head of coombe	Regular sides, wide, very deep, flat bottom
11	Right (east) side of coombe	Regular sides, wide, very deep, flat bottom
12	Not applicable	

The death of the sun in the western sky in itself might suggest, of course, a basic cosmological association between water, the west or left, and rituals concerned with death and the underworld with which the coombes and the dykes may have been particularly associated. There is an obvious precedent for the bivallate dykes in the form of the Neolithic cursus monuments, but

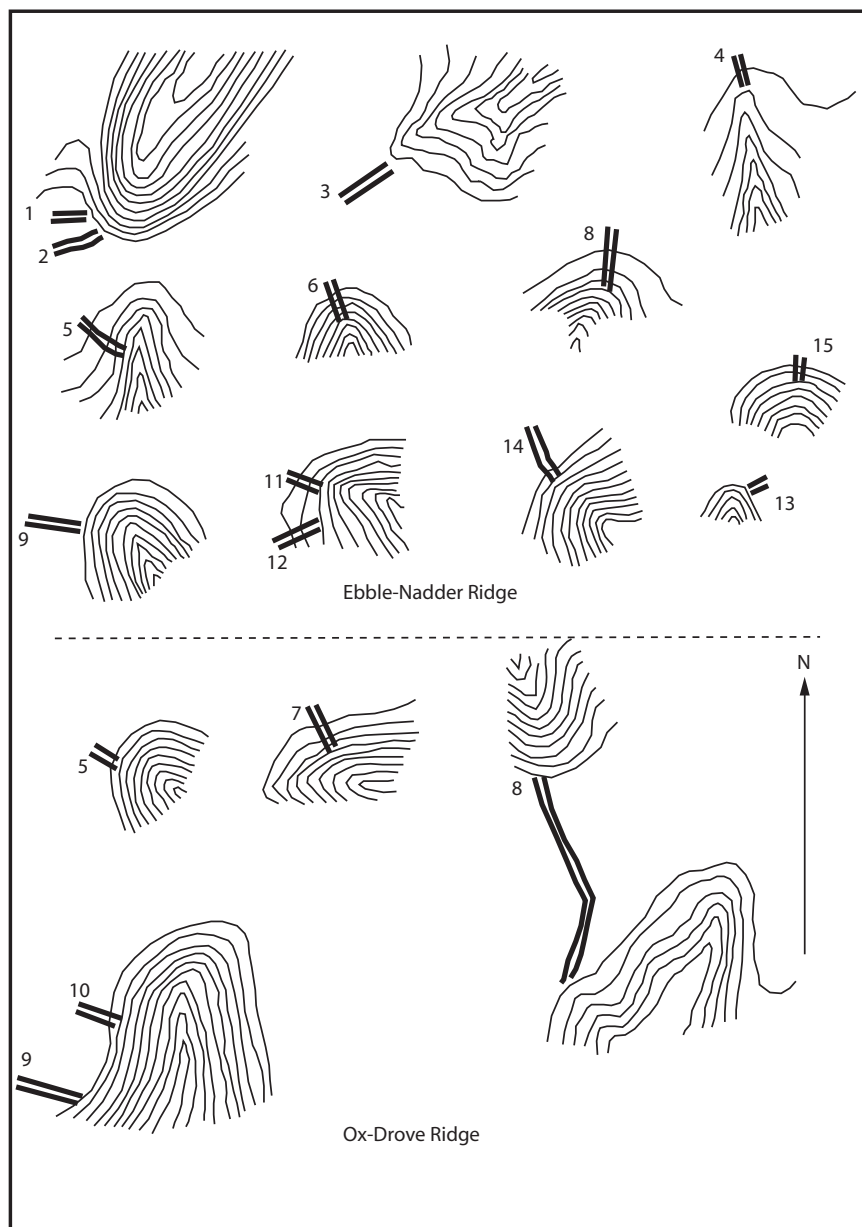


FIGURE 4.29 Sketch plans of the relationship of the terminal ends of dykes along the Ebble-Nadder and Ox-Drove ridges in relationship to coombes.

although the cursus monuments may cut across both ridges and valleys, as is the case for the Dorset cursus (Tilley 1994), the cross-ridge dykes appear to be much more subtly keyed and linked to the landscape. In sum, they connected important elements of the topography into a reticulated system, improving on what nature had already done. They completed the unfinished work of the Gods.



CHAPTER FIVE

THE BEACH IN THE SKY

This chapter provides a novel interpretation of three major and unusual aspects of the archaeological record of South Dorset that have been much discussed in the literature but little understood: (1) the widespread presence of grey Portland chert during the later Mesolithic extending from this area across a large part of southern England; (2) the occurrence of three massive Neolithic bank barrows; (3) the construction, during the Bronze Age, of one of the densest concentrations of burial mounds in the country running linearly along a dramatic 16-km stretch of chalk ridge. I argue that the meanings of these three disparate phenomena are rooted in mythological knowledges of the powers of place and metaphoric or analogic reasoning: attempts to relate to, understand, and culturally appropriate features of the 'natural' landscape that populations encountered on a daily basis. The use of Portland chert during the Mesolithic, the construction of bank barrows during the Neolithic, and the development of a linear barrow cemetery during the Bronze Age were all products of a dialogic encounter through which populations interpreted and reinterpreted the landscape in which they lived and incorporated earlier sets of understandings

physically objectified in monuments and topographic features, a metaphorical restructuring of social memories.

THE LANDSCAPES OF SOUTH DORSET

The study area (Figure 5.1) is a roughly 200-square-km stretch of land and sea in southern England. The most striking and important inland topographic feature of the landscape is the 16-km-long South Dorset Ridgeway, the southernmost edge of the chalk downlands of England. It is a windswept narrow ridge of high ground providing extensive views over the English Channel to the south and across North Dorset. The ridgetop runs approximately northwest to southeast. The chalk mass is dramatically truncated to the south by the escarpment created by the Ridgeway fault, where the land drops away to the softer Jurassic clays and shales of the coastal hinterland (Figure 5.2). When one looks inland from the coast, the Ridgeway appears as a huge rampart dominating the surrounding area. To the north, the fall of slope from the ridgetop away to the gently undulating terrain of the river valleys of the South Winterborne and Frome is much gentler and less pronounced. Throughout its course, the ridgetop has been cut into by small streams, now mainly vanished and below the present-day water table, resulting in a series of northward projecting spurs jutting out toward the South Winterborne valley, creating a rolling landscape. These spurs are all lower than the top of the ridge itself, and the folds in the chalk created by the dry valleys form a prominent part of the view north from the top of the ridge. Running along the base of the southern escarpment there is an almost continuous spring line. The southern line of the escarpment is indented at numerous places, but there are only two prominent spurs of chalk south of the ridgetop: Bincombe Hill and West Hill, both at the southeast end (see Figure 5.11).

The course of the Ridgeway can be subdivided into three sections: (1) from Broadmayne and West Hill in the east to Bronkham Hill, where it runs approximately due east-west and where the ridgetop undulates between 130 and 160 m; (2) the areas of Bronkham Hill and Black Down, approximately in the centre, where the overall longitudinal axis of the ridgetop changes to southeast to northwest and where Black Down is the highest point, rising to 237 m, with the tip of Bronkham Hill a little lower (205 m); and (3) the stretch from Black Down to Martin's Down in the northwest, varying in height between 170 and 195 m (Figure 5.3).

The chalk is overlain in a number of places by deposits of Tertiary and more recent date. Bagshot beds consisting of grey gravels with flint and quartz pebbles cap three areas of the Ridgeway: Bincombe Down, Bronkham Hill, and

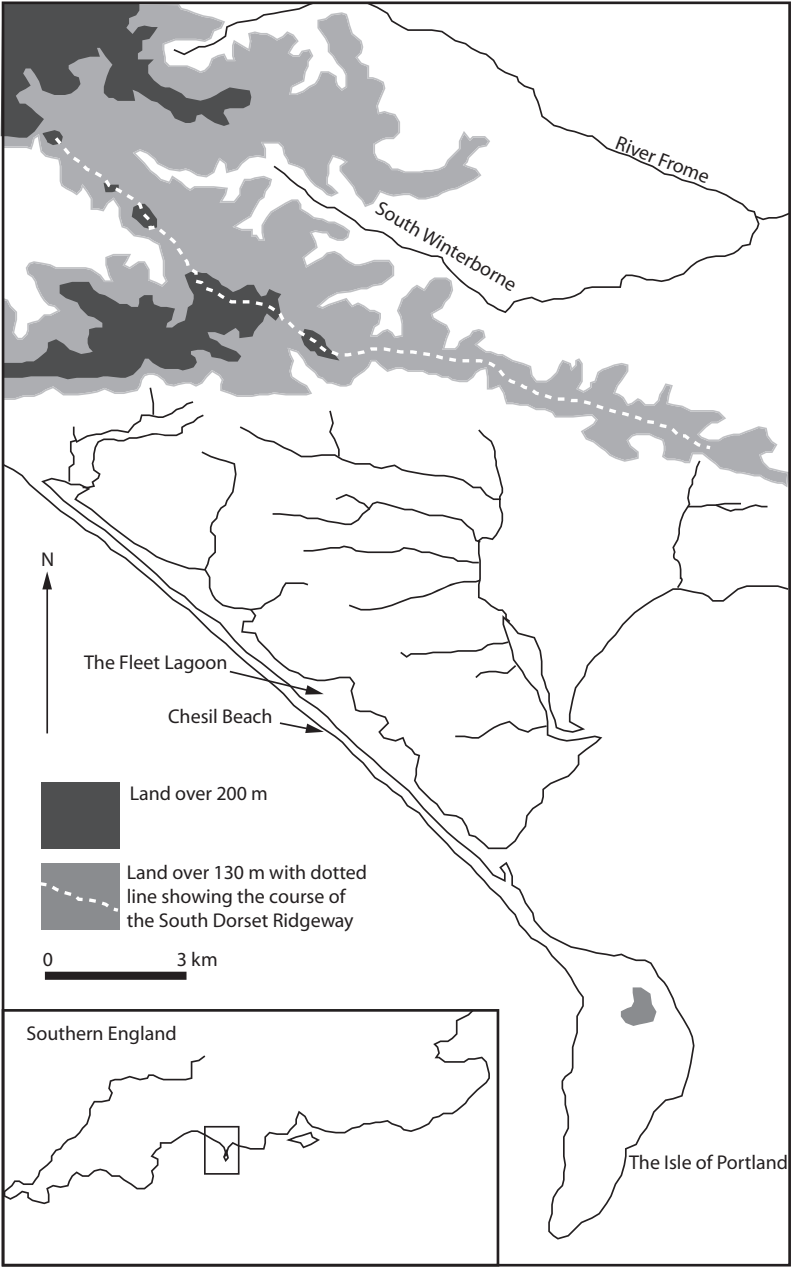


FIGURE 5.1 The study area: drainage and major topographic zones (land over 200 m black; land over 130 m stippled).



FIGURE 5.2 Eastern end of the South Dorset Ridgeway. The escarpment to the south can be seen to the left of the photograph with remains (now much ploughed out) of Bronze Age round barrow cemeteries (Groups R12–R14) running along its edge. To the top right, the Broadmayne bank barrow forming the focal point for barrow cemetery Group R11 is visible (copyright: RCHME).

Black Down, giving rise to a dark uncultivated heathland vegetation contrasting with the rest of the chalk downland, either under pasture or the plough. Small areas of clay with flints and pebbly clay with sand cover parts of the top of the ridge from Black Down to Martin's Down.

The Ridgeway is separated from the coast by a narrow strip of undulating land, mainly shales and clays. Two remarkable geological features mark the coast: the Isle of Portland and Chesil Beach. Portland, 6 km long (north-south) and 2 km at the widest point, juts into the sea like the beak of a huge bird at the end of Chesil Beach. It is utterly distinctive—the most conspicuous headland

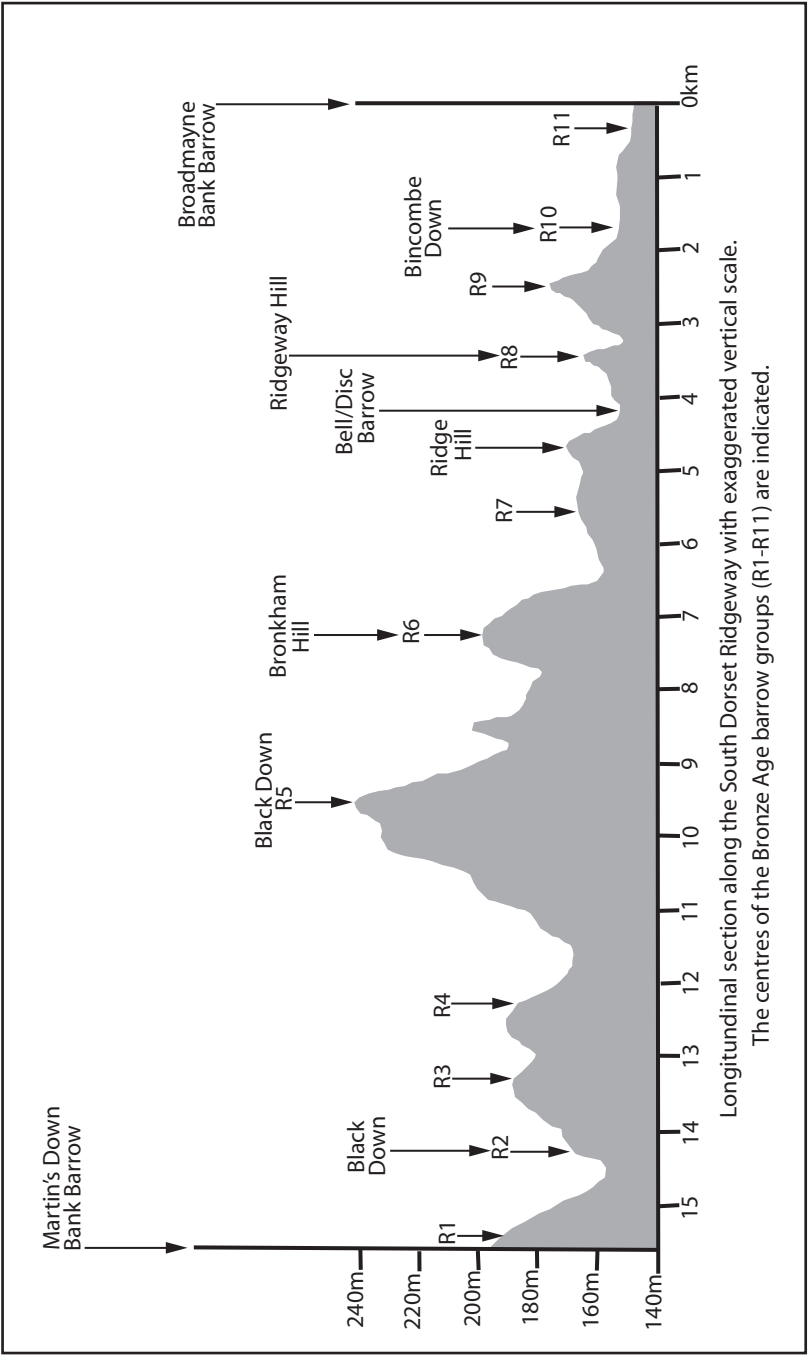


FIGURE 5.3 Longitudinal section along the South Dorset Ridgeway. The centres of the Bronze Age barrow groups (R1-R11) are marked.

along the southern coast of England, with steep limestone cliffs towering over Chesil Beach at the northern end. Nowhere can the flat top of the island be reached without a climb. It gently declines in height from 135 m at the northern end to 10 m at the south. Great waves scour the cliffs surrounding the island and crash like thunder. There is a dangerous race of white water just off the southern tip.

Chesil Beach is a most remarkable geological phenomenon, the most spectacular storm beach in Britain. The western limit of the Beach is essentially arbitrary. At a maximum, it stretches for 28 km from West Bay in a NW-SE curve to the island of Portland, where it abuts the steep cliffs on the north of the island, linking it to the mainland (Figures 5.1 and 5.4). Chesil Beach is a massive curved ridge varying between 150 m and 200 m in width and progressively growing in height until reaching a maximum of 15 m, where it adjoins Portland (Carr and Gleason 1971: 126). The steepness of the beach face, like its height, gradually increases from west to east. The beach is considerably wider at the Portland than at the West Bay end. A course at right angles to the middle of the beach aligns with the Caribbean, giving an uninterrupted fetch of ocean waves for 8,000 km, directly exposing it to the full force of the south-westerly wind and the waves from the Atlantic. It forms a protective barrier, effectively preventing the soft clays and shales of this part of the Dorset coast from massive erosion. The landward site of the Fleet lagoon has been protected from marine erosion, at least since sea level reached its present height. The hills and degraded cliff lines on the landward side of the Fleet must have been shaped during one or more of earlier interglacial periods and were not affected by wave action during the last (Flandrian) postglacial marine transgression, when Britain was cut off from continental Europe. As a result of the continual pounding of the waves, the southern seaward slope of the beach is steep and often concave in shape. Terraces of pebbles are continuously being formed and re-formed by the waves, giving the slope, through time, a mobile character. Although being occasionally overtopped by the sea in storms, the beach does not appear to have been breached by the sea in historical times. On the landward or northern side, the slope is far more gradual in profile, less mobile, and prone to change. Canns, or seepage hollows, are a marked feature of the landward (Fleet) side of Chesil Beach. They are catastrophically formed under exceptional storm conditions when the waves are driven above a certain critical level on the seaward side of the beach. The porosity of the pebbles is sufficient to allow large amounts of water to pour through the cannas at this time, but normally the cannas are dry (Whittaker 1978: 79).

For 13 km, Chesil Beach is separated from the mainland by the brackish tidal lagoon of the Fleet. The lagoon varies in width between 100 and 900 m. It is fed by a mixture of fresh water from small streams draining the chalk of the



FIGURE 5.4 View of Chesil Beach, the Fleet lagoon, and the Isle of Portland from Abbotsbury at the Western end.

Ridgeway to the north. The most westerly of these arises at a spring at Portesham just south of Black Down and runs through Abbotsbury before draining into the western end of the Fleet. Sea water continuously seeps through the pebbles of the beach, the water at high tide being markedly higher on the seaward side. The sea also enters the lagoon through the eastern mouth of the Fleet at Small Mouth. Consequently, there is a marked west to east (low-high) salinity gradient.

Fawn in colour, the beach is made up of yellow and white pebbles of flint and chert (98%), together with quartzites from the Budleigh Salterton Pebblebeds (see Chapter 6), vein quartz, rare porphyries, granites, and metamorphic pebbles with limestones common at the Portland end. A remarkable feature of these pebbles, which has long been noted, is their gradual gradation in size from those the size of a pea at the western end to large cobbles where the beach adjoins Portland. Persons with intimate local knowledge are said to know precisely which stretch of the beach they are standing on through the evaluation of pebble size. The sound of the beach also varies in its course 'from the whisper of sand to the hissing of shingle and then to the hollow rattling and rumbling of down-dragged pebbles' (Treves 1906: 239). Knowledge of pebble size and the sound of the sea were particularly valuable to the smugglers and wreckers of the historical past carrying out their work by night.

Historically, this has been a beach of death, with ships tossed effortlessly upon it and dashed to pieces against its sides, the constantly mobile pebbles and steepness of the shelf of the beach making it impossible for survivors to gain a foothold. More shipwrecks have been recorded here than along any other stretch of the British coast. On a calm day in summer, the beach appears to sit calmly between the shallow blue waters of the Fleet and a line of white foam on its seaward side, but 'in a westerly gale it is a place terrible to behold. The sea roars and thunders against it with a sound that can be heard inland for miles. The ice-smooth combers crash down upon the glaciis with the force of battering rams; the beach is torn at by the receding wave as if the straitened foam were a myriad of claws' (*ibid.*: 236).

Only c. 3–7 km distant, the top of the Ridgeway, for the most part, is within sight and sound and smell of the sea. On a stormy day, the sea can be heard crashing on Chesil Beach below, and there is a distinct tang of salt in the air. The full extent of the beach with its remarkable continuous curve can, however, be fully appreciated only when one is standing on the cliffs on the north of Portland, or from the heights above Abbotsbury. Inland from the Dorset Ridgeway, views are more restricted, and the beach is hidden by the cliffs marking the inland shore of the Fleet, except at certain points.

The regularity of the general topographic form of the beach and the grading of the pebbles give it a remarkably *artificial* appearance, seemingly more of a work of culture than of natural processes. Historically, its origin and form

have been the subject of continuous speculation and debate (for a review see Carr and Blackley 1974). Portland, as a headland, was already in existence by Middle Palaeolithic times, and the island played a very important part in the formation of Chesil Beach and the Fleet lagoon. The beach probably originated as an offshore barrier that was progressively driven landward during the late Quaternary marine transgression. Landward recession now appears to be minimal.

THE MESOLITHIC

Evidence for occupation of the South Dorset Ridgeway area during the Mesolithic is virtually confined to a series of sites on the southern tip of the Isle of Portland and along the inland shores of the Fleet. There are no certain finds from the chalk downlands or the course of the Ridgeway itself. Three other chert and flint scatters with a Mesolithic component are recorded just to the northeast of Maiden Castle and along the gravels of the Frome valley (Woodward 1991: 129; Wymer and Bonsall 1977: 69).

Settlement of Portland appears to have occurred at an early stage, with the site at Culver Well giving a date of 6100–5700 cal. B.C.E. (Palmer 1970). Occupation appears to have been long-lived, and a comparatively large seasonal population is likely. The Mesolithic flint scatters and occupation areas are confined to the southern tip of the island around Portland Bill. Field surveys have shown that all the lowermost fields sloping down to the cliffs on the eastern side of the Bill are ‘thickly littered with artefacts of the same industry, and therefore really constitute one huge site’ (Palmer 1967: 119) within which major artefact concentrations and shell middens occur.

Two of these concentrations at Portland Bill, Portland site 1 (Palmer 1968; 1977) and Culver Well (Palmer 1970, 1977, 1999) are located near to springs, and, in general, spring locations appear to have been particularly favoured during the Mesolithic in Dorset (Rankine 1962: 94). The Culver Well site on Portland is situated on a hill slope at the base of which there was a shallow, oval clay-filled and boggy depression. Debris thrown into this depression, mainly limpet and winkle shells, formed a large mound or shell midden, over which two overlapping limestone floors, probably forming the bases of shelters, were lain down. Hearths or cooking places were found along the eastern edge of the paved area. Excavation of one of the limestone floors revealed a large triangular shaped limestone block toward the northern end, covering a circular hole with a surrounding stone packing and loam fill. Against one side of this capstone was a large oval-shaped Chesil Beach pebble, with one of its ends pointing at the large stone. Three objects formed a triangle in the hole underneath

the stone: a pierced scallop shell pendant, a Portland chert tranchet axe, and a round Chesil Beach pebble standing on edge (Palmer 1975: 50). Scallop shells (a deep-water species) are rare on the site, and the tranchet axe is of a rare and unusual type (*ibid.*). This is clearly a votive deposit of a 'megalithic' nature with an unusually large pebble marking it from the outside.

Large numbers of smooth Chesil Beach pebbles are common on the Portland sites (Palmer 1977: 148, 1999), and they clearly had important ritual connotations, as the find from Culver Well demonstrates. Beach pebbles seem to have had a particular significance not only on the Portland sites but also across southern England during the Mesolithic, being frequently worked to make pebble maceheads, the material of which is frequently of nonlocal origin. Unworked siltstone pebbles of Cornish and 'southwestern' origin from the excavated sites at Farnham and Oakhanger V are the best-known examples of a much more widespread phenomenon of pebble collection, artefact manufacture, and exchange (Care 1979: 98).

Artefact finds, including an unusually large number of core tools—in particular, picks—from Portland Bill are dominated (*c.* 60%) by the choice of fine-grained grey Portland chert readily available in the form of pebbles from the Pleistocene raised beach at the tip of Portland and the eastern end of the Chesil Bank, where it adjoins the island (Palmer 1968: 190).

Mesolithic artefact scatters also occur along the foreshores of the Fleet, along the eastern part of the lagoon, closest to Portland. None are recorded west of Herbury Point (Palmer 1963: 109). Approximately 75% of the artefacts are made from Portland chert, the rest mainly from high-quality brown flint (Palmer 1963: 109, 1977: 149–150). The major silting episode of the Fleet lagoon appears to have begun from the earlier Mesolithic *c.* 7000 B.C.E and lasted until *c.* 5000 B.C.E. (Carr and Blackley 1974: 15). The complex ecology of developing marshes and reedbeds would have created an ideal series of habitats for fishing, fowling, and plant collecting by Mesolithic and Neolithic populations.

The use of Portland chert in the area around Portland Bill and from the scatters along the Fleet dates back to the Late Palaeolithic (Palmer 1970: 89). During the Mesolithic and the early Neolithic its widespread coastal and riverine exchange across southern England from west Cornwall to Hampshire and Surrey (Palmer 1970; Rankine 1951) is of particular interest (Figure 5.5).

Portland chert resembles flint in its general properties and fractures conchoidally but is distinctive in both its pale to dark lead-grey colour and frequent mottled patination. Use of it provided no technological advantage in terms of sharpness of cutting edges obtained and so on. The considerable number of picks on Portland has led Care to interpret it principally as a quarry site (Care 1979: 98). Care notes that the quantities of Portland chert found on

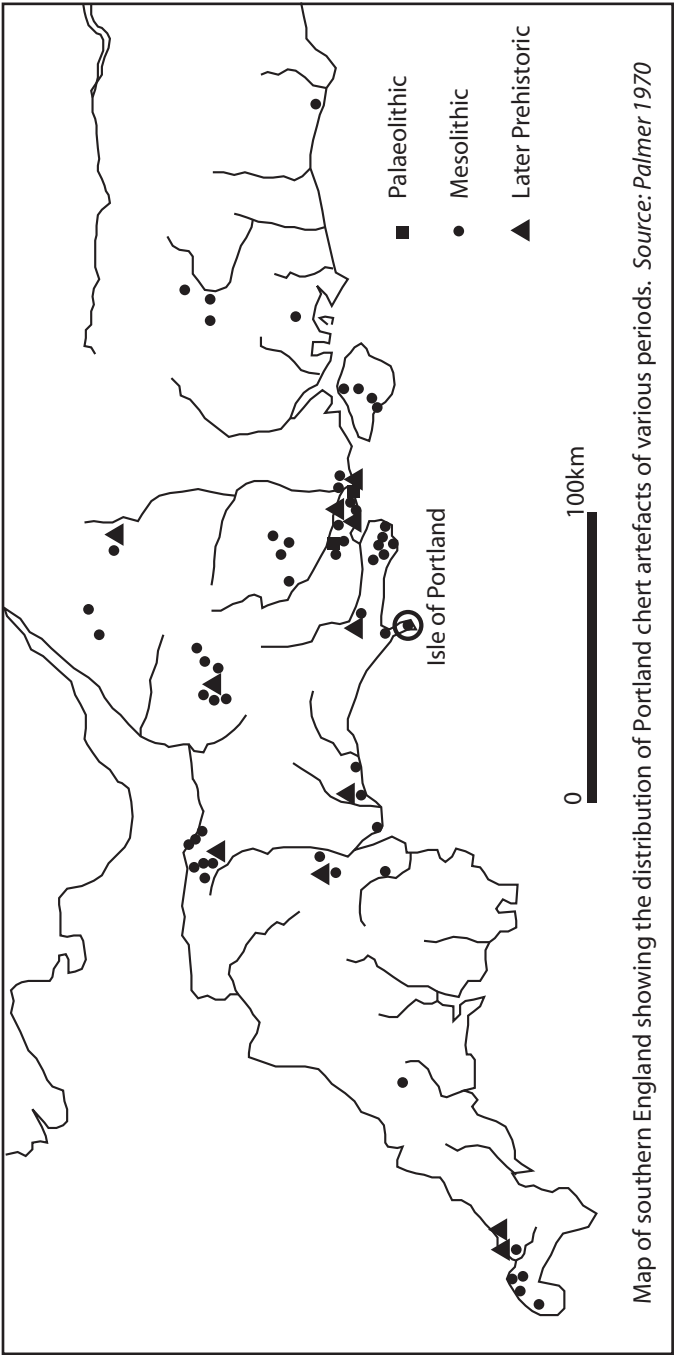


FIGURE 5.5 Map of southern England showing the distribution of Portland chert artefacts of various periods (source: after Palmer 1970).

Mesolithic sites seem to fall off with distance from the source. On some of the Mesolithic sites on Cranborne Chase, some 40 km to the northeast, the presence of picks of Portland chert indicates direct contact with the island as part of a seasonal exploitation cycle. Clearly what was of importance, however the chert was obtained, was that it was easily recognised and came from a *known* source, a dramatic island thrust out into the sea, with important ancestral and symbolic associations. The chert embodied knowledges of *place*, of the island from which it was derived and the populations who inhabited it.

THE EARLY AND MIDDLE NEOLITHIC

Standing on the hill west of Abbotsbury looking down on the great stretch of Chesil Beach running to the gaunt and rocky Isle of Portland, Neolithic and Bronze Age populations must have marveled at this natural phenomenon, as people do today. In the twentieth century, we have various geological explanations for its formation. In prehistory, it would have been similarly explained and rationalised, but in myths and stories. These myths and stories would have had an integral relationship with ritual practices (embodiments or objectifications of mythic structures) and knowledges of prior ancestral human occupation: the Mesolithic middens on the southern tip of Portland.

During the early and middle Neolithic, traces of settlement are largely confined to areas to the north of the Dorset Ridgeway. These include the earliest known monument in the area, the causewayed enclosure at Maiden Castle, and finds of pottery (Hembury ware), pits, and worked flint and chert at Rowden, Poundbury, and Flagstones, together with a series of flint scatters in the vicinity of Maiden Castle (Woodward 1991: 133). To the south of the Ridgeway, Hembury Ware and pits are known from Sutton Poyntz, and pottery and small numbers of flint and chert artefacts of probable early or middle Neolithic date are known from Portland Bill (Palmer 1968: 202–203). Along the course of the top of the Ridgeway, evidence is confined to pits with finds of flint and chert from Bincombe Down. The major focus of early Neolithic activity appears to have been in the vicinity of Maiden Castle.

The Causewayed Enclosure

The Maiden Castle causewayed enclosure is situated on a low but conspicuous hill island bounded to the south by the incised valley of the river South Winterborne. The enclosure, created by the digging of two concentric discontinuous ditches, covers *c.* 7 ha and bounds off the higher eastern end of an oval-shaped ridge. The land drops away steeply to the Winterborne to

the south but more gently to the north. The choice of a chalk island for the siting of the enclosure is duplicated in the contemporary causewayed enclosure of Hamledon Hill in North Dorset. The monument at Maiden Castle was thus bound into the pre-existing topography and when first constructed was explicitly designed to have a striking visual effect when viewed from particular areas of the surrounding landscape. Sharples notes that 'the ditches on the western edge of the enclosure cut across some of the highest ground of the area enclosed, most of the interior slopes from east to west, and the ditches on the east side are well to the east of the break in slope that marks the top of the hill. . . . The enclosure was designed to be seen from the east and to focus attention to the area' (Sharples 1991a: 34). The best and most extensive views of the enclosure interior would be obtainable from the heights of the South Dorset Ridgeway, less than 2 km to the south, at the closest point. When one walks from west to east along the top of the Ridgeway, Maiden Castle is first visible (the view is blocked until this point by the spur of Came Down) from the eastern slopes of Bincombe Down. It is interesting to note in this connection that Bincombe Down is the only area on the top of the Ridgeway for which there is evidence of earlier Neolithic activity. From this point onward to the summit of Black Down, a stretch of 7 km, the enclosure ditches would have been continuously visible, but the interior obscured. Views of the surrounding landscape from the enclosure interior are very restricted to the west, because they are blocked by Hog Hill. To the east, there are views a short distance down the South Winterborne valley. By contrast, to the north views are extensive. To the south, they are limited by the presence of the Ridgeway. The visual envelope thus created is dominated by the chalk heights of the Ridgeway to the south and by views north across the Frome valley to the chalk uplands of central Dorset.

Evidence for the use of the enclosure interior has been almost completely destroyed by the construction of a later Iron Age hillfort. A pit dug into the surface of the hill contained a large quantity of broken pottery, fragments of animal bones, and limpet shells (Wheeler 1943: 86). These are almost certainly votive deposits, and the presence of the limpet shells connects Maiden Castle both with the coast and the earlier Mesolithic shell midden sites on Portland in which limpets also dominate. Excavation of parts of the inner ditch fills recovered large quantities of charcoal, with oak being the dominant tree species, and a child burial, fragments of animal bones, pots, and flint tools. The outer ditch seems to have been completely infilled with chalk rubble soon after it was dug. The rubble sealed a layer of material placed at the bottom of the ditch, including the disarticulated remains of two children and an adult male, scattered animal bones, flint tools, axes, carved lumps of chalk, and high-quality pottery (for details see Sharples 1991a, 1991b).

Maiden Castle is situated just over 13 km due north of the Isle of Portland (Figure 5.6). Finds of Portland chert, the limpet shells from the votive pit in the interior, and the many carbonised seed remains of *Atriplex Littoralis* (shore orache) are direct evidence of a connection with the coast. I suggest that the causewayed enclosure, situated on its distinctive island hill, represented in a physical form the Isle of Portland during the earlier Neolithic and that Portland itself, probably visited only seasonally, represented an ancestral home, a place of origins and cosmic powers. The early Neolithic enclosure of Maiden Castle tangibly represented Portland on the ground. And this ideology of the island as a place of ancestral origins may well have been widespread in the Neolithic of southern England, irrespective of whether it was specifically Portland that was being represented in ritual practice. The choice of hilltop 'islands' as favoured locations for the location of enclosures is commonplace in the Neolithic of southern Britain, as discussed in Chapter 2 of this volume.

Long Barrows and Bank Barrows

There are twenty-one documented Neolithic long barrows in the study area. Three are bank barrows, three chambered long barrows, and fifteen earthen long barrows (Figure 5.6). Nine are located in the north between the valleys of the river South Winterborne and the Frome, the remainder along the Ridgeway and its associated northern spurs. None are known to the south of the Ridgeway. Monument construction on Portland during either the Neolithic or the Bronze Age appears to be absent, although quarrying and development may have destroyed sites in the northern part of the island. Orientation of the long axes of the mounds, their length and positioning in the landscape are variable (Tables 5.1 and 5.2). Eleven of the barrows are clearly related in associated pairs, or groups, with distances between nearest neighbours ranging from between fifty and a few hundred metres. These pairs, or barrow groups, all have different mound orientations and lengths as if to deliberately differentiate between them and mark out difference. The other barrows are more isolated with inter-site distances ranging up to 2 km. All three bank barrows are located on high points, a topographic location shared by only one chambered barrow, the Hell Stone, and the Bincombe long barrow along the entire course of the Ridgeway. By contrast, all but one of the five long barrows located well to the north of the Ridgeway (and all but one out of sight of it) are situated on localised high points or ridges. There is thus much greater differentiation between barrow locations along the Ridgeway than elsewhere. Inter-barrow visibility in all cases is low and confined to closely associated pairs or groups. The sea is visible only from seven of the barrows (33%) all located along the Ridgeway, and when one is looking along the long axis, from only two sites.

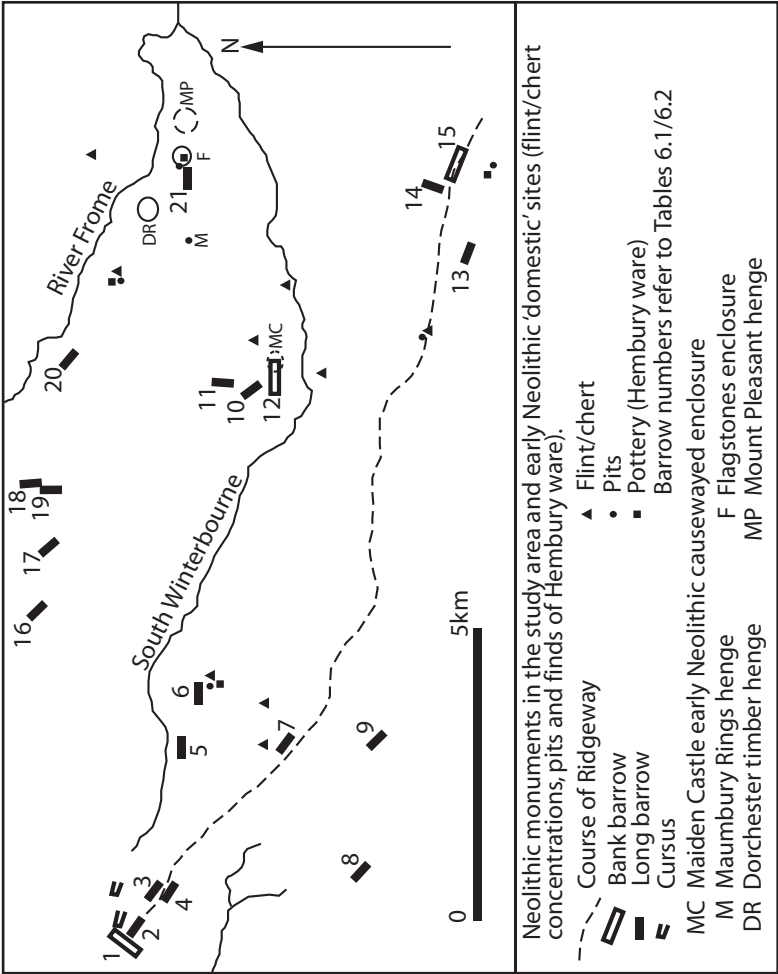


FIGURE 5.6 Neolithic monuments in the study area and early Neolithic 'domestic' sites (flint/chert concentrations, pits, and finds of Hembury Ware). Barrow numbers refer to Tables 1 and 2.

Table 5.1 Long barrows in the study area: Morphological characteristics and relationships to other monuments.

Name	Map	Type	HASL	Length	Orientation	LE	IB	RRB
Martin's Down West	1	B	190	197	NW-SE	–	2.3.4	2,3
Martin's Down East	2	L	180	34	NW-SE	SE	1.2.3	2
Black Down N	3	L	170	92	ESE-WNW	ESE	1.2.4	3
Black Down S	4	L	175	76	NW-SE	SE	1.2.3	2,3
Longlands	5	L	140	29	E-W	E	–	–
Coombe Farm	6	CH?	130	?	E-W	E?	7	–
Cowleaze	7	L	175	55	NW-SE	SE	6	–
The Grey Mare & Her Colts	8	CH	200	24	NW-SE	SE	–	–
The Hell Stone Maiden	9	CH	185	27	NW-SE	SE	–	–
Castle NW	10	L	115	29	N-S	SE	11,12	-
Clandon	11	L	95	97	NW-SE	N	10.12	3
Maiden Castle	12	B	130	546	NW-SE WNW-ESE	–	10,11	2
Bincombe	13	L	160	82	E-W	E	15	2,3
Culliford Tree	14	L	135	52	EME-WSW	ENE	15	1
Broadmayne	15	B	140	183	ESE-WSW	–	13,14	1
Frampton: Pigeon House	16	L	135	42	NW-SE	SE	–	1,2,3
Bradford Peverell: Red Barn	17	L	140	36	NNW-SSE	SSE	18	–
Penn Hill West	18	L	145	26	NE-SW	NE	17.19	–

Table 5.1 Continued.

Name	Map	Type	HASL	Length	Orientation	LE	IB	RRB
Penn Hill								
East	19	L	145	63	NNE-SSW	NNE	18	1,3
Longwalls	20	L	110	45	NW-SE	SE	—	2,3
Allington	21	L	70	75	E-W	E	?	2

Map numbers refer to Fig. 5.6.

Type: B = bank barrow; L = long barrow; CH = chambered long barrow.

Orientation refers to long axis of mound.

LE = largest end of mound; IB = intervisible long barrows.

RRB = relationships to round barrows: 1 = round barrow superimposed. On end of long barrow mound: 2 = long axis of mound continued or referenced across space by round barrows built along the same orientational axis as the mound; 3 = forms a nonlinear focus for a clustered group of round barrows; ? = no information.

Information on the destroyed Allington long barrow from Davies et al. (1995: 104).

Sources for other barrows Grinsell (1959, 1982) and author's fieldwork.

The chronological relationship between the three bank barrows and the long barrows in the area is problematic. Bank barrows were first defined as a distinctive class by Crawford (1938: 228–232) and Wheeler (1943: 18–24). Wheeler's major criteria were (1) a length greater than that of the normal long barrow; (2) the site crowning all or part of a ridge; (3) parallel sides with the bank of uniform height; (4) parallel side ditches that do not return around the ends (*ibid.*: 24). It has usually been assumed that bank barrows are somewhat later in date than long barrows (for example, Bradley 1983; Thomas 1996: 189) and that part of their meaning and significance was derived from the long barrow construction and burial tradition. However, there is some evidence from this area of South Dorset suggesting that the bank barrows were either earlier or contemporary with the long barrows, but it is unlikely that any of them were used for burial.

Two long barrows immediately north of Maiden Castle have their long axis more or less directly orientated toward the western end of the bank barrow, suggesting that these three monuments must be contemporary in date or the bank barrow earlier. Two long barrows on Black Down just under 1 km to the east of the Martin's Down bank barrow (Figure 5.6, nos. 3 and 4, incorrectly labeled bank barrows on the Ordnance Survey map) have an extremely peculiar orientation to their long axis. Drawing an imaginary line across space and extending their orientational axis westward, we find that it encloses the northern and southern ends of the ridge occupied by the Martin's Down bank barrow. It is as if these barrows map out the topographical parameters within which the bank barrow itself is sited. The long barrows are not orientated to the

Table 5.2 The landscape settings of the Neolithic monuments in the study area.

Name	Type	Map	SV	SVAL	HP	LRT	Notes
Martin's Down W	B	1	+	+	+	-	Runs along ridgetop, but ends of mound do not extend to end of ridge. Steep drop west of mound cutting across the Ridgeway.
Martin's Down E	L	2	+	-	-	NW	NW end points up slope to Martin's Down W bank barrow.
Black Down N	L	3	-	-	-	S	WNW end of long axis points to SW end of ridge top, on which Martin's Down West bank barrow is located. Barrow positioned at break of slope to N so as to be skyline'd from N.
Black Down S	L	4	+	-	-	SE	NW end of long axis points to NE end of ridge, on which Martin's Down W bank barrow is sited.
Longlands	L	5	-	-	-	SE	On sloping ground dropping away to river South Winterborne.
Coombe Farm	CH	6	-	-	-	E?	Long axis of mound runs parallel to contours of the valley.
Cowleaze	L	7	-	-	-	SE	Situated on steep slope dropping down to dry valley to NW running down to river South Winterborne.
							Situated towards head of dry valley running down to river South Winterborne. SE end of long axis points up to the Black Down summit.
The Grey Mare & Her Colts	CH	8	+	-	-	SE	On sloping ground. NW end points down to the bottom of a dry valley terminating to the north of the monument.
Hell Stone	CH	9	+	+	+	-	On ridgetop. SE end points to Isle of Portland.
Maiden	L	10	-	-	-	SE	On sloping ground. SW end points to W end of the Maiden Castle bank barrow running along the ridgetop.
Castle NW							On top of knoll. S end points to W end of the Maiden Castle bank barrow running along the ridgetop.
Clandon	L	11	-	-	+	-	

Maiden Castle	B	12	-	-	+	-	Runs along ridge top. False crested. Skyline sited to the north
Bincombe	L	13	+	-	+	-	Runs along crest of localised ridge. Land dips away steeply at W and E ends to dry valleys cutting into the Ridgeway from the south. On sloping ground at head of dry valley cutting into the Ridgeway from the N-ENE end points down dry valley.
Culliford Tree	L	14	-	-	-	SW	Runs along top of Ridgeway at E end. Parallels line of Chesil Beach linking Portland to the mainland.
Broadmayne	B	15	+	-	+	-	On localised high point. Barrow axis runs parallel to line of valley of river Frome to NW and E ends on mound point toward heads of dry valleys running down to Frome valley
Pigeon House	L	16	-	-	+	-	On sloping ground toward the head of a dry valley running down to the river Frome to the NW.
Red Barn	L	17	-	-	-	SW	On high point. Long axis of mounds references dry valley running down to the Frome valley.
Penn Hill W & E	L	18-19	-	-	+	-	High point on ridgetop. Long axis of mound parallels line of Frome valley to NW and E ends of mound point toward dry valleys leading down to Frome valley from S.
Longwalls	L	20	-	-	+	-	On localised high point. Long axis of barrow parallels ridgetop running parallel with the valleys of the Frome to N and S Winterborne to the S.
Allington	L	21	-	-	+	-	

Map numbers refer to Fig. 5.6.

Type: B = bank barrow; CG = chambered long barrow; L = long barrow; SV = sea visible from the mound; SVAL = sea visible along long axis of mound; HP = situated.

On localised high point, LRT= land rises to direction noted.

ends of the bank barrow but rather to the margins of the ridge of topographic space that it occupies.

The relationships of the long barrows and the bank barrows to features of the surrounding landscape are very different. All three bank barrows, sited on ridgetops, command panoramic views in all directions. They are massive, not only in size but also in terms of the visual field of the landscape they command. By contrast, the majority of the long barrows are located on hill slopes with limited views in one or more cardinal directions. In other words, the bank barrows appear to have a wider and more generalised significance in relationship to the landscape than do the long barrows, where the relationship appears to be much more localised and specific. Since this chapter was written, this point has been confirmed by A. Woodward using GIS analysis (Woodward 2002: 134–139). The smaller long barrows have an intimate relationship to particular locales in the landscape in their immediate vicinity, being situated at the tops of coombes running down to the river valleys, and in relationship to particular hills or ridge ends, often with the long axis of the mounds pointing up or down toward these landscape features (see Table 5.2). In terms of their relationship to the metaphorical connections made in ritual, myth, and cosmologies, their siting in the landscape may imply a contrast between a much more highly specific set of meanings connected with the long barrows and a more generalised and broader significance for the bank barrows. Through their particular and localised siting, the long barrows invoked the meanings of place at a much more fine-grained contextual level. By contrast, the bank barrows referenced topographic features of the South Dorset landscape of major regional significance and universal mythological importance. Precisely what they were referencing can best be illustrated by considering in detail the most massive bank barrow of all, that at Maiden Castle.

Toward the end of the early Neolithic, the causewayed enclosure appears to have been abandoned, and perhaps only several decades later (indicated by minimal silting over the top of the causewayed enclosure ditches) a radically new form of monument was constructed along the ridge and into the centre of the area around which the enclosure had been built: a massive bank barrow over half a kilometre (546 m) long and originally 17 m wide (Figure 5.7). It was flanked by two parallel ditches 5.5 m wide and 1.5 m deep. These do not enclose the western or eastern mound terminals. The barrow is set on a false crest, 10 m north of the summit of the ridge at the western end, increasing to 20 m at the east. The central section is situated at the top of a dry coombe running down to the South Winterborne valley. The false crest of the barrow makes the barrow particularly prominent when viewed from areas below it to the north of Maiden Castle. It would also be an impressive landmark when seen from the Dorset Ridgeway to the south. It therefore seems to have been deliberately

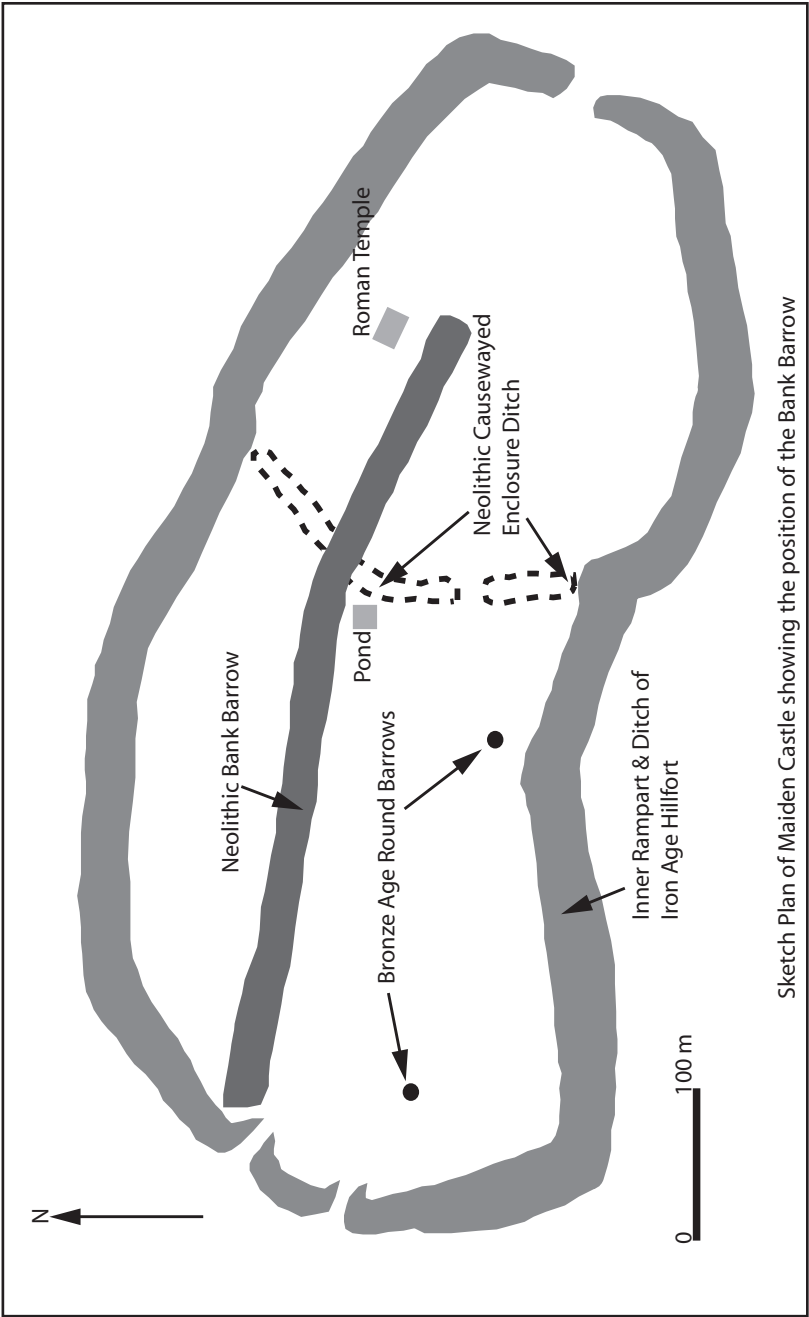


FIGURE 5.7 The Maiden Castle causewayed enclosure, bank barrow, and the relationship between the two monuments.

sited to be visible both from the north and the south. A remarkable feature of this barrow is the irregular manner of the overall orientation of the mound with a change of axis from the western to the eastern terminals. The surviving mound can be subdivided into three sections, each with slightly different orientations: a west section 225 m long orientated approximately west to east, a central section 65 m long in which the axis shifts slightly, and an eastern section 157 m orientated northwest to southeast (Balaam et al 1991: 40; Sharples 1991b: 54). Seen from the south, it curves around to the *right*. The easternmost (NW-SE) section runs across the ditches of the causewayed enclosure and terminates in the centre of its interior. This monument is unique in the British Isles in terms of both its sheer length and the change in orientation. Bradley suggests that it started life as a long barrow of fairly standard size and orientation, situated just outside the causewayed enclosure and associated with the rituals that took place within it. It was then extended to its present form after the enclosure fell into disuse (Bradley 1983). During the 1985–1986 excavations, Sharples found no stratigraphic evidence to either support or call into question this thesis. A point that does seem to suggest that the entire monument was conceived and constructed as a single entity is the remarkably consistent nature of the fill of the ditch along its entire length (Sharples 1991b: 54–55; Wheeler 1943: 86–89). Had the central section been constructed earlier, the fill could be expected to be different in form and character.

The bank barrow does not appear to have had a funerary use. Wheeler's excavations recovered, near the eastern ends of both ditches, concentrations of bones and horn cores of domestic cattle in the primary silts of the ditches. The presence of post holes at the eastern end of the mound was suggested by him to be possible evidence of a concave revetment (Wheeler 1943: 88). Elsewhere within the basal ditch, fill finds were rare: a scattering of animal bones, including an antler pick, and flint.

Interpretations of the Maiden Castle monument have been many and various. Sharples suggests that the bank barrow acted as a 'symbolic barrier' and territorial marker in conjunction with two other bank barrows at both ends of the South Dorset Ridgeway (Sharples 1991b: 256) (see discussion below). Woodward suggests that it 'identifies the territory and resource of the Frome river and valley streams running from the North Dorset ridge' (Woodward 1991: 131). Thomas (1984) links the construction of the bank barrow with the development of an emergent local elite and ritual authority structure. In later publications (1991: 46, 1996: 189–190), Thomas stresses the linearity of the mound as establishing an axis of movement across the site. The presence of the cattle deposits in the ditches at the eastern end and the presence of a possible revetment there suggests that this movement was from west to east along the mound. In the course of walking alongside the mound, one's movement would

have been directed in relation to the orientation of the mound, moving to the right toward the eastern end. It has been argued that there is a clear morphological relationship between the bank barrow and an (earlier?) funerary tradition associated with long barrows. Thomas suggests that although 'the long mound contained no burial . . . efforts were made to establish its authenticity through acts of deposition . . . the burial of cattle remains' (Thomas 1996: 190).

All the different interpretations of this huge monument have failed to explain two features of crucial importance: (1) its sheer size and why it should have been built in South Dorset rather than anywhere else in the British Isles; (2) its irregular orientation. Bradley's (1983) interpretation of the mound as having being constructed in stages and explanations of it as a territorial marker or symbolic barrier explain neither of these things. It almost certainly did define an axis of movement, as Thomas suggests, but why the change in orientation? These attempts to explain the bank barrow all have one thing in common—they try to explain it in terms of a relationship to other types of monuments and/or associated social territories. An altogether different interpretation emerges if instead we suggest a metaphorical linkage of the barrow to what is undoubtedly the *unique* and most striking feature of the South Dorset landscape, Chesil Beach. The Maiden Castle Bank barrow in its linearity, regularity, and morphology—curving round to the right—is an almost exact representation of the beach—the beach converted into a cultural form and set out for display along the Maiden Castle ridge. Both the barrow and the beach have eastern 'terminals': the revetment and cattle deposits and the Isle of Portland, respectively. Chesil Beach, bordered by water on both sides, is mirrored by the bank barrow ditches. For two thirds of its length, the westernmost section, Chesil Beach appears to run parallel to the coast before curving around to the right to join Portland. This is duplicated in the relative dimensions and change in orientational axis of the bank barrow. The profile of Portland itself resembles a long barrow. It is the contention here that the construction of the bank barrow signals a change in the practice of ritual representation, from an earlier emphasis on the Isle of Portland as an ancestral home, or place of origin, during the construction and use of the causewayed enclosure to a later one emphasising Chesil Beach and the linkage it creates between the island and the mainland, stopping it from floating away: an umbilical cord or ancestral thread, a path of wandering.

But all this discussion raises additional questions: *Why* represent Portland, and then Chesil Beach, and in what manner were these representations connected with the ritual events taking place at the causewayed enclosure and the bank barrow? The argument here is that, as centres of ritual performance, the enclosure and the bank barrow were repositories of metaphorical images of mythological structures providing both an explanation and an understanding of the world in which these Neolithic populations lived. There was a need to

explain and situate these places and topographic features as part of their life-worlds in terms of origins and ancestral events. The ritual performances that took place structured and restructured understandings of mythological events.

Ritual practice can be viewed as a transformation and an acting out of myths, a structuring of structure. Analogies and metaphors within narrative mythic structures provide the principle means of explanation. But just as geological explanations require certain proofs, so do myths. Both crucially depend for their veracity on tangible signs. The physical form of the monuments duplicating in miniature that which they represented acted as key metaphorical *images* transcending individual experiences of these places to be reworked as collective sociohistorical experiences in the specific language of ritual expression and communication. The monuments must have formed part of a complex compositional form, including patterns of directed movement, narrative, song, dance, music, deposition of artefacts and bones, socialising persons and structuring knowledges. They were *imagenes mundi*, giving form and definition to the cosmologies created by the mind and serving as tangible foci revitalising domains of personal and social experience. In short, they were objectifications of myths that became activated in the minds of the individuals experiencing the performances that took place at and around them. Through these monuments, people came to know and understand the landscape in which they lived.

Besides the Maiden Castle bank barrow, as already noted, there are two other spectacular linear monuments in the South Dorset area, at Broadmayne and Martin's Down, effectively marking the eastern and western ends of the Ridgeway, respectively. The Broadmayne bank barrow, 183 m long with two continuous side ditches, runs along the summit of the Ridgeway paralleling the highest 140-m contour and orientated ESE-WNW (Figure 5.10). Like Chesil Beach, it is slightly wider and higher at the eastern end. The Martin's Down bank barrow also runs along a ridgetop along the 190-m contour, one of the highest points of the Ridgeway. It is orientated NE-SW, slightly wider at the northeast end but higher to the southwest. Again, there are panoramic views across the surrounding landscape. This is the only barrow in the area from which the sea is visible when one looks along its long axis. While the long axis of the Broadmayne bank barrow points along the east-west course of the Ridgeway, that at Martin's Down effectively crosses it at right angles, acting as a physical and visual barrier to further east-west movement (Figure 5.8). Both these monuments are still massive in the landscape, creating a lasting visual impression and contrasting with the other smaller Neolithic monuments.

From the Martin's Down bank barrow, West Bay and the western end of Chesil Beach are visible, but not the Fleet lagoon, besides which runs the visually most impressive section of the beach (arguably, it can be conceived as beginning



FIGURE 5.8 The bank barrow on Martin's Down at the western end of the Ridgeway (source: Cambridge University Collection of Air Photographs, Unit for Landscape Modelling).

at Abbotsbury). The Broadmayne bank barrow is the only one in the area from which Chesil Beach is visible with water on both sides of it. Walking toward the barrow from the east provides a revelation. It is *precisely* located on the ridgetop so that the bulk of the Isle of Portland, and more important, Chesil Beach, is *first visible* only when one is standing on its extreme eastern end. From the site of the bank barrow, the orientation of barrow and beach appear parallel, as distant transposed mirror images of each other. I have already argued that the Maiden Castle bank barrow metaphorically invoked Chesil Beach. The Broadmayne and Martin's Down bank barrows performed a similar role in ritual practice. They also represented 'beaches in the sky'. In this respect, it is of great interest to note that the Martin's Down bank barrow is located on the Ridgeway precisely 7 km due north of the point at which Chesil Beach diverges from the mainland and the Fleet lagoon begins. This stretch of the shingle bank, where it is defined

by water on both sides, is without doubt most impressive and, indeed, might be defined topographically as the beginning of the beach as a separate entity. Just as the beach begins at this point, the Martin's Down bank barrow can be regarded as the beginning of the Ridgeway in that, although higher land continues to the west, the ridge is not so well defined topographically, and immediately to the west of the ridge on which the bank barrow lies, the land plunges down in a most dramatic manner. The eastern end of the Maiden Castle bank barrow is located 13.5 km due north of point at which Chesil Beach ends joining the west coast of Portland, but neither Chesil Beach nor Portland is visible from here. The Broadmayne bank barrow, from which both are visible, marks the point at which the higher land of the Ridgeway drops away to the east *and* is situated due north of the eastern side of the Isle of Portland. These three barrows together thus both mark the topographic limits or ends of the high ground of the Ridgeway and relate the ridge to both the Chesil Bank and the Isle of Portland. They perform the symbolic role of linking the topographies of the chalk ridge and the beach into a connected and bounded symbolic system. The form and nature of the symbolic world thus created can be understood now, in retrospect, only by looking at developments in this area during the later Neolithic and Bronze Age, in which relationships between topographic features of the landscape and monuments became more pronounced and explicit.

THE LATER NEOLITHIC AND THE BRONZE AGE

The period from around 2900 B.C.E. onward is characterised by a growing contrast between the character of the activities and the ritual performances taking place to the north of the river South Winterborne and those taking place to the south along the Dorset Ridgeway. The area to the north of the Winterborne is characterised by the construction of large monuments, including the Maumbury henge, the Dorchester timber henge, the Mount Pleasant timber henge and enclosure, a series of other possible small henge sites along the upper reaches of the course of the Winterborne valley, and later, stone circles. That to the south, primarily along the course of the Ridgeway, is principally defined by the construction of round barrows. The monumental evidence and associated deposits recovered by excavation have been extensively discussed elsewhere (see Barrett 1994: 97–107; Lawson 1990; Thomas 1996: 197–233 with references; Woodward 1991: 136–154). The account here is largely confined to developments occurring along the course of the Ridgeway.

Along the Ridgeway between the Martin's Down and Broadmayne bank barrows, the most dramatic and spectacular linear Bronze Age barrow cemetery in Britain began to be constructed sometime after 2400 B.C.E. (Figure 5.9).

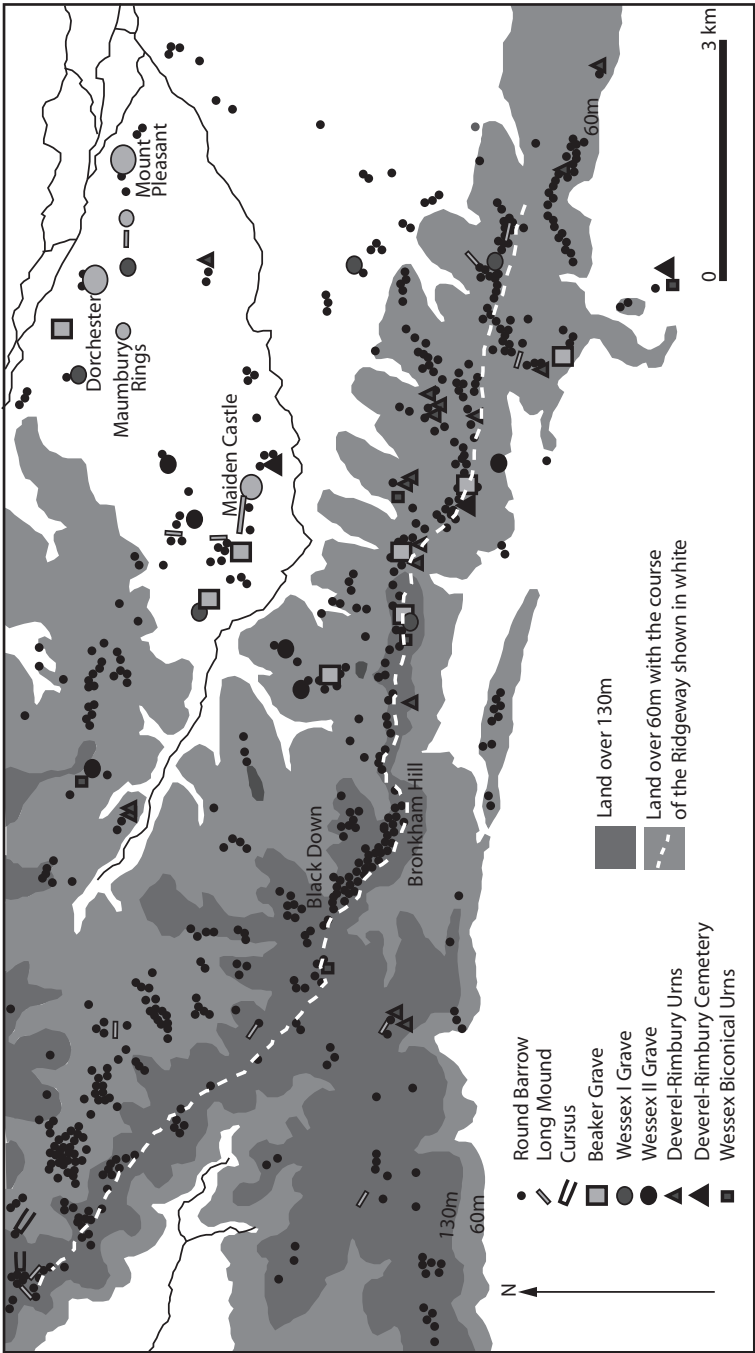


FIGURE 5.9 Distribution of Bronze Age barrows in the South Dorset Ridgeway area. The course of the Ridgeway is marked by a stippled line. The 130-m and 60-m contours are marked (after Thomas 1996).

There are only two other areas with a comparable barrow density in England, and these both occur around the major ritual centres of Stonehenge and Avebury in Wiltshire (Fleming 1971; RCHME 1970; Woodward 2002; Woodward and Woodward 1996). Around Stonehenge and Avebury, average barrow density is considerably lower per square kilometre than that which occurs along the top of the Ridgeway, making the development in South Dorset even more unusual and impressive (RCHME 1970: 427). The bank barrows at both ends effectively enclose or bound the major distribution of barrows both to the east and to the west. Between the bank barrows along the course of the very top of the Ridgeway, around 242 barrows are documented (Grinsell 1959; 1982; RCHME 1970: 429). The RCHME survey divided the barrows into fourteen different groups (R–R14), but since their distribution along the top of the Ridgeway is for the most part more or less continuous, some of these groupings are inevitably rather arbitrary. Only an additional five barrows occur immediately to the west of the Martin's Down bank barrow and six just to the east of the Broadmayne bank barrow. An additional twenty-nine barrows forming groups R12–R14 occur to the southeast of the Broadmayne bank barrow on a southern spur of the Ridgeway. Thus nearly 90% of the barrows occupy the high ground defined at the western and eastern ends by the two bank barrows. Peter Woodward (1991: 143) has argued for three separate 'territorial areas' along the course of the Ridgeway, each defined by barrow cemeteries: a western group, running from Martin's Down to Black Down, a Central group from Black Down to Came Down, and an Eastern group centered on Broadmayne and Bincombe. These divisions appear as inadequate, because they do not take a consideration of the landscape setting of the barrows along the Ridgeway sufficiently into account. The powers and meanings invested in the topography of the Ridgeway exerted a fundamental influence. The RCHME profitably suggest that 'the two bank barrows define the ends of a length of ridgetop, which was of significance before it became studded with round barrows. . . . There may in fact be a conceptual connection between the linear aspect of long barrows and bank barrows (apparently a local and abnormal development) and of curses and, more particularly perhaps, between the Ridgeway itself and the ridgelike appearance of the bank barrows' (RCHME 1970: 426). This is precisely the line of argument that will be further developed here and, in particular, the conceptual connection made between the topographic form of the Ridgeway, the linearity of the Bronze age barrow cemeteries situated along it, and the presence of the bank barrows. If the bank barrows represented 'beaches in the sky', what implications does this have for understanding the Bronze age round-barrow cemeteries and their relationship to the topography of the Ridgeway itself and that of the wider South Dorset landscape, in particular the coast and Chesil Beach?

North of the Ridgeway, in the vicinity of the large later Neolithic and early Bronze Age ceremonial monuments, there are very few round barrows that have burials of Beaker date. By contrast, a series of such early burials are known along the course of the Ridgeway (Best 1965; Peers and Clarke 1967). Thomas has argued that a number of small round barrows along the Ridgeway may be of even earlier Neolithic date (Thomas 1984: 164) and has suggested a developing zonation of the landscape with 'one area associated with large monuments and Grooved Ware, and another with funerary activities, Peterborough Ware, and the funerary use of Beakers' (Thomas 1996: 207). This broad division between the Ridgeway as being principally a funerary area with the lower-lying areas to the north being characterised by activities connected with the construction and use of monuments appears to continue throughout the Bronze Age (Figure 5.8). Settlement evidence during the late Neolithic and Bronze Age indicates that the primary areas utilised were to the north of the Ridgeway along the Frome and South Winterborne valleys and up along the dry valleys cutting into the northern slopes of the Ridgeway (Woodward 1991: 142). The top of the Ridgeway and its spurs became defined as a separate space of funerary practice and ritual situated closest to the sky and set apart from other ceremonial activities.

Fabulously rich grave good assemblages recovered from barrows in the Stonehenge area and along the course of the South Dorset Ridgeway, many with exotic depositions (for example, faience beads, gold, amber, daggers, cups, battle-axes), were used by Piggott to define a so-called Wessex culture in southern England (Piggott 1938). It has been widely accepted in the literature that the Ridgeway cemeteries may be understood, at least in part, as one of the major centres of burial for a local social elite during the earlier Bronze Age of southern England. But perhaps what is far more significant is the manner in which the barrows were continuously re-used for burials throughout the course of the Bronze Age and their meanings transformed in the process, as is documented by the variety of the grave goods and in the dates and types of burials recovered (for details see Woodward 1991: 143–154).

Peter Woodward (*ibid.*) has documented considerable variation in the grave good deposits along different parts of the Ridgeway. But rather than following him in regarding these differences as simple expressions of differing ethnicities and social territories it seems more worthwhile to follow Thomas's suggestion that 'the accrual of meanings by particular locations within the landscape (both cultural and natural) would have made them appropriate for different forms of practice in the Early Bronze Age, irrespective of any continued association with a group of people' (Thomas 1996: 225). We should take seriously the proposition that round barrow burial involved the construction of the social identities of persons in relation to the landscape that

acted recursively so as to establish and define these identities. As Garwood has argued, the event of burial brought together artefacts, persons, and places, relations of affiliation and descent, and dynamically transformed them in relation to one another through the ritual process (Garwood 1991). Barrett cogently argues that

the generalized ancestral origins perceptible to the communities of the fourth and third millennia were . . . displaced during the second millennium. Lines of specific genealogical identity were constructed whose own origins then came to be fixed by mythological images of increasingly more distant times. It was in those distant and mythological ages that the inaccessible and heroic figures had lived and died who now lay buried beneath the massive turf and chalk-capped tumuli . . . The uplands. . . [of] the Dorset Ridgeway were gradually transformed from the end of the third to the end of the second millennium. The burial mounds now emerged as the most significant, permanent points of reference to anyone wishing either to locate themselves in that landscape or to describe the setting of the plain and the ridgeway. (Barrett 1994: 127–128)

Although these arguments are well put, the weakness of Barrett's position and those of Thomas and others lies in their generality. They provide us with no hint of what the mythologies might be and how they link in with the specifics of barrow location in the South Dorset landscape.

FROM THE NEOLITHIC TO THE BRONZE AGE: THE MONUMENTAL RE-REFERENCING OF PLACE

It is readily apparent that the Bronze Age cemetery groups along the Ridgeway were carefully arranged and were developed in relation both to one another and to earlier Neolithic monuments. There appears to be a rather close set of relationships between the Neolithic barrows and the Bronze Age barrow cemeteries throughout the study area. In some cases, the round barrows are superimposed at the ends of the Neolithic mounds. In others, the long axis becomes linearly 'referenced' and extended across space by placing round barrows at its ends. Or the Neolithic mound may form a focus for a nonlinear group of round barrows (see Table 5.1). The two bank barrows on the Ridgeway, and all but one of the long barrows (Cowleaze), form the foci around which many of the later Bronze Age barrows cluster. It is also noteworthy that a high proportion of 'fancy' types of Bronze Age barrows, disc and pond barrows, cluster toward the western and eastern ends of the top of the Ridgeway in the

vicinity of the long barrows and bank barrows. These sets of relationships can be illustrated most clearly by considering in detail the Neolithic and Bronze Age barrow groups at the eastern end of the Ridgeway.

The Broadmayne bank barrow and the Bincombe long barrow both have their long axes orientated approximately E-W along the axis of the Ridgeway itself (see Figure 5.6). They are skyline sighted, making them highly visible both to the south and the north, blocking out any view of the landscape beyond them as they are approached from these directions. By contrast, from the east and the west they are visible only from a short distance away, 150 m or less. The much smaller Culliford Tree long barrow is unusually orientated, ENE-WSW, and is not skyline sighted. In every respect, it *reverses* the siting and overall form of the nearby Broadmayne bank barrow. Its orientational axis is at right angles to that of the latter barrow (Figure 5.10). The broader and higher end is situated down-slope, whereas that of the bank barrow is situated up-slope. The bank barrow runs precisely along the top of the ridge, with the land sloping away from it to the north and the south. The Culliford Tree long barrow, by contrast, is situated toward the top of a south-north slope, with its long axis running up-slope to the lower and narrower end. The land also slopes away from it gently to the east. It is prominent in the landscape only from the west and east, that is, along the general axis of the Ridgeway itself rather than from below. Bronze Age, round barrows were built on top of both of these mounds. On the bank barrow, the Bronze Age barrow was built at the lower and narrower western end of the mound itself—on the Culliford Tree long barrow, on the higher and broader northern end (down-slope). It would be hard to introduce a more contrastive set of characteristics both in terms of mound morphology and landscape siting.

There are a number of interesting nuances at work here in relation to the manner in which the siting of these three barrows ‘works’ in relation to the surrounding landscape. Although the Bincombe and Broadmayne long barrows are sedimented into the lie of the ridge axis itself, they are meant to be seen from areas below it to the north and to the south. The Culliford barrow traverses this axis but would be most visible along it. The Broadmayne and Bincombe barrows are thus *internally* positioned and *externally* sited in terms of visibility. The Culliford barrow reverses these principles.

The Bronze Age barrows completely alter the character of the Neolithic cultural landscape and the manner in which the monuments relate to the topography. This change involves an attempt toward the re-visualisation of the world, and the meanings embodied within it, while maintaining links with the associations objectified by the Neolithic barrows. The long axes of the three Neolithic barrows effectively define and mark out the general orientational axes of the area later occupied by the Bronze Age barrows

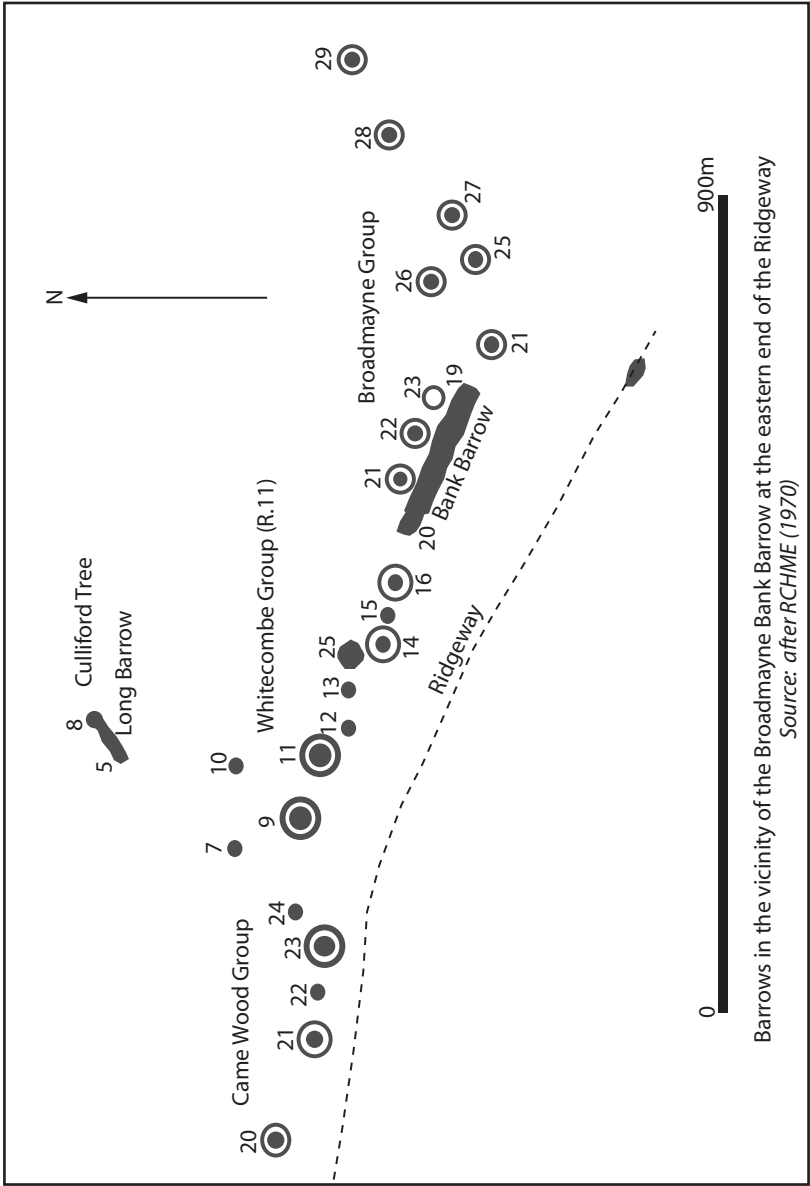


FIGURE 5.10 Barrows in the vicinity of the Broadmayne bank barrow at the eastern end of the Ridgeway (after RCHME 1970).

stretching from Bincombe to the Broadmayne bank barrow. The positioning of the Bronze Age barrows: (1) clearly extends the directional axis of the bank barrow along the ridgeway at both ends and (2) infills and extends the area occupied by monuments on the highest land between it to the Bincombe long barrow and beyond. However, what becomes important now is no longer the orientational axis of the ridge itself but a microtopography of place in which breaches in the ridge mass created by valleys and coombes become marked out and emphasised. In the process, water sources (springs) assume great significance (see below). The area marked out by the Neolithic barrows becomes literally built on and extended. The Bronze age barrow builders were obviously acutely aware of the presence and the significance of the Neolithic barrows and their positions in the landscape. They seem to have set out to both tap into and usurp their powers and significance. There are a number of ways in which this happens:

1. Height was obviously of enormous ritual significance. In the Bronze Age, the bank barrow and the Culliford long barrow have round barrows built on their terminal ends.
2. The directional orientation of the long axis of the bank barrow is extended in both directions by constructing round barrows. Rows of barrows are also offset from this axis to the west and the east along the course of the Ridgeway itself thus creating a sinuous, meandering, snakelike line.
3. The Broadmayne and Bincombe barrows are joined by a barrow arc, and studded lines of barrows on Bincombe Hill and West Hill create fresh orientational long axes in the landscape related to the localised microtopography of the Ridgeway. Both of these places are slightly higher than the area of land on which the bank barrow is located, and from them one can look *down* on it. The Bronze Age Bincombe Hill barrows in particular appear far more conspicuous today.
4. The skyline sighting effect of the Broadmayne barrow becomes deliberately altered not only by the construction of a barrow on it at the western end but also by the placement of another on slightly higher ground a short distance from the eastern end, and a whole string of barrows on the skyline due east. Two round barrows and a pond barrow were sited immediately in front of it on the northern side. Viewed from the slopes of the chalk downland to the north, it is the two round barrows and those to the west and east of the bank barrow that stand out on the skyline. The bank barrow is made as if to deliberately recede into the lie of the land as if it were part of the topography itself, an order of nature rather than of culture. The two round barrows are also

visible over the top of the mound of the bank barrow when seen from the south, thus creating a similar effect from this direction as well. When these round barrows were freshly constructed, the visual effect must have been quite striking: gleaming white mounds contrasting with, perhaps, a dull grey-green profile of the bank barrow, merging as it does today into the surrounding grass of the chalk downland. The aim must have been to usurp and tap into the directionality, height, and skyline sighting of the bank barrow. Its size and position on the Ridgeway made this a far more significant monument than that on Bincombe Hill, which simply became incorporated into the arc of Bronze Age barrows with the addition of a small round barrow down-slope from its eastern end. The Culliford long barrow was evidently far less important, since it did not occupy a high point with skyline sighting and represented much less of a 'threat' or challenge to the Bronze Age barrow constructors.

WALKING THE RIDGEWAY

The top of the Ridgeway still is, and was in historical and prehistoric times, an important path of movement. Much of the present-day interior stretch of the southwest coast path follows the line of the ridge and the barrows, and along substantial sections of the ridgetop there are either modern or documented medieval roads. The ritually proscribed and 'correct' linear path of movement along the ridgetop (which does not imply that this was the *only* path of movement) seems to have been from east to west, beginning at the Broadmayne bank barrow and ending at the Martin's Down bank barrow. This much seems to be indicated by three features: (1) the 'facilitating' orientation of the Broadmayne bank barrow running parallel with the ridgetop but blocking north-south movement; (2) the 'blocking' effect of the Martin's Down bank barrow running at right angles across the west-east axis of the ridgetop; and (3) the presence of two cursus-type monuments a short distance away from the Martin's Down bank barrow, which clearly channel movement toward it from the east—in this case, from the upper reaches of the South Winterborne valley with its series of important Bronze Age barrow cemeteries, stone circles, and standing stones (Bailey 1984; Bradley 1983; Thomas 1996: 190; Woodward 1991: 131). The idea put forward by the RCHME that the course of the Ridgeway conceptually constituted a kind of open and undefined cursus monument, or a gigantic 'natural' bank barrow, its slopes being the 'ditches', is a pertinent one to explore further in terms of the ritual processions between the monuments that might be expected to have taken place. The linearity of this putative

movement of people along the ridgetop, and the distances involved, clearly contrasts dramatically with the localised and intimate patterns of movement and artefact deposition taking place within the late Neolithic and early Bronze Age circular monuments and enclosures to the north of the river Winterborne (see Thomas 1996: Chapter 7). Whereas ritual activities at these locales took place within the proscribed limits of the monuments set *within* the landscape, those taking place along the course of the Ridgeway may have had more the qualities of processions and pilgrimages of an 'integrative' character, drawing together wider and more generalised meanings about relationships *between* topography and places.

The sea, to the south, and the rolling chalk downland to the north are visible from virtually all the barrows located along the ridgetop, with but a few exceptions. The barrows were obviously located with reference to the sea, and this visual perspective was of essential significance to their meaning. Approaching these ridgetop barrows from the north, one notes that they invariably mark an important point in one's visual perspective on the world. When one reaches the barrow line, the sea becomes visible for the first time. By contrast, from the barrow sites located on the lower northern spurs of the ridgetop, 50 m or considerably less from it, the sea is invisible. From these barrows, there is an utterly different view of the world, a more sheltered, less open and dramatic inland view of the world, studded with other barrows and monuments.

The barrow groups along the course of the Ridgeway are invariably located with reference to transition points in the landscape. Two types of transition can be distinguished. One is a transition interiorised in terms of walking along the Ridgeway itself: points at which the land begins to rise or fall away in front or behind along the course of the chalk ridge. The other is in terms of the relationship between the Ridgeway and the surrounding landscape: coombes sweeping in and breaking up the chalk—an exteriorised transition. The majority of the Bronze Age barrow cemeteries have coombes as a central 'focus', or the coombes constitute and mark spatial breaks or divisions between different barrow groups (see Figures 5.11, 5.12, 5.13, 5.14, 5.17, 5.18).

The barrows obviously were meant to be *seen*. But there are various modes of seeing that may be distinguished: first from barrow to barrow, or barrow group to barrow group, along the course of the Ridgeway. The linear groups of barrows are in most cases staggered so that you can see long lines of mounds as you walk along, and this is why they do not form neat and exact linear lines. Second, one can view these barrows from off the Ridgeway, primarily from the south or the north. So we can distinguish between 'internalised' visibility along the Ridgeway and externalised visibility from off it. The third case is, of course, the barrows being sited so as to be both visible 'internally' and 'externally'.

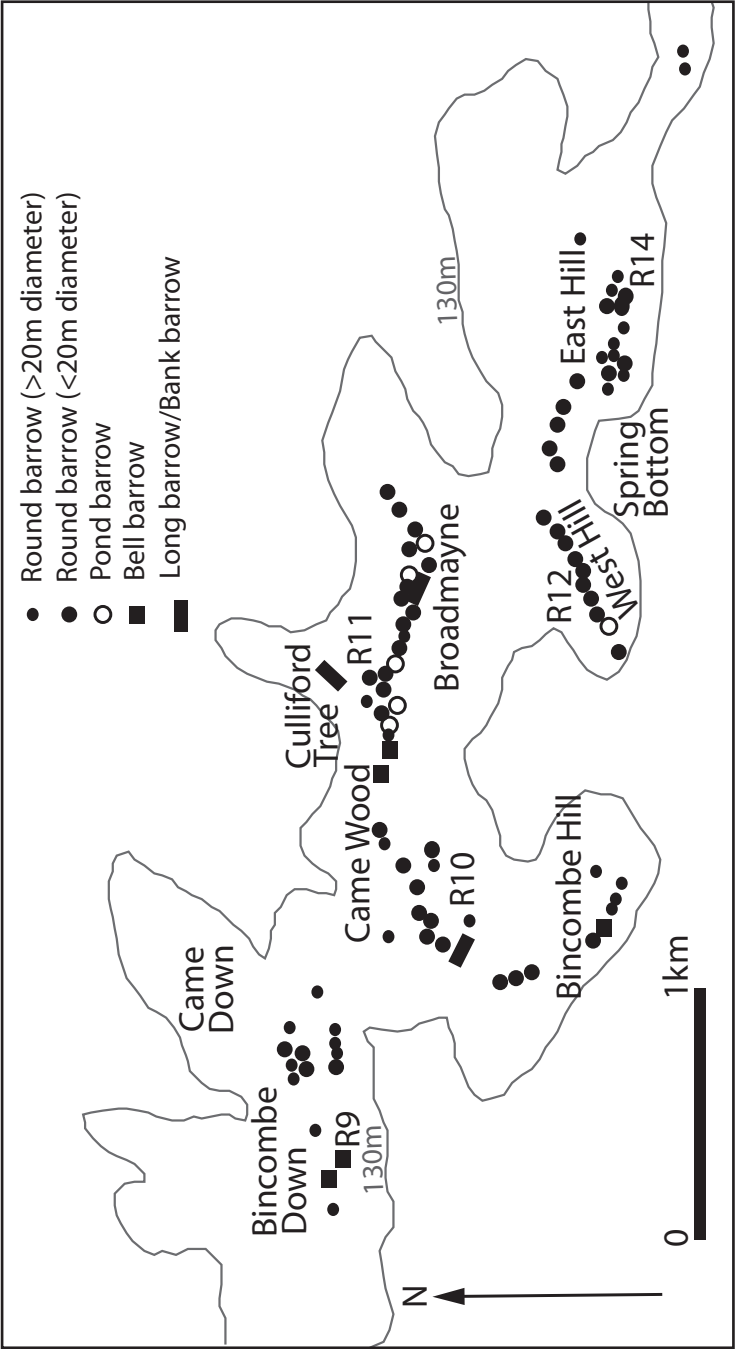


FIGURE 5.11 Barrow groups along the South Dorset Ridgeway from Broadmayne to Bincombe Down. Barrow distribution after RCHME 1970. The 130-m contour is marked.

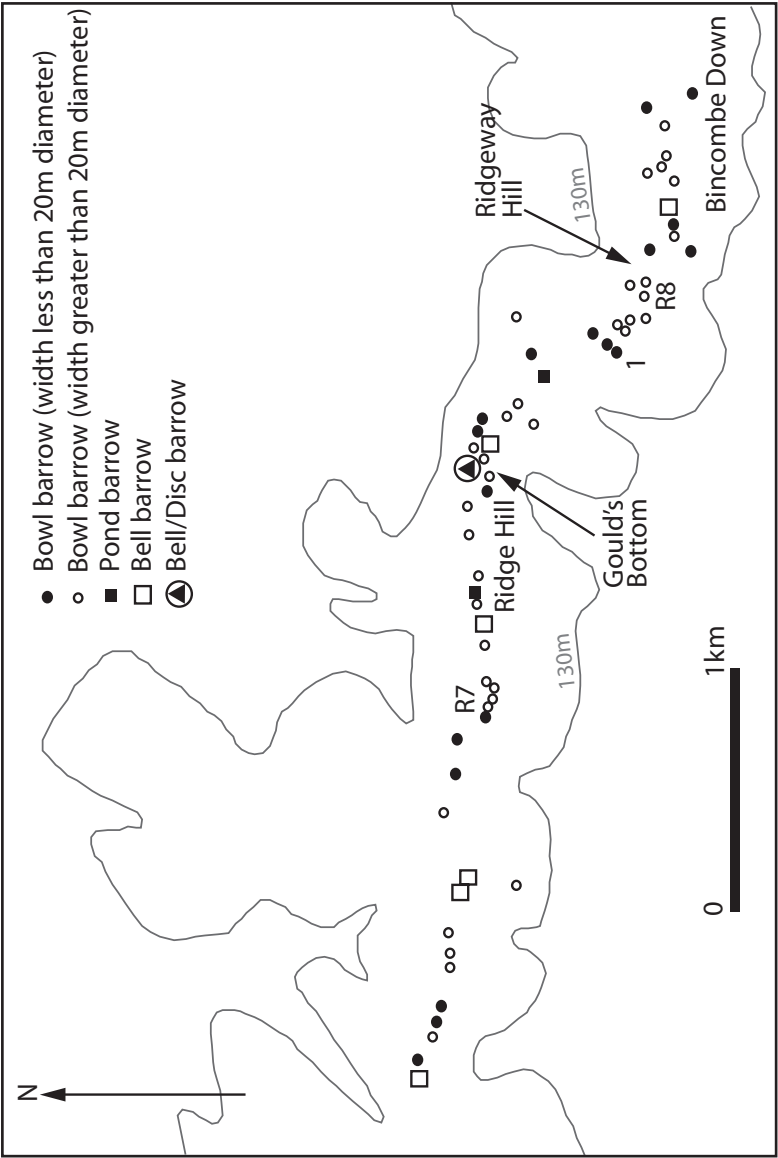


FIGURE 5.12 Barrow groups along the South Dorset Ridgeway from Bincombe Down to Bronkham Hill. The 130-m contour is marked. Arrows indicate bottoms of dry valleys cutting into the Ridgeway. Barrow distribution after RCHME 1970. Numbered barrow refers to text.



FIGURE 5.13 Part of the barrow line looking east along the Ridgeway from below Bronkham Hill toward Ridge Hill.

From Broadmayne to Bincombe Down (Figure 5.11)

The barrow groups at the eastern end of the Ridgeway form two great arcs. One stretches from just east of the Broadmayne bank barrow to Bincombe Hill in the southwest. These forty-eight barrows make up an almost continuous staggered group 1.1 km long, defining the very highest part of the ridge encircling a broad valley cutting into the chalk from the south. All but one of the ‘fancy’ barrows cluster in the vicinity of the Broadmayne bank barrow. The second group of thirty barrows runs for 600 m along the southern escarpment of the ridge, clustering around the steep declivity of Spring Bottom, the source of the river Jordan running south to the sea. All but one (a pond barrow) are bowl barrows, nine with extant surrounding ditches. The fall of the land here and at Bincombe Hill is quite dramatic. The barrows in both groups are placed in what might be termed points of transition on the lips of sloping land, usually just above points at which it begins to plunge away more or less steeply. Their spatial arrangements more or less exactly replicate the lie of the land. Closely located barrows are normally staggered rather than occurring in precisely orientated linear rows, so that when one stands at one barrow site, up to four or more others are visible down the line.

From the majority of the barrow sites, there are extensive views south to the sea and the Isle of Portland and to the north across the rolling chalk downland. Views west along the Ridgeway itself are restricted by the rise of Bincombe Down. The late Neolithic and Bronze Age enclosures to the north—Maiden Castle, Maumbury Rings, and Mount Pleasant—are not visible.

The eastern approach to the top of the Ridgeway, along the present road from Broadmayne, involves climbing a gentle and gradual slope (*c.* 100 m vertically to the ridgetop in just under 3 km). The first monuments encountered are a series of round barrows strung along both sides of the road, forming a corridor. The road gently climbs up to its highest point at the beginning of the Ridgeway proper at the eastern terminal end of the bank barrow. After the road, as one walks along the Ridgeway, one passes two round barrows on the right-hand side and reaches another on the left part of the terminal end of the bank barrow, which is first visible from *c.* 150 m away. It appears as if it might be part of the profile of another round barrow. It is only after one has passed by another barrow pair (pond to left and round to the right) that the entire length of the bank barrow and its associated round barrows can be seen stretching into the distance.

From the barrow sites, there are dramatic views of the isle of Portland and Chesil Beach stretching out and joining the mainland. This eastern end of the Ridgeway is the only area from which the link of Chesil Beach to the mainland is visible. Elsewhere it is obscured by the low coastal hills around Weymouth. From the extreme eastern end of the barrow line at Broadmayne, the very northern tip of Portland is first visible when one is standing on top of the barrows but not beside them. It is fascinating to note that from the western end of the bank barrow the Bronze Age barrows parallel and continue the bank barrow's course, extending the visual perspective of Portland and Chesil Beach. Before reaching the bank barrow, the orientation of the line of Bronze Age barrows is different, simply following the sloping route up to the ridgetop from the south marked by the bank barrow. When one walks below the bank barrow along its northern edge, the view of Portland and Chesil Beach is entirely obscured. From the southern side of the barrow, only the tip of Portland is visible, except at the western end. It is only from the top of the barrow that the line of Chesil Beach is continuously visible from the western to the eastern end. When one steps off the mound at the eastern end, the beach suddenly vanishes. Walking from east to west along the barrow top, one notes that the view of Portland becomes more and more distinctive, the site of the most westerly Bronze Age barrow immediately to the north of the bank barrow, marking the point at which one first notices that Portland is an island surrounded by sea, Chesil Beach its only link with the mainland.

From the western end of the bank barrow, the land dips away very gently to the west for c. 350 m. to a meeting of tracks (now a modern crossroads): the Ridgeway itself and one running up to the Ridgeway from the south and another to the north. This meeting point of trackways may explain the close location of the two long barrows here. By this meeting of tracks, two pond barrows are located. From this point, the land gently rises once more until the last barrow in the western part of Came wood is reached, marking the point at which the great arc of round barrows runs away to the southwest, following the very highest ground. When one follows the line of barrows west from the Broadmayne bank barrow, the line of the Chesil Beach is first obscured by Bincombe Hill at the point at which the barrows begin to curve round to the south. Only the very top of the Isle of Portland is visible from the Bincombe long barrow, but on reaching the other barrow groups to the south, one notes that the view of Portland and Chesil Beach dramatically reappears.

Beyond this barrow, moving west, one sees the land dip away gently once more before rising and dipping to the end of Came wood. At this point, a deep coombe cuts into the Ridgeway from the south. Continuing to walk west, one sees the land rise once more to Came Down (a northern spur of the Ridgeway) and Bincombe Down along the Ridgeway itself. The rise of Bincombe Down blocks views farther west. On the eastern slopes, a linear cemetery of four barrows is situated. The highest land is occupied by a cluster of seven barrows on the southern part of Came Down. When one approaching these up-slope from the east, Maiden Castle is first visible to the northeast from these barrow sites. On the upper eastern slopes of Bincombe Down, there are two impressive bell barrows that dominate the view when approached from the east. There are stupendous views from these massive barrows of the whole of the eastern coast of Portland, as opposed to its towering northern cliffs, the only part of the island visible previously along the Ridgeway. These two barrows are not intervisible with the group on the western slopes of Bincombe Down. It is only after reaching the top of the Down that one can see Black Down in the distance beyond for the first time since leaving the Broadmayne bank barrow.

From Bincombe Down to Bronkham Hill (Figure 5.12)

From the top of Bincombe Down, a long staggered row of barrows is visible stretching away down-slope and up again to the top of Ridgeway Hill to the west, the top of which is broken by the profile of a single prominent barrow (Figure 5.13). Walking down the steep slope, one sees Black Down gradually disappearing over the horizon, to become visible once more only just before one reaches the barrow on the top of Ridgeway Hill. It is only when this barrow is reached that those on the eastern part of group R7 are visible. From

the barrow on the top of Ridgeway Hill, the land gradually slopes down to the symbolic centre of the R7 group marked by an enormous barrow, unique on the Ridgeway in terms of form (intermediate between a disc and a bell barrow) and size (largest in overall diameter). From the barrow sites on the western slopes of Bincombe Down, the southern tip of Portland, Portland Bill, is clearly visible. Portland and Chesil Beach gradually slip out of sight as one walks down the slope of Bincombe Down in a westerly direction, both being entirely obscured from view when one reaches the bottom of the slope and the modern (and Roman) road from Dorchester to Weymouth. From the lowest barrow on the western side of Bincombe Down, Portland is visible only from the top of the barrow mound, being obscured as one stands beside it. Walking up the western slopes of Ridgeway Hill, one first sees Portland at the lowest barrow, and soon after the line of Chesil Beach linking it to the mainland. They both remain continuously visible until one passes the barrow on the crest of the hill, and then they disappear out of sight. From this point onward, the stretch of Chesil Beach linking Portland to the mainland remains invisible along the rest of the Ridgeway. For the next 700 m, Portland is visible only from the tops of the larger barrows. It is invisible from the top of the massive disc/bell barrow just to the north of the declivity of Gould's Bottom, and the sea is not even visible from the summit of the barrow mound. By contrast, Portland and the sea are clearly visible from the barrow sites no more than 30 m to its south. Portland and the sea remain in sight from all the barrows along the next 5 km stretch of the Ridgeway to the summit of Black Down.

Unusually, the enormous bell-disc barrow is situated not on a high point, the norm for the largest and most impressive barrows, but in a dip on the Ridgeway, with the land rising steeply to the west of it, more gently to the east. It is located on a north-south slope, with the land rising above it to the south. This means that this barrow is not visible from off the Ridgeway to the south, being hidden by rising land above it. The top of the mound is first visible from the barrow on the summit of Ridgeway Hill 750 m away to the east but from only 250 m away to the west. From both these vantage points, one looks *down* on the barrow. Only the central mound is visible from the east until an observer reaches the two barrows immediately adjacent to it on the eastern side and passes beyond them. The entire barrow—with central mound, wide berm, ditch, and external bank—is visible from the west, but only from a short distance away. When one approaches from the south, the barrow is visible only when the crest of the Ridgeway has been reached c. 60 m. away. It seems to have been located in a deliberately hidden location at the *lowest* point on the whole of the Ridgeway between the Broadmayne and Martin's Down bank barrows. It is visible only from a long distance away from the north, where it appears as prominent and skyline-sited from the

Maiden Castle bank barrow 1.9 km away. It must have been deliberately sited to have been seen from this direction and location. This huge round barrow was thus constructed in this location so as to explicitly reference the bank barrow. The bell/disc barrow is sited at the head of two dry valleys. One long narrow valley cuts into the Ridgeway from the north; another much deeper valley, Gould's Bottom, cuts from the south. Standing on the Maiden Castle bank barrow, an observer feels his gaze drawn up the coombe to the bell/disc barrow at its head. From the barrow site itself, views along the Ridgeway are very restricted. To the west, the rising slope blocks the view after a few hundred metres, with the large barrows on the top of Ridge Hill being invisible. To the east, views are restricted by the rise of Ridgeway Hill. Bincombe Down is visible only from the top of the mound. Rising ground blocks any view off the Ridgeway to the south. It is only when one is passing over the ditch and bank on the southern side of the mound that there is a glimpse of the sea and the landscape beyond, but the view becomes properly visible only from the top of the Ridgeway south of the barrow.

Leaving this barrow, one walks west up a steep slope to the top of Ridge Hill surmounted by an impressive string of barrows. These are skyline-sited and highly visible from both the north and the south off the Ridgeway. Black Down comes into view just before one reaches the top of the slope. From these barrows, there are panoramic views across the landscape. Looking west, one sees an unbroken chain stretching away toward Bronkham Hill and Black Down. The land dips away gently at first from the summit marked by the barrows to the north and south and then more steeply. From the summit of Ridge Hill, the western course of the Ridgeway dips away gently for about 2 km before rising up steeply to Bronkham Hill. Bronkham Hill and Black Down, the latter blocking all views of the rest of the Ridgeway, are the most distinctive westerly skyline features apart from the barrows themselves.

Glimpses of the Fleet and the Fleet stretch of Chesil Beach are visible from the barrow sites between Ridge Hill and Bronkham Hill, but it is only from the first of the larger barrows lining the ridge of Bronkham Hill that the Fleet and Chesil Beach become major and impressive features of the coastal landscape.

Bronkham Hill and Black Down

At the eastern end of Bronkham Hill (Figure 5.14), a shallow coombe cuts into the Ridgeway from the south and another, Ridge Bottom, from the north. These coombes mark a low point on the Ridgeway before the land rises steeply up to the summit of the hill. Bronkham Hill is situated at the midpoint of the Ridgeway. It marks another important transition point, a change in the overall directional orientation of the ridgetop from being almost exactly westeast to

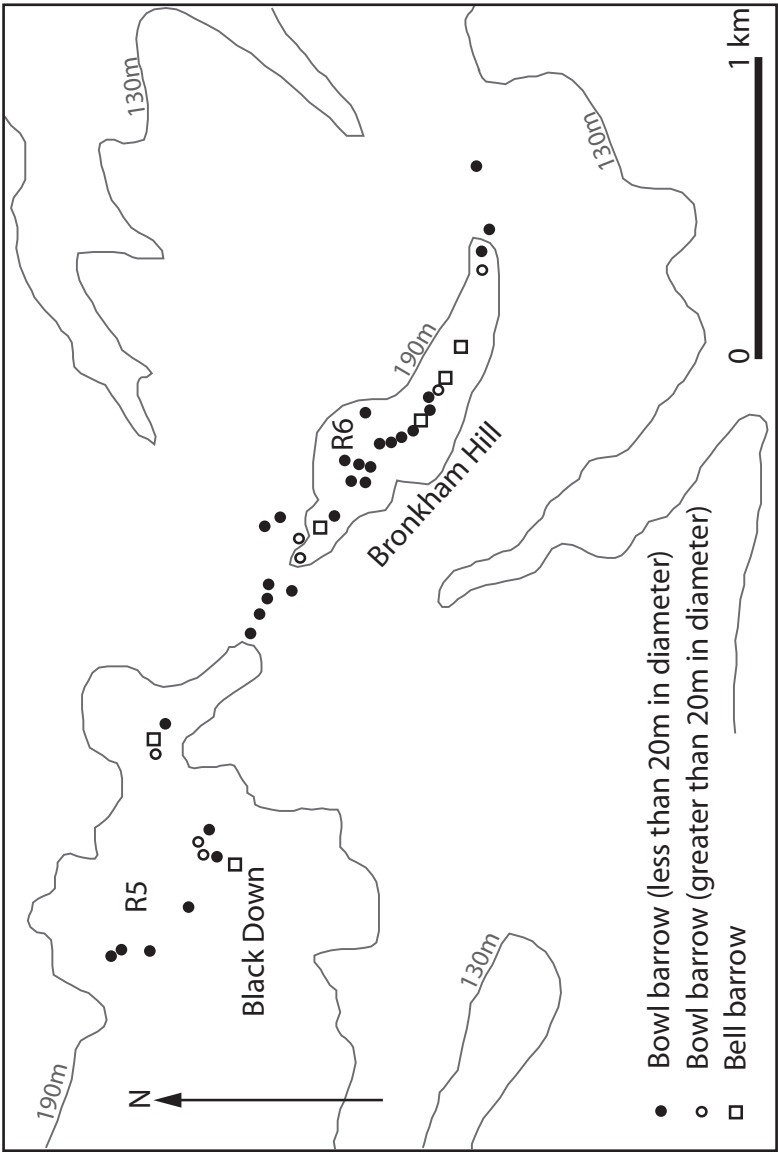


FIGURE 5.14 Barrow groups along the South Dorset Ridgeway from Bronkham Hill to the Black down summit. The 130-m and 190-m contours are marked (barrow distribution after RCHME 1970).

northwest to southeast. From the dip where the coombes meet, four prominent barrows are visible studding the skyline of the hill.

The character of the land on the top of both Bronkham Hill and Black Down differs markedly from the chalk areas surrounding them. Here there is a thick capping of Bagshot gravels with heath development. The ground is rich in flint pebbles, which were used to construct the monuments—essentially flint cairns of various colours. The tactile qualities of heather and bracken, flint, and back peaty soil give these hills an utterly distinctive feeling compared with other parts of the Ridgeway. The only other comparable area is Bincombe Down, but there the pebble gravels capping the chalk are thinner, less extensive, and well developed. These two hills are also the highest points along the Ridgeway, the roofs of the world, where one is in the closest contact with the sky. Black Down is slightly higher than Bronkham Hill, but whereas the top of Black Down is broad and relatively amorphous in shape, Bronkham Hill forms a long and narrow spinal ridge, rising up both from the eastern and western ends, with the land dropping away sharply to the northeast and the southwest. An unbroken 1.8 km line of thirty barrows are studded along the restricted spine of the ridge up along the eastern and western slopes of the hill. Of these, four are bell barrows, the largest and highest concentration of barrows of this form anywhere along the Ridgeway. The highest point on the hill is occupied by the largest bell barrow. One of the other bell barrows is situated on the northwestern slope of the hill, the other two on the southeastern slopes. Apart from the bell barrow mentioned above on the northwestern slope, all the other most impressive and prominent barrows are situated on the southeastern slopes and are meant to be seen from the Ridgeway itself as well as from off it to the north and the south. West of the large bell barrow on the hill summit, there is a small, flat plateau area. Here the arrangement of the barrows becomes more clustered. The mounds of these barrows, in contrast to those situated on the narrowest parts of the ridge, are all small and relatively inconspicuous. Beyond barrows 12 and 13 (see Figure 5.16), the land begins to dip and undulates significantly. The remaining eleven barrows in the group are situated on sloping land, mostly on spurs or small knolls with the land dropping away steeply to the north and east of them. This repeats the pattern found in barrow location on the southeastern part of Bronkham Hill, where again the land, in the majority of cases, drops away steeply to the north of the barrows. Hugging the line of the ridge, the barrows were deliberately positioned so as to be most prominent when seen from the north, south, and east. The siting of some of the barrows on small knolls considerably increases their profiles when viewed from afar. Moving along the line of barrows from east to west or west to east, barrow intervisibility in the cemetery is restricted. From bell barrow 10, one can see the other barrow sites to the west but only

a couple of other barrows to the east. It is only from the bell barrow at the highest point that the majority of barrows both to the west and the east are visible. Inter-barrow visibility is extremely restricted on the southeast slopes of the hill, with the majority of barrows out of sight to the west. The largest bell barrow on top of the hill marks the point at which (1) the majority of barrows are visible and (2) the 'hidden' plateau area is not visible from the eastern slopes of the hill. When one walks up the slope of the hill following the line of the barrows, Black Down comes into view only from the tops of the barrow mounds until one reaches the summit and the bell barrow (No. 20). Thereafter, the ground slopes away to the northwest, and Black Down is continuously visible to the west. The finest and most extensive views of Chesil Beach and the Fleet lagoon are obtainable from the vantage point of the largest and highest bell barrow on the summit of Bronkham Hill, where two continuous stretches of the lagoon and the beach are visible: parts of the east and west Fleet. Descending Bronkham Hill, one notices that views of the lagoon and the beach become less striking and impressive until one reaches the barrows on the summit of Black Down.

Undoubtedly, the most remarkable feature of Bronkham Hill is that the entire ridge is studded with over two hundred dolines, or sink holes, some of which are very large, deep, and impressive. Seen from a distance, the ridge resembles a lunar landscape (Figure 5.15). On the ground, these dolines are visible only from a short distance away, which surprises an observer on top of the hill, having to walk around and between them. They are all almost perfectly circular in shape, ranging in diameter from around 4 m to 15 m or more (the average diameter is 8 m), and they may be up to 4 m deep (House 1991: 149–153). Apart from a small group of dolines in an area on the top of Black Down where Bronze Age barrows also cluster around the Hardy monument, they occur nowhere else along the Ridgeway.

These circular hollows are depressions formed in the chalk by subsurface solution in areas where there is a cover of gravel and sand deposits (Bird 1995: 58). These surface deposits collapse into the solution holes invisibly formed beneath them to create a dramatically pock-marked topography. The sink holes on Bronkham Hill are particularly striking not only because of their size and depth but also in terms of their close association and juxtaposition with the burial mounds, something that, quite surprisingly, has been completely ignored in the archaeological literature on the Dorset Ridgeway. When one stands near to some of the largest barrows, it appears as if the barrows themselves have been thrown up out of the largest of the dolines. The dolines may indeed have been enlarged or at the least have provided a ready source of building material for barrow construction. One is a transformation or inversion of the other. The circular shape of both serves to emphasise this connection.



FIGURE 5.15 Oblique aerial photograph of the summit area of Bronkham Hill seen from the northeast showing dolines and barrows. The summit barrow (with excavation trench) is toward the top right of the photograph (copyright RCHME).

There exists a strong relationship between barrow and doline distributions. In the densest concentrations of some of the largest and deepest dolines, the largest and most impressive of the barrows are situated (Figures 5.15 and 5.16). Three of the four bell barrows have dolines in their surrounding ditches. Five of these dolines almost encircle the ditch of the largest and highest bell barrow (No. 20). Three occur in the eastern side of the ditch of barrow 10 and

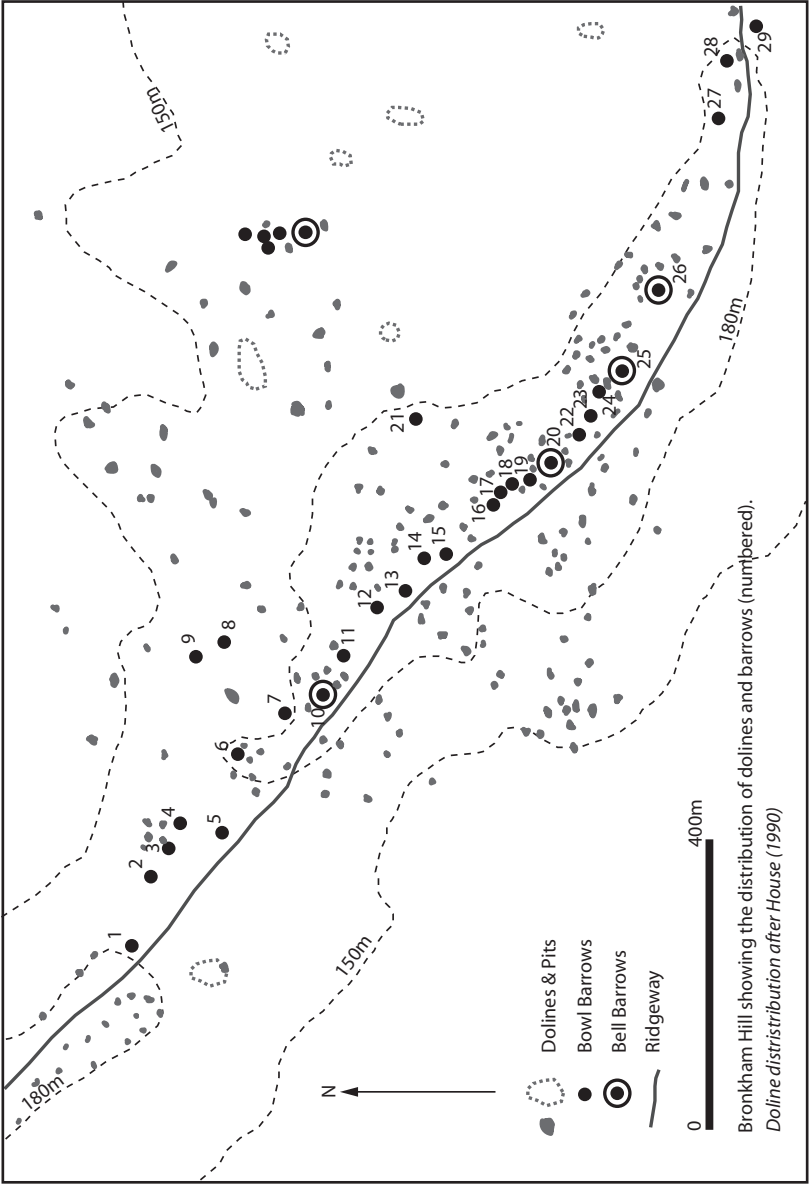


FIGURE 5.16 Bronkham Hill: the distribution of dolines and barrows (numbered) (doline distribution after House 1991).

two in the northern part of the ditch of barrow 26. The remaining bell barrow (No. 25) has no dolines in its ditch but is surrounded by large dolines to the north and south. The dolines in the barrow ditches are usually considerably smaller in diameter than those encircling and surrounding them. A remarkable series of deep doline holes completely encircles a large ditched bowl barrow (No. 24) situated between two of the bell barrows on top of the hill and bounding it off from them. A much smaller bowl barrow is precisely situated at a point where there are no dolines in the circuit surrounding the barrow, thus completing the ring (see Figure 5.17).

Some of these dolines hold water in wet weather. House has noted that a few on the northern side of the hill have developed spring hollows (House 1991: 149). There is thus a clear association with sources of fresh water, springs, and these doline holes. The precise date of the formation of the dolines remains unclear, but it seems to have taken place over a very long time well before the construction of the Bronze Age barrows and up to the present day. Their appearance on the ground surface can be quite sudden and dramatic. Wilson and associates state that 'during the [geological] survey of this area [1931–1946] two of these solution pits showed evidence of the process of their formation. On the top of Bronkham Hill, beside the largest tumulus, a hole about a foot in diameter appeared on the surface. Beneath it was a large cave about 20 ft in diameter and 20 ft deep. In a field 630 yd W.S.W of the Hardy Monument a solution pit was formed within five years' (Wilson et al. 1958: 179). House attempts to date most of the dolines on Bronkham Hill as being later than the barrow construction: 'It seems unlikely that such splendid tumuli would have been erected on a site considerably pockmarked by deep solution hollows . . . the probability is that the surface was relatively smooth at the times of the burials' (House 1991: 153). I want to make precisely the reverse argument. It was *because* of the presence of the dolines that the barrows were constructed here. It seems highly unlikely that dolines should develop by chance exactly in the ditches of three out of the four of the finest and largest monuments, the bell barrows, on the ridge and that some of the most impressive dolines should be situated so close to the barrows so as to surround and encircle them. Unequivocal evidence of an intimate relationship between dolines and monument construction is shown by a cross dyke of probable Iron Age date that runs over the top of one of the Bronze Age barrows and links a series of doline holes that clearly predate it and were used as part of the structure of the dyke (Figure 5.17). Note that no new doline holes cut the dyke. It is not hard to imagine that during the Bronze Age these circular sink holes were conceptualised as sites of ancestral activity: the places where the ancestors entered and exited into the land to a sea of the underworld existing below. Their close association with the barrow

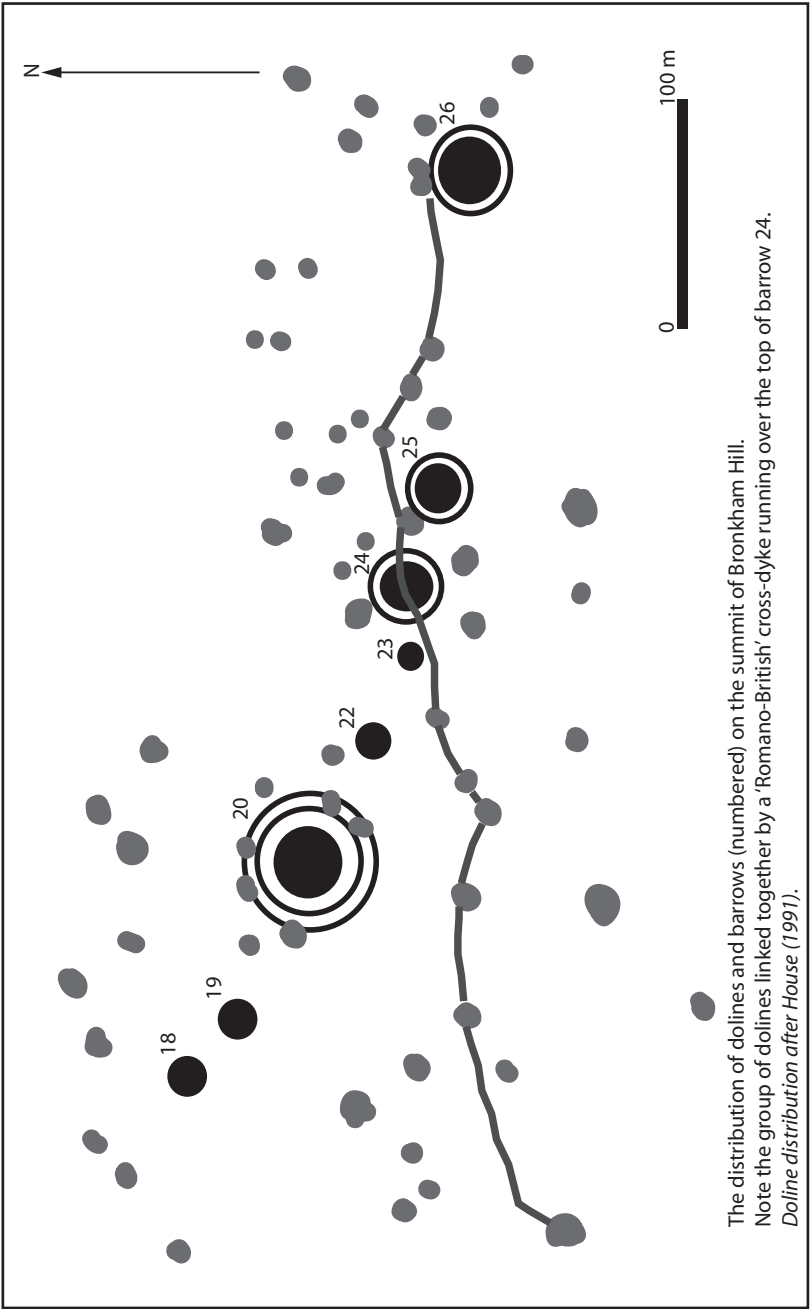


FIGURE 5.17 Distribution of dolines and barrows (numbered) on the summit of Bronkham Hill.

ditches and sites is thus readily explicable. The dolines formed an essential part of the mystery and power of the place.

As already noted, on both Bronkham Hill and Black Down, the overlying deposits are of Tertiary age, the Bagshot beds. The mounds of the Bronze Age barrows, visible in disturbed patches, are constructed out of these gravels, which include 'flint cobbles, pebbles of flint and quartz, jasper from Cornwall, slate, chert, and grit from the Upper Greensand and silicified Purbeck limestone [and] a matrix of yellow and white quartz sand' (*ibid.*: 40). These burial mounds thus contrast with all others along the Ridgeway in terms of the gravelly and pebbly nature of their construction and the numerous colours and textures of the material. The numerous smoothed pebbles occurring in these Bagshot beds are frequently exposed in the sides of the doline holes and bear a remarkable resemblance in colour, texture, shape, and size to those forming Chesil Beach 6 km away to the south. Bronkham Hill and Black Down are both within sight and sound of the sea, the Isle of Portland, and stretches of the Fleet lagoon and the line of Chesil Beach itself. These gravel and pebble sediments, in geological time, were carried and deposited here by a river draining from Dartmoor and the Haldon hills eastward across Lyme Bay, and their waterborne origin is obvious. To the prehistoric people, the pebbles on the top of Bronkham Hill and Black Down must have represented the tangible ancestral remains of a *beach in the sky*.

At the end of the Bronkham Hill barrow cemetery, the land gradually dips and then winds up to the top of Black Down. Two small barrow groups on the way are constructed on small knolls, thus emphasising their size. Just before the Black Down summit is reached, the land rises very steeply. On Blackdown, there is a group of eight barrows, the largest on the summit. From this vantage point, there are sweeping vistas along the Ridgeway in both directions. The Martin's Down bank barrow at the northwest terminal point is also just visible on the horizon. To the south, Portland is visible and stretches of the Fleet lagoon enclosed by the sweep of Chesil beach, the same view as from the top of Bronkham Hill. More immediately, the doline-pitted and barrow-studded spiny ridge of Bronkham Hill is visible below, appearing as if in an oblique aerial photograph. For the first time, one can see the westward stretch of the coast of Lyme Bay and the distinctive profile of Golden Cap.

The top of Black Down around the Hardy Monument, like Bronkham Hill, is studded with dolines. It is here, as on Bronkham Hill that the main cluster of barrows occurs, again in close association with the doline distribution. However, these dolines, in comparison with those on Bronkham Hill, are less numerous, generally shallower, and far more irregular in shape. Given the usually close association between height and spiritual power in the Bronze Age, it is somewhat surprising how few barrows occur on the Black Down

summit. The surviving summit barrows are not prominent today, and it is unlikely if they ever were. They are modest constructions. Only one (now destroyed) was a fancy barrow and situated south, down-slope from the highest point. These barrows are in place, mark the place, but were not intended to be visually prominent from any distance. It is therefore unlikely that Black Down was the most important sacred hill along the Ridgeway, despite both its towering height and the magnificent views in all directions. It can be understood better as a large 'viewing platform' in which populations were able to look down, as today, and fully appreciate the mystery of Bronkham Hill with its pronounced dolines, barrows constructed out of pebbles, and its narrow *ridged* resemblance to Chesil Beach.

From Black Down to Martin's Down

From Black Down to Martin's Down (Figure 5.18), the character of the Bronze Age barrow distribution differs markedly from that occurring along the previous stretches of the Ridgeway. The barrows are either isolated or cluster in clearly defined groups rather than forming an almost continuous line along the ridgetop. The northwest arm of the Ridgeway is remarkable for the regularity in barrow placement: single barrows, or barrow clusters, occur at distances of between c. 400 and 600 m. There is a gradual increase in numbers of barrows as one moves away from Black Down from pairs of barrows or single barrows to large barrow groups, the last two groups both being focussed around long barrows, the final point being the remarkable Martin's Down complex, consisting of a massive bank barrow with a possibly associated cursus leading up to it. There is thus an increase in monumentality as one moves northwest. Fancy barrows occur only in the last two groups.

Three small flint cairns were built a little way down-slope from the top of Black Down to the west. Only one, the largest, is visible from the summit. Two smaller cairns are sited on the margins of the highest land. To the west and north of them, the land plunges away. From here, the profile of the long barrow at Cowleaze, running along the upper slope of the Ridgeway in the distance, acts as a prominent visual marker. The broader southeast end is orientated directly up to the Black Down summit in one direction and precisely along the remainder of the Ridgeway at narrower northwest end, establishing a general direction in which to walk. When one leaves the Black Down summit, the Fleet and Chesil Beach disappear out of sight as one walks east past the last of the summit barrows. Henceforth, views of the sea from the next stretch of the Ridgeway from Black Down to Martin's Down are those of Lyme Bay. This part of the sea and the coast is visible from the majority of the barrow sites, constituting a completely different perspective on the world.

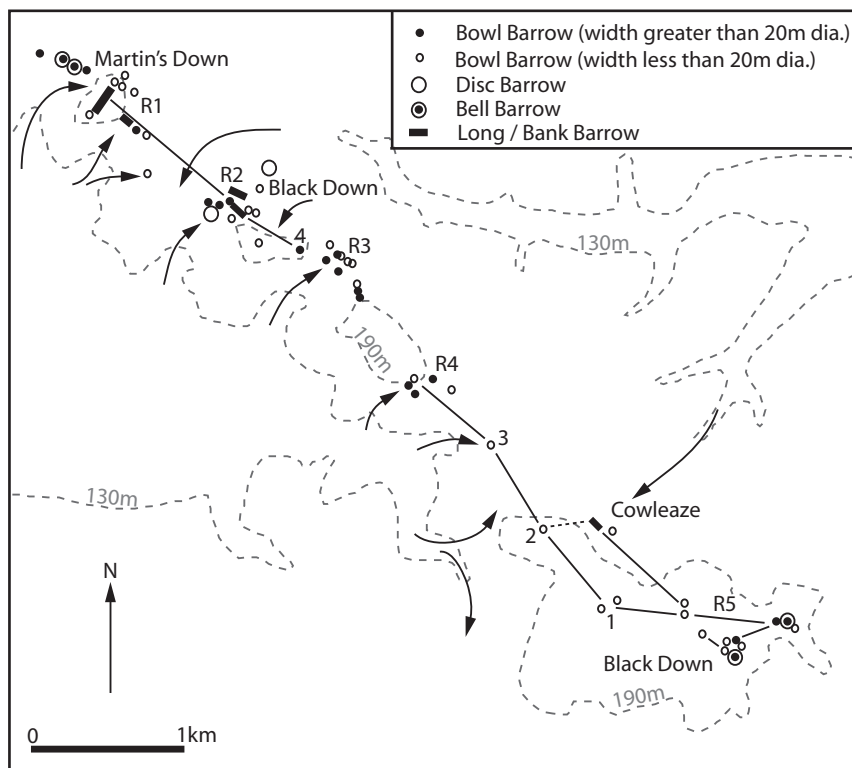


FIGURE 5.18 Barrow groups along the South Dorset Ridgeway from Black Down to Martin's Down. The relationship between barrow groups and dry valleys cutting into the Ridgeway from the south and the north is shown by arrows. Intervisibility between barrows and groupings is shown by connecting lines. R1-R2 = barrow groups. Numbered barrows refer to text. *Barrow distribution after RCHME (1970).*

The western slopes of Black Downslope down are gentle. Moving downward and westward, one encounters a pair of barrows situated beyond the margins of the Bagshot pebble gravels. They are located at the top of a western arm of a dry coombe, part of the Valley of Stones, with prominent exposed sarsen boulders in its depths. These barrows are sited so as to be most prominent from below to the west and south. Viewed from these directions, they appear to mark the top of the hill, and the Black Down summit is invisible beyond. Directly northwest, another prominent barrow is visible, at a distance of just over 600 m (Figure 5.17: 2). The land slopes down gently for 250 m and then is flat until this barrow is reached. It is situated on a break of slope. To its north and west, the land plunges away quite steeply. The previous barrow is skyline-sited from here. The next barrow, also located at a distance of 600

m, would have been prominent from here (Figure 5.17: 3); however, it is now much ploughed down, obscured by a wood and a hedge. The way to it replicates the previous move between barrows 1 and 2 (see Figure 5.17). At first, there is a gentle slope and then a flat stretch of ground in the middle of which the barrow is placed. It is located just to the west of an arm of the Bride valley, forming a steep wooded coombe, at the point of which the dip finally disappears into the ridge. This barrow clearly marks a point of topographical *transition*. From it, the Cowleaze long barrow is clearly visible. The barrow Group R4, the centre of which is again situated c. 600 m away, would originally have been prominent from this barrow. The walk to them is flat for the first 400 m. The ground then slopes up gently to the northwest, where the barrows are sited. They are located so as to be prominent when seen from the southeast. Beyond them, the view of the Ridgeway is blocked by rising land. This rise is conspicuously absent of barrows, and it is only when one reaches the top at 190 m that the next barrow group can be seen below. Martin's Down can also be seen from this point. The only prominent visible barrow in Group R3 is the one farthest to the northwest at its terminal point (Figure 5.18: 4).

Barrow Group R3 consists of eleven barrows in two staggered rows aligned northwest to southeast. The most prominently sited is the most north-westerly barrow in the group (just visible from the summit of Black Down). It and the three most southerly barrows in the group are sited at the ends of a shallow dip in the terrain in the middle of which the others are sited. So these terminal barrows in the group are sited on transition points along the Ridgeway where the land rises and falls (Figure 5.17). Just to the south of the centre of the dip, and the barrow group, is an impressive arc-shaped coombe cutting into the chalk from the south. The higher ground at the western end of the dip effectively blocks any view along the remainder of the Ridgeway to Martin's Down, and it is only when one reaches the western terminal barrow in the group that one can see in the distance Martin's Down with its bank barrow. This is the first point along the whole of the Ridgeway where the massive bank barrow and its associated long and round barrows can be seen clearly and in their entirety (a hazy outline of the bank barrow seen with strained eyes on the summit of Black Down excepted). So the westernmost barrow in group R3 marks a very important point in an observer's visual field. Beyond it, the bank barrow is an increasingly prominent feature on the horizon, never slipping out of view but blocking any view of the land beyond it. When one looks east, barrow 4 is the only one in Group R3 visible from Groups R2 and R1. It commands a two-directional visual field along the Ridgeway and is also a prominent skyline feature seen from off the course of the Ridgeway from both the north and the south.

Beyond it the land slopes down gently to Group R2 (Figure 5.19), the beginning of which, marked by the end of a long barrow, is 400 m distant. The

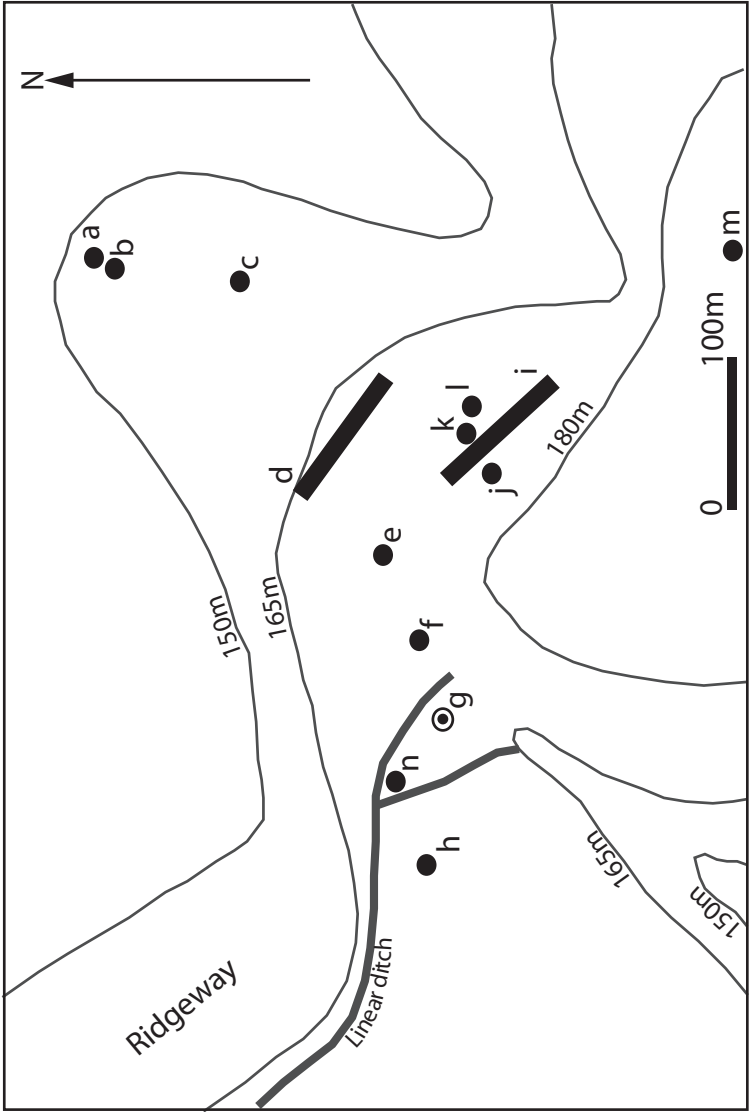


FIGURE 5.19 Barrow group R2 (after Bailey 1980).

terminal end of this barrow is the only monument in Group R2, apart from three outliers to the north, visible from this point.

Group R2, a diffuse clustered group, consists of two long barrows of great length, ten bowl barrows (four with surrounding ditches), and two disc barrows. It is prominent as a group only from Martin's Down in the northwest, being almost invisible until it is reached when approached from the southeast. The northern long barrow is aligned directly along the top of a slope (165 m contour) dipping steeply to the north, and this barrow and the rest of the barrow group appear prominent when seen from off the Ridgeway from the north but is invisible from the south. Black Down is not visible from any of the monuments in this group, and the bank barrow on Martin's Down blocks any view beyond it farther west, an impenetrable barrier. Although the round barrows cluster around the long barrows, clearly the focal point for the group, none of the round barrows are placed so as to be directly in line with the orientation of the axis of the long barrows. Only one round barrow, centrally located, is intervisible with almost all the others. This is the most prominently sited barrow, the only one in the group visible when one is walking all the way toward it from Martin's Down.

The group is located at a number of significant transition points, both internally with reference to the course of the ridgeway, and externally:

1. The southeastern end of the group, marked by barrow m on a high point, is due south of a shallow coombe cutting into the ridgeway from the north (see Figures 5.18 and 5.19).
2. Barrow g is situated just at the head of a deep coombe cutting into the ridgeway from the south.
3. Barrows f and e and the end of long barrow d mark a break of slope where the land begins to dip away steeply to the northwest along the course of the Ridgeway itself.

From Group R2, the round barrow by the Martin's Down bank barrow and in staggered alignment with the long barrow and two other barrows to its south, although not particularly large, is extremely prominent. From Group R2, the Martin's Down bank barrow marks the termination of the world of the Ridgeway. Nothing is visible beyond it. Walking at first down-slope and then up-slope, one can see that it completely dominates the horizon. It becomes the horizon of horizons.

The distance between the long barrows in Group R2 and the Martin's Down bank barrow is c. 1 km. The land dips down into a shallow, wide coombe, cutting into the Ridgeway from the north for 300 m, and then steadily rises up to the bank barrow. Another steep narrow coombe cuts in from the south, and at

the head of this the first barrow in Group R1 is sited. The others are scattered on sloping land rising up to the bank barrow. Two barrows are directly aligned in relation to its long axis, one at the southern end, the other at the northern end. Group R1 is clearly meant to be seen from Group R2 along the Ridgeway. The bank barrow is hardly visible from the cluster of three barrows, two of which are very prominent bell barrows below and beyond it to the northwest.

This terminal Group R1 consists of eight bowl barrows (three with ditches), the massive bank barrow itself, and a small long barrow with its long axis orientated up to the bank barrow. Walking up the slope, one notes that the bank barrow dominates the horizon, and it is not until passing around it, or walking over it, that the hills beyond can be seen. The land dips away sharply to the northwest of the bank barrow to a dip marking the top of a coombe slicing into the ridgeway from the south. In the middle of the dip, two massive bell barrows and a smaller bowl barrow cluster. The bank barrow is sited on the highest part of the Ridgeway (195 m) to the northwest of Black Down. The massive cross-bank is reminiscent of the terminal bank at Thickethorne Down of the Dorset cursus (see Tilley 1994). The bank barrow has a dramatic effect on the landscape (Figure 5.8). Two-thirds of the way along it there is a curious break in the profile of the mound. Walking along the length of the barrow on the eastern side, one can see the hills beyond only through this gap. No monuments are visible through it. As Bradley has noted, the ditches on both sides are continuous and unbroken, so it is unlikely that the gap marks a trackway cut through the mound. It might be an antiquarian excavation, but another possibility, suggested by Bradley (1983), is that the barrow was at some point extended and originally was a shorter, less imposing structure and one that would not completely block an observer's visual field from the east. It was something added to create this effect, to terminate the Ridgeway—restricting flexibility of movement, visual knowledges, and access to that lying beyond.

THE RIDGEWAY AS AN ANCESTRAL BEACH

The transformation of the entire course of the Ridgeway into an almost continuous barrow cemetery in the Bronze Age can be understood as part of a process in which a set of pre-understandings, cosmological meanings, and associations extending back to the Mesolithic were both extended and transformed. During the Neolithic, the most sacred areas of the Ridgeway, the high points of Bronkham Hill and Black Down, were avoided. During the Bronze Age, barrows were constructed in these places among the sink holes. This configuration clearly must have involved an active appropriation of the ancestral powers associated with and invoked by these areas of the ridge. If the old

Neolithic bank barrows represented beaches in the sky—cultural representations of Chesil Beach manipulated in ritual practice—then in the Bronze Age, this idea seems to have been extended to encompass the whole of the Ridgeway, which itself became re-conceptualised in ancestral mythology as an enormous ancient raised beach on which the barrows were now constructed, studding the beach crest.

There are a number of specific analogies that link the Ridgeway and Chesil Beach, features that would have demanded a cosmological explanation and understanding:

1. Both are ridges that run roughly parallel to each other in a westerly to easterly direction and terminate due north of each other at both ends.
2. The profiles, or cross-sections, of both ridges are very similar: steep on the south side with much gentler slopes on the northern faces.
3. Chesil Beach is composed of smooth and water-worn chert and flint pebbles. Smooth and water-worn chert and flint pebbles are similarly exposed on the highest points of the Ridgeway, where the Bagshot beds cover the chalk: on Bincombe Down, Bronkham Hill and Black Down. The construction of the barrows in these areas would have systematically unearthed and exposed these pebbles, which were used to construct the burial mounds.
4. Along the northern and landward side of Chesil Beach, circular cans, or seepage hollows, regularly and catastrophically form during storms. Similarly, almost perfectly circular dolines, or sink holes, catastrophically appear in areas of the chalk covered with thick Bagshot bed (pebble) material—on Bronkham Hill and Black Down—which may temporarily fill with water. On these areas of the Ridgeway, the barrows are surrounded by these circular sink holes.
5. Chesil Beach is bordered on both sides by water; the Fleet lagoon and the sea and sea water seep through and issue out of the shingle bank. Similarly, the chalk of the Ridgeway is defined by the presence of water at its base and acts as a repository for it. The water flows out of the base of the chalk ridge from a series of springs, seasonally giving birth (hence the common village name Winterborne) to small streams to the south of the ridge and the river South Winterborne to the north. Like Chesil Beach, it forms a barrier, and like the beach, it is steeper on the southern than on the northern (inland) side. Spring waters from the Ridgeway flow south to fill Chesil lagoon, and almost the entire length of Ridgeway itself is bordered to the north by the river South Winterborne, which, although small, is the most important water course in the area, with its source only a few km from the Martin's

Down bank barrow. The relationship of the river South Winterborne to the Ridgeway is thus in many ways analogous to that between Chesil beach and its lagoon—both form protective dry barriers impounding water to the north, which flows east. The Ridgeway acts, then, to the river South Winterborne as Chesil Beach does to its lagoon. But it feeds and gives birth to both.

Now, all these geological similarities would have been well known to the Bronze Age populations (whose intimate knowledge of the landscape in which they lived we can scarcely hope to appreciate). They would have required an explanation. Why the pebbles up on the ridge, clearly worn by water and so similar to those occurring on Chesil Beach? Why the sink holes and the seepage hollows? Why the steep profile of both the Ridgeway and Chesil Beach to the south? And so on. The suggestion here is that their mythological explanation must have involved, in some particular narrative form, the notion that the Ridgeway itself was a raised ancient and ancestral beach. For the Bronze Age populations, it would have represented a 'prehistoric' version of Chesil Beach—a beach along which the waves had once washed but had been thrown inland and landlocked in mythological time. And no more fitting or appropriate location could be imagined for the burial of the ancestral dead; their corpses were being inserted into an ancient marine bank that had been sanctified and raised up from the sea to rest in the sky closest to the moon, the sun, and the stars. In myths and stories, the Ridgeway, like Chesil Beach, must have been viewed as an ancestral creation. Tangible proof of this would have been provided by the metaphorical analogies listed above. But the Ridgeway must have been conceived as an older creation, no longer by the sea but a raised beach in the sky, perhaps connected through the sink holes with the beach by the sea.

From the Neolithic to the Bronze age, then, a fundamentally different consciousness of the landscape developed that is related to monument construction and ritual performance elaborating on pre-existing cosmological principles concerning the place of humanity within the cosmos. In the Neolithic, the bank barrows marked out the Ridgeway as being of mythic and symbolic importance, and these barrows were visual mimetic reminders of the Chesil Beach, an explanation and understanding of which was fundamental to local cosmologies. Gradually during the course of the Neolithic, virtually the whole of the top of the Ridgeway and its northern spurs were cleared of both primary and secondary forest. The Neolithic long barrows and the two bank barrows cluster at the western and eastern ends of the Ridgeway. There appears to have been little or no Neolithic activity on the central and highest parts of the course of the Ridgeway. A small isolated long barrow at Cowleaze

(Figure 5.18), the only one to be positioned in a central area of the Ridgeway, is set on a northern lower spur of the chalk well below Black Down. It references the hill through the orientational axis of the mound pointing toward it across the landscape, but it was not until the Bronze Age that the summit area became a major focus for funerary activity. The process of clearing the course of the top of the Ridgeway was probably completed only by the beginning of the early Bronze Age (Woodward 1991: 140). This stripping of the forest cover would have had the effect of revealing the overall morphology of the Ridgeway much more clearly. It would have exposed the pebbles of the Bagshot beds, revealed and emphasised the sink holes, and indeed because of faster ground water percolation further stimulated the sink holes' development. It is very likely that these sink holes, situated on the very highest points of the Ridgeway, were conceived, as in contemporary Australian Aboriginal cosmologies (see Tilley 1994), as places where the ancestors entered and left the earth. The sink holes would have acted as points of intersection, or doorways, between the material and the spiritual world. Hence it is not surprising that one of the most dramatic and important Bronze Age cemeteries along the entire Ridgeway occurs on Bronkham Hill, which is also its approximate geographical centre.

This process of revealing the bones of the land stimulated the redefinition of the old Neolithic mythic cosmologies in order to aid an understanding of what had now been revealed. These new mythological structures in turn became linked with the new mode of burial practice in round barrows and the establishment and maintenance of ancestral ties and genealogies through the development of the entire Ridgeway as a dedicated area for funerary practice. The uniqueness of the bank barrows of South Dorset and the equally unique linear accumulation of Bronze Age barrows along the course of the Ridgeway between them both have a common origin as explanatory landscape metaphors, activated in ritual performances, for Chesil Beach, which runs below them—one of the most striking features of the British coastline and still regarded by many as one of the wonders of the natural world.



PART III

FROM PEBBLES TO SANDSTONE AND SLATE



FIGURE III.1 Looking east down the upper reaches of the Exe valley, Exmoor.

This section considers two contrasting landscapes: the Pebblebeds landscape of East Devon and Exmoor in North Devon and Somerset (see Figure 1.1). The long, low ridge of the East Devon Pebblebeds, stretching from the coast 12 km inland and up to 3 km wide, is absolutely unique in the United Kingdom. Although chalk, granite, and sandstone and slate landscapes occur elsewhere, there is nothing comparable to this extraordinary landscape made up entirely of pebbles. Pebbles elsewhere occasionally cap some chalk hills, as discussed in Chapters 3 and 5, but these belong to different geological formations—the Bagshot and Reading Beds of Tertiary date (*c.* 65 million years old). They form shallow deposits, are significantly smaller in size, and are less colourful. The brightly coloured Triassic (*c.* 250 million years old) Budleigh Salterton or Bunter Pebblebed pebbles are dramatically exposed in a band running through the coastal cliffs and are visible everywhere where the mantle of vegetation is absent: along stream beds and tracks and footpaths crossing the heathlands. The pebbles in the coastal cliffs run through a bright red sandstone that is also exposed in cliffs along the course of the river Otter and along part of the Exe that bound the area on either side of the ridge.

Chapter 6 is about the poetics of the pebbles. Individual pebbles may be wonderful objects of beauty and power, which reside in the manner in which the pebbles' surfaces are sometimes stained and patterned with multiple colours and the intricacy of quartz veins that may meander and flow across their surfaces, twisting and turning, becoming broader or narrower (see colour plate 3). These pebbles also occur in different shapes and sizes, from very large ones weighing up to 12 kg and being up to 50 cm long to those the size of a pea. Nobody made these pebbles, but we might claim that some have an inherent beauty of form and so are perhaps for this very reason more wonderful than anything an artist might make. This is a modern aesthetic sensibility, but how might prehistoric populations have thought about them? Might they not have regarded them as wonderful in some way and have emotionally responded to their forms? And how might they have conceptualised the significance of this pebble ridge in the landscape so extraordinary and different from anything encountered elsewhere?

We know a number of things from the outset. The Bronze Age populations constructed ritual monuments and places to bury their dead (cairns) out of pebbles. This was not an easy task because pebbles are smooth and have no edges making them inherently unstable as a building material. Pebbles from the heathlands themselves have been found way beyond the heathlands themselves: to the west on the Haldon Hills and on Dartmoor and on Neolithic and later sites off the heathlands such as High Peak and Hembury.

The German term for the Pebblebeds is *Bunter*. This is derived from the German word meaning 'bright'. In the Neolithic and Bronze Age world the multi-coloured nature of the pebbles would most likely have been quite extraordinary (see colour plate 3). Today our culture is saturated with artificial colour in the clothes we wear, the books and magazines we read, in film and TV, the cars we drive, the houses we live in, and so on. We take colour for granted. In the prehistoric world, the different colours of the pebbles, as well as their permanent nature, would have been quite striking. Other natural colours in this world, such as the colours of flowers, would come and go with the passing of the seasons. In contrast, the multi-coloured pebbles were always there in the landscape.

The rainbow serpent is an animal of immense spiritual power and potency to Australian Aboriginal populations. As the name suggests, it has a vibrant multi-coloured skin. It lives in holes in creeks and comes out, or is 'activated', when the rain falls and the desert turns green—a time of renewal and plenty. We cannot, of course, make any direct analogy with this. But the suggestion that we can make is that such multi-coloured objects as the Pebblebed heathlands, on a macro scale, and individual pebbles within them, on a micro scale, had power and spiritual potency. So building cairns out of pebbles was a way of tapping

into powers inherent in the land. Individual pebbles with intricate colours might have been considered to be magical stones that were especially curated.

There are other properties of pebbles that can be considered in this light. Pebbles, unlike other stones, are inconstant in colour. When they are dry, they can often appear quite dull, and their colours vanish. This is because being exposed to the elements and the rolling actions of sea waves or river currents often bleaches their outer surface a dull white or grey. As anybody who walks along the beach knows, the colour of the pebbles is activated by water. If it is not raining, the most colourful pebbles are those washed by the waves.

There is another very interesting connection to be made here with another natural phenomenon. The colours of a rainbow form when the rays of the sun meet falling rain. This is a kind of 'miracle' that transforms the sky. Just as pebble colours are inconstant, the rainbow eventually fades and is lost in the sky. Water then brings forth the real colours of pebbles, which are otherwise disguised beneath a 'skin'. The ideas of the pebble having a skin and an outside and an inside, and being activated by water, may have also constituted part of their spiritual power and potency.

All the pebbles in the Pebblebed heathlands are quartzites. Quartzites are also known as firestones. They produce orange sparks and smell like gunpowder when struck or violently rubbed together—far better and bigger sparks than those produced by flint. In darkness there is an orange flash, and even when struck under water they emit a flash (Ellis 1965: 69). So, pebbles are associated with both water and fire, an elemental opposition. Their colours are activated by water, and when struck the pebbles produce fire.

A final material property of pebbles that is of great importance is their tactile properties: the manner in which they are smooth and rounded to touch. The contrast with the coarseness of granite (see Part IV) is absolute. But they feel smooth even compared with fine-grained sandstones and chalk. Pebbles, because of their form, seem to almost naturally lend themselves to sorting or grading activities in terms of colour or size or shape. They also have a voice: Often one can hear the crunching sound of someone out walking on the Pebblebed heathlands before one can see them.

Chapter 7 discusses the lithic 'monuments' of Exmoor in a landscape whose bones are sandstones, shales, and slates. The sandstones here are brownish-pink, considerably less vibrant in colour than the sandstones of East Devon. The shales and slates produce flaky grey material. The pebbles, only found here on the beach, are considerably less rounded, more irregular in form, and distinctly less colourful than those of the Budleigh Salterton Pebblebeds. The defining characteristic of this landscape is the absence of rock exposures, except along the dramatic coastal cliffs, the highest in southern England. Elsewhere, rocks are only sparsely exposed along valley sides and in the beds of watercourses,

and in this respect, at least, the landscape is similar to that of the East Devon Pebblebed heathlands. Whereas the latter are defined by distinctive higher ridges and hills, the Exmoor landscape lacks definition or natural boundaries except that provided by the coast to the north.

When on the moor it appears as an immense table-land, intersected by deep narrow valleys, called coombes, at the bottom of which a stream always flows. At some distance apart are ranges of hills rising gradually and with gentle slopes above the general level of the moor. The curves appear so moderate and the ascent so easy that there can be no difficulty in walking or riding over them. But on going towards them, the table-land suddenly sinks in a deep coombe, when it is apparent that the moor which looked so level is really the top of a hill. This coombe has to be descended, and ascended, and the sides are high and steep. Presently another coombe intervenes, and after five miles' walking very little progress has been made. The country is, in fact, very deceptive, much wider and more difficult than it looks. The country is, in fact, very deceptive, much wider and much more difficult than it looks. . . . The illusion is assisted by the smooth outline of the moors, without a fence for miles together, and without a visible tree. . . . One vast breadth of open, wild, and treeless country reaches in every direction, and it is at once obvious why the deer have remained at large since the most ancient of times. (Jefferies 1892: 7–10)

In many respects, Jefferies's eloquent description of Exmoor, written toward the end of the nineteenth century, says it all. Although Exmoor is a relatively small and compact upland area in southwest England (the area designated a National Park in 1954 covers just 692 sq km), distances are always deceptive, and the moor often seems huge. The defining characteristics are long convexly rounded ridges and hills cut by deeply incised valley systems with shallow fast flowing rivers and streams. This is a landscape of enormous contrasts between smooth, broad, rounded, and treeless upland areas and deeply cut, reticulated, and often heavily wooded valleys. The bedrock consists principally of Devonian sandstones, shales, and slates that occur in a series of east-west bands crossing the moor and that make it strikingly different compared with the other upland areas of southwest England, where the bedrock is granite: Dartmoor, Bodmin Moor, and West Penwith (see Chapters 8 and 9), with their spectacular tors. In many respects, Exmoor is the negative image of these granite uplands in that, where the rocks are exposed, it is in the low places, the valleys, rather than on the tops of the hills. The consequence of this is that the high hills do not provide any dramatically defined orientation summits. It is easy to get lost and disorientated on the moor because of the absence

of distinctively shaped hills or landmarks. Thus one must orientate oneself not to the hills or ridges but in relation to the valley systems and watercourses (see colour plate 5). Even Dunkery Beacon, the highest point (519 m), is distinctive only because of its massive summit cairn.

Walking across Exmoor one must orientate oneself ‘underground’ rather than ‘overground’ with reference to the distinctive valleys and stream systems. Note that on modern maps, most of the valleys and water courses are named, whereas the hills and ridges are often not. This may well be because the valleys have both a differentiated and individual personality, or character, while the smooth rounded hills and ridges all look fairly similar. They do not form dramatic or easily recognisable landmarks, except in certain places along the coast. In this respect, it is also interesting to note that where the hills and ridges are named, they are frequently named after a nearby village—for example, Winsford Hill or Withypool Hill—or nearby water courses—for instance, Lanacombe, Hoccombe Hill—or indeed after the Bronze Age barrows erected on them (for example, Two Barrows, Five Barrows, Brightworthy Barrows, Chapman Barrows).



CHAPTER SIX

SENSORY EXPERIENCE ON THE EAST DEVON PEBBLEBEDS

This chapter discusses the coastal Pebblebed heathlands of East Devon, a long low ridge that forms the watershed between the Exe estuary to the west and the river Otter to the east. At least twenty-six round barrows of presumed Bronze Age date mark this landscape (Figures 6.1 and 6.2). As far as we can tell, these were the first monuments to be constructed in the locality. The other surviving monuments are a single Iron Age hillfort and a roughly contemporary dyke to the north. There has been very little systematic archaeological research in this area since the 1940s going beyond the cataloguing of field monuments and no interpretative accounts. In addition, the empirical evidence from excavations is slight. However, even with this paucity of recent research, I attempt to make some interpretive sense of individual barrow locations by considering, in detail, the manner in which they are fundamentally tied to the sensory experiences provided by their landscape settings. This interpretive approach works on the key premise that the meaning and the significance of these barrows were, and are, intimately related to the specific qualities

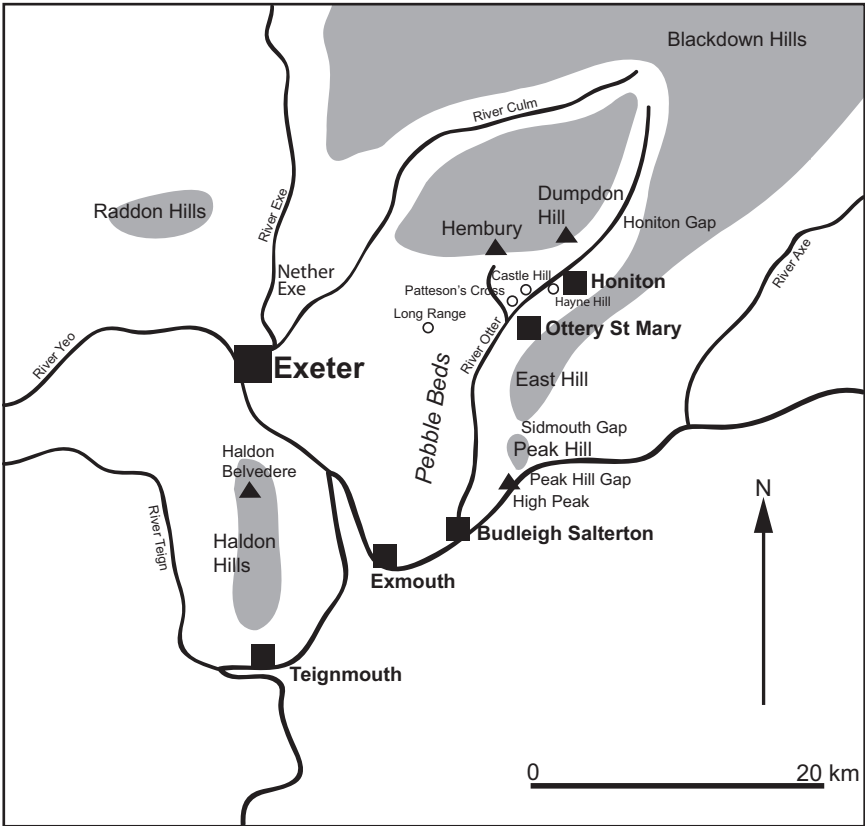


FIGURE 6.1 Location of the Pebblebed heathlands in East Devon and places mentioned in the text.

of the place together with the immediate and more distant landscape contexts in which they are literally embedded. The research attempts to consider the monuments from the wider perspective of the landscape and then works back again to consider the landscape from the perspective of the placement of the individual barrows. It suggests some provisional answers to the following basic questions: Why were the barrows constructed here rather than elsewhere in this area of East Devon? In what manner do individual barrows mark and monumentalise the landscape? What might their significance be beyond the fact that at least some were places for repeated ceremonies, with the final act being the burial of the dead? How might we conceptualise a sense of place and its significance in relation to social identity and cosmologies in the past?

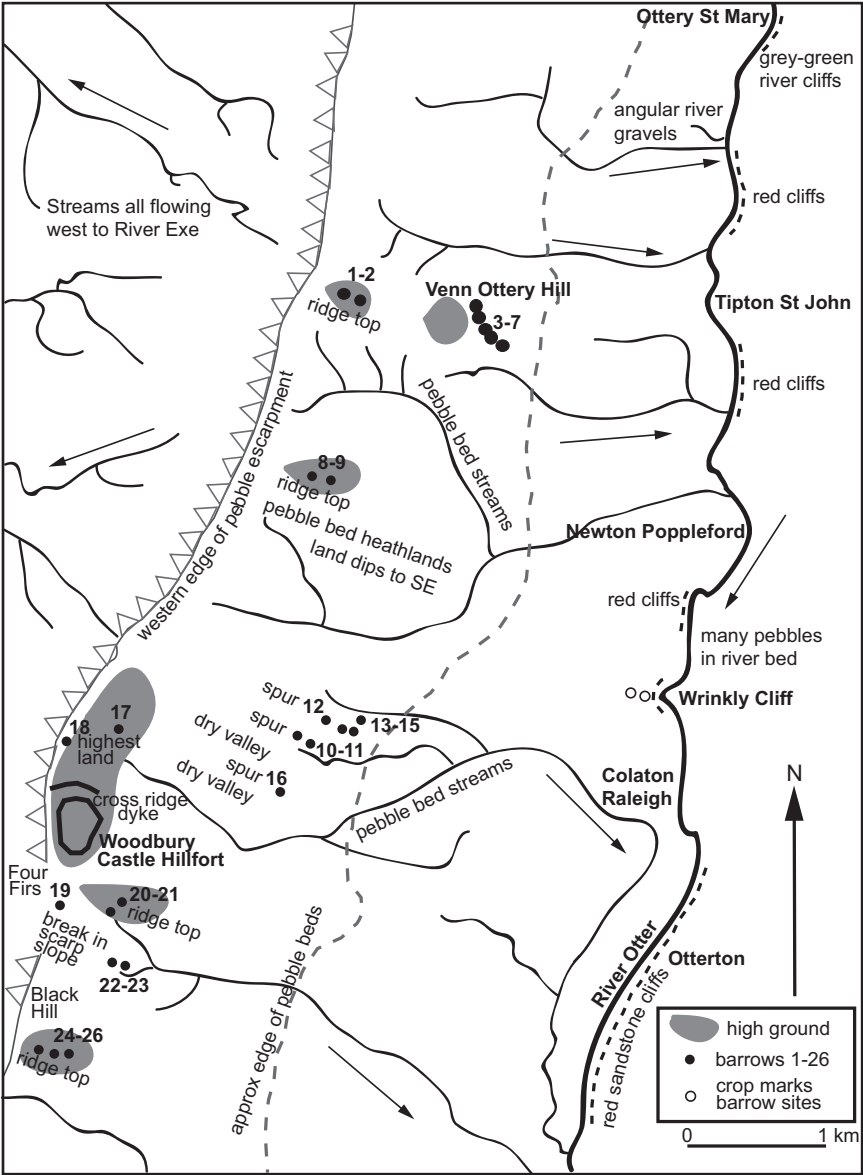


FIGURE 6.2 Location of barrows on the Pebblebed heathlands.

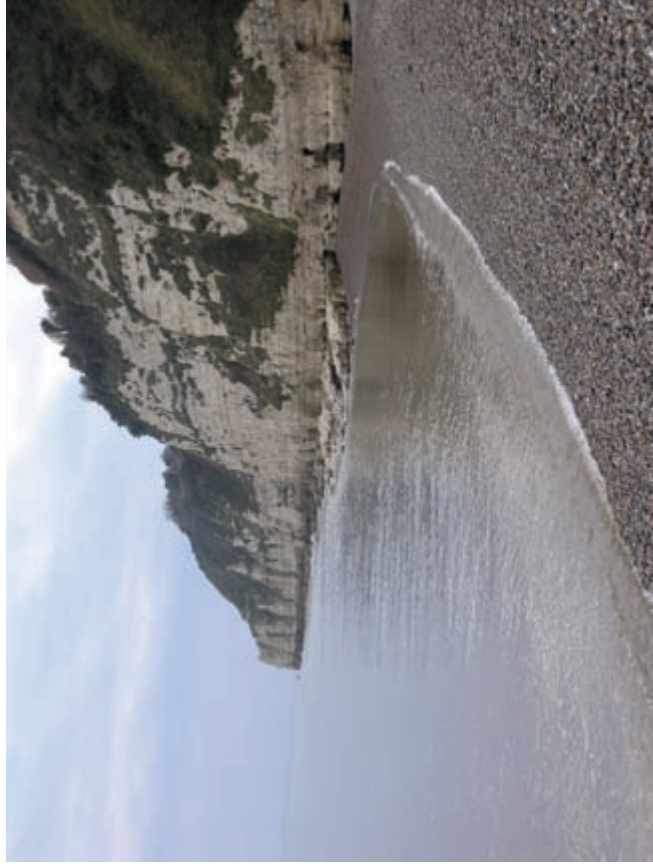
THE VIEW FROM THE BEACH

There are very few natural inland rock exposures in this area of East Devon, and none are very large. The only places where the underlying rocks can be seen occur in river cliffs along the Otter and the Exe valleys and along a few valleys with small streams flowing east into the river Otter. Like the modern geologist, the prehistoric cosmologist might have attempted to understand what was under his or her feet by looking first at the land from the beach. The Steamer Steps sea cliffs to the west of Budleigh Salterton rise up sharply above the beach in a series of staggered ledges to West Down Beacon (129 m), the highest point before the land drops down to the west and the Exe estuary. The cliff exposure here provides a dramatic and huge cross section through the landscape—elsewhere almost always mantled in soil and covered in vegetation. An inspection of the sea cliffs thus permits a unique glimpse of another concealed world, the hard structure, or the ‘bones’ of the land, beneath the constantly changing soft, damp and fleshy surface (Figure 6.3).

From Exmouth eastward, the cliffs and headlands are composed of the relatively soft and warm red-coloured New Red Sandstone formations. West



FIGURE 6.3 The Pebblebed exposure running through the cliffs at Budleigh Salterton.



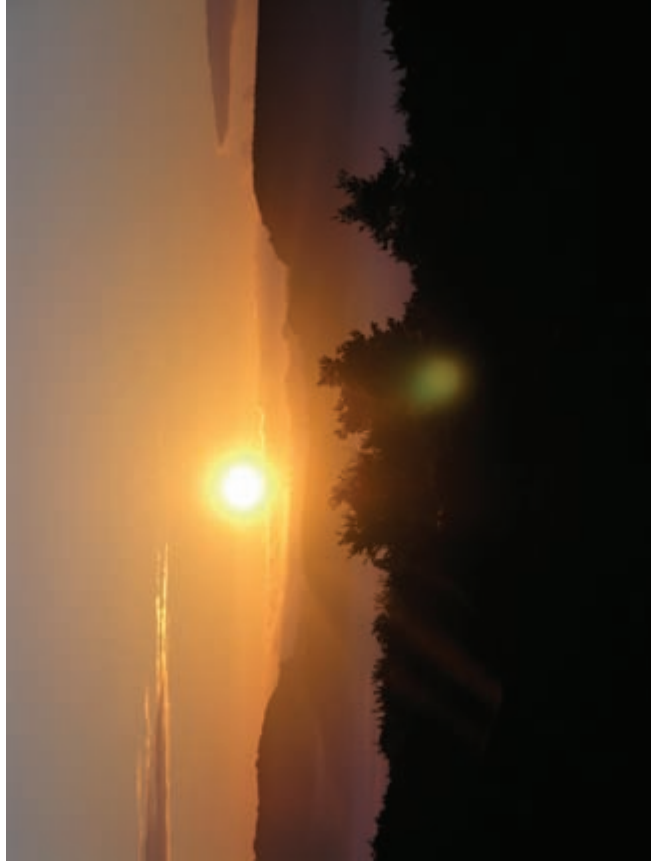
COLOR PLATE 1 Chalk cliffs at Beer.



COLOR PLATE 2 Malacombe Bottom.



COLOR PLATE 3 Multicoloured pebbles of Budleigh Salterton Pebblebeds.



COLOR PLATE 4 Equinoxal sunrise through Sidmouth gap.



COLOR PLATE 5 Looking up Chains valley, Exmoor.



COLOR PLATE 6 Lanacombe I stone setting, Exmoor.



COLOR PLATE 7 Loudon Hill long cairn, Bodmin Moor.



COLOR PLATE 8 Carneglos stone row, Bodmin Moor.

Down Beacon marks the point where the geologically famous Triassic Budleigh Salterton, (or Bunter) Pebblebeds first outcrop and attain their maximum thickness in the cliff face of up to 26 m (Selwood, Edwards, and Simpson 1984: 96). This strip of pebbles, the remains of an ancient river flowing north through a red sandy desert, dips diagonally down through the otherwise red sandstone cliffs in a distinctive band, dipping and narrowing to the east. It finally disappears in the cliff face near to the edge of the small valley cut down to the beach by the stream at Budleigh Salterton. It marks the eastern limit of the Pebblebed outcrop.

The contrast between this band of pebbles and the New Red Sandstone appearing both above and below it could not be greater. The fine-grained red sandstone is smooth and uniform in colour. The only variation in its surface appearance is caused by localised honeycomb wind weathering creating numerous rounded hollows eating into the cliffs' face. The Pebblebeds are dense and infinitely varied in terms of texture and the forms and colours of the stones. They are composed of well-rounded spherical or oval, clearly water-worn pebbles, cobbles, and boulders bedded in a coarse and gritty or finer and sandier matrix. Within the sand and grit lenses, pebble-filled channels can be observed, proof of the ancient riverine origin of these formations, thought to be formed by an ancient river flowing north into this part of East Devon from Brittany to the southwest (Edwards and Scrivener 1999: 91; Perkins 1971: 130).

Throughout the cliff exposures, the pebbles in the beds are only crudely sorted and are interleaved with silty sand and grit lenses so that stones of markedly different sizes and shapes, 3 cm or less to a maximum diameter of 45 cm, occur together, both in the cliff face and as eroded material on the beach below. The pebbles are mainly quartzites (up to 90%) with porphyry, vein quartz, and tourmalinite occurring more rarely (Edwards and Scrivener 1999: 87). All the colours of the rainbow and more are represented here. These multi-coloured pebbles vary from white to black through greys and reddish pinks to yellows, yellow-greens, browns, and, extremely rarely, blues. Their surfaces are frequently mottled in colour, and narrow sinuous quartz veins are frequent.

In the Budleigh Salterton cliffs, the most easterly of the Pebblebed exposures are distinguished, at the very top and quite low down near to the beach, by a striking bright yellow band of sandstone appearing immediately beneath the Otter (new red) sandstones (Figure 6.4). Below this is a thin black layer that includes ventifacts: wind-faceted and polished pebbles with two or more smooth faces with a distinctive ridge between them, and one rough face. Some, termed *dreikanter*, have a very distinctive triangular appearance with three facets at the top; others may have four or more. The dark colour of these pebbles is only a surface varnish caused by desert weathering during the Triassic era.



FIGURE 6.4 The yellow band running across the Pebblebeds in the cliffs at Budleigh Salterton.

When split open, they are ordinary quartzites, like the other pebbles (Perkins 1971: 130).

Today, of course, these beach pebbles provide an endless source of fascination for tourists on the beach: collected, sorted, displayed, thrown in the sea. Semiprecious stones such as carnelian, a smooth and waxy form of quartz, can be found sparkling along the beach, which grades down to the sea from banks of pebbles at the top directly beneath the cliffs, to grittier and

then finer pebble-free sands, continuously covered and then exposed by the tides. It seems not unreasonable to suggest that the band of pebbles in the cliff, their similarity to those on the beach, the *ventifacts*, and the blackened layer of pebbles, and the band of bright yellow sandstone running through the red sandstone cliffs might also have been of some considerable interest to prehistoric people.

They may well have asked some 'geological' questions, such as: Why this dipping band of pebbles sandwiched in the cliffs between the red sandstone rocks? What was its origin? What was the relationship between the pebbles in the cliffs and those found on the beach below the cliffs and beside the sea? How might the significance of the distinctive surface patina of blackened pebbles and the bright band of yellow sandstone have been understood? In precisely the same manner as for the contemporary geologist, any knowledge and understanding of these things would have depended on empirical observation and making sense of the strata seen in the cliffs. However, the logical premises for such observation would, of course, have been radically different.

FROM THE BEACH TO THE HEATHLANDS

The Pebblebeds extend north and inland from the seashore for a distance of about 13 km. Today these underlie the barren East Devon heathlands, fringed by marls and clays to the west and the east. This heathland zone is in places about 2–3 km wide and almost continuous, from south-north, being broken up today only by pockets of improved agricultural land. The rich pasture land of the marls and clays ends abruptly where the Pebblebeds begin to be replaced by bracken, pine, heather, and gorse.

The western side of the Pebblebeds is defined by a distinct scarp slope (see Figure 6.2). The highest point at Woodbury Common (183 m) is marked out by the Iron Age hillfort of Woodbury Castle and its associated cross-ridge dyke. Here the scarp is about 20 m or so high, rising up quite steeply from the lower undulating marls to the west. To the north and south, the scarp edge is somewhat more broken, less steep and pronounced, but it nevertheless forms a significant landscape edge, or boundary. From the western scarp, the land dips eastward quite gently to the Otter valley, and toward the south and the sea. The overall dip of the land is from the northwest (high) to the southeast (low), thus more or less replicating the dip in the band of pebbles seen in the sea cliffs at Budleigh Salterton.

At the base of the western scarp, there is a spring line. To the east of it, the sloping heathlands are broken up throughout by small valleys that sometimes originate in broader and boggy irregular basins. The Pebblebed heathlands are

highly porous and drain quickly. Small, east to west or northwest to southeast fast-flowing streams now occur in the valleys, where the water has cut down to the marls below. Farther up beyond the surface streams, there are dry valleys formed in permafrost conditions during glacial periods. Anywhere where the vegetation is absent or disturbed, in the streambeds, on exposures on the often quite steep sides of the valleys, and on paths and trackways crossing the heathlands, pebbles are exposed at the surface (Figure 6.5). These are precisely of the same ungraded and multi-coloured character as those found on the beach and include blackened ventifacts. The only difference is that the farther you walk inland to the north across the pebble heathlands, the smaller the average pebble size tends to be.

Today, most of the area where the Pebblebeds occur is uncultivated and ungrazed, covered with bracken, heather, and gorse and contrasting utterly with the rich pasture on the marls to the west and the east (Figure 6.6). Farms and villages are sited where streams emerge from the heathlands. Parish boundaries extend from the rich pasture land up onto the commonland of the heathlands, both to their west, up the scarp slope, and to the east, across the dip slope, ensuring that each had its share of fertile agricultural land as well as uncultivated grazing land.

Although few animals graze the commons today, in the past, the heathlands provided important and substantial areas of rough grazing, principally for sheep, and afforded the collection of other resources: peat and furze for fuel (Brighouse 1981). The peat, except in the valley bottoms, is largely post-Bronze Age in date. The dry, thin, and gravelly soils of the commons could never provide much in the way of productive arable land, and the contrast in both vegetation and land use between the Pebblebed areas and those covered by the surrounding marls, either in the present or in the prehistoric past, could not be greater. Today trees grow naturally (there are numerous recent pine plantations) only on the lower slopes of the Pebblebeds. The original vegetation on the surrounding marls would have been dense deciduous forest. The plant remains analysed from these lowland areas to the north of the Pebblebeds in recent excavations in advance of the A30 improvement scheme demonstrated significant woodland clearance and the presence of a mixture of local habitats and resource use during the Neolithic and the Bronze Age. The commonest habitat type represented was arable followed by grassland and included scrub/woodland and woodland/grassland (Clapham and Stevens 1999: 196ff.). In the Pebblebed areas, the original forest would have been either locally absent altogether or far lighter and more open. It seems highly likely that both during the Neolithic and the Bronze Age the primary uses of the heathland areas would have been for plant gathering and hunting and for pasture for domesticates, with any permanent settlement occurring off



FIGURE 6.5 Pebbles exposed in a streambed on Aylesbeare Common.



FIGURE 6.6 Looking to the southeast across the Pebblebed heathland on Bicton Common; Barrows 22 and 23 (see Figure 6.2) in valley bottom marked with flags.

the heathlands and along the spring and stream lines to the west, north, and east. Pollen analysis from the old land surface underlying the ramparts of the Woodbury Castle Iron Age hillfort and cross-ridge dyke demonstrate the local dominance of pasture at that time, with pollen from grasses forming more than half the total (Dimbleby in Miles 1975b). The recent excavations along the line of the new A30 road from Honiton to Exeter have revealed a series of Neolithic and Bronze Age settlements, some associated with field systems, situated in precisely the locations we might expect: near to watercourses in low-lying areas, just to the northeast of the northernmost extent of the Pebblebeds (Fitzpatrick, Butterworth, and Grove 1999).

LOOKING OUT TO A WORLD BEYOND

Standing on Woodbury Beacon there is a magnificent and panoramic view of the landscape surrounding the Pebblebed heathlands. To the west, one looks across the great line of the Exe estuary to the unbroken ridge of the Haldon Hills running along its eastern edge (Figure 6.7). Farther west still over the line of the Haldon Hills, there are glimpses of the tor-crowned high peaks of



FIGURE 6.7 View to the west to the Haldon Hills from Woodbury Castle looking across the Exe estuary.

Dartmoor. High Willhays and Ugborough Beacon are just visible some 48 km distant. To the northwest, the Raddon Hills, capped by a Neolithic causewayed enclosure and later Iron Age hillfort, frame the near landscape. To the north, the line of the Blackdown Hills is prominent, with another Neolithic causewayed enclosure and Iron Age hillfort at Hembury occupying a prominent southern spur. Way beyond the highest point on Exmoor, Dunkery Beacon, some 58 km distant, and the Quantock Hills can be seen on a clear day. To the northeast, the hill island of Dumpdon (Figure 6.8), crowned by another hillfort and possibly another Neolithic causewayed enclosure, is prominent in the Honiton gap created through the Blackdown Hills by the river Otter. To the east, the landscape is framed by the broad Otter valley and the almost unbroken line of the East Hill and Peak Hill ridges, which together block any view farther in this direction (Figure 6.15). To the southeast, High Peak, with its distinctive triangular-shaped profile, is a dominant coastal landmark (Figure 6.11). Beyond it there are more distant views across Lyme Bay to the Isle of Portland 70 km distant—glimpses into other worlds and different landscapes.

But for the most part, views out from the rest and lower areas of the Pebblebed ridge are strikingly restricted by the higher hills that surround



FIGURE 6.8 Dumpdon Hill in the Honiton gap seen from the southwest.

them: the unbroken line of the Haldon Hills to the west, the more irregular line of the Blackdown and Raddon Hills to the north, and the East Hill and Peak Hill ridges to the east. These all rise up fairly abruptly above river valleys and are flat-topped. The eastern scarp slopes of the Haldon Hills and the western scarp of the Peak and East Hill ridges appear remarkably uniform from the Pebblebeds. This contrasts markedly with their appearance from the other side, where all these ridges are deeply indented with coombes and valley systems. Their most uniform and regular scarp slopes face toward the Pebblebeds.

The East Devon heathlands are thus visually surrounded by higher hills on three sides, by the north-south line of the Exe and its estuary to the west, the broad lower part of the Otter valley to the east, and by the sea to the south: a landscape that is both peculiarly distinctive, framed or bounded. When the Otter and the Exe valleys fill with mists, the ridge and hilltops are dramatically transformed, appearing to be islands enveloped in a grey sea. On the eastern side, there are three very significant gaps through the ridge line: that between High Peak and the Peak Hill Ridge to the southeast by the sea, the Sidmouth Gap in the middle to the east, and the Honiton gap between the East Hill ridge and the Blackdown Hills to the northwest. No dramatic gaps through

the hills and ridges occur to the west or to the north. The Sidmouth gap (see Figure 6.1 and colour plate 4) in particular is a major topographic landmark that has more than a local significance. It is visible from as far away as the southern edge of Exmoor to the north.

What makes this landscape so special is not only the local presence of the pebble heathland but also the hills that physically and visually hem it in with significant gaps on the eastern side. None of the surrounding ridges and hills have any Pebblebed outcrops or exposures. To the west, the Haldon Hills are covered by grey and white flinty gravels. The Blackdown Hills to the north and the East Hill and Peak Hill ridges to the east are capped with substantial layers of clay with flints and chert derived from the underlying greensand (paradoxically grey to grey-brown to yellow in colour), as is High Peak to the southeast (Woodward and Ussher 1911: 67ff.). All these surrounding hills thus contrast greatly with the much lower rolling Pebblebed heathlands in terms of their far greater height, their much more pronounced scarp slopes, and the sharp, angular, and jagged stones that cover them. Sensorially encountering the bones of this landscape, we move from the smooth and rolling heathlands, with exposures of smooth rounded multi-coloured pebbles, to higher flat-topped hills with steep scarps covered with brittle, irregular, and jagged material of fairly uniform and dull colour, an important series of visual, tactile, and colour contrasts (Figure 6.9 and colour plate 3).

Another contrast occurs between the stones that may be observed along the ridges and the hills and those exposed along the rivers. The numerous river cliffs that occur along the lower course of the Otter are all exposures of the Otter sandstone, as are those found along the Exe estuary at Lymptone. Along the Exe, there are very limited exposures compared with those found along the lower course of the river Otter. Immediately to the north and the south of Ottery St Mary, these are grey-green in colour. Beyond here all the way south to the sea, where the river passes the Pebblebed heathlands to the west, these river cliffs are all bright red in colour. They occur along its eastern side except in a short stretch between Newton Poppleford and Colaton Raleigh, where they are on the western side. By contrast, nowhere along the course of the Otter can the exposed stratum of the Pebblebeds be seen.

Walking north, east, or west off the heathlands, one notes that the pebbles rapidly disappear under the surrounding marls. None are exposed along the sands and muds of the Exe. Redeposited material does occur locally in the river bed along the Otter river valley, particularly in its lower stretches from Ottery St Mary southward to the sea at Budleigh Salterton. In the upper reaches of this stretch of the river, the pebbles are few, and the river bed is largely made up of angular gravels largely derived from the clay with flints capping of East Hill. Lower down the river in some places between Tipton St John and Colaton

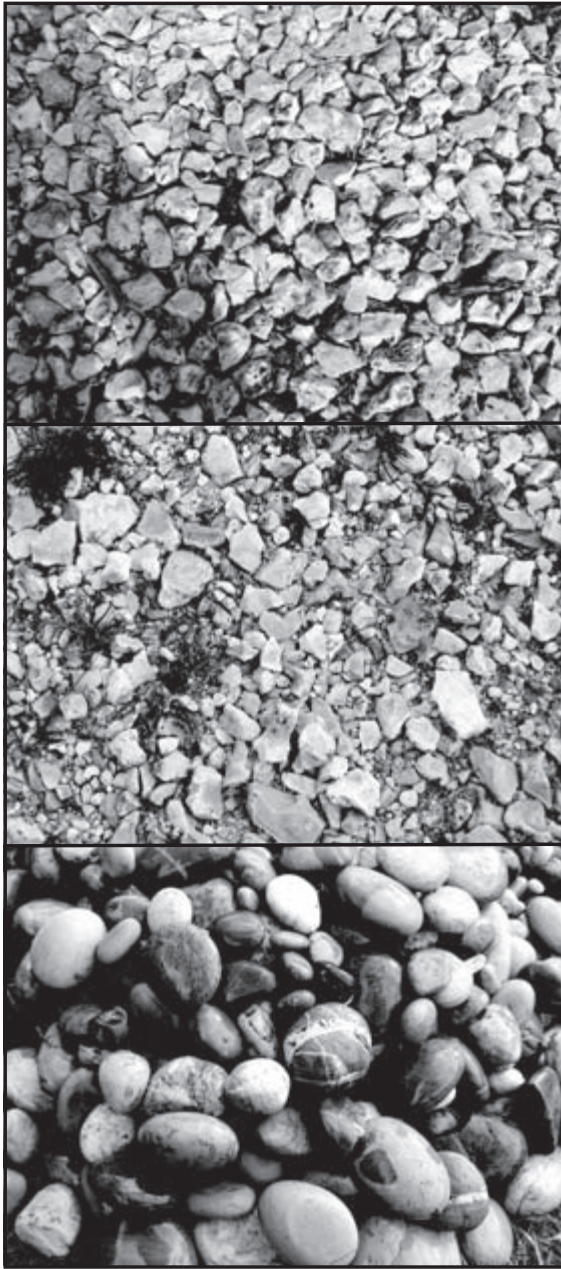


FIGURE 6.9 (Top) Gravels on the top of Peak Hill; (centre) Haldon Hill gravels; (bottom) Pebblebed pebbles.



FIGURE 6.10 Wall with pebble facing, Budleigh Salterton.

Raleigh, Pebblebed material locally dominates. Newton Poppleford is named after the ford crossing the pebbles, or ‘popples’, derived from the Pebblebeds that are numerous here along the river course. In the villages and farms near to the heathlands, pebbles were an historically significant decorative local building material. Today, many houses and walls have patterned pebble surfaces (Figure 6.10). Tightly packed pebbles were also used as ‘popples’ flooring for external pavements, yards, and house and barn interiors. This material, sometimes laid in fan-shaped arrangements, was used in many farm houses and formed the original floor of Woodbury church before imported stone was laid down in 1621 (Brighouse 1981). An interest in collecting and building with pebbles and making patterns out of them has a long recent history, and interest in them goes back at least as early as the Neolithic.

THE MESOLITHIC AND THE NEOLITHIC

Mesolithic and Neolithic finds from the Pebblebed heathlands consist of a few finds of Neolithic axes and mixed surface flint scatters in the central Blackhill

area of the heathlands, containing both Mesolithic and Neolithic material, and two Mesolithic flint scatters to the south and southwest of Woodbury Castle (Smith 1956; Wymer and Bonsall 1977). These are all on the highest areas of the heathlands. Beyond the heathlands, Mesolithic material was recovered from the excavations at Hembury (Berridge 1986). Neolithic flint scatters are recorded along the coast to the west of High Peak and to the south and the north of Otterton, on Mutter's Moor, part of the Peak Hill ridge, at Patteson's Cross just to the north of Ottery St Mary, and a series of others much farther north along the Exe valley around Nether Exe (Griffith and Quinnell 1999a; Miles 1976; Pearce 1979). In addition to these surface flint scatters, Neolithic settlement and ritual deposition in pits is documented from the A30 excavations at Castle Hill and Long Range (Fitzpatrick, Butterworth, and Grove 1999). A house together with possible enclosures (for animals? the land was never ploughed) on the top of the Haldon Hills (Gent and Quinnell 1999b; Willock 1933, 1937) has long been known at Haldon Belvedere. There are three known Neolithic causewayed enclosures and/or hilltop settlements on High Peak—at Hembury and at Raddon, a much greater distance away to the northwest (Gent and Quinnell 1999b).

High Peak (see Figure 6.11) is the highest and most distinctive point along this stretch of the East Devon coastline. Although it is considerably lower (157 m) than either the Peak Hill or the East Hill (highest point: 246 m), ridges to its north—both of which rise up to 200 m and more—it appears



FIGURE 6.11 The distinctive triangular shape of High Peak on the horizon.

both higher and more prominent because of its relative isolation, distinctive triangular shape, and coastal situation. This hill, in common with all the coastal and almost all the river cliffs in this area, is distinctively red. Water running out of the cliff face down onto the beach is orange-red in colour. The hill is capped with clay, with the yellow/grey-green and white of the clay with flints and greensand deposits making up the top third of the hill. The lower two thirds of the hill consist of bright red sandstone that is smooth and soft compared with the overlying deposits. Pollard mentions that the Budleigh Salterton Pebblebeds also reappear in a very thin band right at the bottom of the cliffs by the sea (Pollard 1966: 38). However, close inspection of the cliffs, which are scoured at low tide, revealed that this is not the case. The beach immediately below High Peak is strewn with jagged boulders derived from the greenstone and chert capping of the hill. The red sands that extend east to Sidmouth together with a thin band of pebbles immediately below the cliffs are absent here. Small coves do contain a small amount of pebble material, but this is identical to that occurring farther along the beach toward Sidmouth and is derived from the greensand, chert, and clay with flints capping of the coastal hills. However, immediately beneath High Peak, some large Budleigh Salterton or Bunter-type pebbles do occur among the greensand blocks exposed at low tide. The most likely explanation is that they are derived from pebbles taken to the top of High Peak by human agency and subsequently eroded away down the cliff face.

Excavations on High Peak revealed traces of a possible Neolithic causewayed enclosure on top of the hill, virtually all of which has been subsequently destroyed, along with the ramparts of a later Dark Age hillfort, by coastal erosion. The Neolithic remains included a short ditch segment, rock-cut in its lower part through the greensand and underlying chert bands with a primary fill that included charcoal, bone fragments, and flint flakes with pottery in the upper fill (Pollard 1966: 41). Pollard also identified 'cooking areas' with flint and pottery scatters and three pits. Two of these had regular flint linings. The pottery recovered was of two principal types and identical to that from Hembury (see below). Most flints were of local material but included two pieces of Portland chert and black flint derived from Beer (*ibid.*: 47–48; Tingle 1998). Among the groundstone axe fragments there is more exotic material: a jadeite piece with an Alpine origin and a picrite piece from Callington, Cornwall. Other groundstone axes were made from the local greensand, and a number of pebbles showing signs of usage, from the Budleigh Salterton Pebblebeds, were found among the Neolithic material (*ibid.*: 52).

As elsewhere in southern England, causewayed enclosures began to be built in the thirty-seventh century cal B.C.E. (Whittle 2007: 137–138; Whittle et al. 2007). Radiocarbon dates have suggested that the Neolithic occupations

on High Peak and that on Hembury were roughly contemporary (Pollard 1967: 41), but unfortunately the 1960s dates from Hembury and those from High Peak were from bulk samples and not very reliable. The enclosure at Raddon is somewhat later (Gent and Quinnell 1999a: 64). The causewayed enclosure at Hembury occupies the southern tip of a prominent spur of the Blackdown Hills, with extensive vistas to the south across the Pebblebed heathlands to the sea. Liddell's excavations revealed eight ditch and low bank sections with intervening causeways cutting across the spur and house structures and substantial occupation debris inside indicating permanent settlement (Liddell 1929–1932a, 1929–1932b, 1929–1932c, 1936). A second ditch line was also found to the north, as well as additional ditches, by Todd's re-examination of the northern part of the spur, indicating the presence of multiple enclosures (Todd 1984).

Artefact finds included pottery tempered with local quartzites derived from crushed Bunter pebbles; imported gabbroic pottery from the Lizard peninsula, Cornwall; implements made from Beer flint and a few of Portland chert, others from closer flint sources only a few km away; greenstone axes of Cornish origin; and from North Devon, querns and rubbing stones from the local Pebblebeds, beads of steatite, and jet, possibly from Spain and Brittany (Liddell 1929–1932a, 1929–1932b, 1929–1932c).

The excavated materials from High Peak and Hembury indicate a systematic gathering of artefacts and raw materials from (1) the immediate locality; (2) the Pebblebed areas that had to be crossed to move between these two places, and (3) more distant sources at a variable distance away—Beer Head, Portland, Exmoor, Dartmoor, Cornwall, and those from very distant origins as far as the Alps and Spain. Materials and artefacts used on these two Neolithic enclosures thus brought together and incorporated elements drawn from the immediate and the more distant landscape at a variety of scales. Some of these landscapes, such as the local Pebblebed heathlands and Beer Head (see colour plate 2), could be crossed or visited in a day. Other more distant places (Portland, Dartmoor, Exmoor) could be seen on the far horizon. Finally, there were artefacts and materials brought from places that could never have been experienced by people remaining in place or travelling only through this local landscape. This pattern of raw material utilisation seems to contrast with the Neolithic and Bronze Age domestic assemblages found during the A30 excavations, in which stone material other than flaked flint and chert is rare and of local origin (Mephram 1999: 210–221). It appears that the curation of and the use of pebbles were confined to meeting places of special significance and ceremonial importance. During the Neolithic the pebbles were associated with the living, whereas in the Bronze Age they became associated with the dead.

BRONZE AGE BARROWS IN THE LANDSCAPE

There is no known evidence of Neolithic mortuary practices from this area of East Devon. The excavations at High Peak, Raddon and Hembury revealed no human remains from the enclosure ditches or interiors, and no long barrows or other mortuary monuments were constructed. One rectilinear structure at Castle Hill excavated in advance of the A30 construction has been suggested to be a 'long mortuary enclosure', but there is no direct evidence to suggest a funerary use (Fitzpatrick, Butterworth, and Grove 1999: 213). Another has been suggested to be part of a possible cursus monument, but again the evidence is equivocal. It remains the case that the first certain monuments to be constructed in this area of East Devon are round barrows of early Bronze Age date. The Bronze Age barrow distribution in this area of the East Devon landscape between the Exe and the Otter is almost exclusively confined to the pebbly heathlands. Around twenty-six barrows survive as upstanding monuments. There are also a number of ring ditches just beyond the limits of the present-day heathland areas revealed as cropmarks through an important campaign of aerial photography undertaken by Griffith since 1983 (Griffith 1999: 8). These ring ditches may be barrows or, alternatively, traces of round houses. Note that although the A30 excavations revealed the presence of round houses with circular timber post settings, Bronze Age barrows or other evidence of funerary activity was entirely absent. It therefore seems likely that the Pebblebed heathlands constituted a reserved area in the landscape for the burial of the ancestral dead being fringed by the settlements of the living.

The surviving monuments are all round barrows, and at least eight have a surrounding ditch. They vary in diameter from small structures of between 4–10 m (sixteen or *c.* 60%) to much more substantial mounds, three of which are over 20 m. Two of the largest barrows, including the very largest mound (32 m in diameter), appear to be flat-topped rather than rounded in profile. The smaller barrows are rarely more than 1 m high, whereas the larger mounds vary in height between 1.5 and 3.5 m (Table 6.1; Figures 6.12–6.15). These monuments were all constructed from the local pebbles that show through wherever the thin soil covering is eroded. They may best be described as pebble cairns.

One of these barrows (Woodbury e; Figure 6.2: 16) was excavated by Carter in 1930 and 1936. He reports a surface patterning of large pebbles, under a thin turf layer, in various 'geometric' forms. The centre of the mound had, according to Carter, surface patterns of a circle and an ellipse. A ring of large pebbles surrounded the edge of the mound. At about ground level, a large blue stone overlay a pebble cairn containing another blue stone. Under this was an 'ashy layer' resting on the undisturbed Pebblebeds. At the bottom of this ashy layer, he discovered decorated beaker sherds, a small pebble of

Table 6.1 The dimensions and height above sea level (HASL) of the Pebblebed barrows and location notes. Barrow numbers refer to Figure 6.2.

Number	Height	Diameter	HASL	Location Notes
1	—	1.3	159	Ridgetop, now ploughed out.
2	—	—	150	Ridgetop, now ploughed out.
3–7	0.3–1	4–9	110	Hillside overlooking Otter valley to east. Barrows run down slope from NW to SE. Five barrows in a staggered row.
8	2	16	160	Ridgetop.
9	1.6	21	160	Ridgetop.
10–11	0.3	0.8–1	115	Toward end of NW-SE sloping spur between dry valley and valley with stream.
12	1.2	12	95	In middle of NW-SE sloping spur below 12.
13–15	0.4–0.7	0.4–0.5	85	In middle of wide NE-SW sloping spur between dry valleys.
16	0.3	7	125	In middle of wide NW-Se sloping spur between dry valleys.
17	3.5	22	175	On high point on western escarpment edge.
18	3.6	32	175	On local high point on western escarpment. Possibly enlarged for use as a fire beacon.
19	1.8	14.5	130	In dip on western escarpment edge. One of four mounds situated on both sides of the Four Firs crossroads. This arrangement and the location are peculiar. They are all landscaping mounds that have been variously attributed to troops stationed on Woodbury Common during the Napoleonic wars or the landscaping work of Lord Rolle of Bicton (Grinsell 1983: 19).
20	1.4	18	120	On upper ridge slope facing south directly above (100 m) a spring and stream source.

Table 6.1 Continued.

Number	Height	Diameter	HASL	Location Notes
21	1.4	18	115	Same as 20.
22–3	1	5	90	In valley bottom near to the head of the valley and spring and stream source above an extensive bog .
24–6	1.3–2	7–8	150	Toward the end of and in the middle of a gently sloping W-E ridge.



FIGURE 6.12 The large summit barrow and lone pine on Aylesbeare Common.

dark-coloured stone, and a barbed and tanged arrowhead. Below this was another pebble cairn in a pit with blue stones on top and underneath (Carter 1936: 291). Excavations around the cairn revealed that it was surrounded by a pebbled pattern extending on all sides like a carpet for some distance on the plain of the Common, the overall diameter being about 50' [16 m] (*ibid.*: 292) (Figure 6.16). To the southeast of the mound in this pebble platform/pattern,



FIGURE 6.13 Barrow 18 on the western scarp edge of the Pebblebed heathlands.



FIGURE 6.14 Barrow 12 in the centre of a spur between valleys seen from the east.



FIGURE 6.15 Barrow 17, crowned by Scots Pines seen from the northwest, with the continuous line of the East Hill ridge beyond.

a Mesolithic axe hammer was found at the base of a small cairn and below it a layer of small quartzite pebbles. Other ‘subsoil cairns’ (that is, small pebble piles) at the east and west cardinal points of the mound were found on the edge of the pavement.

Carter’s report seems to suggest that the large cairn formed a central focus for a patterned pebble skirt surrounding it. Both covered preexisting small pebble cairns in pits, some with specially selected blue-coloured stones (rare in the Pebblebeds—they occur in a ratio of 1:1,000 *ibid.*: 284) (Figure 6.17). The central cairn contained an Early Bronze Age Beaker burial, or deposit. The presence of Mesolithic material in a small pebble cairn at this location indicates long-term continuities in both the usage of specific locations across the heathlands and a fascination with the symbolic qualities of the pebbles themselves.

Carter also excavated a whole series of other pebble structures, or ‘mounds’, on both Woodbury and Aylesbeare Commons (Carter 1936, 1938). In all these cases, there was no large cairn: ‘About thirty spots have been excavated. My attention was mainly directed to the countless mounds there, of dimensions

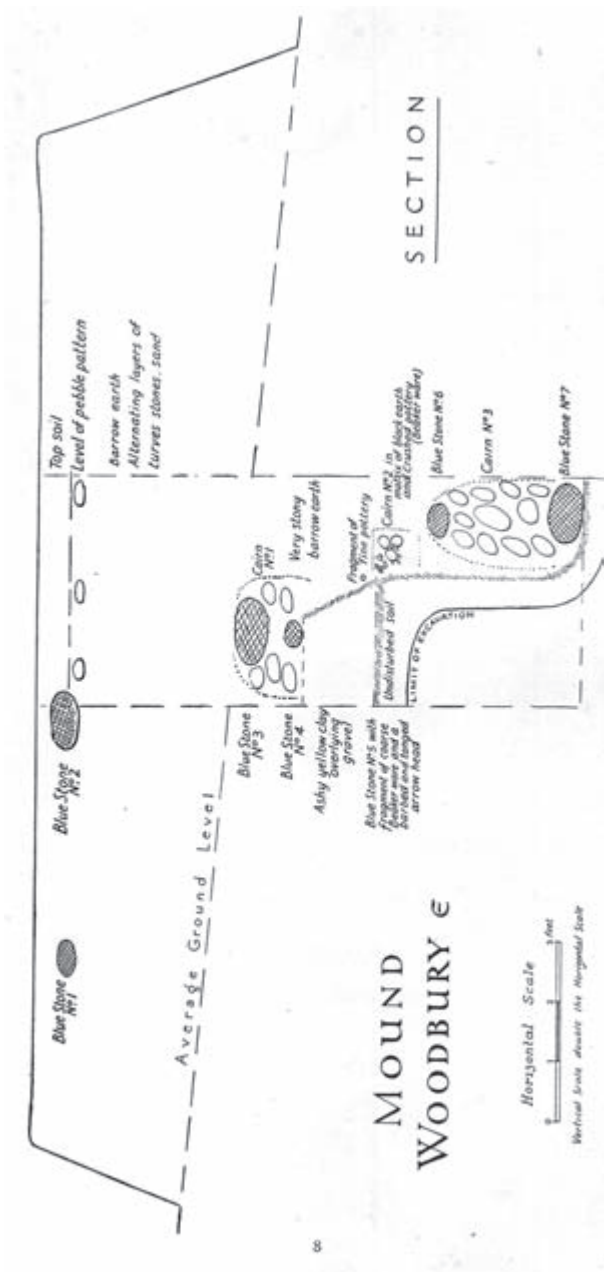


FIGURE 6.16 Carter's section drawing of the Woodbury e cairn.



FIGURE 6.17 The Woodbury e pebble cairn excavated by Carter with the external pebble pavement (source: Carter archive).

barely perceptible except on waste recently cleared by fire' (Carter 1936: 283). Woodbury AA6 (Carter's numbering system), about 200 m south of Four Firs (see Figure 6.2), is described as a saucer-shaped depression about 0.5 m deep and 5 m in diameter with a fire pit west of centre. The base of the depression was found to be covered with geometric arrangements of pebbles, small pebble cairns, and selected blue stones and areas of pebble paving/platforms.

Woodbury QL, about 100 m northeast of AA6, was a circular mound about 5 m in diameter and 0.5 m high with elaborate pebble patterns on its surface and small pebble cairns and selected blue stones beneath. Carter suggests that some of these mark out the east and west cardinal points. In 'the northeast quadrant of the mound was a small circle of pebbles under which in succession were two blue stones and (on the bottom level) a circle of stones' (*ibid.*: 286). The only finds of artefacts from these excavations were single flint flakes.

On Aylesbeare Common just to the north and down-slope from the two ridgetop cairns (Figures 6.2 and 6.12), Carter discovered a series of twenty-two mounds after swaling, or burning. Two of these were described as 'keyhole' mounds. They consisted of a rectangular mound about 3 m long, 2 m wide, and less than 10 cm high, narrowing in the middle and attached to a circular platform about 4 m in diameter (Carter 1938: 92). Under Aylesbeare 1, a pit had been excavated under the circular platform to a depth of about 1 m. 'The floor had been smoothed, pebbles laid thereon in some pattern, and prolonged fires burnt on the floor, the ashes of which had been swept to the sides, where they had hardened into a heavy cement' (*ibid.*: 92). There was no charcoal. Many of the other mounds examined by Carter covered layers of ash, small pebble cairns, arrangements or patterns of pebbles, pits, and blue stones. Some were on spring lines (*ibid.*: 94).

What Carter's excavations seem to reveal is a whole series of unique pebble structures in close proximity to some of the pebble cairns/barrows and probably connected with the ceremonies taking place at them, although he claimed (ignoring evidence to the contrary, such as the beaker sherds in the Woodbury e barrow) that they were of later Iron Age date. He describes some as being of 'keyhole type'—that is, a circular mound linked to a rectangular platform or pavement. Some of these resembled double-headed ceremonial axes in form (Figures 6.18 and 6.19). These pebble structures are not monumental, only about 10 cm or less high, and there are certainly many more to be discovered. The character of the scrub vegetation on the Pebblebed heathlands, with the gorse sometimes growing to over 2 m in height and elsewhere the heather cover being dense, largely precludes the possibility of discovering additional pebble structures today in the absence of swaling, or burning, a common practice in the past, which permitted Carter's own discoveries. The exact status of



FIGURE 6.18 Pebble pavement on Aylesbeare Common in the shape of a double-headed axe. (source: Carter archive).

these mounds in the absence of any modern excavations or dating evidence remains somewhat enigmatic. The mounds might be fairly recent in date, but the presence of flint in some, the absence of any modern find material, and the fact that they occur in the vicinity of Bronze Age barrows seem to indicate a genuinely prehistoric date.

In contrast to these low and discrete pebble structures, some of the barrows or pebble cairns were clearly intended as monumental constructions, punctuating and marking the landscape and visible for long distances. Others, however, are in much more discrete and hidden locations. The very largest barrows all occur on ridgetops or localised high points in the landscape. By contrast, the smaller barrows occur in the middle of low-sloping spurs between valleys,



FIGURE 6.19 Axe-blade-shaped pavement on Aylesbeare Common (source: Carter archive).

on the sides of slopes rather than on the tops of ridges, or in dry valley bottoms. There is thus an important association between barrow size and height. The lower down the barrows are situated in the landscape, the smaller and less conspicuous they tend to be. This pattern of constructing large barrows in high places is consistent with that known for barrows elsewhere in southwest England and in particular on the uplands of Dartmoor, Bodmin Moor, and Exmoor (see Chapters 7 and 8).

The large ridgetop barrows all occur in the western and northern areas of the overall distribution. Barrows 17 and 18 (see Figures 6.13 and 6.15), both situated on the edge of the western scarp slope, are unusual in that they can be seen skylined on the horizon far away to the west, from both the Exe valley

and from the top of the Haldon and Raddon Hills. They punctuate the skyline and must have been located so as to be highly visible landmarks when seen from the west or northwest. These barrows are also visible from long distances away to the east and can be seen from the East Hill and Peak Hill ridges. They also have the highest degree of intervisibility with others on the Pebblebed heathlands (Figure 6.20). Other large barrows are sited in the landscape so as to be most visually impressive when seen from long distances away only from the east. Few can be seen from all but short distances away to either the north or the south (Table 6.1). Some barrow groups consisting entirely of small mounds such as those on the slopes of Venn Ottery Hill and others on Bicton Common are not intervisible with any others, whereas those in the southeast (Figure 6.2: Nos. 10–15) are only locally intervisible.

Four of the barrows (12, 16, 17, 18) occur singly. There are five or six barrow pairs and three groups of three or more barrows. The barrows, as a whole, occupy every different major topographic situation in the landscape:

1. Highest points on the western escarpment edge (Nos. 17, 18)
2. Flat ridge summits (1, 2, 8, 9)
3. In middle of and toward ends of sloping ridgetops (23–25)
4. Upper sloping sides of ridges (20–21)
5. On low sloping spurs between valleys (10–16)
6. On upper slopes of valley sides (3–7)
7. In valley bottoms (22–23)
8. In a dip in the western escarpment edge (19)

The close association of these barrows with valleys and/or water sources is strong. Barrow 17, although situated on the western escarpment edge, is also set just to the north of a shallow valley that gives birth to a stream. Similarly, Barrows 21–22 are situated on the side of a ridge a few hundred metres away from the head of a stream. Barrows 22–23 are set almost at the bottom of the head of another stream valley above a substantial boggy area. Barrows 10–16 are all on sloping spurs between valleys and near to the source of streams. The barrows, as a whole, then, occupy both high and ‘dry’ locations in the landscape and are associated with water and valleys that give birth to streams running in beds of pebbles. The barrows are all associated with streams draining the Pebblebed heathlands that flow east or southeast to join the river Otter in its passage toward the sea. There are only two barrows/ring ditches known from the marls due west of the heathlands between them and the river Exe. Others cluster in the vicinity of Exeter along the Exe valley itself to the northwest (Griffith and Quinnell 1999b: Map 6.5). The barrows on the Pebblebed heathlands are linked with each other and the Otter valley by valleys and streams that have their sources near to, or beside, them. Carter’s work seems to

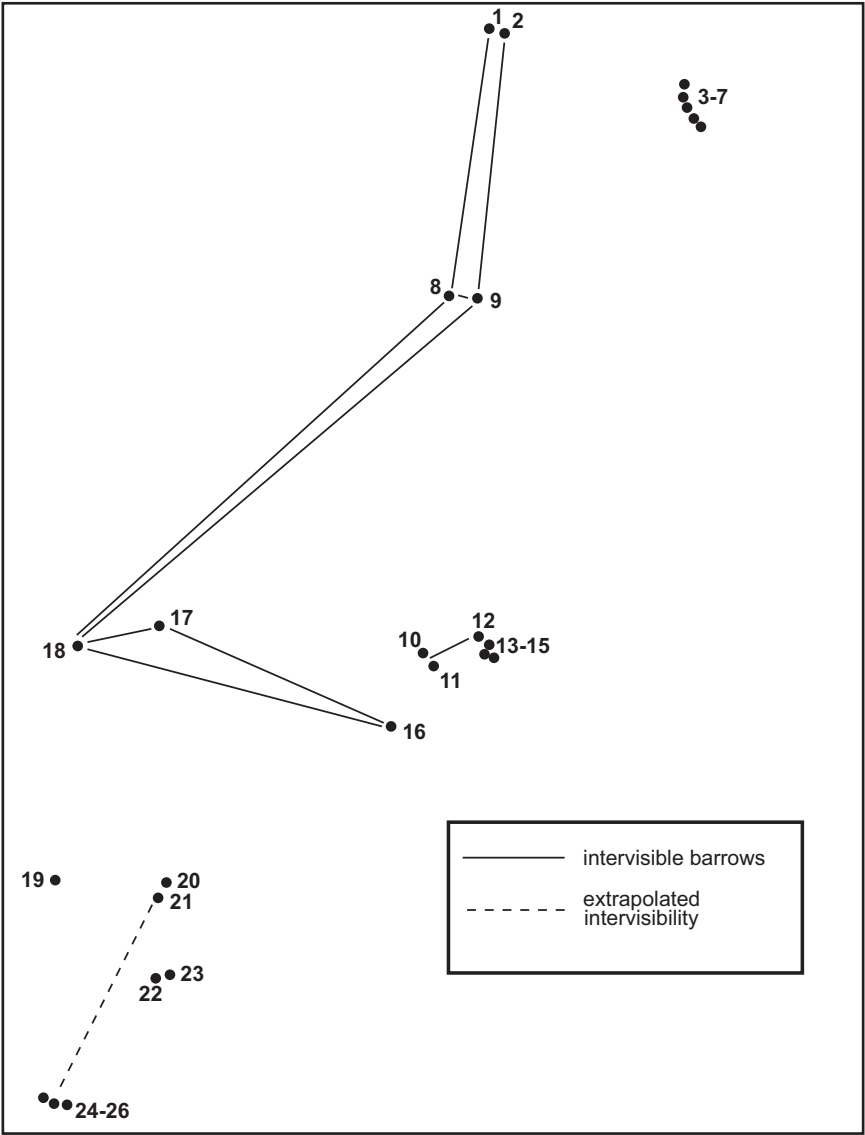


FIGURE 6.20 Barrow intervisibility on the Pebblebed heathlands.

underline the significance of springs in the vicinity of the barrows. He reports that in low marshy ground southeast of Barrow 16 ‘a spring had been carefully paved with pebbles. . . a cairn had been erected over it and the whole enclosed in a large mound’. There was a flint flake in the cairn and below it on

the pavement 'a beautiful sacramental flint'. The association between some of the pebble structures and springs to the north of Barrows 8–9 on Aylesbeare common has already been noted.

The Exe estuary, to the west of the Pebblebed ridge is a wide and shallow valley of muds and shifting sands (Figure 6.21). The Otter valley, by contrast, is a valley of pebbles and gravels (Figure 6.22). Along its course it mixes and combines pebble material washed down from the heathlands and more jagged flints and cherts from the East Hill and Peak Hill ridges. It flows beneath Dumpdon Hill, and its northern tributary, the Tale, is born, or has its source, on the eastern side of the spur occupied by the early Neolithic Hembury causewayed enclosure. The Otter flows to the east of High Peak before entering the sea near to the east of the cliffs at Budleigh Salterton, where the Pebblebeds are most dramatically exposed.

The sea, to the south, is visible from all but two of the barrow locations. The Peak Hill and East Hill ridges flanking the Otter valley to the east are visible from all but a few. A series of barrows and smaller flint cairns once crowned the tops of these ridges, but because of forestation only a couple now survive on East Hill. Grinsell (1983) records the former presence of at



FIGURE 6.21 View across the Exe estuary looking west at low tide.



FIGURE 6.22 The river Otter at Dotton.

least six from the Peak Hill ridge and fourteen running along the spine of East Hill. There are extensive views from these ridgetops across the Otter valley and the Pebblebed heathlands to the Haldon Hills and Dartmoor beyond. Some of the barrows and cairns on these ridge spines would certainly have been visible from almost all the barrows on the Pebblebed heathlands below them. By contrast, the Haldon Hills and Hembury are visible from only those barrows situated on ridgetop locations or along the western scarp of the heathlands. No barrows are known from Hembury. On the Haldon hills there are at least twenty-six small barrows and cairns (*ibid.*: 13; Finneran and Turner 2003: 242–243). Because of their small size, distance, and their specific locations (mostly on the upper western slopes of Little and Great Haldon), none of these would have been visible from the barrows on the Pebblebed heathlands. All these cairns running along the East Hill, Peak Hill, and Haldon Hill ridges, constructed of angular and dull materials, would have made a striking visual and tactile contrast with the patterned Pebblebed cairns, perhaps objectifying in their material form different social identities and relationships to the east of the Otter and to the west of the Exe: differing landscapes and social worlds.

ANCESTRAL HILLS AND THE BIRTH AND THE DEATH OF THE SUN

It is striking that High Peak is visible from all the Bronze Age barrows, whatever their position in the landscape. The only ‘barrow’ it is not visible from is an eighteenth- or nineteenth-century landscaping mound at Four Firs (see Table 6.2 and Figure 6.2: No. 19). Given the presence of the Neolithic occupation and probable causewayed enclosure on its summit, this peak likely was a hill of paramount ancestral significance for the local Bronze Age populations living in the vicinity of the Pebblebeds. It is situated to the east, southeast, or east-south-east of all the barrows. Sunrise at the spring and autumn equinoxes would first be visible through the Sidmouth gap between the Peak Hill and East Hill ridges (see Table 6.3 & colour plate 4). The presence of this gap to the east of the barrow distribution thus points to the significance of the *rising* sun as seen from the barrows at significant points during the year. The gap thus serves to frame and dramatise and animate these important celestial events and the brilliant changes in the colour of the sky from red to yellow. By contrast, the setting sun in the west over the Haldon Hills, visible from relatively few of the barrows, is not framed by any dramatic gaps. The Raddon Hills, with their Neolithic causewayed enclosure, may have represented another more distant place of ancestral significance. Situated to the northwest of the

Table 6.2 The visibility of principal hills and ridges from the Pebblebed barrows. For locations see Figure 6.2.

No.	High Peak	Peak Hill Ridge	East Hill Ridge	Dumpdon Hill	Hembury	Haldon Hills	Raddon Hills	Sea
1–2	+	+	+	+	+	+	+	+
3–7	+	+	+	+				+
8–9	+	+	+	+	+	+	+	+
10–11	+	+	+	+				+
12–15	+	+	+	+				+
16	+	+	+	+				+
17	+	+	+			+		+
18	+	+	+	+	+	+	+	+
19		+				+	+	+
20–21	+	+						+
22–23	+							
24–26	+	+	+					+

Table 6.3 The visibility of the ridge and hill gaps from the barrows and the main directions from which the Pebble Bed barrows look most impressive from in the landscape.

Barrow No.	Sidmouth Gap	Peak Hill Gap	Honiton Gap	Most Impressive from
1–2	+	+	+	n/a: destroyed
3–7	+	+	+	East but small
8–9	+	+	+	East
10–11	+	+	+	East but small
12	+	+	+	East or west
13–15	+	+	+	n/a: very low
16	+	+	+	East or west
17	+	+	+	East or west
18	+	+	+	East or west
19	-	-	-	n/a: probably modern
20–21	-	+	-	South or east*
22–23	-	+	-	n/a: in valley bottom
24–26	+	+	+	South or north*

* = extrapolated owing to the presence of Modern plantations.

barrows, they might have been associated with the setting of the sun on the summer solstice (see Figure 6.23). However, the effect would not have been dramatic and was visible only from a few of the barrows (Table 6.2). In relation to the significance of the rising sun as seen from the barrows, note that the entrances to the excavated Bronze Age round houses found during the course of the A30 excavations at Patteson's Cross and Hayne Lane all face toward the southeast—so as to face the East Hill ridge and in the direction of the rising sun (Fitzpatrick, Butterworth, and Grove 1999).

Dumpdon Hill, despite its considerable distance from the barrows, about 20 km away, is visible from a surprising number of them (twenty, or 77%; Table 6.2). This hill, like High Peak, is a hill island situated in the middle of the Honiton Gap. As is the case with High Peak, the river Otter runs beneath it, but to the west rather than to the east. Dumpdon Hill is, like Hembury and High Peak, crowned by a hillfort. This is a very likely location for another Neolithic hilltop enclosure. Like High Peak, this hill may have had a special ancestral significance for the Bronze Age pebble cairn builders. At the winter solstice, the setting sun would have been seen sinking between Little and Great Haldon to the west on its descent into the sea. All these celestial events would have been visible only from a few barrows, but would have been known to all.

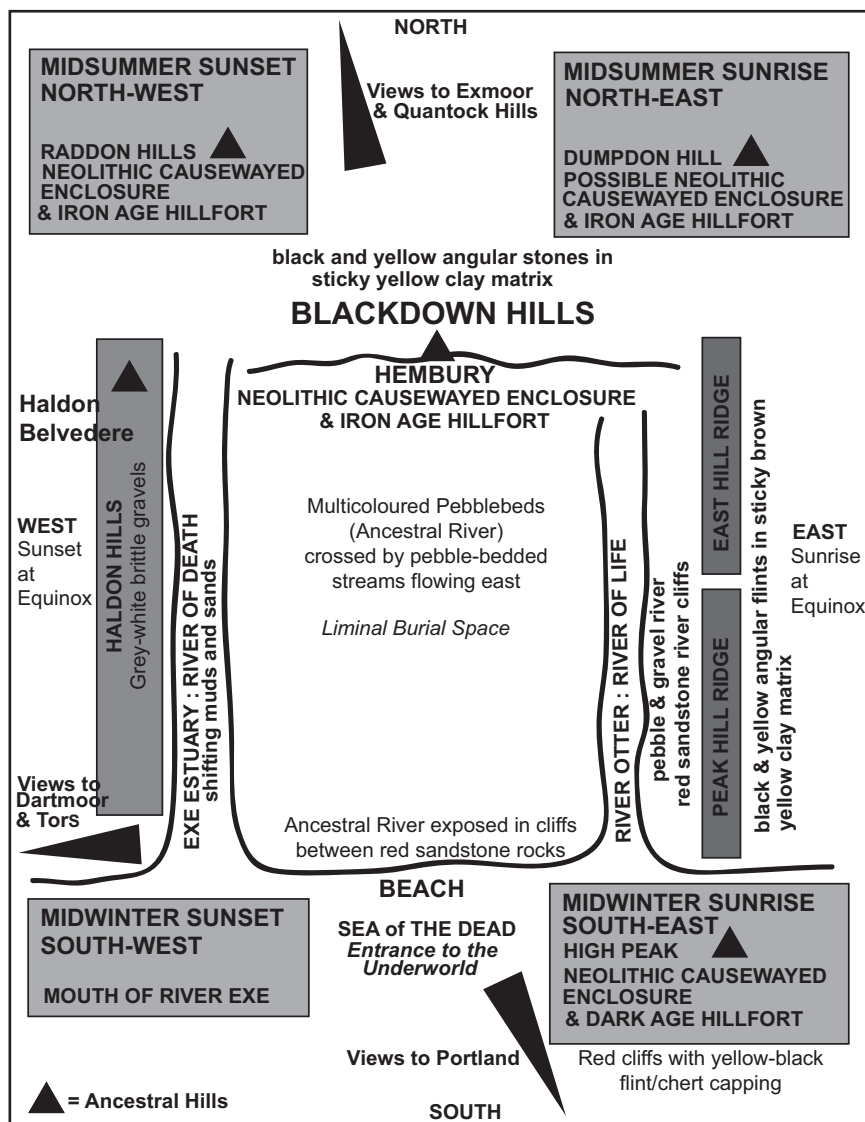


FIGURE 6.23 The cosmological landscape of the East Devon Pebblebeds.

RIVERS OF LIFE AND RIVERS OF DEATH

The mouth and the course of the river Exe to the west of the barrows may have been both actually and conceptually associated with death. In contrast, the

Otter to the east may have been associated with birth and the regeneration of life. These possible associations are worth further exploring, both with reference to the physical characteristics of the two rivers and their association with barrows. The Exe, with its source on Exmoor, far to the north, is a major river linking different landscapes with Bronze Age settlement and barrows across the southwest peninsular. But the Otter, with its source in the Blackdown Hills, is of specific local significance. In other words, it is far more intimately related to the East Devon landscape, and, as discussed above, the locations of the barrows on the Pebblebed heathlands are intimately related to valleys and streams flowing into it. No such intimate relation can be claimed in relation to the barrow locations and streams flowing west toward the Exe from the spring line at the base of the Pebblebed scarp.

The lower stretches of the Exe, visible from Barrow 18 (See Figure 6.2) and the highest part of Woodbury Common, are inundated by the sea twice a day, since this is a wide tidal estuary. The river meanders sluggishly through shifting mud and sandbanks in an estuary up to 2 km wide (Figure 6.21). The mud and sand are left exposed and then covered by the tides, and the smell is salty and brackish. At the mouth of the estuary there are particularly violent and dangerous currents. The water is saline, muddy, and unfit to drink. The Exe estuary would have made an ideal depository for the bodies of the dead, only a small minority of whom would ever have been buried in the Pebblebed barrows. Acting as a kind of sump, it would soon have concealed and buried or washed away the remains of the dead. The Exe could then have provided the ideal place for the disposal and forgetting of the dead. We know from numerous finds of unburnt bones from rivers that river burial took place during the Bronze Age (Bradley and Gordon 1988; Garton, Howard, and Pearce 1997). In this respect, it is interesting to note the large concentration of Bronze Age barrows clustering in the very bottom and lower slopes of the Exe valley itself just beyond its tidal limit. Here at least twenty-nine are recorded by Grinsell (1983: 13) and about as many more as ring ditches by aerial photography of the same area (Griffith and Quinnell 1999b) just to the north of the symbolically important confluence of the river Yeo or Creedy, the river Exe, and the river Culm, about 9 km north of the normal tide limit (itself extending about 12 km inland from the river mouth). No barrow cemeteries occur along the bottom of the Otter valley, whose normal tide limit extends only a few kilometres inland. The closest barrows to the Otter itself are a pair of ring ditch sites about 150 m to the east of Wrinkly Cliff, an impressive red sandstone river cliff just over 1 km to the south of Newton Poppelford in the Pebblebed heathland area. Otherwise, the nearest to it are the barrows and cairns situated along the East Hill and Peak Hill ridges, those located farther to the west in the

central Pebblebed heathlands themselves, and on the spurs and ridges of the Blackdown Hills to the north (*ibid.*: Map 6.5).

The river Otter, in contrast to the Exe, has a shallow and stony bed. The water is fresh, clear, and fast-flowing: a most unsuitable and inappropriate place for the disposal of corpses (see Figure 6.22). Only its very lowest reaches, the last few kilometres, form a muddy estuary that is today almost completely blocked by an enormous pebble bank at its mouth as a result of west-to-east longshore drift. A few hundred years ago, the river was navigable as far inland as Otterton (now 3 km inland from the mouth). The Otter flows beneath what have been suggested to be two very significant ancestral hills, Dumpdon and High Peak, and mixes angular stones from these hills together with those derived from the Pebblebed exposures, a river of life associated with ancestors, pebbles, pebble-cairns, pebble streams, and fresh drinking water.

If the Exe, situated to the west, and the dying sun represented a river of death, the Otter to the east might be conceptualised as a river of life. It was associated with the reborn sun, framed and shining through the gaps between the ridges and hills. In relation to the activities of the living and the disposal of remains of the dead, the locations of the barrows on the Pebblebed heathlands in between these two rivers can be regarded as betwixt and between liminal places (Figure 6.23). The pebble cairns erected here, with their complex internal patterning and structural organisation, were perhaps associated with the remains of, and offerings to, founding ancestors.

The continued presence of the outcropping Pebblebeds inland from the sea in the form of surface pebbles covering the heathlands may well have been recognised and understood as the inland presence of the same band of pebbles seen running through the red sandstone cliffs on the beach at Budleigh Salterton. This band of pebbles might well have been understood by prehistoric populations in a similar manner to the way in which geologists explain it today: as the course of an ancient and dead river. There could, then, be no more fitting place than the Pebblebed heathlands to erect cairns to the memory of the ancestral dead. The pebbles may have been understood as a special material created by the ancestors, a gift from the dead to the living that was then used to honour the dead.

From the Neolithic onward there is indisputable evidence, discussed above, for both an interest in and the use of the pebbles—their selective procurement, transport, and relocation; their use in broken form as temper for Neolithic pottery; their arrangement into geometric patterns; the construction of large cairns and small pebble structures; the selection and arrangement of pebbles of unusual colour; their association with springs, water sources, the rising sun, and the cardinal directions.

THE COLOURS OF THE LAND

Although colour symbolism has long been recognised in anthropology, the significance of colour in archaeological research is only just beginning to be appreciated (Bradley 2000b; Jones and MacGregor 2002; Tilley 1996). One of the most striking features of the Pebblebeds is the variety of colours (see colour plate 3). In addition, the colours constantly change according to the light and the time of day and in relation to the weather. When it is dry, the pebbles become duller in hue and lose much of their colour. Rainfall transforms and enhances their surfaces, enriching and enhancing the colours and bringing them to life. Along the beach at Budleigh Salterton, the most colourful pebbles are those washed by the tides rather than those higher up the ridge of the beach. By contrast, the angular gravels found on the ridges and hills surrounding the Pebblebeds look similar whether the weather is wet or dry, and they are not significantly different. In comparison, the colours of the pebbles are in a continual state of process and transformation. Young (2005, n.d.) has recently discussed the manner in which surface colour changes in the land are indexical of the enormous power that ancestral forces exert from beneath and below the ground among Aboriginal populations. The surface changes of land and sky are created by the ancestors who are present inside the landscape, present beneath the surface. There is a whole ontology of colour that is a central part of the way people conceive of the potential in coloured things. In particular, highly coloured things and things that change colour are regarded as energetically charged. The image of fecund land is one of colourful flux, whereas a loss of colour is associated with a loss of vitality and life force. This idea may be linked to Rowlands's argument that an understanding of materiality can be linked to processes of materialisation such that some things and some people are more material and thus powerful than others (Rowlands 2005).

CONCLUSIONS

The multi-coloured pebble cairns may thus have been conceived as transitional places situated between the world of the dead and the world of the living. They were constructed from and rested on the colour-charged pebbles of an ancestral river connecting these two domains. The pebble cairns thus represented conceptual entry points into an ancient dry river bed associated with the ancestral dead and their ultimate journey to a netherworld beyond and beneath the sea. The small pebble structures associated with the larger pebble cairns might have been used and erected in ceremonies connected both with

the Otter, a river of life (hence the association of some small pebble structures with fresh water springs), and the physical disposal of the remains of the dead in the river Exe. Thus the pebble cairns were monuments and memorials to the memory of the ancestral dead and the old dead river of pebbles associated with them, whereas the river Exe became the medium by means of which corpses of the vast majority of the recently deceased in the Bronze Age could be moved and transported, in a living river, to another world beneath the sea. Here it is of interest to note that the Otter flows out to the sea through a pebble bar laterally wedged between red sandstone cliffs to both the west and the east just as the Pebblebeds are vertically wedged between red sandstone above and below them in the Budleigh Salterton Cliffs. By contrast, the muddy and sandy mouth of the Exe has no blood-red cliffs or pebbles bordering its exit to the sea.

The other world may have been conceptualised as a watery world under the feet of the living connected by ancestral and contemporary rivers with the sea, through which one entered it. Glimpses of the actual course of the ancestral river to the sea were visible only in the cliffs at Budleigh Salterton. Here a dry river of pebbles could be seen running through the cliffs and disappearing into the pebble beach and the sea. Above this river, a layer of 'burning' (blackened triangular-shaped pebbles) occurs and above this, again, a bright yellow band of sandstone perhaps associated with the rays of the rising sun and thus symbolising the regeneration of life. Note that Owoc has emphasised the significance of yellow clay mound caps and embellishments on Bronze Age barrows in the St Austell area of the southwest peninsula in relation to the deposition of materials and standing stones marking the mid-winter sunrise and the mid-winter sunset, suggesting a direct metaphorical link between the yellow clay and the sun (Owoc 2002: 135–136).

The red cliffs themselves and their pebbles perhaps provided inspiration for the rituals taking place at the barrows and pebble structures involving the burning and blackening of materials inland on the Pebblebed heathlands. Pebbles are easy to pull out of the ground and lend themselves to sorting activities. They can be handled easily. Each is interesting, with its own character, and yet the pebbles can be sorted into different groups in relation to size or shape or colour or a combination of the three. Pebbles can be curated, ordered, and relayed in patterned transformations. Pebbles create the opportunity to re-order the given world. The triangular shape of the *dreikanter* perhaps provided a miniature material metaphor for the distinctively triangular shape of High Peak, the pre-eminent sacred hill. The old, dead, ancestral river is seen flowing through the cliffs and running downward, west to east, in the direction of the rising sun, before reaching the sea. It narrows, rather than widens, where it reaches the sea. By contrast, the Exe and Otter rivers both flow north-

south and widen in their lower reaches before they enter the sea. The relation between these two watery rivers and the dead ancestral river thus involves a triple inversion, or reversal, in terms of materiality, directionality, and breadth. Thus the domain of the dead was an upside-down existence compared to that of the living, as the former also appears to be in relation to barrow construction in the Stonehenge landscape, as discussed in Chapter 3.



CHAPTER SEVEN

STALKING WITH STONES ON EXMOOR

THE CHARACTER OF THE LAND

Hard and smooth pinkish brown sandstones generally underlie much of the northern part of Exmoor moor, with grey flaky shales and slates covering much of the area to the south (Edmonds and Williams 1985; Edwards 1999, 2000). This geological structure is broadly reflected in the topography consisting of two principal west-east ridges: one running along the coast and a central ridge that includes the highest land, The Chains and the highest point at 519 m, Dunkery Beacon (Figure 7.1). Replicating the geological axes, a watershed runs roughly east-west across this part of the moor. Rivers or streams flowing north do so swiftly, sometimes through rocky gorges, for only short distances to the northern coast. The local term for these is ‘water’—for example, Farley Water, Hoar oak Water, Badgworthy Water—which infers that they are too small to be properly called rivers and too large and powerful to be referred to as streams, flowing as they do in very deeply incised valleys created in ancient periglacial conditions (Straw 1995). There are some thirty named rivers and

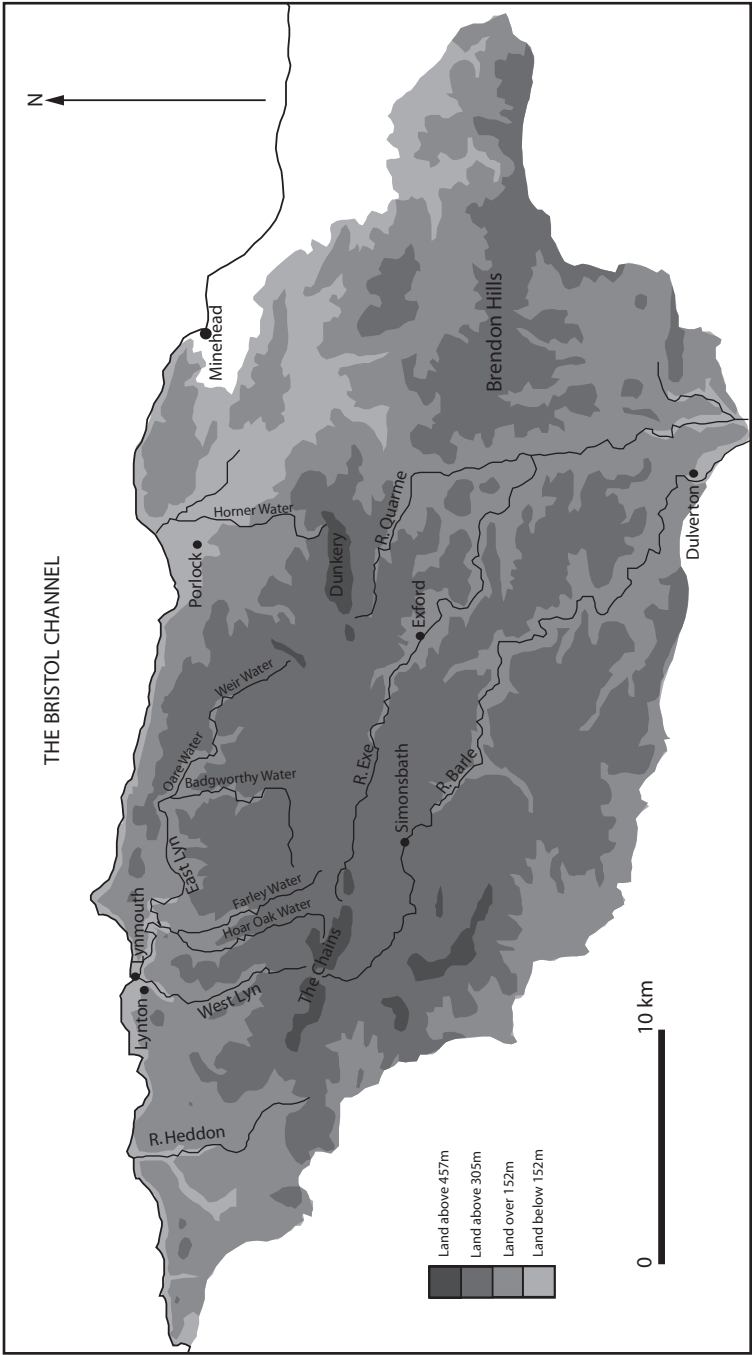


FIGURE 7.1 Exmoor, showing places mentioned in the text.

waters marked by the Ordnance Survey crossing Exmoor averaging about 10 miles in length making a total of 300 miles of significant watercourses together with hundreds more miles of unnamed streams and tributaries (Allen 1978; Bonham-Carter 1991: 81). The rivers flowing south generally have less steep gradients and wind through the confined flat valley bottoms in which alluvial sediments have built up over millennia. The rivers are far longer, connecting the moor with the English Channel. The moor is named after the river Exe, which rises in its centre before flowing south to reach the sea beyond Exeter in East Devon (see Chapter 6). This dual directionality makes Exmoor distinctive both in terms of its own geography and its riverine and coastal connectedness to the outside world.

The northern boundary of Exmoor is created by dramatic sea cliffs, which are also the highest in England. The coastal hills have a distinctive 'hog's back' shape, at first steeply dropping away in a long seaward slope and then plunging vertically to the sea below forming a small vertical sea cliff over which coastal waterfalls plunge (Arber 1911). These cliffs form a formidable barrier to the Bristol Channel with few natural harbours or landing places, creating a distinctively sharp northern edge to this upland world. There is only one area of flat coastline, the 2-mile sweep of Porlock Bay between Gore Point and Hurlstone Point. Here there is a massive curving shingle storm beach, with its pebbles distinctively graded in size (smallest to the east), with brackish inland salt marshes behind. The southwest boundary of the moor is well defined by a third ridge with steep south-facing slopes. Elsewhere, to the south, west, and east, the moor lacks any distinctive edge; instead it slips away, merges, and blends into the surrounding undulating hilly landscapes of North Devon and West Somerset.

Only small boggy patches on Exmoor are associated with the upper parts of the valley systems—nothing like the extensive and treacherous bogs that occur on Dartmoor and Bodmin Moor. Today, the high moors are treeless, and about one fifth of the higher central moorland area is occupied by *Molina Caerulea* (purple moor grass), a coarse perennial species forming dense tussocks and growing up to 0.7 m high and in wetter areas deer sedge with cotton grass being abundant. Elsewhere, the moor is a mixture of heather, ling, and gorse, with bracken on the drier hill slopes. In spring and winter, the moor is a mosaic of stark contrasts between the bleached dead grasses, which are commonplace on the upland ridges, the brown hues of the dead bracken, and the blackness of areas where heather is dominant. (Sinclair 1970). Briefly, in August and September, the heather transforms into a striking purple carpet locally studded with bright yellow gorse. Parts of the northern coast and the stream and river valleys are thickly wooded in their lower courses, particularly along the course of the Lyn and in the area between Dunkery Beacon and Porlock on the eastern side of the moor, where the extensive Horner Wood consists largely of stunted and often crooked sessile oaks.

The rocks are obviously and dramatically exposed in the coastal cliffs, but elsewhere there is an almost complete absence of outcropping rocks across the moor. There is only one notable exception, the Valley of the Rocks—but even this is anomalous, being situated close beside and running parallel to the coastal cliffs at Lynton. This extraordinary location is in fact the now dry valley of an ancient river and is the only place where dramatic sandstone rock stacks, or tors, occur (Figure 7.2a). The main river system flowing north off the moor, the Lyn and its tributaries, has created a series of rocky boulder-strewn gorges with many waterfalls in its lower courses before reaching the sea at Lynton. In inland areas, the bedrock is only sparsely revealed as small crags along the valley sides, occasionally jutting out in a series of parallel outcrops, like ribs (Figure 7.2b). Along the Barle, Exe, Badgworthy, Farley, and Oare Water valleys there are also a series of rocky valley floor knolls. Extensive frost-shattered scree slopes along valley sides occur in the northern parts of the moor and on the steep slopes, where these drop down to the coastal cliffs. In general, the farther north you go on Exmoor, the greater the frequency of these scree slopes and rock outcrops, but, for the most part, it is the absence of surface rock exposures that is the defining characteristic of Exmoor.

Weather

The high moors of Exmoor are utterly exposed to the winds, whatever their direction. This exposure prevents trees and even shrubs growing at the higher altitudes, where the vegetation consists mainly of heather, gorse, bracken, and purple moor grass. The high moors provide only rough grazing for livestock, and arable cultivation is restricted to pockets of coastal lowland, notably the Vale of Porlock on the eastern boundary. Substantial woodland is confined to the valley systems. In the absence of trees or rocks, there is no protection or cover as the wind scours the open expanse of land. The prevailing south-westerly winds are generally mild, but when the winds blow from the east or the north, it is bitterly cold, chilling to the bone. The only refuge is down in the stream and river valleys, where, not surprisingly, all the contemporary settlements are located. The absence of farmsteads or electricity transmission lines over the moor is evidence of how hostile and exposed the high moor is. Besides the scouring winds there are frequent sea mists and fogs that envelop the high hills, reducing visibility to 50 m or less. The contrast with the surrounding lowlands that may be bathed in sunlight while the moor is shrouded is dramatic. On a clear day, views from Exmoor are particularly extensive to Dartmoor, south Wales, Bodmin Moor, the Mendip Hills, and the East Devon hills. The English Channel and the Bristol Channel can both be seen from the highest points, but when the dense fogs and mists descend, the moor closes in

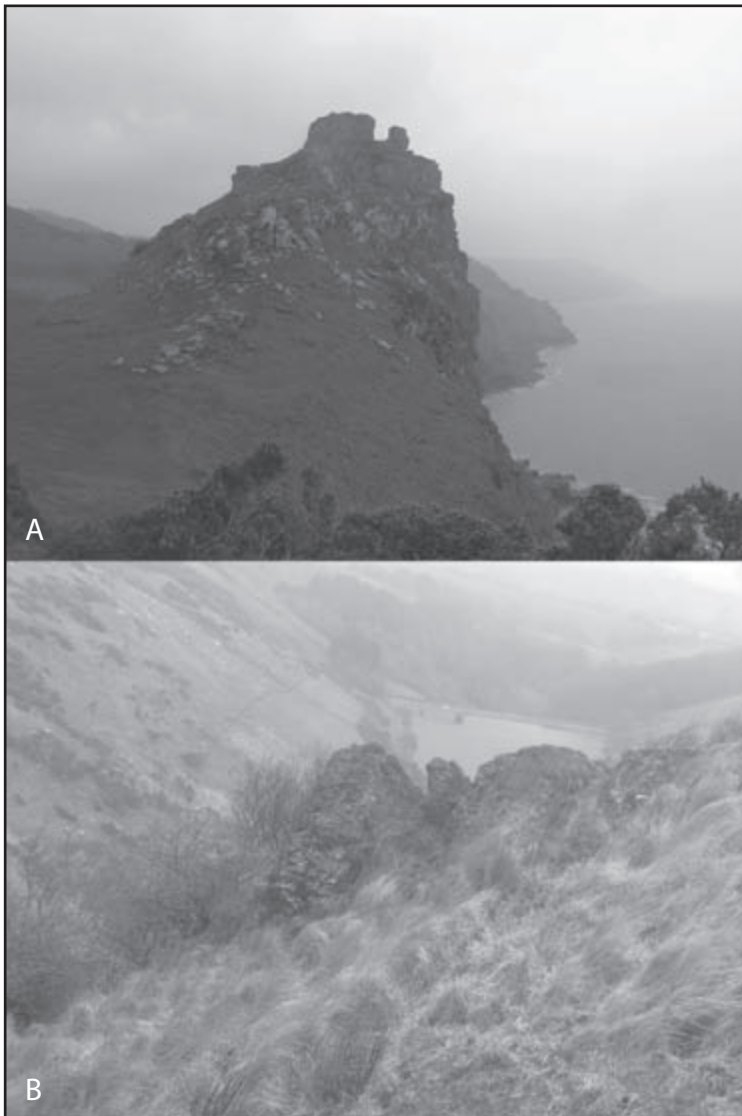


FIGURE 7.2 (A) Castle Rock in the Valley of the Rocks, Lynton; (B) Swincombe Rocks, Challacombe.

on itself and is shut off from the outside world. Exmoor becomes an interior introspective world of localised geography.

In all weathers, the sky is the dominant element of the high moor, with the two elemental planes of land and sky rubbing against each other, one static, the

other dynamic, forceful, and ever unpredictable. Because Exmoor is exposed to the maritime climate of the southwest, the weather is constantly changing. The light can change in an instant, one moment being diffuse, the next intense and focussed, shifting from a brilliant clarity to thick obscuring mists in which it is unwise and dangerous to venture from the security of the valleys to the indifferent emptiness of the open moors. Broad vistas across and off the moor become lost in a dense and impenetrable shroud of cloud, making orientation and a sense of place impossible to realise. The hills may be obscured in clouds for many days at a time before they appear again, opening up to the wider world beyond. The sunlight slanting through the clouds may occasionally individually highlight such features as part of a ridgetop or deep-sided gullies, clefts, and valleys, which otherwise are not distinctively dramatic in this landscape. So, in a largely undifferentiated landscape, it is the changes in the light that create the spectacle of the landscape. One moment a particular hill is brought into prominence, and then it fades away among the backdrop of other hills as the light passes from it. Such changes in visual experience alter one's perception and experience of the landscape, which become foregrounded or backgrounded, as in Gestalt experience.

Exmoor opens out and closes in on itself on a regular basis. The fogs and mists most often shroud the high hills, leaving the valleys free; at other times, they descend to the rivers and stream courses, covering the landscape in a soft grey and dripping blanket, encouraging the growth of tree ferns and unusual hanging lichen growth on the trees in the deep valleys.

Perhaps the single most important defining feature of Exmoor is rain—in terms of frequency, total volume, and, on some occasions, sheer intensity. Because of the mean altitude of the landscape, Exmoor has a distinct microclimate, whereby it can be sunny in surrounding areas and yet raining heavily on the moor. Not surprisingly, facing the direction of the maritime winds, the southwestern edge of the moor has the highest rainfall. Annual rainfall on The Chains reaches over 2,000 mm, whereas in surrounding areas it is half that amount. Between Dunkery Beacon and the Vale of Porlock, the rainfall drops by half in as little as a few miles (Pearce 2001: 35). The whole upland area of the moor acts as a huge sponge, retaining considerable amounts of water that occasionally reach their limit with dramatic results. The saturation can become so great that the moor resembles a huge lake or reservoir with water running off the highest ground like a continuous sheet, accumulating in the narrow valleys and producing catastrophic flood events such as that which occurred in August 1952 at Lynton, when the escape of floodwater was exacerbated by landslips and blockages. This reservoir effect is created by the absorbent qualities of surface peat and the impermeable geology below, and it enables the rivers and streams to be perennially fed from the rain collected and released from the high

moors. The heavy rainfall also fosters peat development, which rises and shrinks depending on the moisture content of the ground. This shrinking and rising of the peat may obscure, or reveal, many of the lithic monuments, whose visibility is also affected by the degree of vegetation growth during the summer months.

Because of the high wind speeds, deep snow is relatively rare on the moor but especially along the coast. In the recent historical past, terrible blizzards occurred in winter, filling the lanes and roads with snow and making movement in to or out of the moor impossible and isolating farms and villages for weeks (Burton 1969: 83ff.; Eardley-Wilmot 1990: 178ff.). Winters can be severe. As recently as 1963, the cold began on 23 December and lasted until 3 March, with the mean day temperature on the Moor being -3 degrees centigrade during those seventy-one days (Burton 1969: 84). Blackmore, in his novel *Lorna Doone*, drawing on historical records of the 1676 winter, describes the scene dramatically: 'There was nothing square or jagged left, there was nothing perpendicular; all the rugged lines were erased, and all the breaches smoothly filled . . . Not a patch of grass was there, not a back branch of a tree [in the Doone valley]; all was white; and the little river flowed beneath an arch of snow; if it managed to flow at all' (Blackmore 1997: 286–287).

An Isolated Moor

Exmoor is the least visited of England's National Parks, with very few tourists staying within it. The resident population is very low, with about only 10,500 people living within the Park boundary. The main settlements—Lynton and Lynmouth, Dulverton, Porlock, and Dunster—are all along the coast or are on the fringes of the moor, which still seem, despite modern transport links, peculiarly isolated, a point that has been commented on many times (for example, Pearce 2001: 11), and this was also the case in the historic and prehistoric past. There are few substantial upland settlements or field systems on Exmoor belonging to the prehistoric period, which stands in sharp contrast to Dartmoor and Bodmin Moor. Exmoor, with low population and no discernable economic resources, was never Romanised as were other parts of southwest England, although it does have two small military forts, suggesting some exploratory interest. It becomes a compelling view that the people of prehistoric Exmoor principally inhabited not the high moors but the uniquely named and characterful valleys, each with its own personality, as is the case today. These sheltered locations were also the places in which the elemental rocks of the landscape revealed themselves.

The lithic 'monuments' recorded here—stone circles, stone rows and geometric arrangements of stones, and stone settings—are all small, discrete, and difficult to find. They are often entirely hidden by long rushes throughout

the year or moor grass during the summer and autumn. Often they remain invisible until you reach them. In a sense, their very presence on the moor is unexpected and extraordinary, given the almost complete absence of surface stone on the extensive hills and ridges.

Stone Circles

There are only two stone circles known with any certainty on Exmoor (Figure 7.3). The Withypool stone circle is situated on a gentle southwest facing slope half-way down a markedly rounded hill island bounded by the river Barle to the north and east and valleys with small streams to the west and south leading into the Barle. On the top of the hill, there is a large but low summit cairn out of sight from the circle. From it there are extensive views to the south, where the Sidmouth Gap is visible in the far distance, to the west as far as Dartmoor, and east to Dunkery Beacon. Views out from the circle are similar, except that the Sidmouth Gap can be seen only from the upslope northern arc of stones in the ring and is lost from view in the rest of the interior. Both the location and the stones themselves are discrete. All the surviving twenty-seven stones are 0.5 m high or less, and the circle may have had up to one hundred small stones. The most likely source of these is from the stream bottom to the west of the circle. Some of the stones in the northern and southern parts of the ring appear to have been chosen because of the presence of quartz veins (Table 7.1).

While the Withypool circle stands in splendid isolation, the Porlock stone circle is associated with a short stone row 50 m to the southeast and a small low cairn 4 m to the northeast. The stone row is aligned in the direction of the cairn but not the circle. This circle, like that at Withypool, is also situated on a gentle southwest-facing slope, with high land to the northeast restricting visibility in this direction. It is situated close to the head of a valley down which views are seemingly directed, with a stream that runs west and then north to join the Lyn river system and the Bristol Channel. The fourteen surviving stones are irregular sandstone blocks, the largest, about 0.8 m high, being in the southeast and northwest parts of the ring, which also has a small centre stone (Table 7.1; Fig 7.4). Excavations by Harold St. George Gray revealed packing stones around uprights as little as 0.1 m in height. At the geometric centre of the circle, about twelve small stone slabs were revealed but no charcoal or other finds (Gray 1928: 75).

It is interesting to note that these two stone circles, one situated in the southern part of Exmoor, the other in the northern part, are associated with water courses and river systems that flow, respectively, south to the English Channel and north to the Bristol Channel, thus symbolically connecting Exmoor to the outside world. There are no stone settings anywhere near the

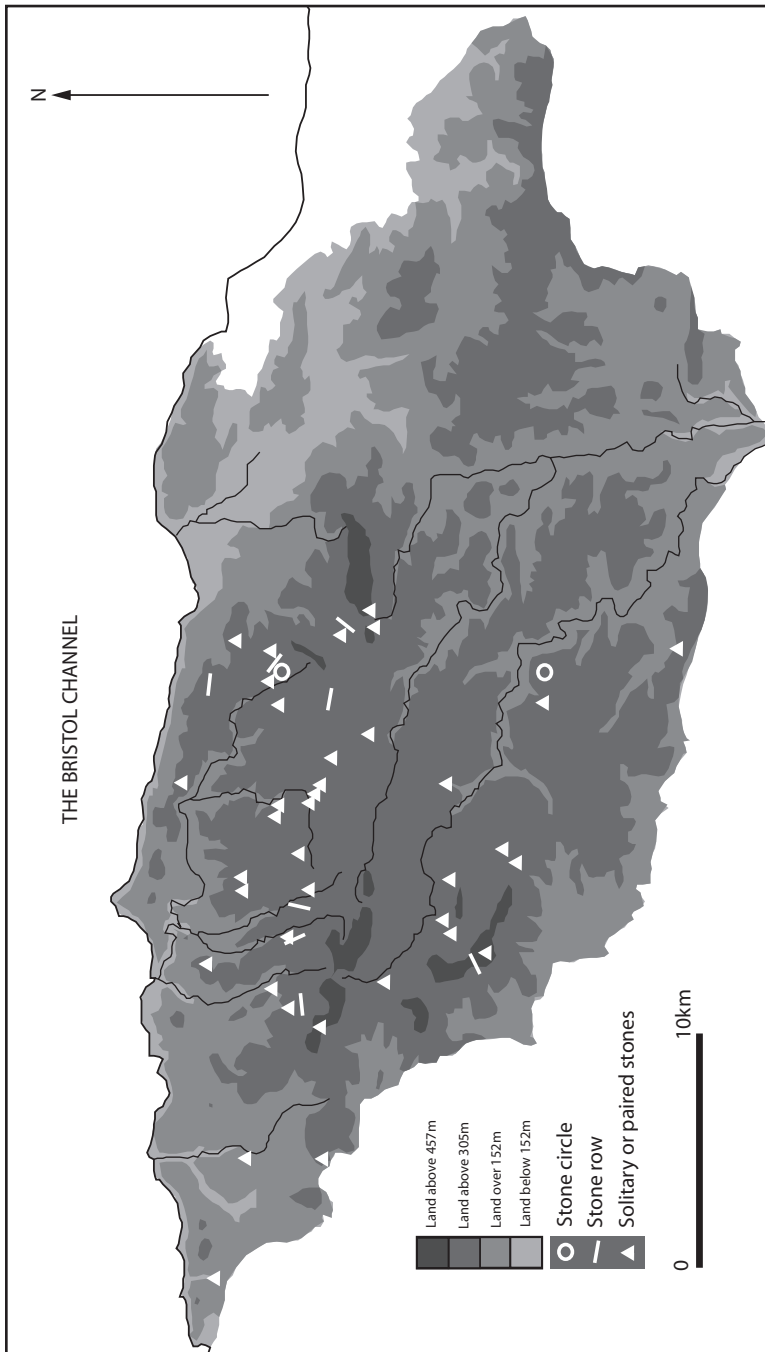


FIGURE 7.3 Distribution of stone circles and stone rows on Exmoor.

Table 7.1 The Stone circles of Exmoor: morphology (for locations see Figure 7.3).

Stone Circle	Diameter	Approx. No. of Stones	Highest Stone
Withypool	36 m	37–100	0.5
Porlock	24 m	14–21	0.8



FIGURE 7.4 Stones in the northwest part of the Porlock stone circle.

Withypool circle and only one within 1 km of the Porlock circle—and since both these circles are surrounded by substantial areas of unimproved moorland, this absence may be significant (see discussion below).

Stone Rows

Nine stone rows are documented on Exmoor (Riley and Wilson-North 2001: 24; Riley 2007). They are highly variable in terms of length, orientation, numbers of stones documented, and in terms of their topographic locations (Tables 7.2 and 7.3; Figure 7.5). Three of them, Culbone, Madacombe, and the White Ladder row are long rows exceeding 250 m, while the other six are short alignments, only two of which (Warcombe Water and Wilmersham A) are longer than 50 m. Six are single rows and three are double rows. The numbers of stones present varies between three and well over 160. In all cases the stones are small and virtually invisible from the surrounding landscape.

Table 7.2 The stone rows of Exmoor: morphology (for locations see Figure 7.3).

Stone Row	Orientation	Length	No. of Stones	Type	Associations
Culbone Hill	West-East	371 m	21	Single	Cairns/ barrows
Cheriton Ridge	North-South	32	7	Single	-
Furze Hill	NE-SW	14	3	Single	-
Madacombe	WNW-ESE	286	12	Single	Cairns
Porlock	NW-SE	12	11	Double	Cairn/Stone circle
Thornworthy Little Common	ENE-WSW	44	16	Single	-
Warcombe Water	NW-SE	99	12	Single	-
White Ladder	NW-SE	426	160+	Double	Barrows
Wilmersham A	NE-SW	56	51	Single	-
Wilmersham B	NNE-SSW	12	17	Double	-

Table 7.3 The stone rows of Exmoor: topographical locations and visual fields (for locations see Figure 7.3).

Stone Row	Topography	Visual Field
Culbone Hill	Runs up east (low)- west (high) slope Parallel with coastline	Extensive to north across Bristol Channel to Wales, east To Hurlstone Point, more limited to west and south
Cheriton Ridge	On nearly flat ridge top	Panoramic. Most extensive views from any stone row, E toward Lynton and valley head of Farley Water, N to coastal hills and down val- ley of Farley Water, W to Holdstone Down and S to The Chains

(Continued)

Table 7.3 Continued.

Stone Row	Topography	Visual Field
Furze Hill	On flat ridgetop. Valley head of Warcombe Water prominent.	Panoramic. Extensive views N to coast at Lynmouth, S to The Chains, W to Holdstone Down, E to Brendon Common
Madacombe	Across south (high)-north (low) slope	Limited in all directions. Overlooks Madacombe valley and valley head visible a short distance to the NE
Porlock	Across N (high)-south (low) slope	Restricted especially to north by rising ground. Extensive to W across Moor and up-slope to east and valley head
Thornworthy Little Common	Up west (low)-east (high) slope just above a break in slope to a N-S stream valley	Views extensive to N to coastal hills otherwise encircled by higher ground and hill slopes
White Ladder	Across S (high)-north (low) slope. Runs down to lowest point on the ridge but terminates just short of it	Restricted to S and E, more open to W, extensive to N
Wilmersham A	Up SW (low)-NE (high) slope. Axis of row runs down to main valley bottom mirroring natural gullies in facing hillside	Restricted by rising ground in all directions
Wilmersham B	Across SE-NE slope. Axis of row points toward junction of valleys	Restricted in all directions

The most impressive of these rows in terms of the size of the stones is that on Culbone Hill. This row runs up an east (low) to west (high) slope running parallel with the coast with extensive northern views across the Bristol Channel to Wales. Here the widely spaced stones, up to 0.6 m high and 0.9 m broad, are set with their broad faces parallel with the slope, as if meant to be seen from the north or the south. It is closely associated with a series of cairns and barrows to the south and at its western and eastern ends.



FIGURE 7.5 (A) Thornworthy Little Common stone row looking west; (B) Part of the White Ladder stone row looking northwest. The large Setta barrow is visible on the skyline; (C) Looking down the Wilmersham Common stone row. The locations of the stone rows are marked by flags.

The short row of tiny stones on Cheriton ridge occurs in the middle of an almost flat ridgetop, gently rising to the south and affording panoramic views in all directions. There are no cairns in its vicinity, and no stone settings are visible from it. The alignment of three stones on Furze Hill also occurs on a flat ridgetop with extensive panoramic views and is a similarly discrete monument.

The row at Madacombe, by contrast, runs across the contours of a gentle south (high) to north (low) slope overlooking the Madacombe stream valley to the north. It is associated with intervisible cairns at its western and eastern ends. The Porlock double stone row also runs across a gentle north-south slope, is in close vicinity to the Porlock stone circle (see above), and is roughly aligned on a small cairn to the northeast of the circle. The single short row on Thornworthy Little Common runs up a west (low) to east (high) slope and is not intervisible with or closely associated with any other monuments (Figure 7.5a). The White Ladder double stone row (Figure 7.5b) is by far the longest and has a remarkably high number of small quartz blocks less than 0.1 m high, most of which are invisible except in exceptionally dry conditions when the peat shrinks. It runs diagonally down the side of a south (high) north (low) slope and is situated close to a dramatic ridgetop grouping of barrows. It is not aligned in relation to any of these barrows, only a few of which are visible from it.

On Wilmersham Common there is a unique row consisting of two separate interlinked alignments (Figure 7.5c). The longer of these comprises very small rounded single stones about 0.1 m high. The shorter alignment has pairs of similarly small stones. The short row crosses the slope, whereas the longer row runs down the slope. The transition point between these rows and both ends of the row are marked by significantly taller stones about 0.5 m high. This row is discretely located on the slopes of a basin defined by valleys with streams and dry gullies with rising ground on all sides restricting views across the wider landscape. It is not associated with any other monuments in its vicinity.

Each of the rows is unique when we consider their morphology and landscape settings in combination. They are widely distributed across central, northern, and southern parts of Exmoor. Half are associated with cairns and/or barrows in their vicinity, but none is intervisible or closely associated with stone settings, suggesting that the stone settings constitute a discrete and special set of monuments radically different in both form and social significance.

Stone Settings

The unique characteristic of the prehistoric landscape of Exmoor is the presence of numerous geometric stone settings (Figure 7.6). These were first recognised

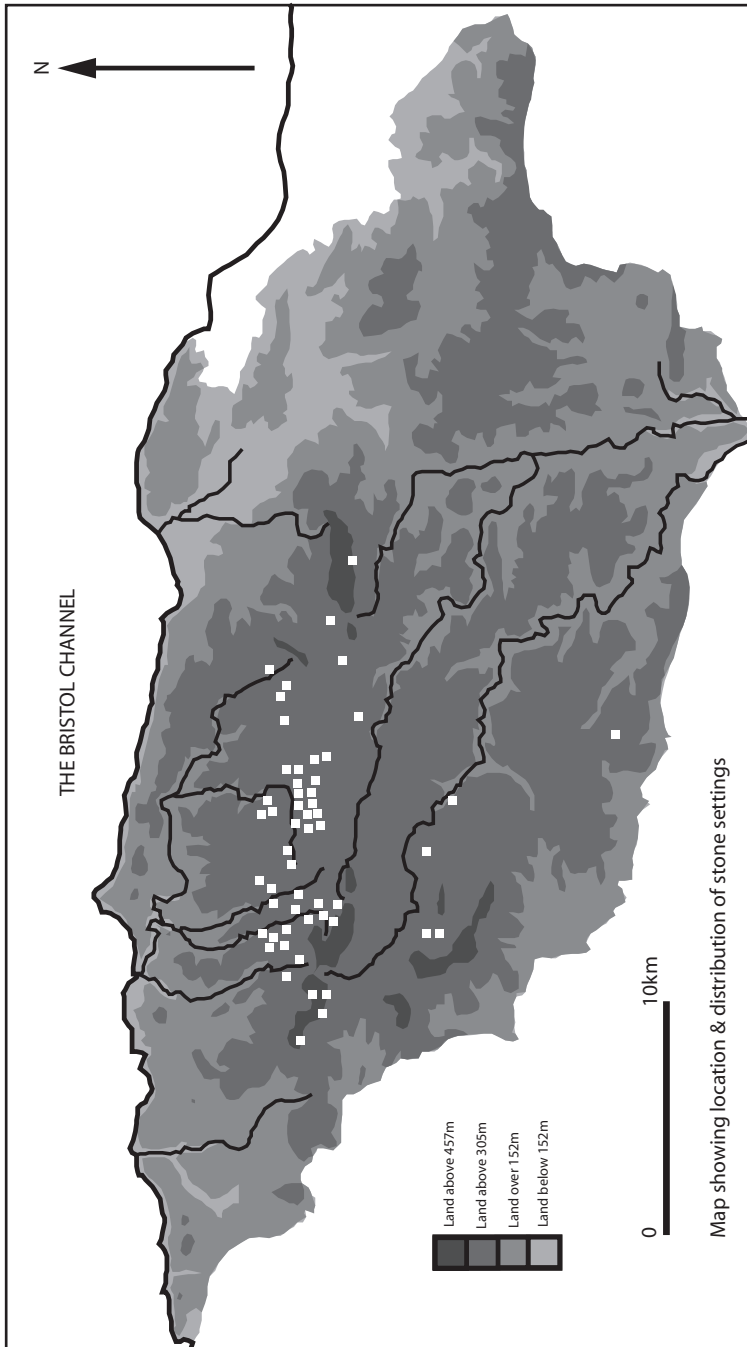


FIGURE 7.6 Distribution of the stone settings on Exmoor.

in the early seventeenth century, systematically recorded during the first decade of the twentieth century (Chanter and Worth 1905, 1906) with the most comprehensive and detailed survey documenting fifty-seven surviving monuments (Quinnell and Dunn 1992; Riley and Wilson-North 2001: Appendix 1; since then another has been found: Riley 2007). Given the nature of the heathland vegetation and the small size of the stones, one surmises that there are probably many more yet to be located and that many others on improved land have been destroyed. These stone settings have no convincing parallels elsewhere in Britain and appear to be unique to Exmoor. They are presumed to be of late Neolithic or early Bronze Age date, but there are no radiocarbon dates, and their purpose has remained entirely enigmatic. Exmoor in this respect is both same and different: stone rows and stone circles are found elsewhere throughout many parts of the British Isles and are common on Dartmoor, where the most northerly of the rows is only 48 km distant from the White Ladder stone row (Burl 1976, 1993), but they are not settings of stones of this type. This fact may suggest that they are about internal relationships and particular types of identification of people once living on Exmoor with this particular landscape.

These stone settings consist of geometric arrangements of stones in patterns of variable form. Some appear to consist of triangular arrangements of stones, others rectangular or quadrilateral arrangements or quincunxes (if there is a fifth stone at their centre), parallelograms, and rhomboids of various dimensions. Burl refers to this 'angular' megalithic geometry as being 'like a series of Euclidean exercises' (Burl 1993: 89). The smaller stone settings may consist of only three stones. The larger ones may have up to fifteen. In many cases, individual stones may have been removed, making the original pattern or design of the stones impossible to ascertain. What appear to be solitary standing stones or pairs of stones today may originally have been part of much more complex geometric arrangements. Consequently, some appear to be random arrangements of stones simply because some are missing—collected over the centuries to create field boundaries and stone walls. Quinnell and Dunn estimate that within the twentieth century one tenth of the recorded settings have been totally destroyed, and of the remainder one quarter are less complete than when originally described by Chanter and Worth and others (Quinnell and Dunn 1992: 4). A concern with geometry and precise arrangements and alignments of these stones is quite clear in those cases where the original arrangements have been well preserved. In some cases, the stones are arranged in parallel rows leading Burl (1993) to attempt to classify them as very short, double, treble, or multiple stone rows, but this seems a rather contrived interpretation, given both the existence of long, single and double stone rows and the very different locations of the stone settings in the landscape (see below). Only three have ever been excavated (see below).

Common to all the stone settings, and a feature that they share with the stone rows and the stone circles, is the tiny size of the stones. A stone 0.5 m high is large on Exmoor (Figure 7.7). Such stones are not impossibly heavy to carry, and all the stones used to build a stone setting could be comfortably brought to the construction site by only one or two persons. Even the largest and most



FIGURE 7.7 (A) Toppled slate central stone in the Chapman's Barrows stone setting; (B) Central sandstone stone in the Brendon Two Gates Stone setting.

complex of the stone settings might easily have been erected by a small group of five or six persons in a matter of days. In sharp contrast to the many large Bronze Age cairns and barrows found across Exmoor, they required only a minimal mobilisation of labour. These settings, like the Exmoor stone rows and circles, are not in any sense monumental at all. Even today, when standing within a stone setting, one notes that many of the individual stones are concealed by vegetation—bracken, heather grass, and rushes—or engulfed in peat. Some of their locations are intervisible, but the stones themselves are not. How are these remarkable yet discrete monuments to be understood and interpreted?

The Landscape Settings

All the known stone settings occur within the heart of Exmoor on high land 5 km or more distant from the coast (see Figure 7.6). The fact that none occur in the vicinity of the Bristol Channel appears to be a genuine feature of their distribution rather than being a simple product of differential destruction, since stone rows and standing stones exist near to the coast, as do areas of unimproved moorland, where they might be expected to survive. They are thus related to the inner part of the moor rather than the coast. Most (90%) occur in a rough west-east band approximately 20 km long and 3 km wide. Ten occur in the vicinity of the headwaters of the rivers Exe, Barle, and Quarme, draining the moor to the south to form one interlinked system flowing into the English channel. The majority (82%) are situated near to the headwaters of rivers and streams draining the moor to the north and the Bristol Channel—the West and East Lyn and their tributaries.

The landscape locations of the individual stone settings are distinctive insofar as they do not occur in any obvious way in pairs or groupings at a short distance from one another. Straight-line distances between the nearest stone settings in the central area of the moor, where they are most densely clustered, vary between a few hundred metres and 1 km, with the majority being situated 250–500 m distant from each other. This parallels their individuality in terms of the variability of their geometric forms and the numbers of stones used to construct them. Although located high up on the moor in a general sense, they are never located in the centres of ridges or on hilltops—or flat ground at the very highest points—but occur most frequently on gently sloping ground near the tops of ridges and hills. This means that, unlike with some of the stone rows, there is never a panoramic view over the whole landscape from any particular stone setting. The view out from them is invariably limited in one or more directions by gently rising land. In other words, they afford distinct viewpoints over particular and specific areas of the moor in particular directions. So, in terms of the wider landscape, they afford restricted views

and have a directionality about them. This emphasis on directionality is replicated in the component stones, which are invariably arranged, in the larger and more complex settings, so that the stones run up and down the hill slopes rather than running along or parallel to the contours, a characteristic feature of some of the stone settings. Fifteen representative examples (see Figure 7.8) from across the central part of the moor are now discussed in more detail from the west to the east.

CHAPMAN BARROWS (FIGURES 7.8, 7.9) This stone setting consists of five thin slate slabs forming a quincunx. They now range from 0.1 m to 0.8 m high with a substantial central pillar. The broad faces of all but the easternmost stone cross the slope in a uniform arrangement. The setting is located toward the top of a gentle south-facing slope. Views to the north and the east are restricted by rising ground. They are very extensive to the south down the deeply incised Challacombe stream valley, where the outcropping ribs of Swincombe rocks 750 m distant (Figure 7.2b) are visible along the valley sides and to the west across Barnstaple Bay and as far as Dartmoor.

WOODBARROW (FIGURES 7.8, 7.10) This stone setting now consists of six stones and may originally have been a rectilinear setting made up of more stones. Two upright stones are 0.5 m high and up to 0.4 m broad. Four fallen stones are between 0.7 m and 1 m in length. All are of local slate. The setting is situated on a gentle north-south slope near to the top of a ridge. The east side consists of a row of four stones, three of which are fairly substantial rectangular blocks, the fourth a stump. The west side now consists of two stones that are markedly different in form, being lower and broader. Both are set with their broad faces end on to the slope. These stones are located just over 300 m to the northeast of the head of Yarbury coombe, a stream system forming a major topographic divide in the local landscape and flowing into the river Bray. There are extensive views across the coombe to the south and to the west and east across the moor. To the north rising ground limits the view.

LONG CHAINS COOMBE NORTH (FIGURES 7.8, 7.11) Three stones between 0.3 m and 0.4 m high, forming a triangle, are situated just above the break of slope down to Long Chains Coombe to the south on gently rising ground to the northwest. Just below the stones, the land plunges down to the bottom of the coombe. The easternmost stone in the setting is situated at the point on the slope at which the bottom of Long Chains Coombe first comes into sight as one walks down the slope. From the stones there are dramatic views up the length of the coombe to the southwest. The locations of the Exe Head stone setting 750 m to the south and another stone setting set high up

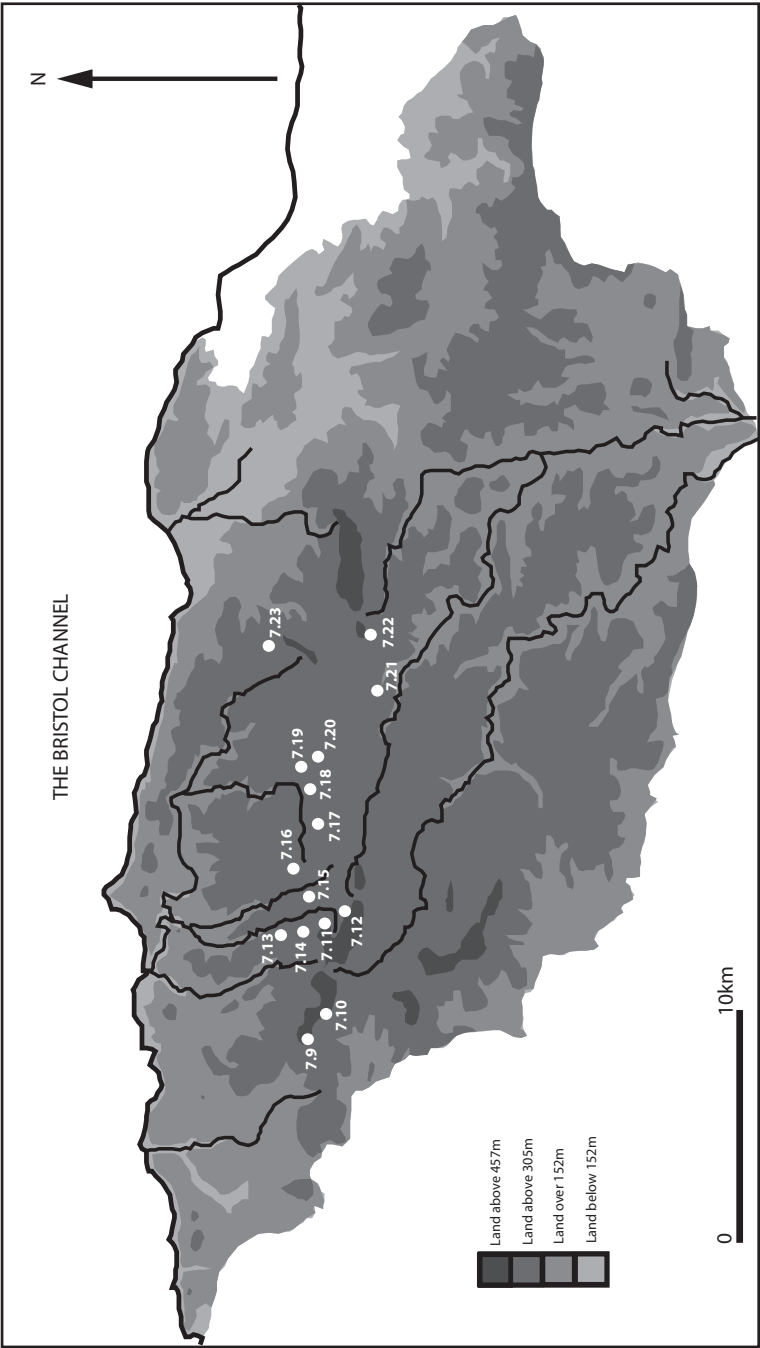


FIGURE 7.8 Locations of the stone settings discussed in the text.

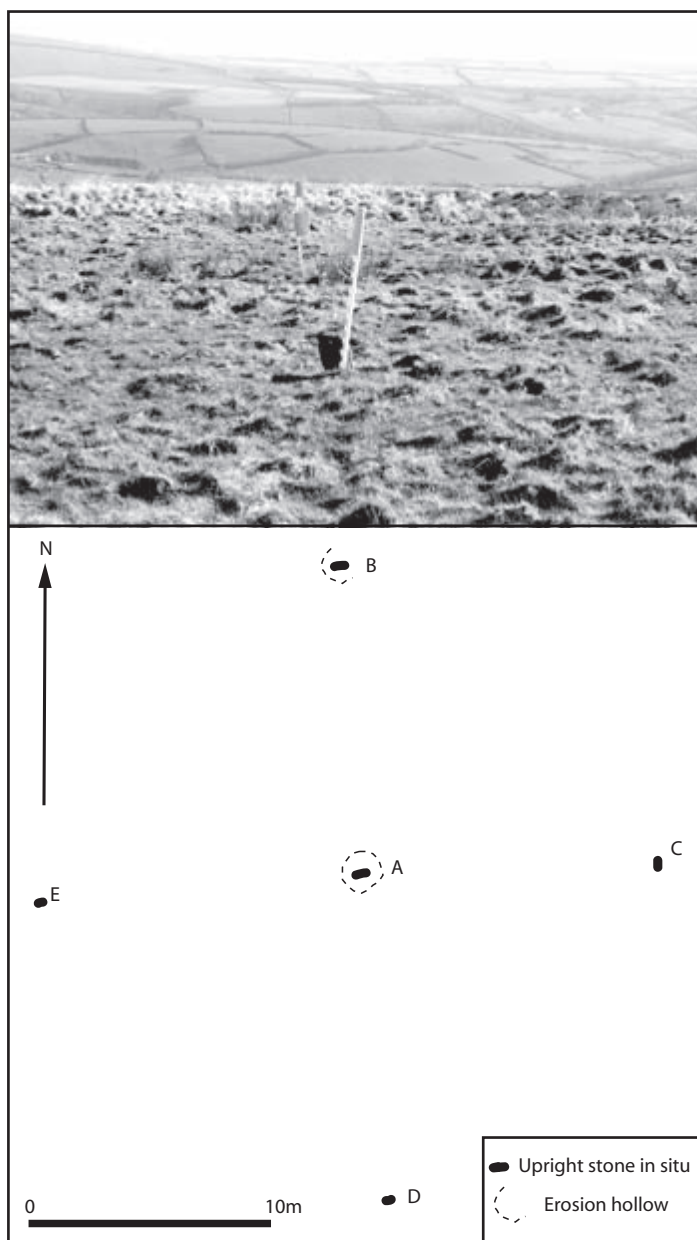


FIGURE 7.9 Chapman Barrows stone setting. (*Top*) Central part of the stone setting marked by flags looking south over Yarbury Combe. (*Bottom*) Plan after Quinnell and Dunn 1992.

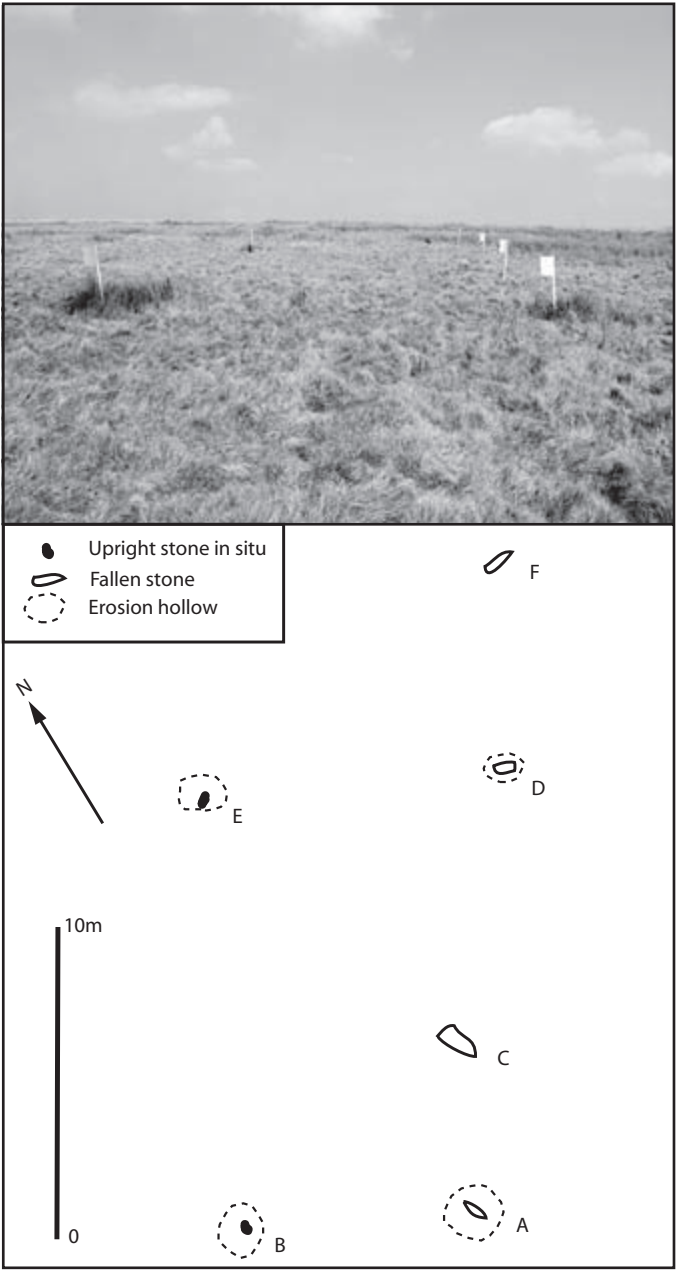


FIGURE 7.10 Wood Barrow stone setting. (*Top*) Visible stones marked by flags looking north up the hill slope. (*Bottom*) Plan after Quinnell and Dunn 1992.

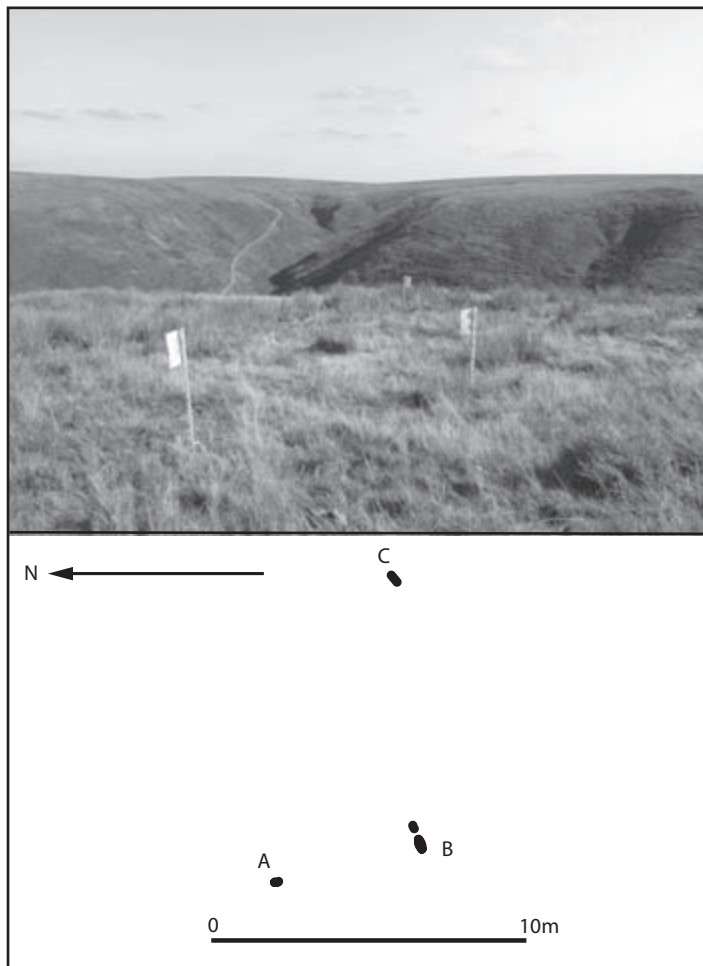


FIGURE 7.11 Long Chains Combe (North) stone setting. (*Top*) Visible stones marked by flags looking south across Long Chains Combe and up to the head of the Hoar oak Water. (*Bottom*) Plan after Quinnell and Dunn 1992.

on the south side of the same coombe are visible but not the stones themselves. Views to the north and northwest are restricted by rising ground, but there are extensive views to the Bristol Channel to the northeast.

EXE HEAD (CHAINS VALLEY) (FIGURES 7.8, 7.12) This stone setting now consists of at least ten small upright and fallen stones 0.1 m–0.6 m high. They are all of the local pinkish-brown sandstone. It is situated high up on a

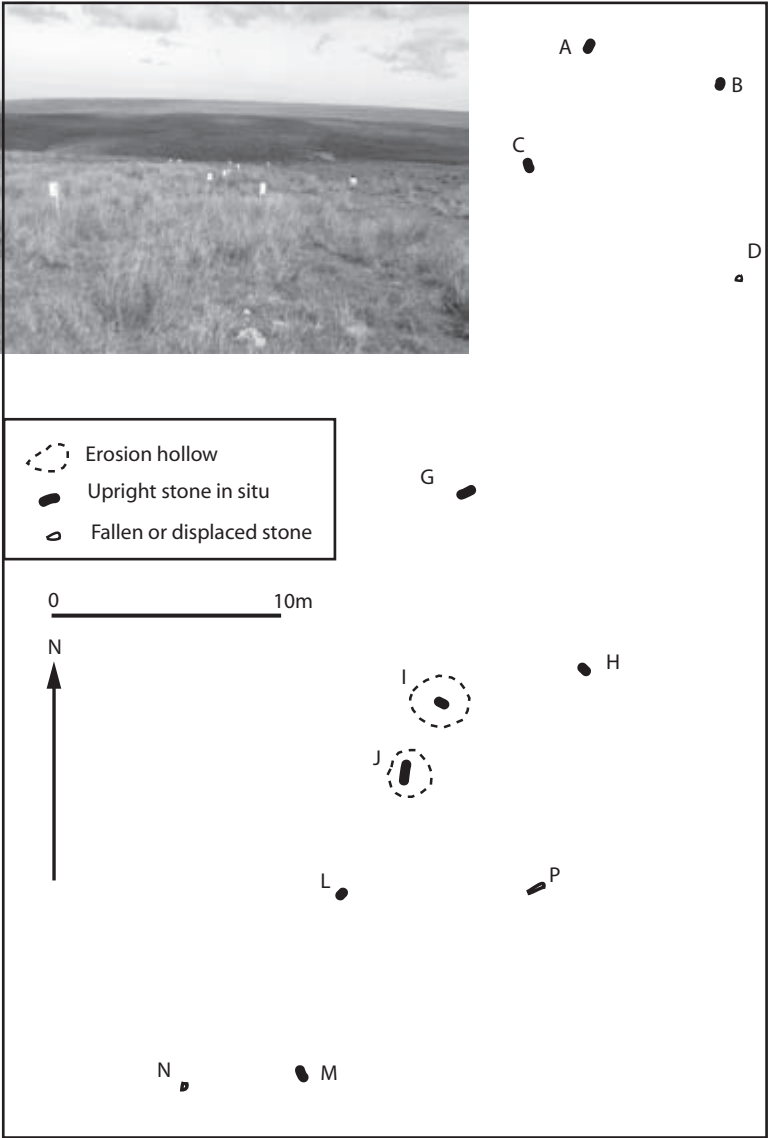


FIGURE 7.12 Exe Head stone setting; plan after Quinnell and Dunn 1992; visible stones marked by flags looking south toward the head of the Hoar oak Water.

of these rows on the southeast side form the original arrangement, with that on the northwest side being added later. Most of the stones are arranged so that their broad faces parallel that of the slope, whereas the possible additional

gentle north-facing slope. To the north, there is an extensive view across the moor and the Bristol Channel to south Wales. By contrast, to the south the view is limited to a few hundred metres by rising ground and to the west by The Chains ridge about 500 m distant. To the east, it is extensive down the Exe valley as far as Almsworthy Common. From the centre of the stone setting, there is an extensive view down the line of Hoarok Water flowing north, and the setting is located immediately above the head of this valley and the source of the stream. It is also only 250 m from the extensive boggy area forming the head of the river Exe to its west. The valley immediately below the setting to the north is joined after a short distance by the Long Chains Valley. There are small rock outcrops jutting out of the valley sides and patches of scree where the Long Chains coombe joins the valley.

The setting itself gives the impression of being two parallel NNE-SSW alignments of stones extending over 30 m. Some of these have their broad faces positioned down the slope, others across the slope or set diagonally in relation to it.

FURZEHILL COMMON V (FIGURES 7.8, 7.13) This setting now consists of seven upright stones up to 0.6 m high and 0.4 m broad, together with a series of four shallow erosion holes that probably mark the positions of other stones. The original form of the setting may have comprised three parallel lines of stones forming a rectangle about 20 m long and 10 m broad. The setting is situated on gently sloping ground on a west-east slope running down to the Hoarok Water to the east. It is positioned high up on the western side of the stream valley on a shelf. The linear N-S axis of the setting runs parallel to that of the valley below. Immediately to the west, the ground rises, restricting visibility in that direction to about 10 m. Looking north, one sees the coastal cliffs, and there are extensive views south to The Chains ridge and to the east across Brendon Common.

HOAROK (FIGURES 7.8, 7.14) This stone setting now consists of three upright stones 0.1 m–0.4 m high and three fallen slabs forming a pentagonal shaped setting. It is located high up on a west-east slope running down to the Hoarok Water, which the setting overlooks. Views west are restricted by rising ground. They are extensive north to the sea along the Hoarok Water valley, east to Brendon Common and south to The Chains ridge.

CHERITON RIDGE IV (FIGURES 7.8, 7.15) This setting consists of four short rows, each including four stones, all of which are sandstone blocks and pillars between 0.2 m and 0.7 m high. Eight are upright, the rest fallen. Positions of others are marked by erosion hollows. Interestingly, not all the rows are of the same length, and it has been suggested that the original form was diamond in plan (Quinnell and Dunn 1992: 10). However, it is possible that three

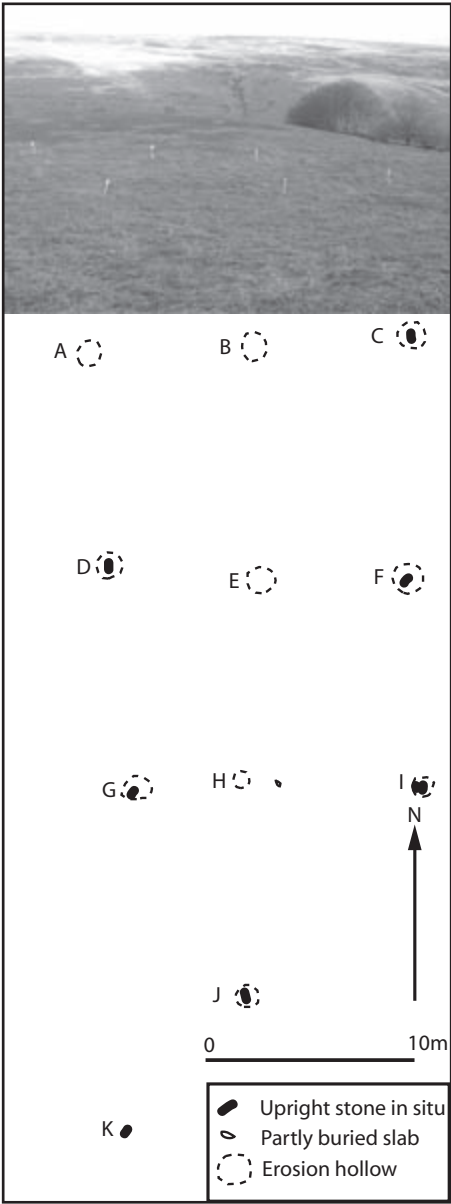


FIGURE 7.13 Furzehill V stone setting. (*Top*) Visible stones marked by flags looking east across the Hoarok Water. (*Bottom*) Plan after Quinnell and Dunn 1992.

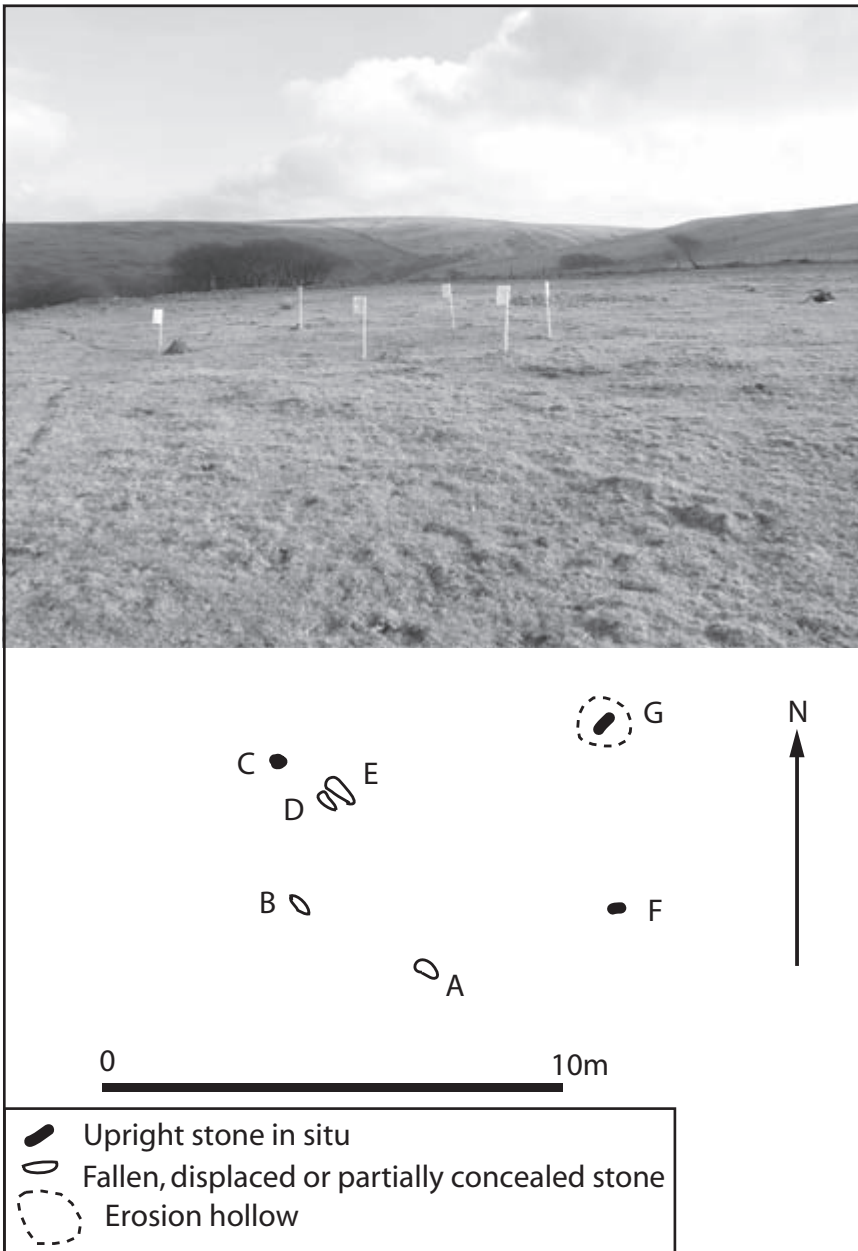


FIGURE 7.14 Hoar oak stone setting. (*Top*) Visible stones marked by flags facing south-east. (*Bottom*) Plan after Quinnell and Dunn 1992.

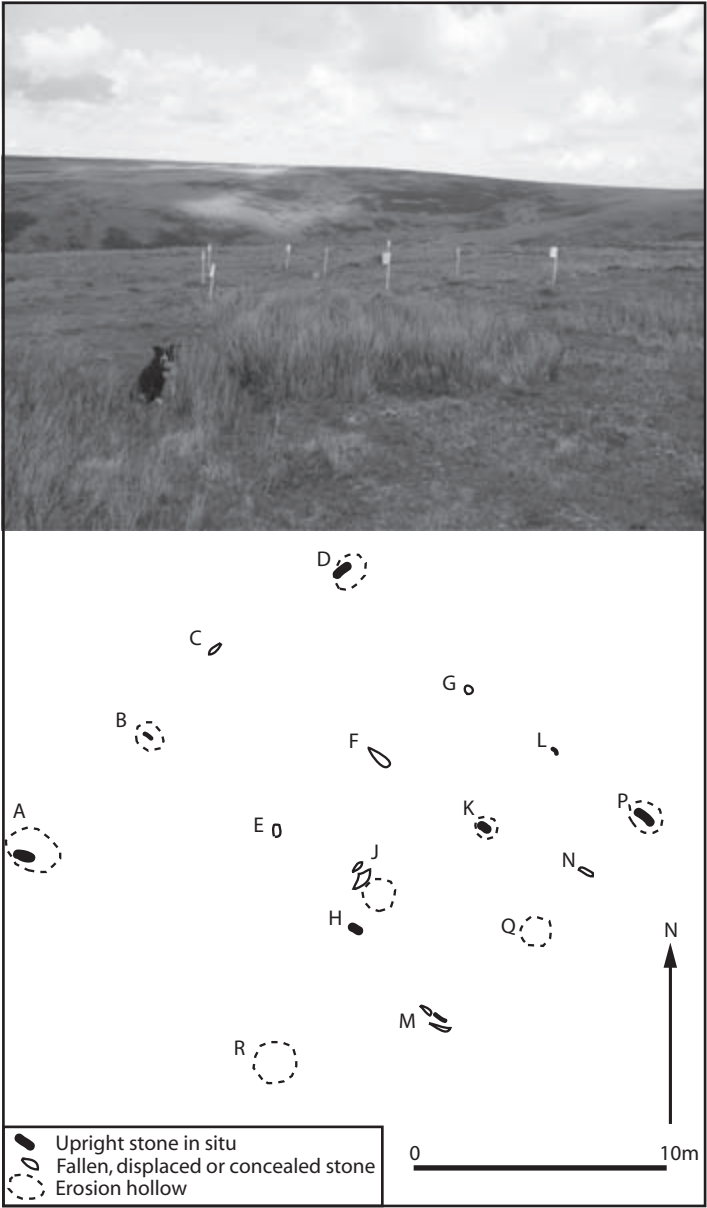


FIGURE 7.15 Cheriton Ridge IV stone setting. (*Top*) Visible stones marked by flags facing west toward the head of the Farley Water. (*Bottom*) Plan after Quinnell and Dunn 1992.

of these rows on the southeast side form the original arrangement, with that on the northwest side being added later. Most of the stones are arranged so that their broad faces parallel that of the slope, whereas the possible additional row has two stones with their broad faces positioned across the slope, two down the slope and the uppermost stone diagonal in relation to it. The setting is situated high up on a southwest-to-northeast slope above the Farley Water with extensive views to the north along it, south to the head of the valley and east across Brendon Common. To the west, they are restricted to a few hundred metres by rising ground.

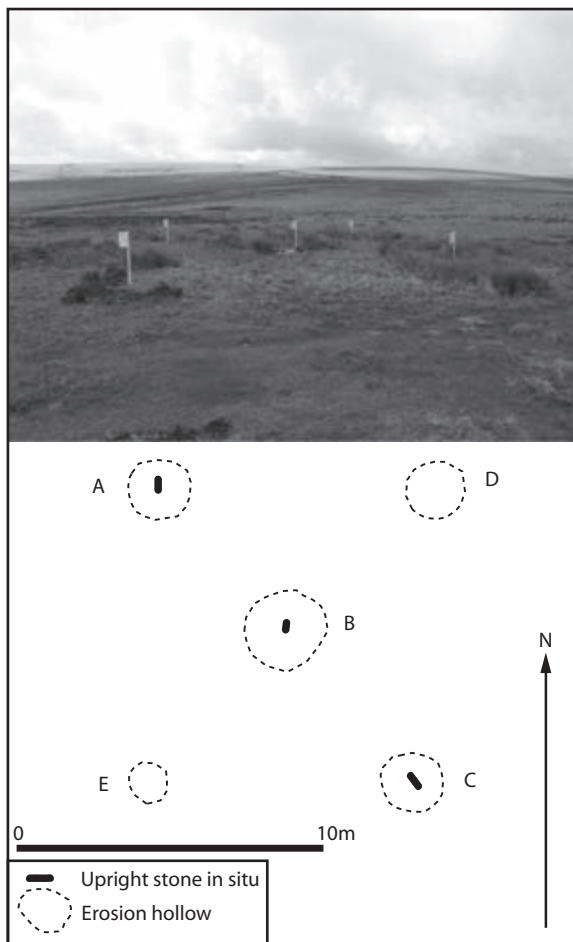


FIGURE 7.16 Brendon Two Gates stone setting. (*Top*) Visible stones marked by flags facing south to the head of Hoccombe Water. (*Bottom*) Plan after Quinnell and Dunn 1992.

BRENDON TWO GATES (FIGURES 7.8, 7.16) This setting is a quincunx with one central pillar, the tallest, in the centre. There are two other surviving stones, an erosion hollow marking the position of a third and the remaining stump of a fourth, making up a rectangular arrangement around the central pillar. It is situated high up on a gentle north-south slope overlooking the head of Hoccombe Water. There are extensive views to the east down the valley, to the west and south across it. Rising ground restricts views north to a few hundred metres.

LANACOMBE I (FIGURES 7.8, 7.17) This setting is located on a gentle southeast-facing slope near to the top of a ridge that runs northwest to southeast. It is one of a series of six settings located to the south of Lanacombe Hill. Views are restricted to the northwest by the rising ground but extensive to the west and east along the Lanacombe valley and extend about 1 km south to the top of Trout

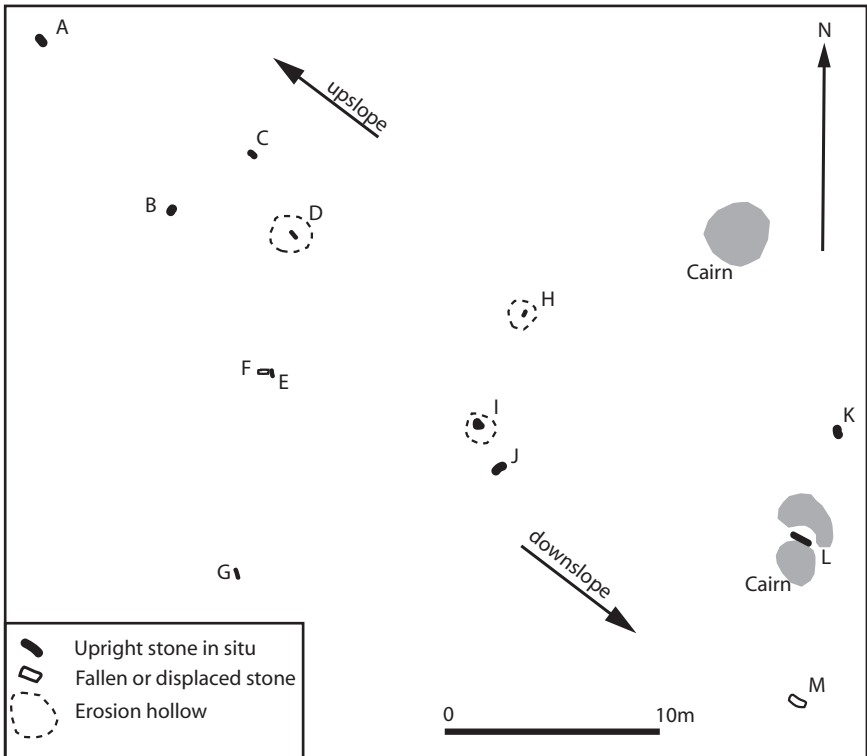


FIGURE 7.17 Plan of the Lanacombe I stone setting after Quinnell and Dunn 1992, with additions; see also colour plate 6.

Hill. The stone setting was built overlooking the area where Lanacombe swings around to the north in a great arc, with a side valley running into it dramatically from the southwest. Just below the setting is a boggy area and a springhead producing three parallel rivulets running into Lanacombe from the north.

The stone setting is made up of at least eleven upright or recumbent stones and two fallen stones set in a straggling NW-SE arrangement extending over 43×18 m up the slope. They vary between 0.3 m and 0.65 m in height and 0.2 m to 0.4 m in width. All are a fine-grained pinkish-brown sandstone. The stones differ markedly in shape and height. Some have their broad faces placed in the same direction of the slope, others in the opposite direction—across the slope. As one walks through the setting, the arrangements of stones progress and change. There appears to be a definite pairing of stones in terms of the manner in which the stones are set end-on or face-on to the slope. The stones differ markedly both in shape and size, and all have their own individual characteristics. No attempt seems to have been made to collect similar stones, which would have been quite possible, or to erect them in a uniform pattern in relation to one another. One of the uprights is set in a very small low cairn. To its north, 11 m distant, there is another small cairn (2.5 m in diameter and 0.2 m high). The original form of the setting was obviously quite complex, and it may well have been altered and extended in prehistoric times. Resistivity survey suggests that the setting may have been erected in an area where the soil was markedly thinner than elsewhere, perhaps even an area with outcropping smaller stones, a feature noted elsewhere at East Pinford and Tom's Hill (Gillings, Pollard, and Taylor 2007). A 2-m-square excavation around an exposed stone hole (H) revealed that it had been created simply by removing outcropping rock from a northeast-southwest aligned oval to a depth of 0.18 m beneath the contemporary ground surface. The base of the hole was levelled with a few flat stones to provide a level base for the upright, which was secured by small vertical and sloping packing stones (*ibid.*: 11–12). Two large pieces of worked quartz were recovered from the stone hole. A small excavation around a fallen stone (C) at the Lanacombe III setting revealed that this was not situated in an area with outcropping rocks or very thin soils. Here a small ramped posthole was dug and the pillar-shaped upright placed in it and then bedded in place and packed with small stones thrown up from digging the stone hole (*ibid.*: 25).

TROUT HILL II (FIGURES 7.8, 7.18) The setting is located high up toward the top of a west-east slope. Views out from the setting are limited to the west by rising ground. They are extensive up the higher reaches of the Badgworthy Water to the southeast and down the line of the valley to the north. The setting consists of three small uprights, one fallen stone, and an erosion hollow that contained a fifth stone. This is the remains of a quincunx that survived until

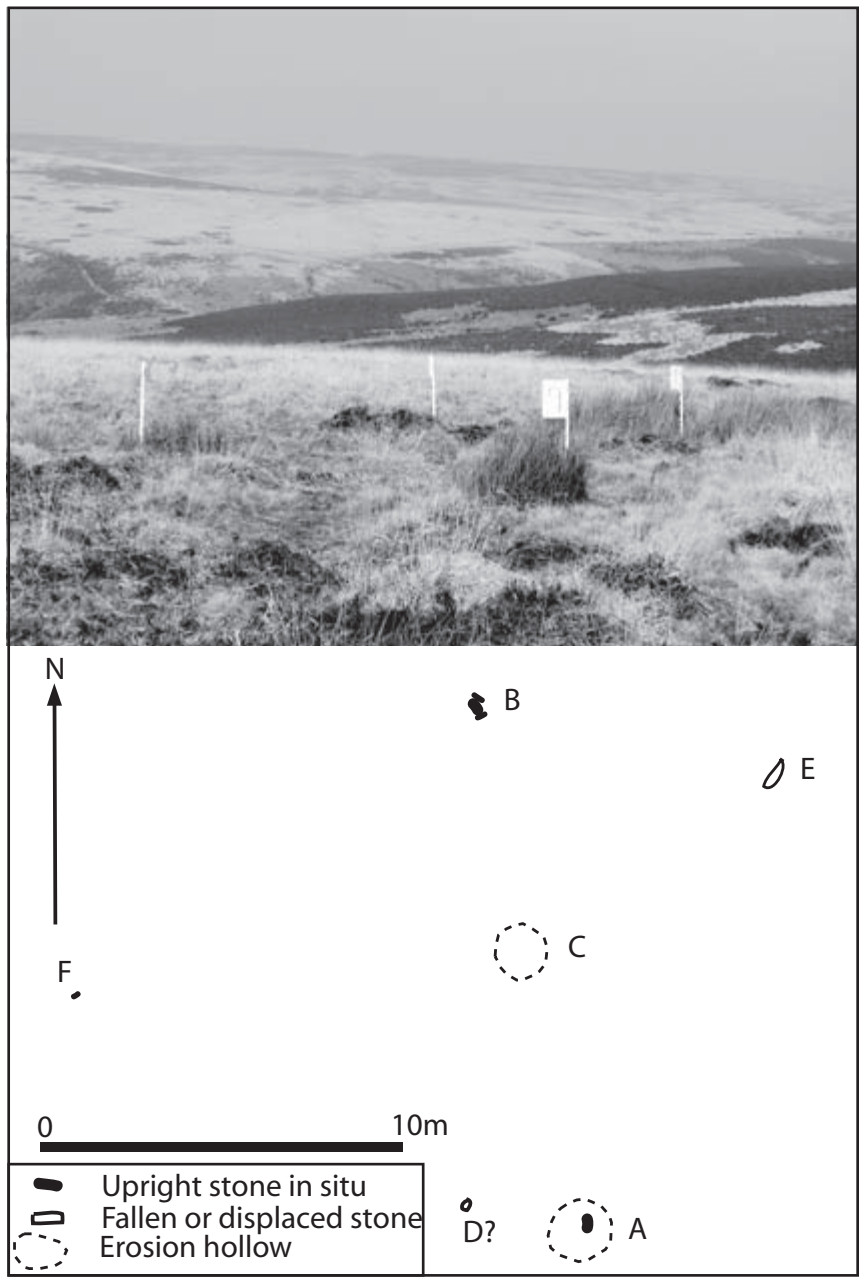


FIGURE 7.18 Trout Hill II stone setting. (*Top*) Visible stones marked by flags facing northeast. (*Bottom*) Plan after Quinnell and Dunn 1992.

about 1976, when an unexploded shell was detonated against the central stone (Quinnell and Dunn 1992: 43).

GREAT TOM'S HILL (FIGURES 7.8, 7.19) This stone setting now consists of five upright stones and a fallen slab. The presence of erosion hollows

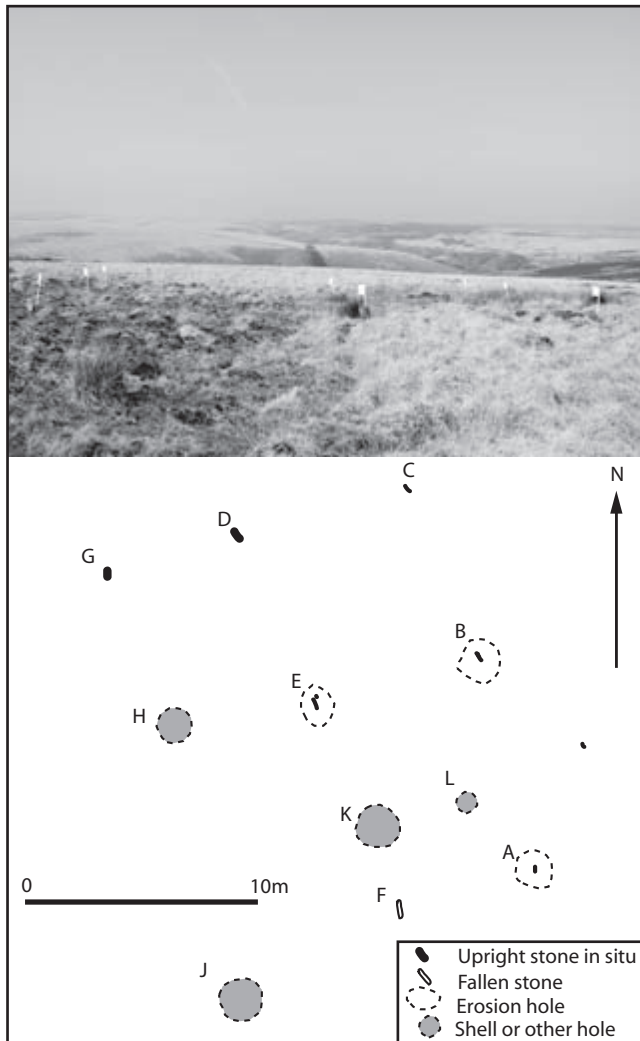


FIGURE 7.19 Great Toms Hill stone setting. (Top) Visible stones marked by flags looking north toward the Badgworthy Water. (Bottom) Plan after Quinnell and Dunn 1992.

suggests that the original form may have been of three parallel rows, each with three or more stones creating a rectangular shaped setting. Resistivity survey found that hollows J and K are impact craters rather than erosion hollows and that the setting might have been aligned along an area of shallower soil above the bedrock (Gillings, Pollard, and Taylor 2005: 7). The surviving uprights, which are of sandstone, are thin posts between 0.3 m and 0.5 m high. They are set across the slope with their broad sides facing down-slope. The setting is situated high up on gently sloping ground rising to the southeast, where views are restricted. They are extensive to the west, north, and south across the moor and in particular over the junction of the Badgworthy Water with Lancombe, where the locations of other stone settings are visible.

EAST PINFORD (FIGURES 7.8, 7.20) The setting now consists of a rectangle of six stones ranging from 0.3 m to 0.7 m high, with its long axis orientated east-west. Circular settings of small stones are visible around four of the uprights. The tallest stones are at the western and eastern ends of the setting, with those at the eastern end set at a noticeable angle to the others. There are numerous small stones in its vicinity, some resembling broken stumps. This is very unusual for Exmoor and might indicate that the original form of the stone setting was larger than that visible today, extending farther to the east. There are also substantial rock outcrops visible beside the Badgworthy Water, a short distance to the west. The flat surface of one of these is covered with a series of distinctive erosion hollows that resemble cupmarks (Gillings, Pollard, and Taylor 2005). The location of this setting is highly unusual, being situated low down in a hidden location in the landscape. It is situated on a very gentle east-west slope but in an almost flat area bounded by stream valleys and ridges and hills to the west, north, and south and rising ground to the east with restricted views in all directions. To the south of the setting, a stream head is visible, one of the sources of the Badgworthy Water.

WESTERMILL (FIGURES 7.8, 7.21) This setting consists of four stones arranged so as to form an irregular rectangle. Four of these are 0.6 m high and about 0.2 m thick, the fourth only 0.2 m in height. They are all slim sandstone posts. The broad faces of three of the stones face uniformly down the slope. The broad face of the fourth stone is set side on to the slope. The setting is situated toward the top of a gentle east-west slope running down to Sparcombe Water and in the vicinity of two very deep valleys running down to the deeply incised Exe valley 1 km to the south. Views out from the setting are restricted to the east by rising ground but extensive to the west along the Exe valley and to the north and south.

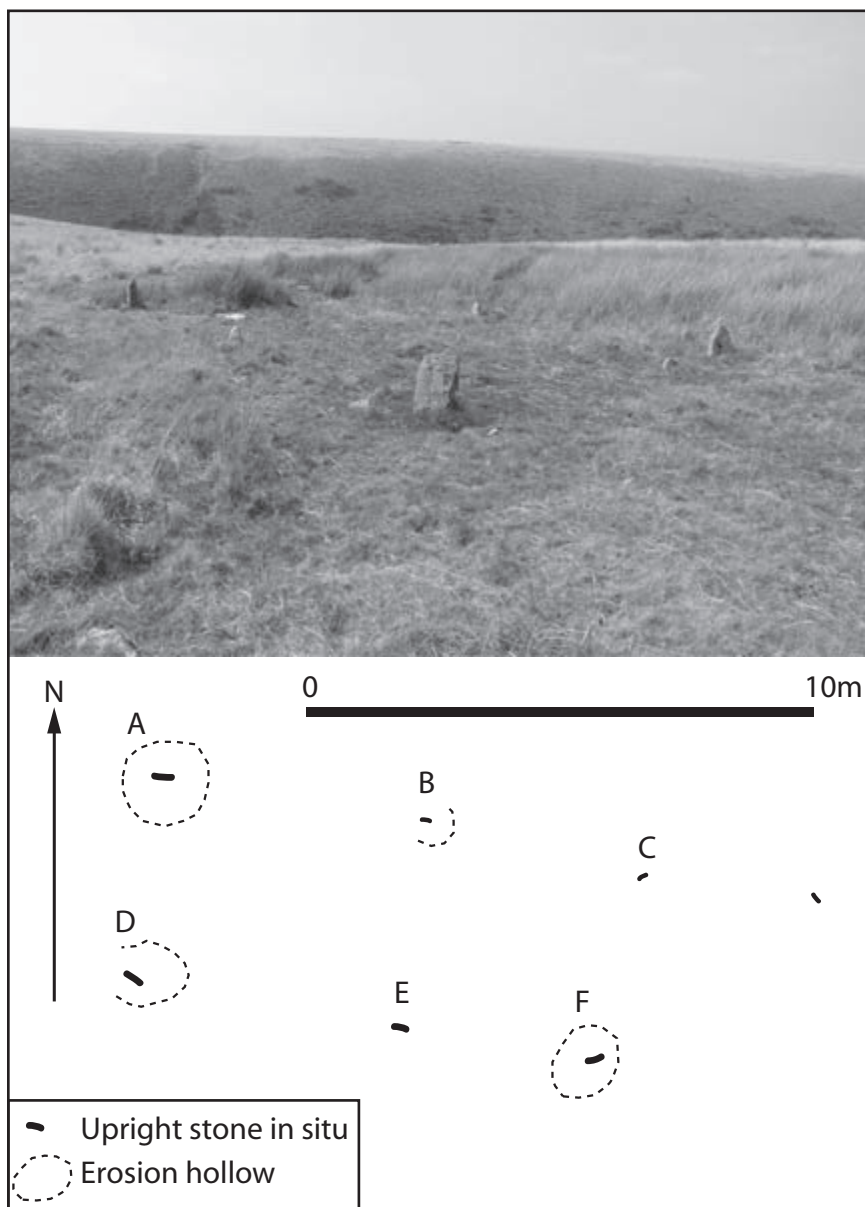


FIGURE 7.20 East Pinford stone setting. (*Top*) Looking west to the Badgworthy Water. (*Bottom*) Plan after Quinnell and Dunn 1992.

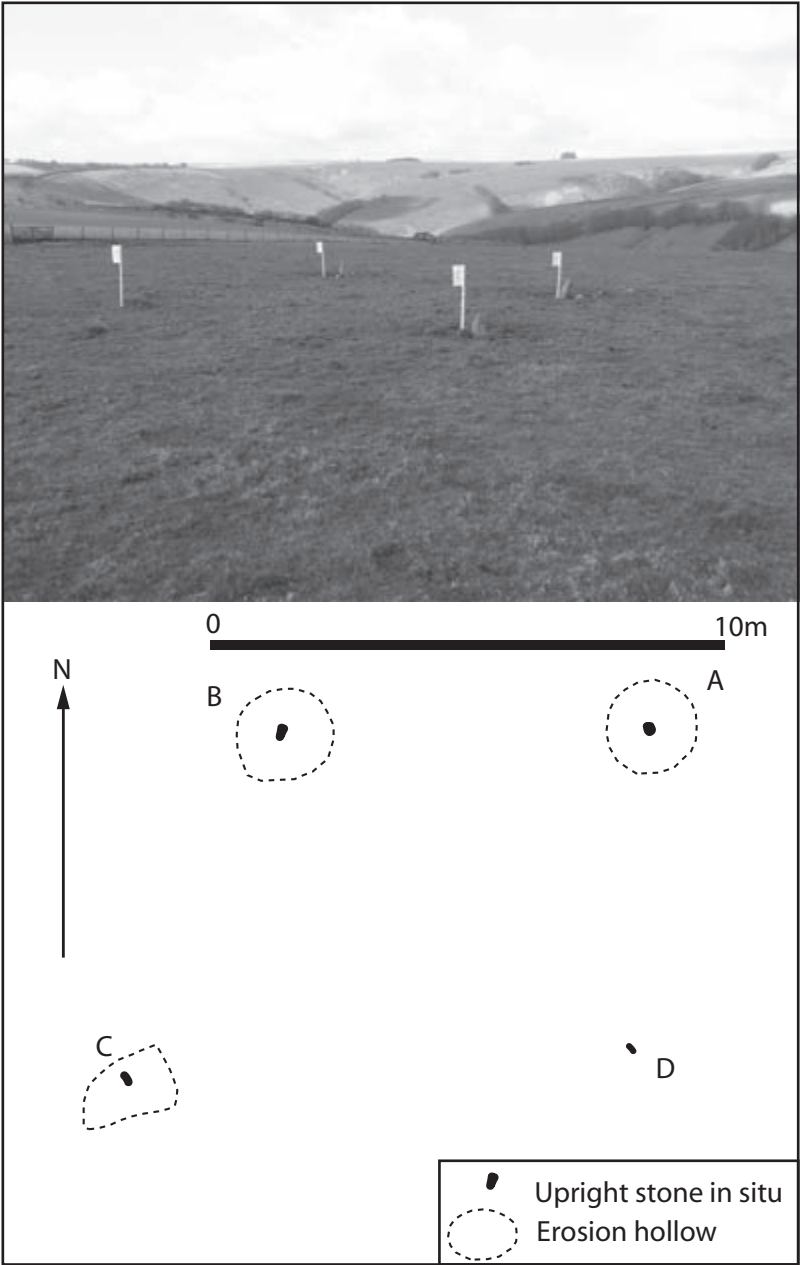


FIGURE 7.21 Westermill stone setting. (*Top*) Visible stones marked by flags facing southwest toward the Exe valley. (*Bottom*) Plan after Quinnell and Dunn 1992.

An area defined by three of the four stones was entirely excavated in September 1981. This excavation uncovered the old ground surface on which the stones were erected and identified the socket for a fourth fallen stone (now replaced). No further structural or artefactual evidence whatsoever was recovered nor was there any buried soil suitable for pollen analysis or charcoal (Burrow and McDonnell 1982).

ALMSWORTHY COMMON (FIGURES 7.8, 7.22) This is one of the larger and more complex stone settings on Exmoor. It is situated in the middle of a gentle NW-SE slope. The views out from the setting to the north and the northwest are restricted by rising ground to no more than a few hundred metres. To the east, the visual field extends as far as the ridge of Rowbarrow, studded with large cairns. Views are extensive to the northeast as far as the sea and to the west and south-west across the moor. The stone setting is situated a few hundred metres east of a springhead at the top of a coombe to the east forming part of the Chetsford Water stream system running north, and from it one can look down the stream valley. The setting consists of at least fourteen earth-fast stones and another that is loose on the surface. All are a soft pink-coloured, fine-grained local sandstone. The stones vary in height from 0.1 m to 0.7 m high and 0.2 m to 0.7 m in width and are 0.1 m to 0.3 m thick. The two largest stones in the setting are down-slope toward the lower end. Some of the stones are set so that their broad faces look down the slope. Others have their broad faces set side on to the slope, and a few are diagonally set across the slope. As elsewhere (see below), there appears to be some indication that individual stones, or pairs of stones, were deliberately set so that their broad faces occur at right angles to each other rather than in a uniform fashion, thus differentiating between them. The stones in the setting are all different in terms of both shape and dimensions. Some are flat topped; others have pointed tops; most are irregular in form but a few roughly rectangular.

This setting, first discovered in 1931, was described, somewhat fancifully, as a stone circle made up of thirteen stones with an outlier, forming three concentric ellipses. Quinnell and Dunn (1992: 37) suggest more satisfactorily that it in fact consists of four parallel rows of stones, each with a slightly different north-east to southwest orientation. Undoubtedly some of the original stones making up the setting are now missing, and others have been reduced to stumps.

PORLOCK ALLOTMENT (FIGURES 7.8, 7.23) This is an arrangement of six stones in two groups of three set above and below a large and unusually shaped sandstone block with a small cairn (6.5 m in diameter and 0.5 m high) nearby. The setting is situated at the end of a spur defined by streams flowing to the north and to the south. The setting overlooks the confluence of these streams, which flow north, forming the Weir Water. Views down the

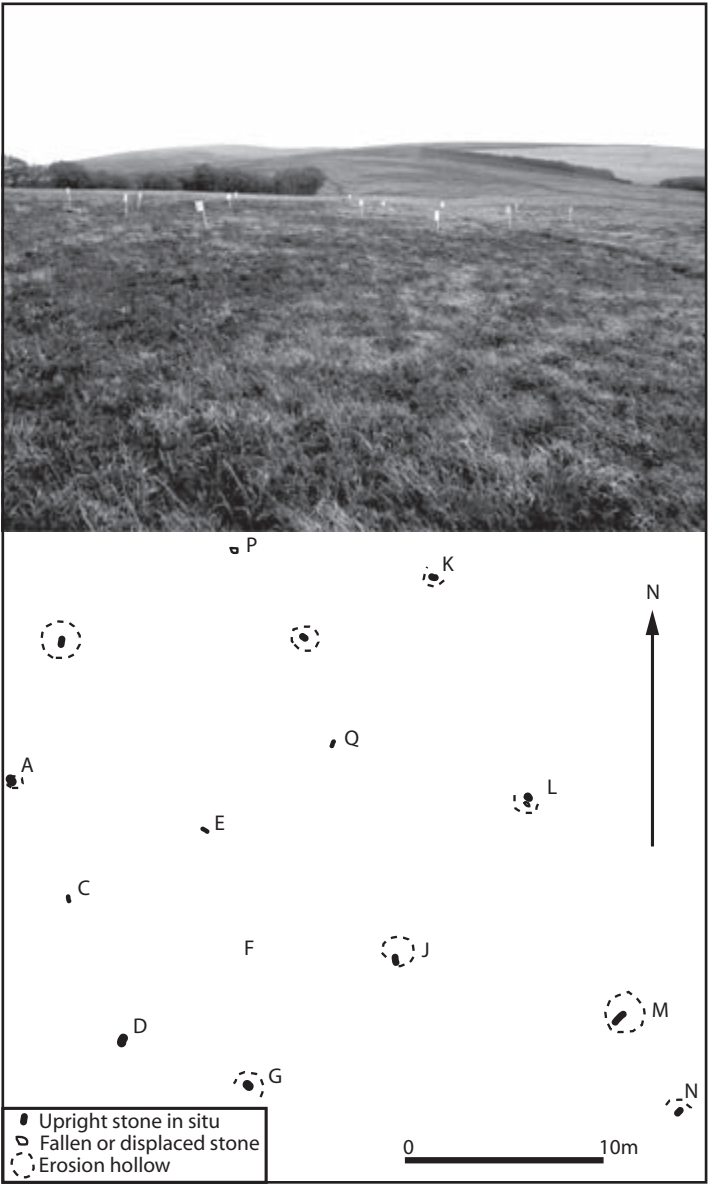


FIGURE 7.22 Almsworthy Common stone setting. (Top) Visible stones marked by flags facing west toward one of the heads of the Chetsford Water. (Bottom) Plan after Quinnell and Dunn 1992.

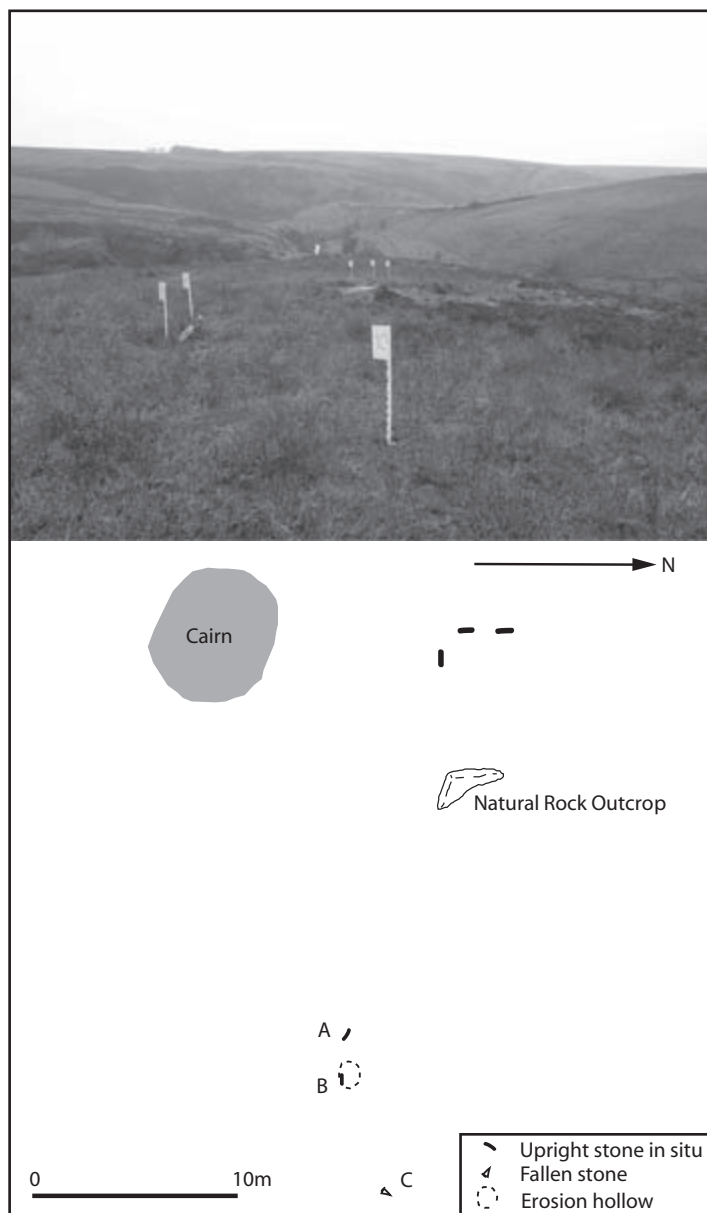


FIGURE 7.23 Porlock Allotment stone setting. (*Top*) Looking west down the Weir Water. (*Bottom*) Modified plan after Quinnell and Dunn 1992, with additions.

valley to the northwest are extensive but restricted to the east, north, and south by rising ground. The rare large stone—2.5 m long, 0.8 m wide, and 0.5 m high, with a bow-shaped edge facing up the slope—may already have been a significant place on the moor before the stones were erected in its vicinity.

Cairns and Stone Settings

Small cairns, very inconspicuous both in terms of height and diameter (0.1 m–0.3 m high and up to 5 m in diameter) sometimes occur near to the stone settings or in very close vicinity to them. There are five cases in which there appears to be a direct association. These cairns are always to the east or the northeast of the stones except in the case of the Porlock Allotment stone setting, where the cairn is to the southwest (Figure 7.23). At Lanacombe I, one of the stones is set within an irregular cairn (Figure 7.17). This is interesting in terms of the association between the Porlock stone circle and stone row and a small cairn to the northeast of the circle. As is the case with the stone settings with which they are associated, these small cairns are utterly different both in terms of their size and their landscape locations from the numerous much larger barrows or cairns on Exmoor, most of which are presumed to be of early Bronze Age date. In total, they number around 350 and may be up to 35 m in diameter and as much as 4 m or more high. Such is the size and prominence of some that they have been used as landscape and boundary markers from at least as early as the thirteenth century C.E., which is why so many have names serving to differentiate a landscape remarkably devoid of other distinctive topographic features (Riley and Wilson-North 2001: 32). The principle ridges and summit areas of Exmoor, all the very highest points, are occupied by these barrows, which occur singly, in pairs, or in larger groups, including diffuse clusters and long linear arrangements along ridges and on nearby hill summits (Figure 7.24). These barrow groups are usually intervisible across the moor from one group to another. Some, such as Five Barrows (actually a group of nine), are skyline sited so as to be visible for up to 20 km away off the moor.

The cairns and barrows are clearly part of an early Bronze Age social and cosmological system found throughout Britain and indeed northern Europe. They represent the participation of people in a much more widespread and generalised system of beliefs and practices, whereas the stone settings appear to have a much more localised significance. The new emphasis on placing the dead in cairns on the hilltops of the high moor enabled these locations to command both distant views beyond the moor and across the interior landscape of valleys and water courses occupied by the living. The dead were being elevated



FIGURE 7.24 The Five Barrows on the skyline seen from the northwest.

away from the living to places in the landscape in which both distance and proximity could be encapsulated.

It is interesting to note that, from the large hill and ridgetop cairns and barrows, the dramatic outlines of the valley systems are rarely visible except when seen from the ridge ends. One looks across the landscape from these monuments to other hills and ridges studded with their own barrows and cairns rather than down and along the valley systems. Importantly, as already mentioned, the stone settings and the large barrows rarely occur in close proximity. From the stone settings, these large ridgetop barrows are rarely visible. One of the few exceptions is the stone setting occupying the same ridge as the Chapman Barrows on the western side of the Exmoor, but even in this case the highest and most prominent barrow in the group is out of sight. This physical separation sets up a whole series of contrasts between the stone settings and the barrows as follows:

Barrows Stone Settings

Mass constructed from
stones derived from

Specially selected blocks probably
from the bottoms of water

surrounding area on high ground and quarry ditches	courses
Monumental with panoramic views across the landscape	Discrete with strongly directional views down water courses and to valley heads
Mass elements put together	Individual elements set apart
Round	Non-circular geometric arrangements
High visibility	Low visibility
Skylined	No skylining effects
Massive labour investment	Minimal labour investment
Permanent landscape marker	Transient in character
Commemorate the dead and dwarf the living	Dwarfed by the living whose relationships they commemorate
Suggestive of genealogical ties and distant relationships	Suggestive of individual relationships

These contrasts are now explored further in a social interpretation of the significance of the stone settings, in an attempt to make some sense of both their geometric forms and their locations in the landscape.

Stalking with Stones

Common to almost all the settings is their intimate relationship to rivers and watercourses in general and the heads of coombes in particular. In all but a few cases, such as East Pinford and Porlock Allotment settings discussed above, they are situated in high locations on hills and ridgetops but never on the very highest points of the moor, which afford panoramic views across the landscape. Because the stones are small, they are imperceptible from the surrounding landscape. Although the locations of nearby settings are often inter-visible, the stones themselves are not. The high landscape locations suggest that these were places from which one looked out across the landscape rather than identifiable places one looked to. The likely sources of the stones are the watercourses themselves, since these are primarily the only places where rock outcrops are exposed and loose stones could be collected. There is no indication that any of these stones were moved any great distance, and whether they are slate or sandstone is a simple reflection of the immediate local geology. Although the stones themselves are not visible from the landscape beyond, people erecting the stones and visiting the settings would have been visible from elsewhere, at least if they had been standing up. Exmoor is a very unusual case in that the people would have dwarfed the stones rather than the other

way round. People's temporary presence might have indicated the position of the stones to others in a fleeting way: here one moment, gone the next. On Exmoor, it was the people rather than the stones that formed the monuments. People revealed their location and thus brought the monuments into being. The stones themselves might have acted as *aides-mémoire* for the people who erected them. Through the stones one could remember persons and events and stories.

So why erect these tiny stones at all? Their significance has always baffled archaeologists, but the general assumption has always been that they must have had some kind of (unspecified) ceremonial or ritual significance, just as the stone circles and the stone rows did. However, suggesting this does not account for the specificity of either their geometric forms or their landscape locations. They appear to mark places with excellent vantage points along and across specific stream valleys and parts of the moor. Today we might marvel at the fantastic views afforded across the moor that has become romanticised and aestheticised through novels such as Blackmore's *Lorna Doone* and Williamson's *Tarka the Otter* and through numerous guidebooks and picture postcards. But this aesthetic is almost certainly not the experience of, nor is it relevant to, prehistoric lives. People were most likely using and looking out from these settings for a much more pragmatic reason, and the interpretation put forward is that they were specifically watching for game and red deer.

Unlike in other areas of southern and southwest England, there is no evidence of Neolithic monument construction on Exmoor. There is a complete absence of long barrows, megalithic monuments, and causewayed enclosures. A possibly late Neolithic henge monument on the western fringes of the moor (Grinsell 1970: 25) has recently been suggested to be more likely an early eighteenth- or nineteenth-century tree ring enclosure (Riley and Wilson-North 2001: 34). The two large Whit Stones, to the west of Porlock, have been suggested to be remains of a megalithic structure, but this is also extremely unlikely, so why this lacuna? Does it represent an absence of settlement or a different lifestyle in relation to place? The direct evidence for Neolithic occupation of Exmoor remains insignificant and ephemeral at best. The material consists of chance finds of artefacts: a few imported flint and groundstone axes. The former are likely to be from Beer Head in South Devon (see colour plate 1) or from the chalk downlands of Wessex; the latter are of Cornish origin (Grinsell 1970: 23). There is no evidence of agriculture; however, finds of more than a dozen leaf-shaped arrowheads do suggest the importance of hunting, as do finds of discoidal polished flint knives from Furzehill and Kentisbury (*ibid.*: 25; Riley and Wilson-North 2001: 20).

Environmental evidence for agriculture is slight. Pollen analysis has shown that tree cover existed across Exmoor before blanket peat developed on the hill and ridge summits and probably continued into the historic period on the

steeper slopes and valleys. Former woodland cover on The Chains, where the peat has a maximum thickness of up to 3 m, consisted of oak as well as hazel, birch, pine, alder, and elm. At Warren Farm, direct evidence survives in the form of tree stumps preserved below the peat (Straker and Crabtree 1995: 47). Peat began to form on The Chains plateau area around the beginning of the third millennium B.C.E. and during the first millennium B.C.E. on Codsand Moors (*ibid.*: 45). A number of factors seem to be involved, including altitude, humidity, topography, acidification resulting in podzolisation and tree clearance, and use of fire to clear vegetation. One interpretation is that people and domestic animals provided a final stress on an ecosystem already under stress and that blanket peat initiation on Exmoor correlates strongly with a deteriorating climate (Merryfield and Moore 1974). Just how significant domesticates or human interference were in the disappearance of trees across Exmoor from the Neolithic onward is unknown. At Hoar Moor, the pollen record begins at the same time as the putative Mesolithic/Neolithic transition elsewhere. The pollen sequence indicates the presence of open woodland, with much of the land surface affected by mire development without any evidence for clearance phases or arable farming (Francis and Slater 1990: 22). The evidence seems to indicate that a hunter-gatherer way of life continued on Exmoor well into the Bronze Age. The partial skeleton of an aurochs (wild cattle) under the shingle ridge at Porlock Bay, dated to the early Bronze Age (McDonnell 1998), indicates that there must have been a viable breeding population in the area up to this time, long after its extinction elsewhere in southern England. This fact in itself seems to be a strong indicator of a very low human population density and limited interference in the landscape at this stage. Pollen analysis at Codsand Moors showed that peat development occurred there around 470 B.C.E., when additional climatic deterioration occurred with the onset of cooler and wetter conditions. There was no good evidence for arable agriculture in the earliest levels of deposition, but from the fourth century B.C.E., clearance of trees and the spread of grasses increased dramatically relating to livestock grazing and possible cereal cultivation (Francis and Slater 1992: 26–27).

Today the farming economy of Exmoor is pastoral. The bulk of the moor provides only rough grazing land for cattle and sheep at best. Arable land is found only off the moor in areas such as Porlock Bay to the east and in surrounding lowland areas to the south. Stock rearing took place over most of Exmoor in the historical past. From as early as Saxon times, a large part of central Exmoor known as the Royal Forest was protected under Forest law and used for summer grazing by sheep and cattle. Records show that at the end of the sixteenth century, 40,000 sheep, 1,000 cattle, and 400 horses were pastured annually in the Royal Forest administrative area of central Exmoor, with similar numbers in eighteenth-century estimates (Maltby 1995: 35).

The direct evidence for early Bronze Age settlement and agriculture is slight when compared with other upland areas in southwest England such as Dartmoor and Bodmin Moor. Only ten prehistoric field systems, twenty fragmentary field banks, and forty-five house circles, or platforms, are known from the entire area (Riley and Wilson-North 2001: 42). This may be compared with the presence of fifty to one hundred or more houses in a single settlement on Bodmin Moor (Bender, Hamilton, and Tilley 2007; Johnson and Rose 1994). Furthermore, many of these settlement areas and houses on Exmoor might well be of Iron Age or later date—none have been excavated. The available putative evidence for Bronze Age settlement and agriculture across most of Exmoor seems to indicate no more than scattered individual farmsteads and a few associated fields developed in a piecemeal fashion, suggesting no more than isolated pockets of agriculture. The only more extensive pattern of houses and fields with clear evidence of coaxial field systems of likely early Bronze Age date occurs on Codsand Moors to the southwest of Dunkery Beacon, covering a total area of only about 4 ha (Riley and Wilson-North 2001: 40–51).

The Red Deer and Their Significance

Exmoor has long been famous for its wild red deer. It has the largest population in England and is the only area where they have remained continuously in the wild from prehistory to the present. Once widely subject in England to poaching and near extermination as a pest, they survived in Exmoor as royal game in Exmoor Forest. Annual counts suggest that there are around 2,700 within the National Park today, and they have spread to surrounding areas. To many people, Exmoor is synonymous with deer hunting. Hunting has always been the hallmark of an Exmoor identity and relationship to place. This is the last place in Britain where stag hunting has taken place, and it continues in some form despite the recent government-imposed ban on hunting with hounds. The hunt has vibrant local support with many hundreds of horse riders and motorised followers, and it still has a powerful hold on the imagination among some sectors of a deeply rural and conservative Exmoor community. The modern method of deer hunting with horses and hounds is recent. Until the eighteenth century, hounds were used to drive the deer out of their coverts, after which they were then shot with longbow or crossbow (Burton 1969: 55–56). In modern times, deer have been chased rather than driven. Big stags were hunted in the autumn, hinds in the winter and young stags in the spring, a pattern clearly related to the life cycles of the deer, with the calves being borne in June and the rutting season taking place in October. Deer are gregarious and for much of the year move around in herds of between ten and thirty animals, but herds of up to one hundred have been recorded. They live

concealed for much of the time in the woods and are difficult to detect. During the winter, they mainly eat ivy in their wooded retreats but come out onto the open moor in spring and summer to graze, which is when hunting was most likely to have taken place during the Neolithic and the Bronze Age.

Stalking with Stones

All the view—the slopes, the wood, the heather—was instinct with the presence of the wild deer; though sheltering in harbour from the heat, they were there. (Jefferies 1892: 44)

The argument made here is that these stone settings were frequented by parties of hunters and might also have provided places in which rituals connecting with hunting might have taken place. More specifically, they would have provided ideal locations in which one could hide and watch. These hunters, perhaps wearing deer hides, would have stalked from the stones, where they would have lain and waited for the deer. The stones could not have been intended to conceal people among them, since they are all so small. They rather marked places from which it was good to hunt at particular seasons and times of the year and according to the direction of the wind. If the stone settings were named places, a party of hunters might have been expected to go out and meet at a particular stone setting. Such hunting groups were likely to have been small, and, regarding the social symbolism and significance of the stones, one possibility is that each stone might have represented an individual hunter with the setting itself representing the hunting group and the social relationships within it. The well-preserved quincunx stone arrangements all have a central tall pillar with four smaller stones arranged around it: the leader of the hunt and the hunting party of five? Many of the settings seem to be composed of between three and eight stones. Sometimes there are significantly more—up to twelve or more at the Almsworthy Common, Lancombe I, and the Exe Head stone settings discussed above.

An implicit assumption has always been that the settings were planned and erected as a single event, but it might equally well be the case that stones were added to particular settings over time and the overall geometric form of the setting altered over time with the positions of the stones being changed. Perhaps this happened in relation to the success of certain hunting locations over time, or it might be linked to the changing generational structures of hunting groups and the significance of particular locales. Alternatively, the larger settings might be places where much larger groups of hunters met.

The settings undoubtedly marked significant places in the landscape, named places to which one could return, discrete markers of place and identity,

places from which one watched and waited and made preparations for the hunt. The animal that has always been of paramount significance on Exmoor is the red deer, which has been hunted here from prehistory to the present. The stone settings provided, and still provide, ideal locations from which the movements of the Exmoor red deer can be observed. The acts of waiting for and sensing the deer in the surrounding landscape might well have developed strong social bonds and reciprocal relationships among the hunting parties symbolically expressed by the geometric relationships among the stones, providing material metaphors for the hunting group—alert, watchful, acting together, and having an intimate knowledge of place and the wider landscape.

The individual stones in the settings are shallowly set. The differences in the sizes of the stones are small. There is little indication of any 'hierarchical' relationship among them with some stones being much more important—larger and more powerful—than others. The stone settings required very little labour to erect and could have been easily erected by a small hunting group in a matter of a day or days. The geometric and symmetrical relationships among the stones might have provided excellent metaphors for the dynamics of the hunting group. Through the act of erecting the stones, such a group would have been making a claim to a place or a series of interlinked places or territories from which they hunted. It was not necessary that these places be seen from the wider landscape. Indeed, the essence of successful hunting lies in concealment rather than visibility. The stone settings themselves are highly unlikely to have been butchery sites or places where tools were made or fires were lit. The rituals associated with hunting, such as divination and a respect for the bones of the dead animal, would have been unlikely to have left depositional traces in the archaeological record, especially in an area with high soil acidity. All one might expect is small talismans associated with, or perhaps found during the course of, the hunt, such as small pieces of quartz or other unusual stones, and the few excavations that have taken place of the Exmoor stone settings, discussed above, have, perhaps not surprisingly, recovered very little. Deer butchery is likely to have taken place at the site of the kill, with the stone settings representing starting rather than end points for the hunt. These places were repeatedly used and returned to by generation after generation. They marked good places to be and to congregate, memorials to the past successes of the hunting group.

The stones might well have had a moral purpose in terms of expressing the solidarity among members of the hunting group, their social relationships, actions, and events. Recounting hunting stories would have involved recalling the names of the stone settings from which the hunt had commenced. There was a need to mark the place and materialise the significance of these places by erecting stones, because they added power and significance, historical depth,

and moral authority. The unique character of each stone setting arrangement, such as the number and disposition of the stones and the manner in which they were set in relation to the hill slopes, enabled each setting to carry its own name and maintain its own identity as a named place. While the stone settings may have had a deeply personal and individual significance to the hunting groups using them, the stone circles and the stone rows are much more likely to have had a collective social significance to communities as a whole.

The stone settings also appear to have been erected in places where it was likely, based on previous experience, that deer would be found. The primary activities taking place at them would have been sitting and waiting and talking and looking out across the landscape. The attributes of the deer—speed, strength, grace, endurance, intelligence, stealth, and cunning recounted in numerous modern hunting stories (for example, Collyns 1862; Evered 1902; Goss 1931; Hamilton 1907; Jefferies 1892)—are precisely those that one might wish to emulate as a hunter. Becoming and thinking like the deer would be the key to a successful hunt, and through the consumption of meat this would become, quite literally, an embodied process. Among ethnographically documented hunter-gatherers, there is frequently a deeply reciprocal and spiritual relationship among the hunter, the prey, and the landscape (for instance, Ingold 2000: 12ff.; Jordan 2003; Tanner 1979), which might be objectified in the form and the character of the stone settings themselves.

In deer hunting, the direction of the wind is absolutely crucial in that one would have to be down wind of the likely places where the deer would emerge. Jefferies describes this well:

In front appears a coombe, overgrown with heather from summit to foot, and I stop suddenly. On the opposite slope are five hinds lying down, their heads visible above the heather, but too far for a good view. To stalk them it is necessary to go round the head, or shallow upper end of the coombe (a mile or nothing), and so get the wind to blow from them. Their scent is so quick that to approach down the wind is useless.... The hollow of the coombe carries the wind somewhat aslant just there from its general direction like a tube, else I think they would have scented me as it is. (Jefferies 1892: 37)

So, according to the wind direction, it would be appropriate to wait quietly at one stone setting rather than at another. Although the views out across the moor and along the watercourses crossing it are always restricted in one or more directions, most parts of the landscape can be seen by visiting a combination of them, and each stone setting may be suggested to have its dominant or primary view (see Figure 7.25). The predominant wind direction on Exmoor is from the southwest or the northwest and, so it is not surprising that

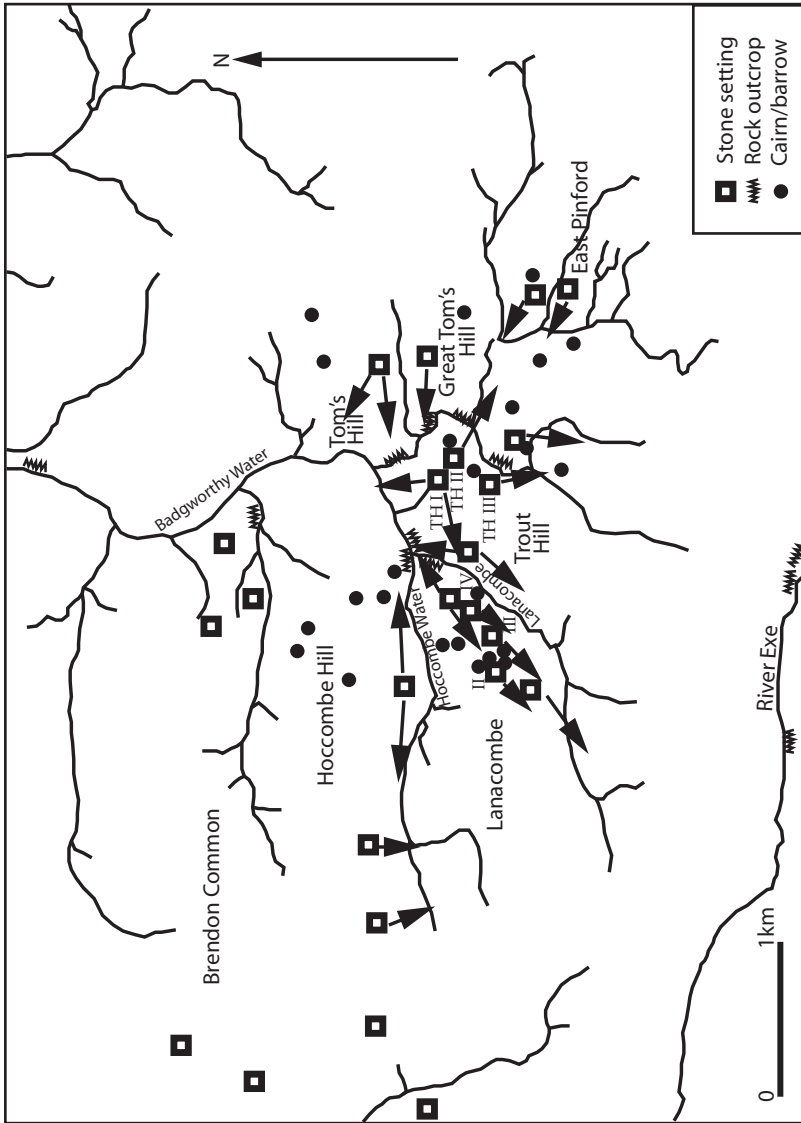


FIGURE 7.25 Dominant views looking out from stone settings around the upper courses of the Badgworthy Water.

the majority of the stone settings are located to the north and the east of the valley systems and combe heads that they overlook.

During the winter, red deer group together in coverts deep down in the heavily wooded valleys of Exmoor. They remain invisible, and hunting in such places is very difficult indeed, unless the animals are driven out from such places onto the open moor, which has always been the traditional practice. It is primarily in the late spring to the autumn that they venture out onto the high moor, to graze during the warmer summer months. So, it would have been from April to October that the stone settings might primarily have been visited and used by groups of hunters. This is the time of year when one is most likely to have long sunny days with excellent visibility. The stone settings were sited at locations where the deer were most likely to emerge from the valleys and pass onto the high open moor.

During our main periods of fieldwork in September 2007 and April 2008, we regularly saw small herds of deer from the vantage points of the settings we were surveying on an almost daily basis (Figure 7.26). There also might be a metaphorical relationship between the geometric and complex forms of the stone settings and stag antlers. With their impressive antlers, large stags have always been the symbolically most important and significant of the deer. There is a special terminology for describing the antlers, with a massive horn or beam curving upward and outward, with tines and points projecting out



FIGURE 7.26 Small herd of red deer seen looking west from the Wood Barrow stone setting.

from it. The size varies with both nutrition and age. A male calf has no horns until a year old. In the second year, slender horns grow; in the third year, the brow rights are added, then the trey. The middle or bay rights come in the fifth year, and in the sixth year, points are added on top, with more points growing between the sixth and eighth year, all the time the antlers increasing in size, length, and strength (Goss 1931: 77–90) (see Figure 7.27).

The whole head of antlers is shed between the middle and the end of April and remarkably regrows and increases in size by late August or early September. This prodigious growth is quite remarkable, providing a ready source of metaphors for place, virility, strength, and regeneration. Impressive

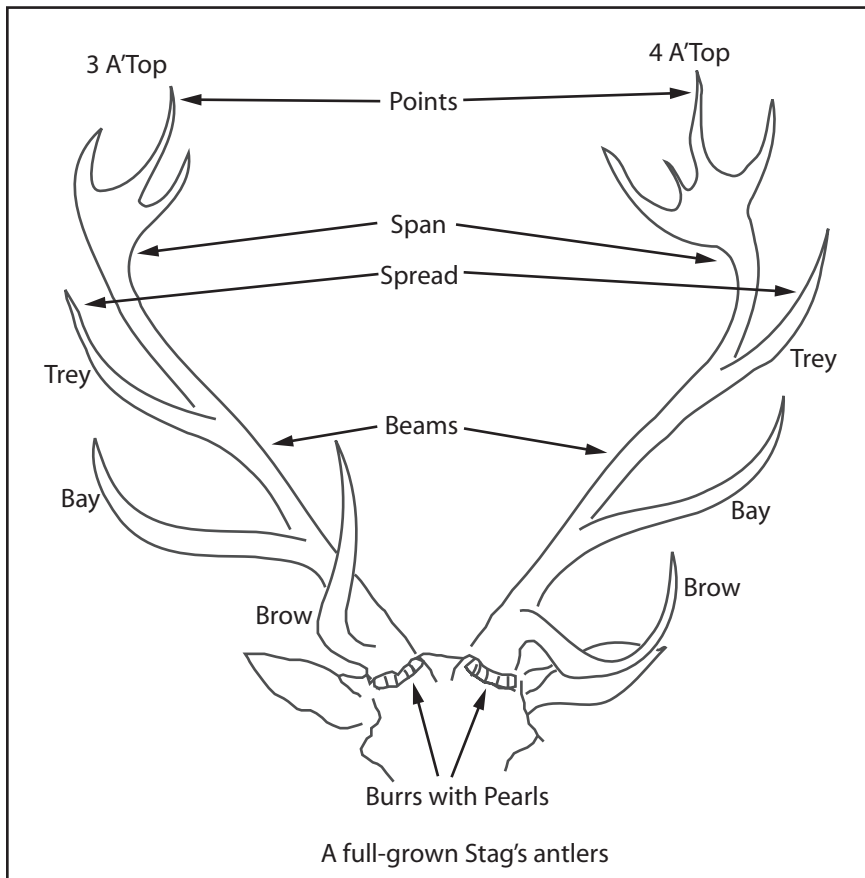


FIGURE 7.27 Full grown stag's antlers and the terminology used to describe various parts (after Burton 1969).

individual stags, identifiable from their antlers, were historically given proper names, like persons. Jefferies notes of the stag: 'He not only lives in the wild, wild woods, and moors—he grows out of them, as the oak grows from the ground' (Jefferies 1892: 100). We know that antler was widely used during the Neolithic to fashion a whole variety of tools, from digging implements to weapons, and was symbolically deposited in the basal segments of the ditches of monuments elsewhere in southern England. Most recently, antlers have been found in excavations undertaken as part of the Stonehenge Riverside Project (see Larsson and Parker-Pearson 2007), deliberately deposited in the basal segments of the post holes of the southern timber circle in the Late Neolithic henge of Durrington Walls, in the ditch of the Stonehenge Cursus, and in the ditch of the large Amesbury 42 long barrow.

The general arrangement of the stag's antlers is linear with the points branching off to the sides at more or less regular intervals and clustering at the top (see Figure 7.27). They are symmetrically arranged on both sides of the head. The numbers of tines, or points, are variable, usually between two and fourteen, with the record for Exmoor being twenty (Burton 1969: 49; Jefferies 1892: 85). No two sets of antlers are identical, and perfect ones are rare. The overall geometric arrangement of the antlers, with the points branching off at intervals in different directions, is analogous to the regular and geometric arrangements of the stones in the settings running up and down the hill slopes and placed at different angles to the slope—some facing down the slope, others across it, and others diagonally to it. The individual stones in the settings most frequently occur in arrangements, or groups, of between three and five up and down the slopes, just as the points do on both sides of the stag's head. Furthermore, the numbers of recorded stones in the settings never exceed fifteen. Most of the better preserved examples have between five and twelve stones, well within the range of the maximum number of points on a mature stag's antlers. So it seems possible to suggest that individual rows of stones in the stone settings might represent the points on a stylized stag's antler or, alternatively, the overall arrangement, a stylized stag's head with points on the antlers.

Over time, some of the stone settings might be expected to grow in size and complexity, just as the size of the antlers on a stag's head grow in relation to the stag's age and maturity. Furthermore, the stream valley systems with their dendritic structure of branches at regular intervals, visible when one looks out from the stone settings themselves, also resemble the form of deer antlers, with the deepest and thickest parts low down and the tips reaching up and out across the high moor (Figure 7.28). The landscape itself can be conceived to be in the form of the stag's head and antlers. Perhaps it is no coincidence that even in the present day this is the logo for the Exmoor National Park. The



FIGURE 7.28 Water courses resembling the forms of stag's antlers. (*Top*) View along the course of the river Barle south of Simonsbath. (*Bottom*) View down the Badworthy Water from Trout Hill.

stone settings placed at strategic points along the valleys and overlooking them may then relate to the ancestral form and significance of stags embodied in the landscape and concomitantly their mythological and social significance, which has continued into modern times. Symbolically, the stone settings are grouped along and within the stag's antlers, represented by the watercourses spreading out, over and up, and across the moor. The stone settings represent an intimate relationship with watercourses and valley heads within the interior world of Exmoor away from the coast. In the most general sense, they are within the body of the same moor to which they relate. This corporeal identity of Exmoor as a kind of body is further exemplified, as discussed above, by the occasional exposure of rocks, often in the vicinity of the stone settings, jutting out like skeletal ribs along the valley sides.

CONCLUSIONS

In prehistory it seems entirely likely that Exmoor was as marginal and peripheral to the social mainstream of events, beliefs, and values as it is today. During the Bronze Age, other moorland areas of southwest England, such as Dartmoor and Bodmin Moor, were centres of tin production and supported large and successful communities. By comparison, the people on Exmoor seem to have remained fairly isolated hunter-fisher-gatherers, well into the Bronze Age and beyond. The physical and cultural isolation of these populations resulted in a deeply conservative ideology, never fully adopting the influences and the values of the outside world and continuing local traditions commensurate with their landscape and its resources.

They had no need to fix their identity or presence their relationship to land in terms of constructing monuments or establishing permanent settlements, boundaries, or fixed settlements. The populations here clearly shared in a general repertoire of ideas concerning the erection of stone circles, stone rows, and large hilltop cairns found elsewhere in the late Neolithic and the early Bronze Age. But what is distinctive about Exmoor is the lack of concern with monumentality, except in relation to hill and ridgetop cairn construction, which is equally ubiquitous elsewhere in southern England. But although the early Bronze Age populations did construct cairns and barrows, many of these have a distinctive local morphology (Quinnell 1988, 1997; Riley and Wilson-North 2001: 34ff.).

The unique forms of the stone settings, with their various geometric arrangements of stones, also indicate a concern to create or to maintain cultural distinctiveness and difference. On the one hand, the tiny character of these lithic monuments can be explained simply in terms of the absence of

suitable building stones—but, on the other hand, the desire to construct cultural difference and mark out a particular and different identity may well have been equally strong. After all, it would have been quite feasible to construct massive megalithic monuments in the Valley of the Rocks near to Lynton, where suitable stones abound.

Monumentality was neither required nor intended in the construction of the stone circles, stone rows, or the stone settings. As markers of place, the stone settings, unique to Exmoor, objectified or materialised the significance of that which was unique to Exmoor: the paramount significance of the hunt. Constructed at particular locales overlooking valleys and coombe heads, they were an intimate part of the symbolic, mythological, and social geography of the hunt. They solidified in the landscape places that otherwise would be unmarked and lost and memories that would be forgotten without being objectified in such a place: places at which to meet, places from which to observe and to hunt, places to recount stories, places in which one might honour and represent the deer.



PART IV

GRANITE



Summit stacks (tors) on Stowe's Pound, southeast Bodmin Moor, Cornwall.

The images and influence of Cornwall are forever breaking through. Like every other major writer who has ever visited Cornwall, Virginia Woolf never forgot the extraordinary impact of that wild, elemental, indeed quite fantastic land. (Val Baker 1973: 44)

And now we will mount the steep flank of Roughtor [Bodmin Moor]. It is covered with great granite boulders dappled with lichens of the most delicate colours. The summit bristles with immense rocks piled one upon the other; a natural fortress worthy of the gods. From one of these rock towers we get a wonderful view over nearly the whole of Cornwall. To the eastward, about a mile away, Brown Willy, the highest of all Cornwall's hills, cuts the sky with its fine rugged outline, but it is not as rock-strewn as Roughtor. These two hills are probably more rugged and of a more mountainous character than any others of equal height in England. (Folliott-Stokes 1928: 73–74)

Leaving Zennor Churchtown [West Penwith], we cross the road from St Ives to Land's End, and commence to climb Zennor Hill. A chaos of rocks soon surrounds us for this is one of the moor's most notable

ramparts. After a steep climb we reach the top, seven hundred and fifty feet above the sea. In front of us is a mass of great boulders, piled one upon the other in a weird confusion of grotesque shapes. On all sides stretches the moor, a great undulating, heath-covered, rock-strewn upland, punctuated with rugged tors, and the massive monuments of a prehistoric race. (*ibid.*: 151)

This section considers two granite landscapes in Cornwall—one inland, Bodmin Moor (Chapter 8), the other where the granite reaches the coast and dips away into the sea, West Penwith (Chapter 9), in the far southwest. As the preceding quotations indicate, the contrast of the high rocky hills, or tors, with their boulder-strewn slopes, and the sedimentary chalk and sandstone, shale, and pebble landscapes (considered in Parts II and III) could not be greater. Here the brittle and grey coarse rock is manifest everywhere along both the coastal cliffs and on the hills, weathered into the most fantastic and striking of forms, providing distinctive reference points in the landscape; and stone here is everywhere a ready source of building material (colour plates 7 and 8). Bodmin Moor, about 20 km across from its northern to its southern edge and the same distance from west to east, and West Penwith, almost an island, bounded by sea cliffs on three sides, are the two classic granite landscapes discussed in Chapters 8 and 9.

Although the rocky tors occupy only a small part of the surface area of the Bodmin Moor or West Penwith, they dominate these landscapes. Visitors come here to see the tors, to climb on them, walk between them, gaze at them, photograph them, and enjoy the panoramic vistas. Made from the hardest granite capping the hills and ridges, they are lenticular blocks, with gently rounded surfaces, resting horizontally on one another, with the individual blocks often being of great size. They sometimes rest precariously on one another—hence the name *logan* (logging or rocking) stone. Although granite is very resistant to erosion, the high tors owe their fantastic shapes to the fact that, as the granite was cooling and crystallising from its molten state, horizontal and vertical cracks and joints appeared, running at right angles to one another, causing the rock to split naturally into cubes and rectangular blocks dividing the mass into columns separated by openings up to 6 cm or more wide. Weathering and the freeze-thaw action of ice in the past have rounded these joints and enlarged them.

Even though the tors are small and insignificant in height, they do indeed appear as immense, majestic, and mountainous to an observer. The apparent hyperbole used in their description by many writers, such as those cited above, is indeed justified. The tors have a striking visual power and dramatic quality out of all proportion to their actual size. The top stones of the highest tors are frequently riddled with solution hollows, or basins, some of which are

permanently filled with water. They are frequently interconnected by channels and erode over the lips of the rock to create incredible arc-like shapes when seen from below.

In addition to the rocky outcrops on the hilltops are characteristically extensive areas of tumbled blocks of stone and fallen slabs below them, known locally as 'clitter'. Such areas make walking extremely slow and arduous, sometimes impossible. There are often numerous voids and chamber-like spaces among the tumbled blocks on the upper slopes. Accumulations of clitter sometimes form distinctive streams running down the hill slope and the bands crossing it. Individual rocks within the clitter masses and huge earth-fast boulders, or grounders, often exert a particular fascination in terms of the aesthetics of their forms, shapes, textures, weathering lines, quartz and mica inclusions, and the lichens growing on their surface. Mostly grey and dull, the rocks glow rose pink at sunset, transforming their appearance. Sometimes the sunlight glints brilliantly on mica inclusions visible only from particular angles and directions at particular times of day and seasons of the year.

The tors, individual rock formations, the tangled clitter spreads, the massive grounders, the slabs forming chambers all create the distinctive sculptural landscapes that are Bodmin Moor and West Penwith. Both have many moods. On a balmy summer's day, they can seem like a tranquil paradise. When the winds roar and the rain beats down, such landscapes can seem to be among the most inhospitable places on earth. Although we still might perceive the forms of the stones as awe inspiring, our modernity has largely bodily disengaged us from them. To visit the tors, to gaze at them and feel an emotional response from a safe distance, is one thing. The intimacy of living among these powerful stones, as did the prehistoric populations, was an entirely different matter.



CHAPTER EIGHT

LANDSCAPES AND POWER ON BODMIN MOOR

Bodmin Moor is a brown, treeless, windswept, and rain-sodden boss of granite, around 200 sq km in size, situated near to the eastern county boundary of Cornwall in southwest England (see Figure 1.1). It is today one of the best preserved upland ‘fossil’ prehistoric landscapes of southern Britain and is exceptionally rich in archaeological remains. Despite much eighteenth- and nineteenth-century clearance in the centre of the Moor, and in the southwest of it, large areas of the land remain rough pasture land, unenclosed and ‘unimproved’, and hence, unlike lowland areas of Britain, traces of prehistoric settlement and large numbers of cairns and other monuments have not been obliterated. Modern settlement is confined to the edges of the Moor, and this pattern seems to have altered little for about one thousand years, apart from a brief period of medieval occupation in central areas, now abandoned. Unlike most lowland areas of Britain, where the evidence for different classes of archaeological sites in the same area is extremely fragmentary, on Bodmin Moor there is still a well preserved, wide variety of different types of archaeological remains: ceremonial monuments (stone circles and stone

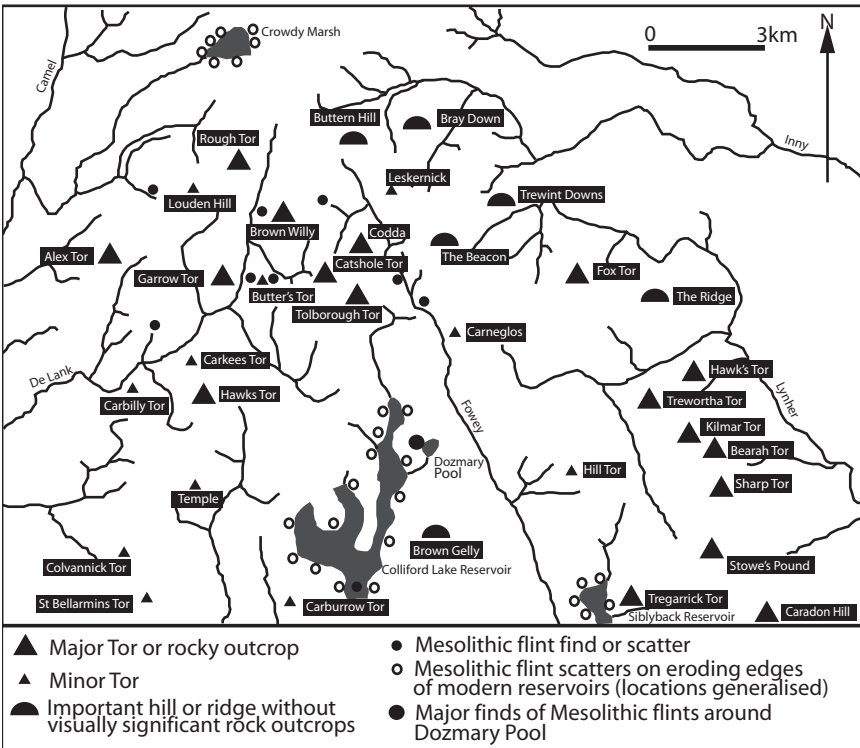


FIGURE 8.1 Major places mentioned in the text and distribution of Mesolithic finds.

rows), barrows and cairns, numerous house circles, settlement areas, and field boundaries. The area has recently been the subject of one of the most comprehensive and meticulous archaeological landscape surveys undertaken in Britain (Johnson and Rose 1994), and the results of this fieldwork provide an invaluable basis for the interpretative work presented here.

The granite boss of Bodmin Moor is intruded through sedimentary rocks of Devonian and Carboniferous age. It is divisible into three parts: (1) those areas most solid and free from cracks and joints that form ridges, hills, and tors of outcropping rock stacks; (2) the main mass of granite more or less decomposed at the surface, forming the more smoothly rounded profiles of the land visible today over much of the area and giving rise to rotted brown subsoil (rab or growan); (3) areas of more easily eroded kaolinized granite, forming hollows (Reid, Barrow, and Dewey 1910; Reid et al. 1911).

The Moor is a dissected plateau, the highest points being near its edges, crossed by sluggish streams, associated with extensive marshy areas. Among

these areas, rounded grass and heath-covered hills and ridges are interspersed with high granite rocky tors (see Figures 8.1 and 8.2) rising to 420 m above sea level at their highest point, the summit of Brown Willy. Cornwall's only natural inland lake, Dozmary Pool, lies in a saucer-shaped depression in the centre of the Moor under the shadow of the Brown Gelly ridge and is of late-glacial origin (Brown 1977). The hardest granite capping the hills and ridges is built up of lenticular blocks of granite resting horizontally on one another, with the individual blocks sometimes being of great size. Periglacial weathering is responsible for the dramatic and fantastic shapes and outlines of many of the granite boulders capping the highest points, below which are characteristically extensive areas of tumbled blocks and stone 'clitter'.

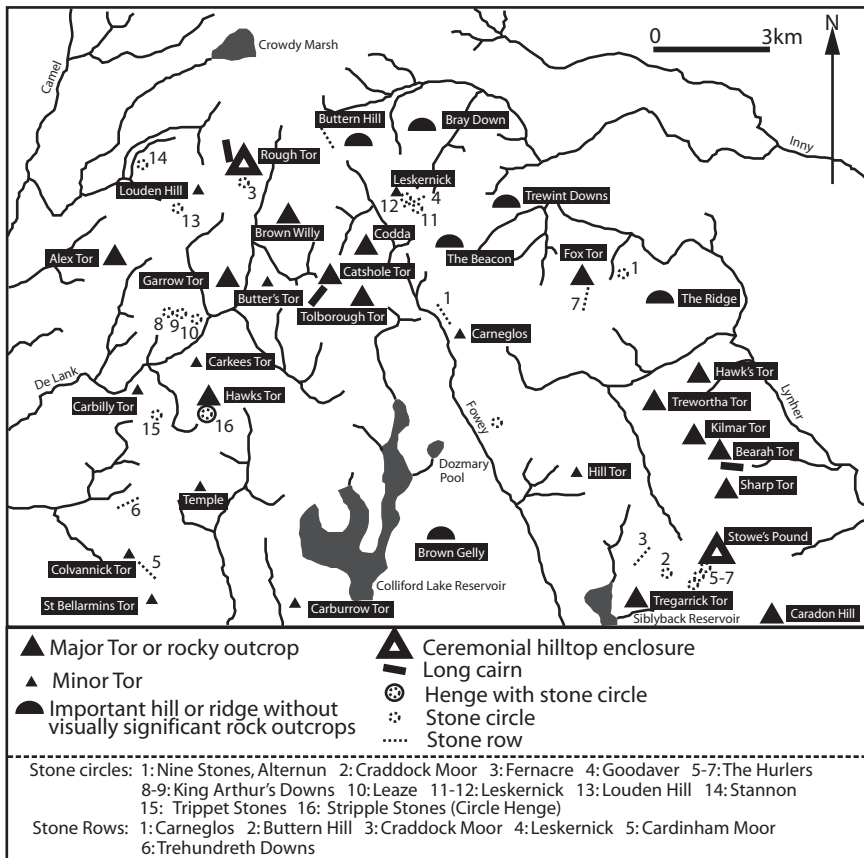


FIGURE 8.2 Distribution of earlier and later Neolithic monuments on Bodmin Moor in relations to tors and hills.

Although occupying a rather small total area, the most dramatic and memorable landscape features of Bodmin Moor are the bold grey-coloured craggy granite hill and ridge summits with their fantastically weathered tors and surrounding boulder (clitter) spreads. Locally visually dominant summits with rock stacks or tors are found all over Bodmin Moor. Some of these, such as St Bellarmin's Tor and Colvannick Tor in the southwest, have a local significance only as landmarks. Others, such as the two highest peaks in the northwest of the Moor, Brown Willy and Rough Tor, and Trewortha, Kilmar, and Sharp Tor in the southeast, form distinctive silhouettes visible on the skyline from far away. Some of the most impressive and unusually weathered individual rocky outcrops occur on the NE-SW-running ridge of Rough Tor and on Stowe's Hill in the southeast. These include the Cheesewring (Figure 8.3), the weirdly formed altar-like stones of Showery Tor (Figure 8.4), the summit of Rough Tor itself (Figure 8.5), possessing long linear cleavage runnels and cave-like formations around its base, and outcrops on Stowe's Hill (Introduction to Part IV). When one moves through the landscape, all these rock outcrops, of course, look somewhat different according to the place and direction from which they are seen. Nonetheless, the highest and most significant hills and



FIGURE 8.3 Cheesewring Tor at Stowe's Pound, southeast Bodmin Moor.



FIGURE 8.4 Showery Tor cairn at the end of the Rough Tor ridge, northwest Bodmin Moor.

ridges with tors, such as the stepped spinal ridge of Brown Willy (Figure 8.6), the pyramidal outcrop of Sharp Tor, and the linear tapering outcrops of Kilmar or Bearah Tor, have a relative ‘constancy of form’ with rock shapes on the skyline that are utterly distinctive and instantly recognizable to a person who knows the Moor. The spatial relationships between the rocky outcrops on the Rough Tor ridge, by contrast, differ far more dramatically according to one’s perspectival relationship to them in the landscape. From the south, Rough Tor appears as a single craggy eminence; from the west, the summit is peculiarly indented and notched; from the east and the north, it appears as a series of rock stacks broken up by flat planes. Today these tors, especially the Cheesewring and those in the Rough Tor area, are a constant source of fascination. Visitors assiduously climb up to them and on them, walk between them, gaze at them, photograph them, and enjoy (the frequent damp mists permitting) the panoramic vistas. The human fascination, a sense of awe and wonder for these places—notwithstanding a modern rational geological explanation for their formation—continues.

In this mosaic of marsh and granite, streams, ridges, and plateau areas, long coarse grassland dominates. Bracken, gorse, and heather cover only limited areas on the steeper hillslopes and among the clutter. The Moor today is still much



FIGURE 8.5 Rough Tor summit. Tor cairns surmount the rocks to the right of the picture, and cairn material is visible below the rocks.



FIGURE 8.6 View to Rough Tor (on the skyline to the right) at the terminal of the Leskernick stone row. The ridge of Brown Willy is to the left.

as Malim described it sixty years ago (Malim 1936). There is virtually no natural tree cover. Recent conifer plantations now cover extensive areas of some parts of the Moor. The extreme exposure of the Moor to blustery winds has

always limited woodland development. Environmental evidence (Brown 1977; Caseldine 1980; Walker and Austin 1985) indicates that, throughout the prehistoric past, trees were substantially confined to the more sheltered valleys, with the rest of the landscape being dominated by grassland and heath as today.

The earliest radiocarbon date for post-glacial sediments on Bodmin Moor is from Hawks Tor (7700 B.C.E.). The pollen record indicates the presence of juniper scrub and crowberry heath, with no woodland development at a time (see below) when early Mesolithic communities had already begun to exploit the area (Brown 1977; Caseldine 1980; Jacobi 1979). At about the same time, birch woodland may have colonised more low-lying areas but was never very extensive. As the climate warmed up around 7000 B.C.E., hazel and oak became the dominant woodland species. During the late Mesolithic, this woodland expanded to its maximum extent but never covered the more exposed and higher parts of the Moor, which were still dominated by grassland (those areas above c. 200–250 m). Tree and shrub pollen never amounted to more than c. 50–70% of total regional pollen counts throughout the entire post-glacial sequence (Caseldine 1980: 10). Caseldine notes that variations in plant community structure would be closely linked to topography, and ‘one distinctive characteristic of the woodland communities, especially at higher altitudes, would have been their openness, and, possibly, their low species diversity’ (*ibid.*: 10). Even given what could be expected to have been a limited woodland cover over the Moor, as a whole there appears to have been a decline in tree cover after c. 3000 B.C.E. (Brown 1977) caused by widespread woodland removal, which must have taken place in more low-lying locations. Excavations under Bronze Age cairns at Colliford in the centre of the Moor provide evidence for only very restricted woodland cover after c. 1500 B.C.E. along the lower sides of valleys (Caseldine 1980: 13). Caseldine suggests that ‘following the construction of the barrows at Colliford the valley probably remained as open moorland similar to that found today. Under the moorland cover of *Molinia*, *Calluna*, *Erica*, and *Ulex* the organic horizons of the soils developed into thicker peat layers’ (*ibid.*). Similarly, on East Moor cairn, construction was preceded by woodland clearance (Brisbane and Clews 1979: 49) without subsequent regeneration.

The climate of Bodmin Moor has altered significantly from the earlier Mesolithic to the present day. The ameliorating post-glacial climate reached a maximum during the late Mesolithic, when mean annual temperatures were a few degrees centigrade higher than today. Summers were both significantly drier and warmer, with marsh and bog areas being less extensive than today. Lower water levels at Dozmary Pool, a focus of earlier Mesolithic activity (Jacobi 1979), may indicate this as well as the presence of carbonized material in the peat deposits, probably resulting from natural fires (Caseldine 1980: 10). Deteriorating environmental conditions with a change to cooler and wetter

summers seem to have occurred, as elsewhere in Britain, toward the end of the Bronze Age, when many settlements appear to have been abandoned.

THE MESOLITHIC: DEVELOPING A SENSE OF PLACE C. 8000–3500 B.C.E.

During the Mesolithic, Bodmin Moor was probably sporadically inhabited by perhaps no more than three or four bands of hunter-fisher-gatherers on a seasonal basis. Jacobi has proposed that Mesolithic populations in the southwest of England concentrated on the exploitation of the rich marine resources of the coast during the bulk of the year. These resources may have included estuarine areas in the late spring and early summer (shellfish, salmon, seal, fish, and sea birds) and rocky coastline areas during the autumn and early winter (shellfish and seabirds), late winter, and early spring (fish and seals). He proposes that the ‘pull’ of upland inland areas such as Bodmin Moor would have been greatest during the summer, when the red and roe deer would move up into their summer pasture lands (1979: 81). Although distances between the coast and Bodmin Moor are short—c. 8 km to the nearest coastline from the northern fringes of the Moor, and roughly twice this distance to the south—this proposal remains plausible.

The Mesolithic evidence from Bodmin Moor consists of flint scatters, and our knowledge of the distribution of sites is limited, because systematic survey by fieldwalking is not possible in an area of substantially unploughed rough-grazing land. The *Gazetteer of Mesolithic Sites* for England and Wales (Wymer and Bonsall 1977) records only five findspots from the whole of Bodmin Moor. Only one of these places, Dozmary Pool, in the heart of the Moor, consists of a substantial flint assemblage with a predominance of earlier microlith forms (Berridge and Roberts 1986: 28–29 with earlier references; Jacobi 1979: 51–54). Large numbers of Mesolithic flint scatters have recently been documented from along the eroding shorelines of the Colliford, Crowdy Marsh, and Siblyback reservoirs (Berridge and Roberts 1986; Trudgian 1977a, 1977b). Herring records two flint scatters of indisputable Mesolithic date at Brown Willy East and Carkees Tor in the northwest of Bodmin Moor found during fieldwalking between 1981 and 1984 (Herring and Lewis 1992: 12). Jacobi notes that the predominantly late-nineteenth-century flint collections from Dozmary Pool contain material mixed with that from other possible sites on higher ground to the west and east of the main lake and lakeshore collection. Herring and Lewis (1992) have recently documented thirty-six flint scatters—all 5 m or less across, most of which appear to be of Mesolithic date—from an area of only c. 5 ha on Butterstor, a small rounded hill in the

middle of the Moor, c. 5 km. to the northwest of Dozmary Pool. This is the only area of disturbed soils to have been systematically surveyed, after ploughing in advance of forestation. Single microliths and other flint material are also documented from the old land surface underlying barrows excavated in advance of the construction of the Colliford reservoir (Griffith 1984: 78–79), and a microlith was found in trenches dug to examine later prehistoric field boundaries at Stannon (Herring and Lewis 1992: 10). This represents the sum of our published knowledge of Mesolithic findspots on Bodmin Moor (Figure 8.1).

What is to be made of the distribution of these finds, and what indications might they provide about the symbolic geography of the Mesolithic? If the only small area to have been systematically surveyed—Butterstor—is at all representative of the overall density of Mesolithic sites across the Moor, one might expect figures approaching an astonishing 140,000 flint scatters, most no doubt representing brief single-episode use for perhaps a few minutes or hours (Herring and Lewis 1992: 9). Dozmary Pool must, by contrast, represent one of a much smaller number of larger, more regularly occupied locales, perhaps intermittently forming a focus for hunting activities throughout the summer months. Here microlithic forms indicate a date of initial occupation and use as early as the first half of the eighth millennium B.C.E. The findspots documented around the Crowdy, Siblyback, and Colliford reservoirs show extensive evidence of both earlier and later Mesolithic activity (Berridge and Roberts 1986: 29).

The Mesolithic populations left no deliberate permanent and tangible trace of their activities and occupation of the Moor. The majority of Mesolithic flint scatters appear to mark paths of movement through the landscape. The Butterstor scatters appear to mark a mix of regularly used tracks and less structured wanderings away from them. Others have been discovered in disturbed ground on contemporary animal and vehicle trackways, fords, and gateways, and along river valley edges. Those places in the landscape that would appear to have had a particular symbolic and sacred importance are the inland lake of Dozmary Pool, springheads, marsh areas, and the more prominent craggy tors.

It seems reasonable to propose that all areas of Bodmin Moor were exploited during the Mesolithic on a seasonal basis, with bands moving inland from the coast in the summer and criss-crossing the Moor with ungulates, principally red and roe deer, providing the main exploited animal resource. Movement up to and into the Moor would almost certainly have taken place by following the routes provided by the main river courses and their tributaries, such as the Fowey, De Lank, Camel, and Lynher. It is interesting, in this respect, to note that the Mesolithic flint scatters found on the eroding edges of the present-day Colliford and Siblyback reservoirs represent relatively high

locations on the open moorland edges of (now-flooded) river valleys, which would have had fairly substantial forest and scrub cover along their edges, providing browse and protection for game, in contrast with higher surrounding areas of the Moor, with substantial areas of open heath and grassland. The river valley edges provided obvious paths of movement for hunter-gatherers following and exploiting game and fish and plant foods. The flint scatters found around the Crowdy Marsh reservoir are all on the margins of a former bog (Trudgian 1977b: 21), and a significant number are concentrated near to where three ancient trackways converged on a ford crossing a tributary of the Camel, draining the marsh (Trudgian 1977a: 17). Dozmary Pool is situated 700 m to the east of the river Fowey, whose remarkably straight-sided valley effectively cuts Bodmin Moor in two. Both the St Neot river, draining the Colliford reservoir, and that flowing from the Siblyback lake are tributaries of the Fowey, while the Crowdy Marsh reservoir is just 2.5 km. to the north-west of its source. Mesolithic findspots at Codda and Palmer's Bridge seem to occur at fords (the given grid references to findspots are only general and inexact) across the river, while three others occur near to stream heads feeding the Fowey or the St Neot river. This situation strongly suggests, as might well be expected, that the Fowey and its tributaries acted as a major axis of movement from the south coast to the heart of Bodmin Moor.

Up to this point I have largely been considering an 'economic' geography of the chase and the catch, but the occurrence of Mesolithic findspots at stream heads, fords, around marshy areas, and along the upper edges of river valleys seems to have been important in a symbolic geography of place. In the light of this, the large concentration of finds in and around Dozmary Pool takes on an added significance. This inland lake was the only substantial body of open water on Bodmin Moor. It was clearly an important seasonally occupied site and was one of the earliest to be occupied. The blue-black high quality flint found here, as elsewhere on Bodmin Moor, consists of transported material from local beach deposits, almost certainly derived from the south Cornish coast. Longer distance transportation of the material from farther away, as has sometimes been suggested, seems unlikely, because the cortical surfaces display 'the characteristic clattering associated with beach pebbles' (Berridge and Roberts 1986: 15). Discussions of Dozmary Pool have concentrated on typological analyses of the flint assemblages. Jacobi records a total of 60 microliths and 115 scrapers as being present and argues for the importance of hide processing (Jacobi 1979: 54). Whatever the economic activities, Dozmary Pool an isolated body of water, lying in a flat hollow among the hills, must have been a place of considerable metaphoric significance to Mesolithic populations. The many Arthurian and earlier legends associated with the place indicate this significance: a giant chieftain who bade his daughters slay

their husbands on their marriage night had his hunting grounds nearby. This was where Bedivere threw the sword Excalibur, seized by a hand that withdrew it to the bottomless depths. It was an *inland* lake, or sea, around which artefacts made from *beach* pebbles were deposited. At least some of these may have been votive offerings rather than simply just lost or discarded artefacts. People were 'drawing out' the hidden meaning of the pool as a manifestation of a sea in the land.

For anyone in the centre of the Moor, the rocky outcrops, ridges, hill-tops, and tors would have provided natural vantage points to hide and wait for game and survey the land below. They would have been important focal points. Together with the river valleys, they provided an indispensable means for human orientation in the landscape. In the past, as today, the tors would have been named and significant places, invested with meaning, between which people moved. Ethnographic studies have shown that, over and over again, sacred places are intimately connected with striking 'natural' landscape features. One publication (Carmichael et al. 1994) gives an outline of the significance of natural landscape features as sacred places with examples taken from all over the world. Although the myths, meanings, and cosmic and symbolic associations of these places differ from example to example, what remains constant are the kinds of topographic features that become invested with a sacred and metaphoric significance: mountain peaks, unusual rocks, caves, springs, lakes, waterfalls, rivers, bogs, large trees. Many of these places are not marked by any human constructions or activities that would be visibly recognizable to an archaeologist in the field, although at most offerings were made.

It is not hard to imagine that the fabulously weathered tors would have been great sources of symbolic potency and power, signifying a wide range of enduring relationships among people, the land, time, and space. We might expect, should excavation take place, substantial evidence of Mesolithic activity in and around them, perhaps much greater than that already documented on the rounded hilltop of Butterstor, lacking any impressive craggy eminences. The tors were, in effect, non-domesticated 'megaliths', or stone monuments, sculptured by the elements and imbued with cultural significance in the Mesolithic imagination in the forms of stories, myths, and events of cosmological import. Lacking any tangible material evidence at present, we cannot, of course, recognize exactly which of the tors and rock outcrops had a special significance to Mesolithic populations, but it seems likely that particularly striking topographical features and high craggy eminences would have been of great importance. With the advent of monument construction during the Neolithic and the Bronze Age, it becomes feasible to retrodict (see sections below) where at least some of these places were.

THE EARLY AND MIDDLE NEOLITHIC C. 3500–C. 2300 B.C.E.

Evidence for the earlier Neolithic occupation of Bodmin Moor is almost as slight as for the Mesolithic. There are no traces of ‘domestic’ settlement apart from flint scatters, as at Dozmary Pool, where Neolithic flintwork was recovered together with Mesolithic and Bronze Age material. Axes from Cornish Neolithic stone axe factory sites are virtually absent from Bodmin Moor (Mercer 1986a: Fig. 2), contrasting with a scattered and sometimes quite dense distribution in other areas of Cornwall, although this situation may be partially attributable to lack of excavation and ploughed areas amenable to field survey.

The beginnings of woodland clearance, associated with possible traces of cultivation, start in the late Neolithic. At Stannon Down in northwest Bodmin Moor, parts of a field-wall system, a greenstone axe and hoe, provide physical evidence of land clearance at such a date (Mercer 1978, 1986a: 38). Ashbee (1982: 12) and Mercer (1986a: 40) have pointed out that distribution maps of Mesolithic and Neolithic sites and findspots in Cornwall are virtually identical. It appears as if economic activities throughout the bulk of the period continued the pattern of seasonal summer exploitation of the moorland established in the Mesolithic. Consequently, it is not surprising to find that exactly the same locales have a consistent representation of both Mesolithic and Neolithic flintwork. The major change occurring during the earlier and middle Neolithic on Bodmin Moor was not of an economic character but an ideological one—the beginnings of monument construction in the landscape. There are two distinct classes of ritual and ceremonial monuments attributable to this period: long cairns and hilltop enclosures (Figure 8.2).

Long Cairns

Three long cairns have been recently documented from Bodmin Moor—Louden in the northwest, Catshole in the central part of the Moor, and Bearah in the southeast (Herring 1983; Johnson and Rose 1994: 24–26). Others are probably still to be found. In addition, an impressive chambered tomb of ‘portal dolmen’ type, Trethevy Quoit, is situated just beyond the southeastern edge of Bodmin Moor, 3.7 km. to the south of the Cheesewring and Stowe’s Pound enclosure (see below).

The Louden cairn is orientated N-S along a contour on the lower eastern slopes of Louden Hill, with the land rising to the north and west on the edge of a marshy area to the east. The long axis of the cairn is not orientated in relation to any visually important tors or other landmarks. The visually dominant

feature of the surrounding landscape is the heights of Rough Tor, towering over the cairn to the northeast (see colour plate 7).

The Catshole long cairn, orientated NNE-SSW, is of trapezoidal shape, with the wider end facing north. It is also situated along a contour, toward the bottom of a slope, with a rock-strewn area of moorland, Catshole Tor, rising above it to the north and west. The broader northern end, with the fallen remains of facade stones, points toward an impressive weathered tor that uncannily resembles a dolmen chamber (Figure 8.7).

The Bearah long cairn is enclosed within a valley, with the land rising up beyond it on all sides, except to the east. Like the Louden and Catshole cairns, it is situated on a slope but is orientated west-east, with the broader end incorporating the remains of a chamber situated down-slope toward the east. Looking to the east along the cairn axis, one has extensive views. By contrast, the western and higher end of the cairn is aligned toward a series of dramatic weathered tors at the top of the slope. Views to the north are restricted by the west-east ridge of Bearah Tor, with its series of linearly arranged rock outcrops leading up to the terminal rock stacks, toward which the western end of the long cairn points.

The lineal alignment in the landscape of the Catshole and Bearah long cairns is such that at both sites one end points toward impressive tors, while



FIGURE 8.7 View along the long axis of the Catshole Tor long cairn up to Catshole Tor on the skyline above. A Bronze Age tor cairn surrounds the cairn.

at the other end there are much more extensive and open views across the landscape. Although there is no such precise alignment in relation to a localised tor at Louden, the tor is situated just below Rough Tor, one of the most visually impressive landmarks on Bodmin Moor surmounted by a ceremonial enclosure, which is probably of Neolithic origin. Its topographic location on a slope is similar to that of the Catshole and Bearah cairns, with extensive views across the landscape along only one cairn long axis, to the south. These three long cairns are, then, all situated *below* impressive tors to which the *higher* end of the long axis of two of them points, thus serving to highlight a specific symbolic relationship between cultural monument and natural rock outcrop and to emphasize the cultural significance of the tors, which had, almost certainly, already been established, or encultured, during the Mesolithic. The construction of the long cairns served to formalise, objectify, and make explicitly *visible*, for the first time, a relationship between social Being and the physical form of the landscape, which had already existed in human *thought* for thousands of years. The building of these long cairns thus served to establish in a material and enduring form a relationship between ritual practices and the landscape. It indicates a new ideological concern—to stabilize a cultural relationship with significant features of the topography by freezing them in time.

Hilltop Enclosures

There are at least two hilltop enclosures on Bodmin Moor, Rough Tor in the northwest and Stowe's Pound in the southeast, which may have their origins in the Neolithic, although both were probably extensively remodelled during the Bronze Age. Excavation has taken place at neither site. Mercer (1981, 1986a: 52, 1986b), Johnson and Rose (1994: 48), and others have all stressed similarities in position and constructional form (the siting in the landscape, use of orthostats, presence of entrance gaps) between the Rough Tor and Stowe's Pound enclosures and excavated Cornish examples of proven Neolithic date at Carn Brea and Helman Tor. Both Carn Brea and Helman Tor were hilltop 'settlements' surrounded by massive stone walls enclosing a series of platforms on which traces of structures were found. At Carn Brea, a large assemblage of pottery, flint (including 750 leaf-shaped arrowheads), and stonework was recovered. The site clearly operated as an important regional centre, since a great many imported artefacts (principally pottery and axes) were found on site. More limited excavations at Helman Tor revealed an enclosure of remarkable similarity to that at Carn Brea, together with house platforms, flintwork, chert, and pottery.

The Rough Tor hilltop is made up of two extensive areas of dramatic rock outcrops and clutter, Rough Tor itself and Little Rough Tor, separated by a

flattish area approaching 350 m in length, now almost devoid of loose small surface stone but with many grounders or earth-fast boulders, some of considerable size. The hill crest is orientated NW-SE, with moderately steep sides sloping away to the north and south. A series of stone walls encircle the crest of the hill joining Rough Tor to Little Rough Tor, enclosing an area of c. 6.5 ha with a maximum width of c. 210 m.

On the northern side, there are up to four stone walls and two entrances (Figure 8.8). The entrance at the southwestern end is particularly elaborate, with a deep hollow passing through four lines of flanking and curved stone

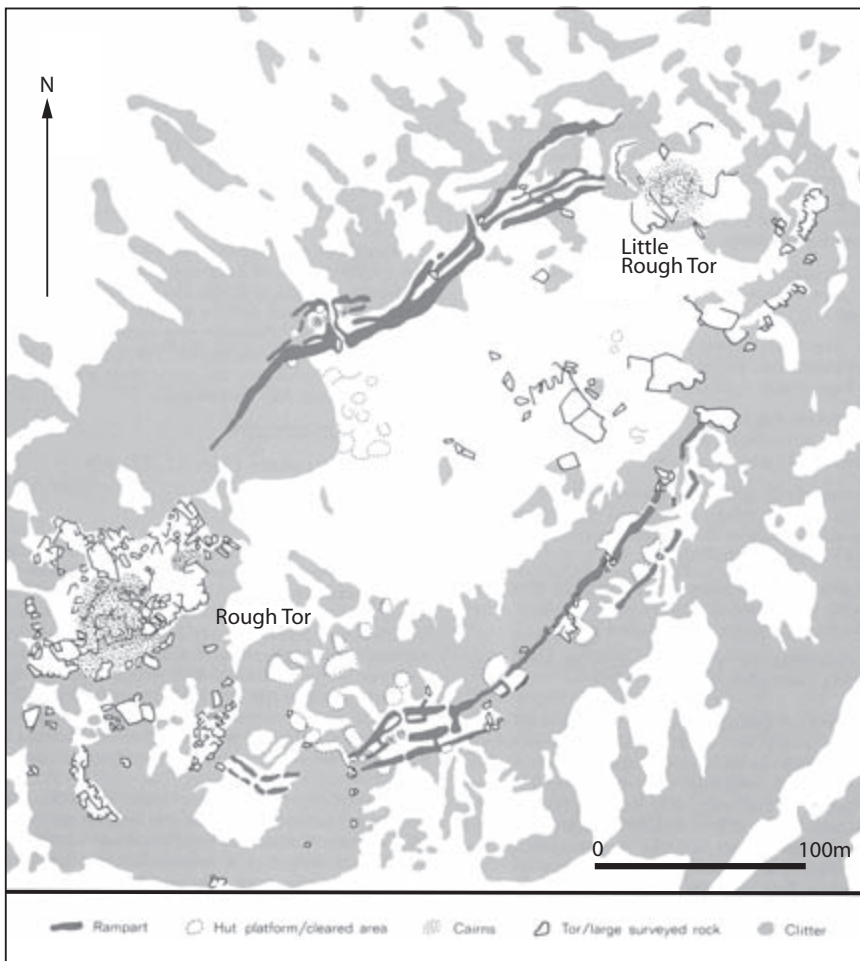


FIGURE 8.8 The Rough Tor enclosure (source: after Johnson and Rose 1994, Fig. 31).

walls. The southern walls comprise two main lines, incomplete where they meet dense areas of clutter at the northeast end of the enclosure. They are most elaborate in the one sector, with a clear entrance at the southwestern end near to Rough Tor. Inside the enclosure, two concentrations of oval house platforms occur, 3–7 m. in diameter, on sloping ground immediately beyond the western entrances, between the northern and southern walls. Otherwise, the interior appears devoid of any structures.

At Stowe's Pound, a massive stone bank, up to 12 m wide and 5 m high externally, encloses an area of about 1 ha, the highest part of Stowe's Hill, with coursed stonework and externally facing orthostats still upright and visible in places. The stone walls link up and incorporate a number of dramatic tors, with the Cheesewring Tor itself at the southern end, just outside the enclosure, in a kidney-shaped ring, with the ground sloping steeply away in all directions. Today there are no obvious entrances, but there may have been one in the south, an area now lost to the Cheesewring granite quarry. To the north, another series of walls enclose a 5-ha area, the rest of the hilltop. There appear to be two main entrances to the large compound, flanked by outworks of stone on the western and eastern sides, funnelling movement into it. Other small gaps along the compound walls may represent simpler entrances of lesser significance. Inside the larger compound, there are around eighty cleared platform areas, one stone-faced house circle, and two Bronze Age cairns in the northern sector.

The Rough Tor and Stowe's Pound enclosures share a number of features in common. In terms of altitude, lack of water, and extreme exposure to wind, few worse positions for a permanent settlement could be imagined. This situation, together with the lack of normal domestic house circles, common elsewhere on Bodmin Moor, the incorporation of the Cheesewring and other prominent tors in the Stowe's Pound enclosure banks, and the summits of Rough Tor and Little Rough Tor at the Rough Tor enclosure, all strongly suggest that both of these places were not normal domestic settlement sites. Both are particularly prominent locales dominating the landscape for miles around. They were meant to be seen, climbed up to, visited for ceremonial events, and then left. At Stowe's Pound, a feature of particular interest is the contrast between the 'permeable' larger and lower enclosure, with its circular platforms and cairns, and the smaller and higher 'impermeable' orthostatic faced walls of the smaller enclosure incorporating the tors, an area where activities would effectively be hidden from the larger enclosure and the rest of the landscape beyond. Both Rough Tor and Stowe's Pound would appear to be multi-period sites. At the latter, the smaller enclosure may have been built first during the Neolithic and the larger one, lacking any evidence for an orthostatic construction, added later during the Bronze Age.

Rough Tor and Stowe's Pound may be two of the very oldest ceremonial complexes on Bodmin Moor. There are a number of other possible hill-top enclosures, which may have Neolithic origins: Berry Down, De Lank, Tregarrick Tor and Notter Tor (Herring pers. comm.). The last two are, respectively, a short distance to the southwest and the northeast of Stowe's Pound. The association of the Rough Tor and the Stowe's Pound enclosures with the most visually impressive individual tors on Bodmin Moor, the former with Showery Tor and the Rough Tor summits and the latter with the Cheesewring, is of more than passing interest and makes them of particular significance. In addition, more solution basins (see Chapter 9) occur here on the high tors than anywhere else on Bodmin Moor (Bender, Hamilton, and Tilley 2007: 429ff.). All three Neolithic long cairns are situated within a few kilometres of these enclosures—Louden Hill, the largest, just below the Rough Tor summit.

During the earlier and middle Neolithic, then, the first stone monuments were built on Bodmin Moor. The positioning and orientation of the long cairns made symbolic reference to the tors but were located at a reserved distance. The hilltop enclosures incorporated tors in their stone walls. The long cairns provided a fixed spatial context for the playing out of local rites connected with the ancestors and ancestral powers. The hilltop enclosures, requiring much greater effort for their construction, may have acted as communal ritual centres. Both types of monument, I want to suggest, drew part of their power and significance through appropriating and making reference to landmarks that already had an embedded cultural significance going back to the Mesolithic. The past sacred powers of topographic space became metaphorically incorporated in the present of monument construction and use, which served to 'draw out' ancestral powers from the landscape, make them visible, and provide symbolic potentiality for their ritual control. The hilltop enclosures marked out the two most important hills at opposite ends of Bodmin Moor, joining and enclosing their rocky tors. The long cairns acted to focus attention to other tors along their axis. In the social context of an area of moorland that was only seasonally occupied by small numbers of people, the use of these monuments would be integrated with movement—patterns involving the dispersal and coming together of populations. The locations of these sites both harmonized and intervened in the topographical structure of the landscape, altering and transforming it, albeit to a limited extent, for good. For the first time, for an individual to possess personal knowledge of important symbolic and sacred topographic elements of the Moor was no longer sufficient in social discourse. Knowledge of these things was now both formalized and to be gained *through* the mediation of monuments. But the potential for social control remained slight and became more fully realized only during the late Neolithic and the Bronze Age.

THE LATE NEOLITHIC AND THE BRONZE AGE C. 2400–500 B.C.E

This period was one in which there occurred a quite massive cultural transformation of the landscape. While the material traces of earlier Mesolithic and Neolithic activity on the Moor are few, and found in restricted areas, monuments and settlements dating to the Bronze Age are almost everywhere and still show an indelible impact on the landscape today. There were four main developments:

1. For the first time, there was widespread evidence of permanent and substantial domestic settlement areas associated with enclosures, fields, the cultivation of the land, and localised woodland destruction.
2. Major ceremonial monuments were built—stone circles and stone rows.
3. Cairns and cairn cemeteries were constructed in a wide variety of locations.
4. Toward the end of the Bronze Age, major land divisions were constructed in some areas, restructuring access to, and experience of, both monuments and the land.

The account below considers each of these developments in turn.

Settlements and Landscape

Recent survey work on Bodmin Moor has identified 1,601 house circles, 2,123 clearance cairns, and 978 ha of prehistoric enclosures and fields (Johnson and Rose 1994: 7). Most of these are of presumed Bronze Age date, although some may date to the late Neolithic, and others may be later. Together with Bronze Age cairn building, this arrangement represents a massive cultural incursion on the landscape, compared with the earlier Mesolithic and Neolithic, and probably marks the first permanent settling of the Moor. The houses were mostly circular or oval in form, stone-built at the base with double or single-faced walling. The house roofs were probably conical, resting on the top of the ring walls and relying for support on central post holes (Bender, Hamilton, and Tilley, 2007; Mercer 1970). One entrance, usually facing in a southerly direction, is normal. Doorways are sometimes elaborated with the provision of external side-entrance porches, orthostatic door jambs, and a thickening of the surrounding walls.

Johnson and Rose document great variety in house dimensions, from smaller examples less than 4 m in diameter to massive ones exceeding 8 m with floor areas extending up to 120 sq m. Most houses are between 5 m and

7 m in internal diameter, providing space for perhaps four to five persons. Excavations at Stannon Down have provided evidence for timber radial subdivisions within the houses and shelf-like arrangements around the walls as well as internal wall recesses (Mercer 1970). It is likely that many of the smaller houses were used only seasonally, for storage, workshops, animal shelters, and so on, rather than as dwellings. Although some house circles are isolated, the vast majority are grouped together in settlements that vary significantly in size and morphology. Smaller settlements may have as few as five or six houses, probably representing a single homestead with one main and a number of ancillary structures, as at Catshole Tor. Larger ones, as at Rough Tor North, may have as many as one hundred or more. Some settlements contain houses of similar dimensions closely clustered together, as at Black Tor, where ninety-six houses (4–7 m internal diameter) occur in an area of only 3 hectares. Others are spread over a much larger area of land with considerable variation in house dimensions, with spatial arrangements suggesting a grouping of houses around compounds with one very large house being associated with a number of smaller ones. Some house circles are not linked with land boundaries and enclosures, but the majority appear to be. Walls frequently link houses, which are strung out like beads along them.

There is a very clear relationship between settlement areas and the local topography. The settlements and farmsteads are generally scattered along valley slopes and ridge edges, generally to the west, south, and east of prominent hills, with one or a number of settlements and farmsteads being associated with a particular area of higher ground. In the north of Bodmin Moor, in an area of only 60 sq km, at least twenty-two settlement areas occur. Based on house numbers, eleven of these (50%) appear to be major settlements, with twenty-five or more houses, and the remainder smaller farms or homesteads. Since it is unlikely that all the houses were in use at the same time, and some show evidence of having been robbed, differences in settlement size may be more apparent than real—that is, the largest settlements were probably in use for much longer periods. By far the greatest concentration of settlement occurs in the area around Rough Tor and Garrow Tor, where, in less than 10% of the total land area of the Moor, about one third of all house circles and cairns are located. Substantial settlements also occur to the south of Leskernick Hill, to the west and east of Louden Hill, on Brockabarrow Common, and on the western and eastern slopes of Brown Willy. The hills and tors are divided from each other by streams and bogs forming natural boundaries between settlement areas in the landscape. It would seem that there are strong symbolic associations between settlement areas and particular hills and tors. For example, Garrow Tor, surrounded by streams and bogs, is effectively a settlement island in the middle of the northwest of Bodmin

Moor, as is Rough Tor. In general, three landscape zones exist, each with different uses and associations:

1. Ridge and hilltops with rock outcrops and tors. Here large cairns occur, as well as the hilltop enclosures of Rough Tor and Stowe's Pound.
2. Sloping ground, often with clutter spreads, beneath the hilltops with settlement areas, enclosures, and small cairns.
3. Flatter plateau areas with major ceremonial monuments: circles and stone rows.

The organization of the landscape around Leskernick Hill in the north of Bodmin Moor exemplifies this arrangement well. The hill and settlement area is bounded off by the river Fowey to the west and by bog and stream areas to the south and east. On the top of the hill is a large kerbed cairn. This is set well away from the settlement area and is not visible from it. The settlement is situated on the lower southern and western slopes of the hill in a stony area with substantial clutter spreads. There are two clusters of house structures, each associated with small enclosures. The western part of the settlement has around thirty houses, that in the south, twenty. Four very small cairns and one cist are strung along the southern edge of the settlement area, and one occurs to the north. South of the settlement on a flattish plateau area is a major ceremonial complex consisting of two stone circles with a large cairn roughly equidistant to them up to which a stone row runs from the north (Figure 8.9). Most of the houses on the southern slopes of the hill have their entrances facing in a southerly direction looking down-slope and across to the ritual complex. Day-to-day life at Leskernick must have involved emerging through the doorway of a house, seeing the ritual complex below—the place of ceremonial processions and dancing grounds—and then moving in the landscape between settlements and fields, ritual monuments and cairns, all constantly serving to structure an individual's experience of the significance of place (see Bender, Hamilton, and Tilley 2007 and below).

Ceremonial Monuments: Stone Circles and Stone Rows

The circle and the line are two basic forms that could not be more contrasting in terms of their basic geometry. The former encloses and delimits a space for activity and event; the latter cuts a line across space, in a manner similar to the axis of the long cairn. Circles imply motion within and around, lines motion along. The stone row has a primary ontological identity as a link between places. The dominant metaphoric associations of the line of stones are with movement, transition, and change. The circle may suggest continuity, repetition, and reproduction, such as the ongoing cycles of days and nights and the

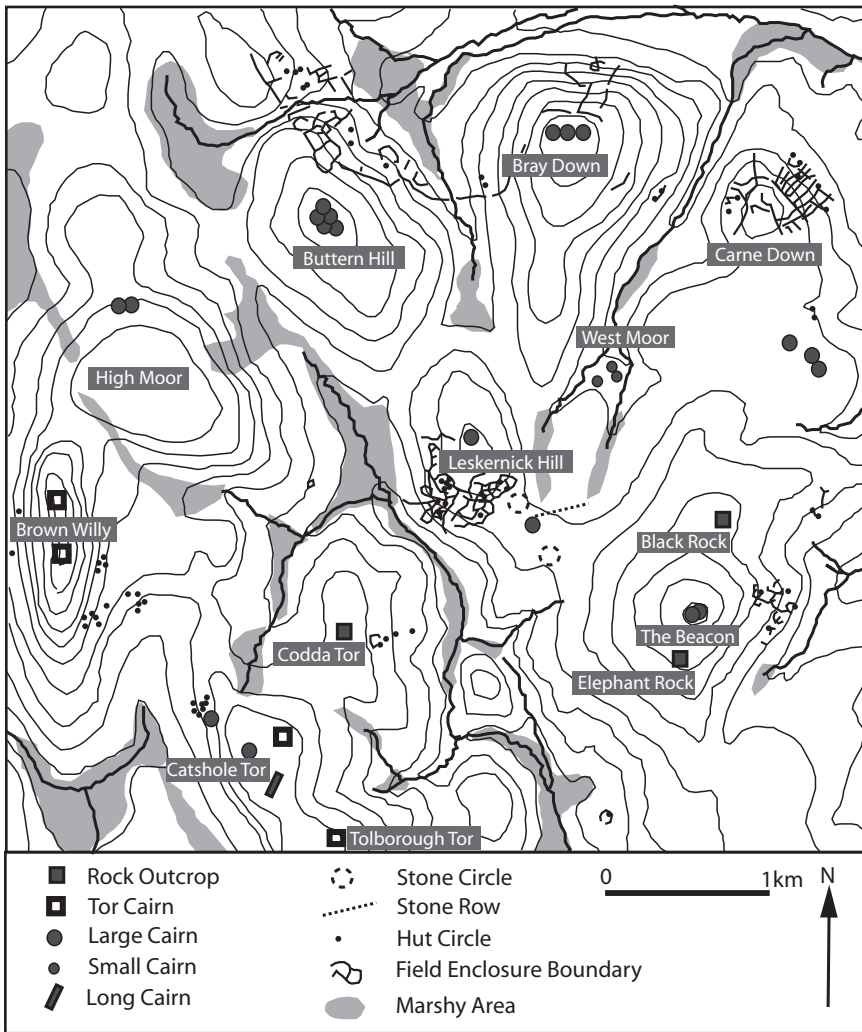


FIGURE 8.9 Cairns, ceremonial monuments, houses, and fields around Leskernick Hill (source: after Johnson and Rose 1994).

passage of the seasons. Both types of monument demarcated spaces to cross, to go beyond; spaces to move into and out of, move between, look at and look beyond. I argue that these were stones by which to learn, stones by which to remember, stones by which to orient, and stones by which to think. Learning, remembering, orientation, and thinking are all metaphoric processes requiring education and instruction. And such knowledge both empowered the

individual and offered the potential for structures of ritual authority to be effective. Controlling access to the ritual secrets of the stones enabled social inequalities to be established and then reproduced. I argue that one vitally important part of the ritual knowledge embodied in the stones, to be both conveyed and selectively 'released' by ritual specialists, was knowledge of the landscape and the spirit powers embedded in it. During the earlier and middle Neolithic, specific features of the topography became referenced for the first time through monument building. This relationship, involving the alignment of a cairn on a tor, or the building of a hilltop enclosure, was not particularly complex. During the late Neolithic and the Bronze Age, this same process was extended and transformed through the process of round cairn construction and use. It also took on a variety of different forms and achieved its most subtle expression at the major ceremonial and processional sites: the stone circles and stone rows.

Stone Circles

Sixteen stone circles are now known on Bodmin Moor (Barrett 1980; Barnatt 1989; Burl 1976: 115–122; Johnson and Rose 1994: 31–33; Tregelles 1906). Only three have been partially excavated. The northern circle at Leskernick has been dated to the early Bronze Age, c. 1600 B.C.E. (Bender, Hamilton, and Tilley 2007: 88–89). The other stone circles may be of the same date, or earlier in date, being constructed toward the end of the late Neolithic and in the earlier Bronze Age, but they likely were in use throughout the period. Most were probably built in tandem with the earliest phase of permanent settlement on Bodmin Moor. They are distributed throughout the area, except in the southwest, and vary quite considerably in terms of diameter and form, stone dimensions, numbers of stones, and the sizes of gaps between them (Table 8.1; Figure 8.2). At least two of the circles have internal central stones, and nearby groups of menhirs are almost certainly associated with the triple Hurlers rings and the Stannon circle. The Strippel Stones is unique: a circle henge with a ring of stones and central stone surrounded by a ditch with an external bank cut through by a single entrance to the WSW. Most of the stone circles have an average stone height of around 1 m, although those at the three Hurlers circles, the Trippet Stones, and the Strippel Stones are considerably higher. Apart from Leaze and the Trippet Stones, where stone height is exceptionally even, the other circles display considerable variation. Higher stones are usually in the southern sectors of the circles. Barnatt suggests that some of the variation in stone height might be the result of systematically grading large stones opposite smaller ones (Barrett 1980: 28). Only the central circle of the Hurlers complex is constructed from dressed stones.

Table 8.1 Morphological characteristics of the stone circles on Bodmin Moor. Map Numbers refer to Figure 8.2. Max. D: Maximum diameter of circle; St. No.: Estimated original number of stones. St. Int.: Estimated distances between stones; CS: Central stone present; Height ranges: Variation in height of stones. Highest stones: Sector of circle in which the highest stones occur (data from Barrett 1980; Barnatt 1989; Burl 1976).

Name	Map	Max. D	St. No.	St. Int.	Shape	CS	Height Ranges	Highest Stones
Nine Stones	1	15.2	12	4.9–3.0	Regular	?	1.0–3.0	-
Craddock Moor	2	39.3	27	4.9–4.2	Regular	-	0.8–1.5	-
Fernacre	3	46.0	77–95	2.5–1.2	Irregular	-	0.3–1.35	-
Goodaver	4	32.7	30	5.6–4.6	Regular	-	0.8–1.35	-
Hurlers NE	5	34.7	29	4.1–3.5	Regular	-	0.9–1.55	SSE
Hurlers Central	6	43.5	29	5.1–4.3	Regular	+	0.9–1.70	S
Hurlers SW	7	32.8	29	3.8–3.2	Regular	-	1.05–1.65	SE
King Arthur's Downs W	8	23.5	16–23	?	Irregular	-	0.7–1.5	SSE
King Arthur's Downs E	9	23.2	16–22	?	Irregular	-	0.5–2.1	SSE
Leaze	10	24.8	22	3.9–3.1	Regular	-	1.0–1.15	-
Leskernick S	11	30.6	31	3.5–2.7	Regular	-	0.7–1.2	-
Leskernick N	12	23.0	28	?	Regular	-	0.3–0.8	S
Louden Hill	13	45.5	33–39	5.1–3.2	Regular?	-	0.4–1.45	S
Stannon	14	42.7	71–82	2.5–1.2	Irregular	-	0.3–1.15	-
Trippet Stones	15	33.0	26–27	4.1–3.6	Regular	-	1.05–1.45	-
Stripple Stones	16	46.3	28–29	5.6–4.6	Irregular	+	1.05–2.75	SE

Taking into account numbers of stones, circle diameters, stone heights and intervals, provision of central stones, and circle shapes, one sees that it is evident that all the circles have unique individual characteristics, and attempts to divide them on typological grounds into clearly defined standardized groups is not possible. However, a basic division may be drawn between circles that are irregular in form and those that are regular, with a much greater concern for symmetry and careful site planning (see Table 8.1). Barnatt (1982, 1989) suggests that the irregular circles may simply have been laid out by eye to appear circular, whereas the construction of the latter probably involved the use of a central peg and rope.

Two circles in particular, Fernacre and Stannon, stand out from all the others in terms of three characteristics: their large diameters, the large number of generally small closely spaced stones, and the flattened shape in the northern sector, which may, in these two cases at least, have been a deliberate design element because of the importance of a north-south symbolic axis in circle placement and use (see below). All the irregular circles occur in the northwest of Bodmin Moor. Burl (1976) and Barnatt (1982) both suggest that they may be somewhat earlier in date, and if this is so, an increasing concern, through time, with symmetry would appear to have been a significant development.

Most occur together in closely associated groups. At King Arthur's Downs, two circles are adjacent, with a third circle, Leaze, only 300 m away to the southwest. In the southeast of Bodmin Moor, three circles, the Hurlers, occur along a rough northeast to southwest axis. Two circles at Leskernick Hill occur only 300 m. apart and are associated with a stone row. Of the eight other circles, all except two occur at relatively short distances from their nearest neighbours (< 1.5 km). Adjacent circles seem to have been deliberately constructed so as to incorporate important aesthetic contrasts. For example, the Hurlers circles, although having the same number of stones of roughly the same height, differ in size, with the central circle being considerably more spacious. The central circle is also the only one of the three constructed from dressed stones and that possibly possessed a central monolith. In addition, it is slightly irregular in comparison with the rigidly regular and symmetrical forms of the northern and southern circles. Excavations revealed that the central circle was covered with a floor of quartz crystals, and a possible paved way led between it and the circle to the north (Radford 1935, 1938).

Five geographical groups may be defined (see Figure 8.2), and processional ways, socially proscribed paths of movement through the landscape, must have formally connected them:

1. Stannon, Fernacre, and Louden Hill in the northwest.
2. King Arthur's Downs East and West, and Leaze in the west.
3. The Trippet Stones and the Stripple Stones, also in the west.
4. The two Leskernick Hill circles in the north.
5. Craddock Moor and the Hurlers in the southeast.

There are only two isolated circles, Nine Stones (Altarnun) and Goodaver.

Patterns of visibility between the circles are interesting to examine. From Louden Hill, both the nearby circles of Fernacre and Stannon can be seen (the latter only from the northern part of the circle). The two circles on Leskernick Hill are intervisible (see Figure 8.9), whereas the circle pair at King Arthur's Downs is not intervisible with Leaze situated down-slope. Craddock Moor and

the Hurlers, situated only 1 km. apart, are not intervisible (see Figure 8.10); however, the Trippet Stones and the Stripple Stones, 1.2 km. apart, are. The entrance of the Stripple Stones henge is precisely orientated so that an observer can look out to the west from the central stone through the gap in the ditch and bank down to the Trippet Stones.

The topographic locations of these circles are summarized in Table 8.2. These fall into four main groups:

1. Circles in exposed positions on or just below the tops of ridges or hills (three circles)
2. Circles on south-facing slopes immediately below impressive tors and hills to the north (six circles at four locations)

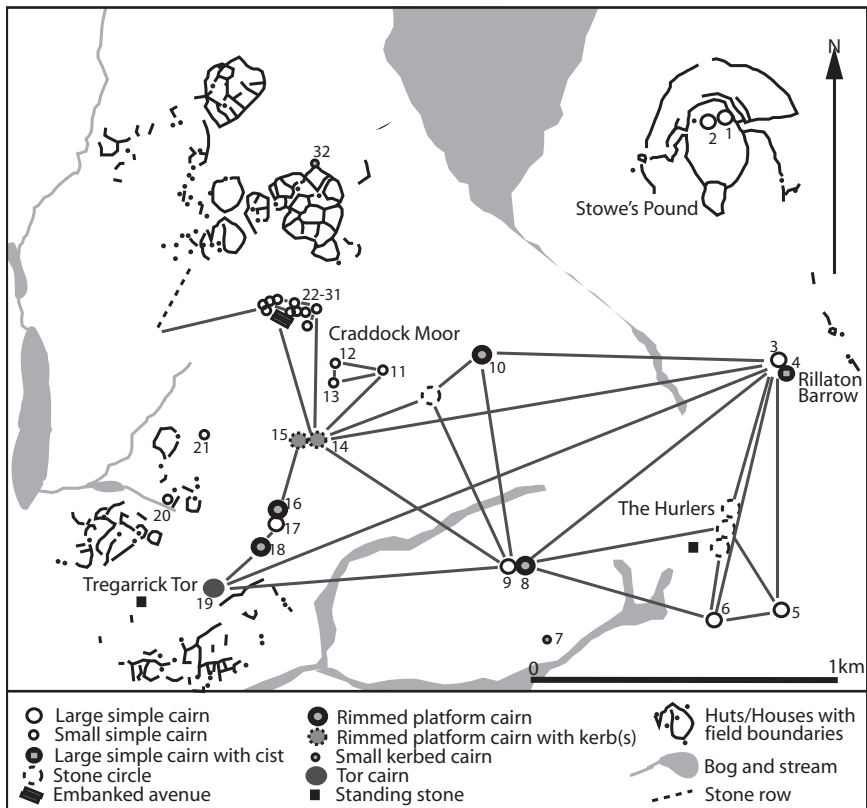


FIGURE 8.10 Intervisibility between the cairns and ceremonial monuments in the Craddock Moor area of southeast Bodmin Moor (map based on Johnson and Rose 1994).

Table 8.2 Topographic locations of the stone circles on Bodmin Moor. Map numbers refer to Figure 8.2.

Name	Map	Height	Notes on Location
Nine Stones	1	292	Exposed position in centre of flat plain enclosed by hills.
Craddock Moor	2	328	Near top of hill on gentle west-facing slope, land rising to east.
Fernacre	3	283	On southern slope of Rough Tor, land rising to north and east.
Goodaver	4	305	Exposed high point on north end of ridge.
The Hurlers	5–7	315	In dip on gentle north-south slope rising to Cheesewring Tor to north. Land rises up to south of circles.
King Arthur's Downs	8–9	260	On gentle slope, land rising to north and west.
Leaze	10	252	On gentle slope, land rising to north and west.
Leskernick S	11	293	Flat plateau, land rising to east.
Leskernick N	12	297	On gentle slope rising up to Leskernick Hill to northwest.
Louden Hill	13	284	Exposed position on top of east-west ridge. Land rises slightly to north.
Stannon	14	250	Flat moorland plateau.
Trippet Stones	15	242	Flat moorland plateau.
Stripple Stones	16	275	Southern slope of Hawk's Tor, land rising to northwest.

3. Circles on gentle slopes (three circles at two locations)
4. Circles on flat moorland plateau (three circles)

Comparing these locations with the five geographically defined groups of circles noted above, one is interested to observe that all groups of circles (except for Leaze and the pair on King Arthur's Downs) have locations that contrast greatly with one another. The variety found in stone heights, circle sizes, and so forth is mirrored by the circles' topographic locations. For example, the regular circle of Trippet Stones, with a virtually even stone height, is located on a flat moorland plateau, whereas its intervisible neighbour, the Stripple Stones circle henge, is irregular in form, with an uneven stone height,

and situated on a slope just below the rocky Hawk's Tor summit. Fernacre is on a gentle slope below Rough Tor (Figure 8.11); Louden Hill is on an exposed ridge and Stannon on a flat plateau. The differences in the placement of these circles seem to further emphasize their often considerable morphological differences, which indicates a desire to build on, draw out, and emphasize natural physical distinctions in the landscape, thus emphasizing ritual connotations and cosmic significance.

The spaces in which the stone circles are located, are for the most part, conspicuously distant from other monuments, cairns, and settlement areas. The prehistoric settlement areas (of any period or date) nearest to the circles are located at distances from 250 m to more than 1 km. In no case do these settlement areas impinge on the immediate area in which the circles are located, and in some cases settlement areas and circle are separated by streams or marshy areas. The major exception is at Leskernick, where the northern circle is less than 100 m from field boundaries (Figure 8.9). Here, and elsewhere, the fields seem to be deliberately laid out to respect a non-domestic zone around the circle. At Leskernick, there is a definite association between a stone row and two circles. The row is not aligned on either of these circles but runs up a



FIGURE 8.11 Fernacre stone circle with the Rough Tor ridge beyond seen from the south.

slope to end in a space roughly equidistant between them, a short distance to the northeast of a large cairn.

Despite this case, few cairns are located in the immediate vicinity of the circles. Only 14 cairns out of a total of 354 known for Bodmin Moor are found within a 250-m radius of the circles (Table 8.3). The frequency of cairns within a 500-m radius is similarly low. Considerably larger numbers occur within 1 km, but frequencies vary considerably from site to site, and very few are large or conspicuous. The area around the Hurlers circles is an important exception (Figures 8.12 and 8.10). Here, of a relatively low total number of cairns within a 1-km radius, 7 out of the 8 are large and/or complex in form. The exceptionally large Rillaton barrow is visible from the Hurlers on the skyline and is directly in line with the orientation of the three circles. As Barnatt (1982: 69) suggests, the circles would appear to be at the centres of reserved sacred spaces, but the size of such areas differs considerably: up to 1 km or more around the Trippet Stones and Stripple Stones, but much more confined spaces around others, such as Craddock Moor and Louden Hill.

All the circles are located only a short distance away from streams and substantial bog areas. Walking from one circle to another invariably requires crossing, or going round, these streams and bogs. It appears as if the natural boundaries formed by these wet areas may have played an important role in marking out the areas of sacred space in the landscape occupied by the circles (*ibid.*: 109). For example, the Stannon circle is surrounded by substantial marsh areas to the south, west, and east with streams flowing a short distance to the south and north. Large Bronze Age cairns to the south of the circle are located on the other side of the marsh (see Figure 8.13). Fernacre has bogs and streams to the north and west across which one must pass to reach areas with settlements and cairns and the nearby Louden Hill circle. The substantial Redmoor Marsh is just to the west of the Nine Stones, and another bog area occurs to its south. The circles at King Arthur's Downs and Leaze occupy a large and featureless undulating moorland area bounded by streams separating them from both cairns and settlement areas.

A special relationship exists between the circles and individual tors on Bodmin Moor. Table 8.4 shows the relationship between the circles and the nearest prominent tors in the surrounding landscape. All the circles are situated at a short distance, 2 km or considerably less, from the nearest tor. Some, such as the Hurlers, Fernacre, Leskernick Hill North, and Stripple Stones circles, are actually situated on the lower slopes of land immediately rising up to the tor. In all except three cases, the circles are situated to the *south* of these tors (see Figures 8.11 and 8.12). The second nearest tors are usually situated considerably farther away, and their directional orientation in relation to the circles is much more variable, and probably not significant.

Table 8.3 Frequency of cairns within a 250 m, 500 m, and 12 km radius of the circles. L/C = Large (>10 m diameter) or Complex (platform cairns, rimmed platform cairns with kerbs (large cairns with kerbs, tor cairns); Dir.: Direction from circle; H/L + Cairn located on higher (H) or lower (L) land than circle; NVis + Numbers of cairns Visible from within the centre of the circle (data from Johnson and Rose 1994 and field observations). Total number of barrows within each circle radius given revised downward (*) when the same barrows fall within the radius of more than one circle. Total % = percentage of all known barrows/cairns on Bodmin Moor.

Name	Map	250			500			1		
		m	L/C	Dir.	H/L	NVis	m	L/C	H/L	NVis
Nine Stones	1	0	-	-	-	-	2	1	EME; SW	H
Craddock Moor	2	2	1	NE; SW	H + L	1	9	3	NE; SW	H + L
Fernacre	3	0	-	-	-	-	1	0	NNW	H
Goodaver	4	1	0	SE	H	1	1	0	SE	H
Hurlers	5-7	2	2	S; SW	H + L	1	2	2	S; SW	H + L
King Arthur's Downs	8-9	0	-	-	-	-	1	0	SE	L
Leaze	10	1	0	NE	H	1	2	0	SW; NE	H
Leskernick South	11	1	1	NE	H	1	5	1	NE	H
Leskernick North	12	5	1	W; NW; SW; SE	H + L	1	6	1	W; NW	H + L
									SE; SW	

(Continued)

Table 8.3 Continued

Name	250			500			1						
	Map	m	L/C	Dir.	H/L	NVis	m	L/C	Dir.	H/L	NVis	km	L/C
Louden Hill	13	1	1	NE	H	1	16	3	N; NES	H + L	1	26	4
Stannon	14	2	0	SW	H	-	5	2	S; SW; SE	H	2	18	6
Trippet	15	0	-	-	-	-	1	1	N	H	1	3	3
Stones													
Stripple	16	1	0	W	H	-	1	1	W	H	-	1	0
Stones													
Total		16	6				43	15				103*	47
Total %		4					12					29	



FIGURE 8.12 The Hurlers stone circles seen from cairn 6 (see Figure 8.10). The Rillaton barrow is seen on the skyline to the right and the Stowe's Pound ceremonial enclosure to the left.

The majority of the circles are intimately related to a particular nearby tor. Pairs of associated circles, and sometimes groups of circles, share this symbolic association with a tor that is usually to the north. However, the nearest tor to any particular circle is in only three cases (Nine Stones, Fernacre, and The Hurlers) the most *visually dominant* tor on the skyline (Tables 8.4 and 8.5). In the others, it may be a tor up to 5 km or more distant. Again, the most visually dominant tor is located, except in the case of the Leskernick circles, to the north (between NE and NW). The location of a circle is related both to a nearby tor at a local level and also seems to make reference to a wider symbolic geography of place going beyond its immediate location.

The number of visually prominent tors visible from the circles in any direction is shown in Table 8.5. There may be as many as seven. The two highest points on Bodmin Moor, Brown Willy and Rough Tor, are each visible from ten of the circles (63%). The only circles from which *neither* of these peaks is visible are the three Hurlers situated in the far southeast of Bodmin Moor. Although Brown Willy is slightly higher than Rough Tor, the latter with its

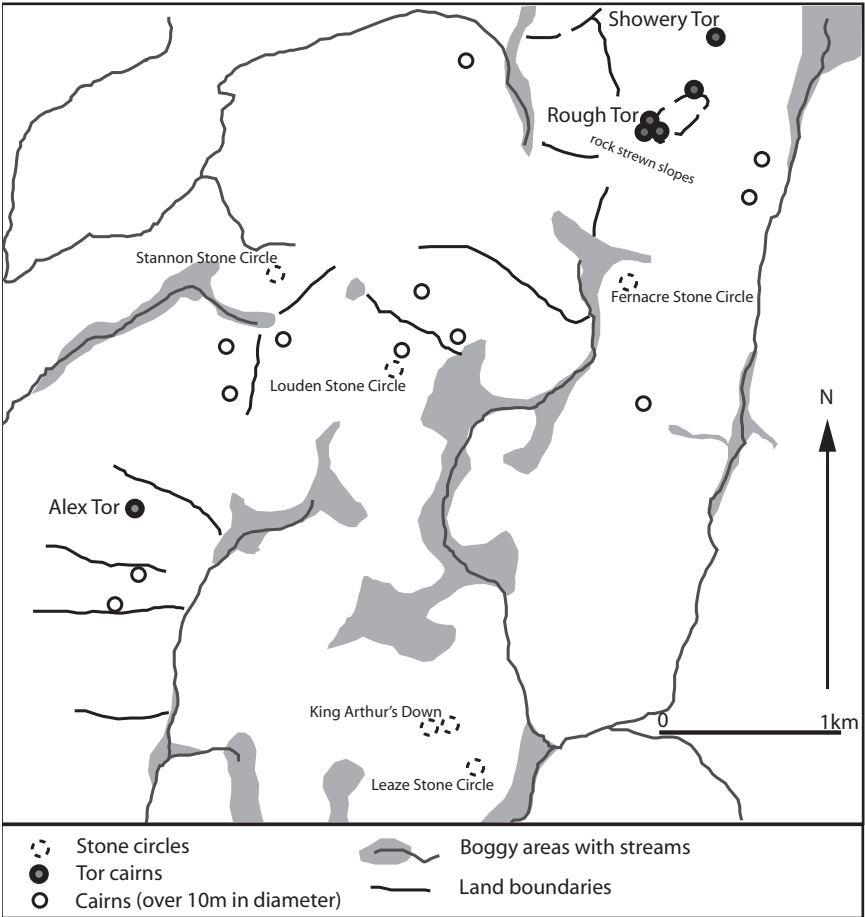


FIGURE 8.13 Distribution of large cairns (more than 10 m in diameter), ceremonial monuments, and land boundaries in the northwest of Bodmin Moor. The land boundaries around Rough Tor run up from boggy areas to the lower rock-strewn slopes of the ridge. Elsewhere they connect marshy areas or run up to them.

particularly jagged outline is visually far more prominent, dominating the skyline for many miles beyond and, as already pointed out, altering dramatically in form according to the direction from which it is seen. It is by far the most striking topographic feature from the circles situated in the north and west of Bodmin Moor, being visually dominant at nine (56%) of the circles. Only three circles in the north, west, or east of Bodmin Moor—Leskernick North and the isolated sites of Nine Stones and Goodaver—have a visual field dominated by

Table 8.4 Prominent tors in relation to the Bodmin Moor stone circles. Map Numbers refer to Figure 8.2. N Tor = Nearest Tor with impressive rock outcrops to circle; 2nd N Tor = Second Nearest Tor; V D Tor = Visually Dominant Tor seen from the circle. Straight line distances and directional orientation of the tors in relation to the circles are given.

Circle Name	Map	N Tor	Dist.	Dir.	2nd N Tor	Dist.	Dir.	V D Tor	Dist.	Dir.
Nine Stones	1	Fox	1.0	NE	Trewortha	2.5	SW	Fox	1.0	NW
Craddock Moor	2	Tregarrick	0.9	SW	Cheesewring	1.0	NE	Cheesewring	1.0	NW
Fernacre	3	Rough	0.7	N	Louden: Logan Rock	0.8	NW	Rough	0.7	N
Goodaver	4	Hill	1.0	SW	Trewortha	3.1	ENE	?	-	-
Hurlers	5-7	Cheesewring	1.0	N	Tregarrick	1.7	W	Cheesewring	1.0	N
King Arthur's Downs	8-9	Garrow	1.0	NW	Carkees	1.2	ESE	Rough	3.2	NNE
Leaze	10	Carkees	0.9	S	Garrow	1.2	NW	Rough	3.6	NNE
Leskernick S	11	Leskernick	0.7	NNW	Codda	1.1	SW	Rough	4.4	WNW
Leskernick N	12	Leskernick	0.4	NNW	Codda	1.1	SW	Brown Willy	2.6	W
Louden Hill	13	Garrow	1.6	SE	Rough	1.9	NE	Rough	1.7	NE
Stannon	14	Alex	1.4	SW	Rough	2.0	NE	Rough	2.0	NE
Trippet Stones	15	Carbilly	0.6	NW	Hawk's	1.1	NE	Rough	5.8	NNE
Stripple Stones	16	Hawk's	0.3	N	Carkees	1.2	NNW	Rough	5.5	N

Table 8.5 Landscape features from the Bodmin Moor stone circles. Map numbers refer to Figure 8.2. Dom Tor = Visually most Dominant Tor looking from the circle in any direction; DLV: Direction of Longest View(s) looking out from the circle; DSV: Direction of Shortest View looking out from the circle; RT: Rough Tor visible; BW: Brown Wily visible; NDT: Number of Tors visible from the circle looking in any Direction. Some observations from Goodaver were impossible because of the presence of plantations on most sides of the circle.

Circle Name	Map	Dom Tor	DLV	DSV	RT	BW	NDT
Nine Stones	1	Fox	S: NNW	E; SE	-	+	1
Craddock Moor	2	Cheesewring	S; SW	E	-	+	4
Fernacre	3	Rough	SW	N	+	+	7
Goodaver	4	?	SW	N	-	+	7
Hurlers	5-7	Cheesewring	SW; SE	N; S	-	-	1
King Arthur's Downs	8-9	Rough	W	NW	+	-	5
Leaze	10	Rough	SW	NE; W	+	-	4
Leskernick S	11	Rough	NE	NW	+	+	4
Leskernick N	12	Brown Willy	NE	NW	+	+	3
Louden Hill	13	Rough	SW; W	N; NE	+	+	7
Stannon	14	Rough	SW; W	NE	+	+	4
Trippet Stones	15	Rough	W	NW	+	+	5
Stripple Stones	16	Rough	W; SW	N	+	+	6

other tors. The most impressive view from the three Hurlers circles and that on Craddock Moor, on the southeastern fringe of Bodmin Moor, is the unusually weathered Cheesewring on Stowe's Hill. As in the earlier and middle Neolithic, Rough Tor and Stowe's Hill appear to have been the most important symbolic features of the landscape of Bodmin Moor, as experienced from the visual field of the stone circles.

Given the presence of tors to the north of most of the circles, one is not surprised that this is the direction of the shortest view from most of them. The longest view out across the landscape is in all but two cases to the west and the south (Table 8.5). This is a particularly interesting point, since the circles may have been entered and exited on the western and southern sides of the rings, which are typically emphasized in some way. The single entrance across the bank and ditch of the Stripple Stones henge faces WSW. Two menhirs, known as the Pipers, stand a few hundred metres to the southwest of the central

Hurlers circle, perhaps indicating a processional way to it. Burl has noted for Cornish stone circles in general that their tallest stones are frequently placed in the south or WSW (1976: 127). In the case of the Bodmin Moor circles, an individual leaving them and walking to the west or the south would experience a sweeping view across the landscape. Indeed, from the Hurlers and Craddock Moor, the sea and the south coast of Cornwall are visible in the far distance. Conversely, entering the circles from the south or the west would be to move into an area delimited by the stones, with a far more constricted view of hills and tors to the north and east, their jagged outlines serving as a spectacular backdrop to the events and ceremonies that took place within these rings of stone.

That visually prominent tors were to be visible from the circles and played a major role in their precise location is evident from a consideration of a number of specific instances. Had the Leaze circle, positioned on a slope, been located no more than 30 m or so to the south of its present position, the outline of Rough Tor would have been invisible. Locating the Louden Hill circle south and down-slope from its present position would have had a similar effect. From Leskernick South, the tip of Rough Tor is clearly visible, as it is from the southern part of the stone ring at Leskernick North. As one moves toward the centre of Leskernick North, Rough Tor becomes hidden behind a spur of Leskernick Hill. Here Rough Tor is visible, for the first or last time, only as one passes into and out of the stones in the south of the circle. Moving the stones no more than a few metres to the north of their present position would eliminate this perspectival effect.

The most interesting case concerns the Trippet Stones and the Stripple Stones (Figure 8.2: Nos. 15 and 16). These two circles are situated 1.2 km apart, the former just below Carbilly Tor to its north, the latter on the southern slopes of Hawk's Tor. From the centres of both circles, the view is dominated by the outline of Rough Tor. The circles are intervisible, with the entrance to the Stripple Stones henge positioned so that the Trippet Stones is visible through it to the WSW. Both circles have their longest visual field toward the west and shortest one to the northwest. The tip of Carbilly Tor, below which the Trippet stones is situated, is also visible from the Stripple Stones. Hawk's Tor forms a prominent landmark to the east of the Trippet Stones. Walking east toward the Stripple Stones from the Trippet Stones, one starts going down a fairly steep slope to a stream. After no more than *c.* 50 m, Rough Tor becomes lost on the skyline. Almost immediately afterward, Brown Willy becomes invisible, at about the same time as the Stripple Stones, a short distance before crossing a stream. After this natural landscape boundary has been passed, the only visible landmark ahead is the tip of Hawk's Tor. As one progresses up the slope, the tips of the Stripple Stones gradually come into view again, but both Rough Tor

and Brown Willy remain concealed behind Hawk's Tor to the north. The tip of Brown Willy becomes visible on the horizon again only 30 m or so before one reaches the entrance to the Stripple Stones. As one passes through the entrance to the Stripple Stones, across the bank, Rough Tor is still invisible. The tip becomes visible on the skyline only immediately after one crosses the ditch. It gradually becomes more and more prominent as one proceeds to enter the stone ring and moves toward the centre of the circle, with its large marker stone.

The entrance area of the Stripple Stones ditch both marks and emphasizes an important *transition point* in relation to the visibility of Rough Tor. It seems highly likely that the Stripple Stones is a multi-period site, the circle having been erected first and later the ditch and bank added to surround it. The effect of elaborating on the monument through the provision of ditch and bank and clearly demarcated entrance area was to emphasize on the ground that which was already known in the minds of the builders—that the significance of the monument was bound up with its relationship both to the Trippet Stones to the west and Rough Tor to the north. When one moves between these sites, in either direction, it is only just before entering the stone rings that Rough Tor becomes visible on the skyline. The major difference is that this transition point is marked on the ground at the Stripple stones, but not at the Trippet Stones.

In a series of publications, A. L. Lewis, who undertook one of the earliest systematic surveys of the circles in the northwest of Bodmin Moor, also argued that a special relationship existed between the locations of circles and prominent tors (Lewis 1883, 1892, 1895–1898, 1896). Lewis noted that the Stripple Stones, Garrow Tor, the Fernacre circle, and Rough Tor are all in a direct line almost due north-south and that the Stannon circle, the Fernacre circle, and Brown Willy are located along a west-east line crossing the first line at right angles. The Trippet Stones and the Leaze circle are also in line with Rough Tor just 12 degrees east of north. Noting that the circles are situated on relatively flat land with an apparent freedom of precise location, he adds that changing the positions of any of these circles by only 100 m or so would put them out of line and concludes: 'I see no escape from the conclusion that each of these circles was placed on the exact spot that it occupies, because that spot was in a certain direction from the hills I have mentioned' (Lewis 1895–1898: 111). He notes that Rough Tor is the only one of the hills visible from all these circles and that it 'may be considered to be the sacred hill of East Cornwall' (*ibid.*: 112, and see Barnatt 1982: Appendix H for results of a computer simulation study confirming the non-random nature of these alignments). The orientation of circles and prominent tors not only reinforces the association between cultural monument and natural landscape feature but also points to a far more

complex regional symbolic geography at work—that the relationship between monuments and landscape features was carefully planned and that, by implication, there must have been proscribed paths of movement between them. They could be approached and entered only from specific directions.

Lewis suggested that the siting of the circles might also be related to the rising and the setting of the sun in relation to horizon features. This theory has been carefully studied by Barnatt, who found evidence for thirteen significant solar associations between six different circles and six prominent tors (Barnatt 1982: 72–75). Brown Willy has the most orientations, marking equinox sunrise and sunset and midsummer sunset from six circles. The Stannon circle has a dramatic solar association with Rough Tor, the sun on May Day rising through a cleft on its western side and shining into the circle. In view of other well-attested examples of such basic astronomical alignments (for example, Stonehenge and New Grange), the absence of such alignments, rather than their presence, would be rather surprising. The stone circle with the greatest number of solar orientations, Goodaver, is located high up on a ridge top rather than below a tor. Its position, with panoramic views (before recent forestation) and with no tors nearby, is very different from that of the other circles. This position may suggest a different use for Goodaver than for the circles associated with tors. The large number of solar alignments from it suggests that it may have been a regional ‘calendrical’ circle that coordinated several festivals.

Stone Rows

Seven stone rows have recently been documented on Bodmin Moor (Johnson and Rose 1994: 32–34), found in all areas except the northwest. Since then, an additional stone row has been found by Peter Herring, while he was walking around Colliford Lake reservoir when water levels were exceptionally low (Herring 2008). The stone rows vary considerably in terms of length, alignment, stone dimensions, and distances between the stones (Table 8.6). Row length varies between 59 m and 560 m, and in all but one case, Trehudreth Downs, the row ends are intervisible. Two rows are aligned roughly west-east, the other five between NE-SW and NW-SE. Six of the seven rows have the southernmost end marked out by larger stones, terminal stone settings, or the provision of transverse stones, and the newly discovered stone row does so likewise.

None of the terminal ends of these rows is directly aligned with reference to visually prominent landscape features such as the granite tors. Fewer tors are visible from the rows than from the circles, and they are usually farther away (Table 8.7). They do not seem, then, to make immediate reference by virtue

Table 8.6 Stone rows on Bodmin Moor (after Johnson and Rose 1994: Table 6 with modifications). Map numbers refer to Figure 8.2. Figures given for row height above sea level, length, alignment, mean height of stones, mean distances between stones. Features, if any, of terminal ends noted.

Name	Map	Ht.	Length	Alignment	Mean Ht.	Stone Dist.	Terminal Ends
Carneglos	1	285	59	N-S	0.15	1.6	Tallest stone at S end
Buttern Hill	2	298	77	NNE-SSW	0.45	3.5	Tallest stone at S end
Craddock Moor	3	280	244	NE-SW	0.30	0.9	-
Leskernick	4	290	317	ENE-WSW	0.20	4.5	Tallest stones at W end
Cardinham Moor	5	250	380	NW-SE	1.30	14.0	Tallest stone at S end
Trehundreth Downs	6	260	460	ESE-WNW	0.25	4.5	Transverse stone at W end
East Moor	7	300	560	NNE-SSW	1.0	10.0	Ends not intervisible
							-

Table 8.7 Landscape features in relation to the Bodmin Moor stone rows. NT: Nearest Tor—straight line distances and direction given; VDT: Visually Dominant Tor from the stone row with distance and direction; RT: Rough Tor visible; BW: Brown Willy visible; PE: Perspectival Effect occurs as one walks along the row (see text). Main Features of topographic location noted. Map numbers refer to Figure 8.2.

Name	Map	NT	Dist.	Dir.	VDT	Dist.	Dir.	RT	BW	PE	Notes
Carneglos	1	Carneglos	0.4	SW	Brown Willy	4.5	NW	-	+	-	Parallels contours along ridge. Land falls to west, rises to east to top of slope. N end slightly higher.
Buttern Hill	2	Brown Willy	2.0	SW	Brown Willy	2.0	SW	-	+	+	Flat area on watershed linking two extensive bogs.
Craddock Moor	3	Tregarrick	0.9	S	Tregarrick	0.9	S	-	-	-	Runs down-slope. N end higher.
Leskernick	4	Codda	1.2	SW	Rough	4.0	NW	+	+	+	Runs down-slope from boggy area at E end, crossing wet land. W end stops at midpoint on slope with land rising beyond it.

(Continued)

Table 8.7 Continued.

Name	Map	NT	Dist.	Dir.	VDT	Dist.	Dir.	RT	BW	PE	Notes
Cradinham Moor	5	Colvannick	0.3	W	Rough	8.5	N	+	+	+	Crosses flat area linking slightly higher ground to N and S.
Trehundreth Downs	6	Colvannick	1.2	S	Rough	7.5	N	+	+	-	Runs down side of slope between plateau top to south. Lowest end at west. Land rises to south.
East Moor	7	Fox	0.3	S	Fox	0.3	S	-	+	-	Crosses saddle linking areas of Higher ground to N and S. Highest end to N.

of their alignment, or specific location, to topographically dominant features of the landscape beyond themselves. Their role, rather than pointing toward, or making reference to, prominent topographic features beyond themselves across the landscape, seems to be one of making *connections* between less visually dominant areas of the terrain, but areas of no less importance. A second role seems to be that of demarcating either the centres or the boundary areas of sacred spaces. In addition, some incorporate striking perspectival visual effects as one walks from one end to another. I examine each of these features in turn.

LINKING SPACES First, the row on Cardinham Moor, running a few hundred metres to the east of Colvannick and St Bellarmin's Tors, links two areas of higher ground, with the land rising up gently beyond the southernmost and tallest stone. The row is not aligned with reference to either of these two nearby tors but rather seems to connect the lower slopes of the land rising up to them. A similar situation occurs on East Moor, with the stone row (the longest on Bodmin Moor) running roughly along the 300-m contours, crossing a saddle, and connecting the upper slopes of Fox Tor to the north, with a well-defined area of higher ground, roughly circular in shape, to the south, in the middle of which are sited two large platform cairns, on the north side of one of which there is a (now recumbent) menhir. The much shorter row at the foot of Buttern Hill is situated deep down in a valley watershed enclosed by ridges of higher ground to the west and east. It does not connect areas of higher and drier ground, as in the previous two cases, but two very extensive bog areas immediately to the south and the north. The row is located just to the north of the source of the river Fowey, whose straight-sided north-south valley effectively divides Bodmin Moor in two. The row extends the natural landscape boundary of the Fowey across its northern watershed to another area of bogs and streams to the north. The row at Leskernick starts at a bog area to the east, crosses another area of marshy land, and terminates with a stone setting on an area of higher land to the west, on which two stone circles and a large barrow are situated. The three remaining rows—Carneglos, Craddock Moor, and Trehudreth Downs—parallel contours in the first case and run down-slope in the other two, without any apparent purpose in terms of connecting locally important features of the topography.

MARKING THE CENTRES OR MARGINS OF SACRED SPACES The second feature is shared, to a greater or lesser extent, by all the stone rows. Like the stone circles, they occur in relative isolation in wide 'empty' tracts of land usually devoid of other contemporary or later monuments or settlement areas. The rows are relatively isolated both from one another, with distances of 1.1

km to 5.9 km, and from other types of monuments (Table 8.8). Distances between the rows and the nearest circles fall within the same range, varying from 0.9 km to 4.7 km. The only exception is the row at Leskernick, which is located only a few hundred metres from two stone circles to the north and south and terminates near to a cairn. In other cases in which cairns or cairn cemeteries occur within 500 m of the rows, few are visible, and in all cases, the cairns are situated on higher ground than are the rows. Given that 354 cairns have been documented from Bodmin Moor, it is of interest to note that only 13 are located anywhere within 250 m of the rows, a meager 34 within 500 m (9%).

Just as none of the row ends are aligned on visually dominant features of the natural topography, none of them are directly aligned with reference to long cairns, stone circles, or standing stones or Bronze Age round cairns. If one draws straight lines out from all the row ends across Bodmin Moor, no monuments occur along them in eleven cases (78%), and in the remaining three cases, single cairns occur, all almost certainly fortuitously, at distances from 0.8 to 1.9 km, none of which is visible. Imaginary lines drawn out from the row terminals thus cross areas that might be described as cultural and topographic deserts, tracts of land that remain undefined either by other monuments or visually striking and memorable topographic features.

The nearest areas of known prehistoric settlement to the stone rows in any direction vary from 200 m to over 2 km. Five of the seven are well away, 3 km or more. The only exception is Craddock Moor, where a settlement area, of perhaps later date, seems to have impinged on the northern end of the row at a time when the monument had probably become redundant (Johnson and Rose 1994: 34).

On Trehudreth Downs, a complex of cairns and standing stones occurs to the south of a stone row, whereas in the area immediately to the north none are known. These monuments are all situated on the top and western and eastern edges of a plateau, with the stone row running diagonally up its side. The complex consists of two standing stones, one of which is surrounded by smaller stones at the base, a group of three or four stones in a row, and ten cairns. Three of these are large and probably originally possessed platform-type mounds. The other seven cairns are small and inconspicuous. Patterns of intervisibility between these monuments and the stone row are shown in Figure 8.14. The groups of standing stones are all intervisible and with the two largest cairns, which are situated on high points with panoramic vistas. One of these large cairns at the western end of the plateau, just before the land starts to dip down to the west, is associated with a group of standing stones. The smaller cairns are situated on sloping terrain and are only locally visible, clustering near to, but down-slope from, the larger ones. The stone row is not visible from any of

Table 8.8 Frequency of cairns within a 250 m and 500 m radius of the Bodmin Moor Stone rows. Map Numbers refer to Figure 8.2. L/C = Large (>10 m diameter) or Complex cairns—direction from stone row given; H/L = Cairns Higher or Lower than the stone row; N Vis: Number of cairns Visible from any part of the stone row.

Name	Map	250 m	L/C	Dir.	H/L	N Vis	500 m	L/C	Dir.	H/L	N Vis
Carneglos	1	0	-	-	-	-	1	1	SE	H	0
Buttern Hill	2	0	-	-	-	-	5	3	E	H	0
Craddock Moor	3	0	-	-	-	-	10	0	NW	H	0
Leskernick	4	1	1	SW	H	1	6	1	SW; NW	H	1
Cardinham Moor	4	0	-	-	-	-	1	1	S	H	0
Trehundreth Downs	6	10	3	S	H	3	10	3	S	H	3
East Moor	7	2	2	SE	H	1	2	2	SE	H	1

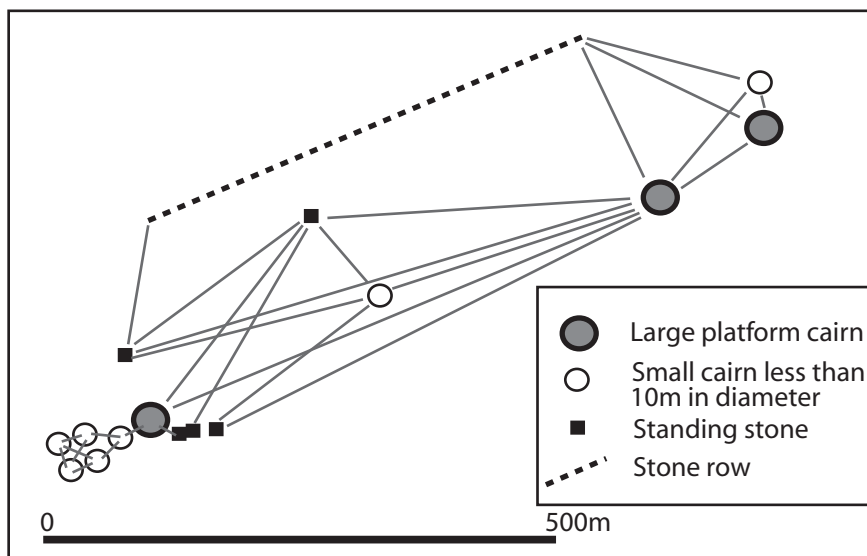


FIGURE 8.14 Intervisibility patterns between cairns and monuments on Trehundreth Downs, west Bodmin Moor (for location of stone row see Figure 8.2). 1: Large platform cairn; 2: Standing stone; 3: Small cairn (less than 10 m diameter); 4: Stone row.

these cairns. Only some of the monuments on the plateau are visible from the row itself: a standing stone at the southwest end, three barrows at the north-west end, another standing stone, and the largest and most prominent barrow of all, as one moves up or down its course. The stone row is not aligned in relation to any of the monuments, nor does it in any obvious way lead up to them. It may mark the northern boundary of the high sacred space that the barrows and standing stones occupy.

Analogous situations occur elsewhere. The short stone row at Carneglos is similarly inconspicuously sited, running along a contour on a west-facing slope of a north-south ridge. On the very top of the ridge, 400 m to the south-west of the row, a large cairn and a standing stone (both are now destroyed) stood next to each other. The stone row and the barrow and standing stone would not have been intervisible. This barrow was originally large, of platform type with a central cist and surrounded by a ditch. The stone row here would again seem to mark a transition point to higher and sacred ground marked out by the cairn and standing stone. The Craddock Moor stone row is situated just over 200 m from an 'embanked avenue' and cairn cemetery to the east. No monuments occur for some considerable distance on its western side. The stone row is not visible from the cairns or the avenue, and the latter can

be seen only from the southern end of the row. The land gently rises up away from the row toward the avenue and the cairns. Similarly, no cairns are visible from the Buttern Hill stone row. To its west side, there are no monuments for a considerable distance. To its east side, the land rises steeply to the summit of Buttern Hill, on top of which a linear group of five cairns are situated, three of which are substantial in size.

PERSPECTIVAL EFFECTS In three cases, the rows have impressive perspectival effects in relation to the wider topography of Bodmin Moor, or beyond, as one walks along them from one terminal to the other. The Buttern Hill stone row, running between two bog areas in an enclosed upland valley of the Moor, is not itself set below or aligned in relation to any particularly visually impressive landmarks. Yet, as one walks toward the southern end of the row, the tip of Brown Willy gradually slips away beyond the horizon, becoming invisible at the tallest stone at the southern end, the point at which the outline of Coddia Tor, 3 km to the south, becomes clearly visible for the first time. At Leskernick, there is a clear association between a stone row, two stone circles, settlement area, and cairns (see Figure 8.9). As one moves west down the Leskernick stone row, the tip of Rough Tor becomes visible for the first time shortly before one approaches the row end, immediately after crossing over a marshy area, and then becomes increasingly visually dominant as one approaches the terminal setting of three standing stones on the midpoint of a gentle slope by a possible cairn (Figure 8.15). The tip of Rough Tor is also clearly visible from the southern circle but disappears from sight as one walks from it and beyond the stone row and cairn and enters the northern circle being invisible from the settlement area beyond. As one walks up Leskernick Hill toward the large cairn, at first the tip of Rough Tor and then the entire Rough Tor ridge, with its ceremonial enclosure and Showery Tor beyond, comes into view. This perspectival effect culminates by the large cairn marking the hill-top. As one walks along the stone row on Cardinham Moor, St Bellarmin's Tor can be seen along the entire length of the row and Colvannick Tor, except as one approaches closest to it at the northern end of the row. But there is a more interesting visual perspective than this. At the northern end of the row, part of the south coast of Cornwall and the sea are visible. Conversely, at the southern end of the row, part of the north coast of Cornwall and the sea are visible. The south coast is not visible from the southern row end and vice versa—an intriguing type of 'twisted' perspective duplicating the effect of not being able to see Colvannick Tor, when one is closest to it, at the northern end of the row.

Trying to take into account variations in the morphological characteristics of the stone rows, their topographic locations and relationships to

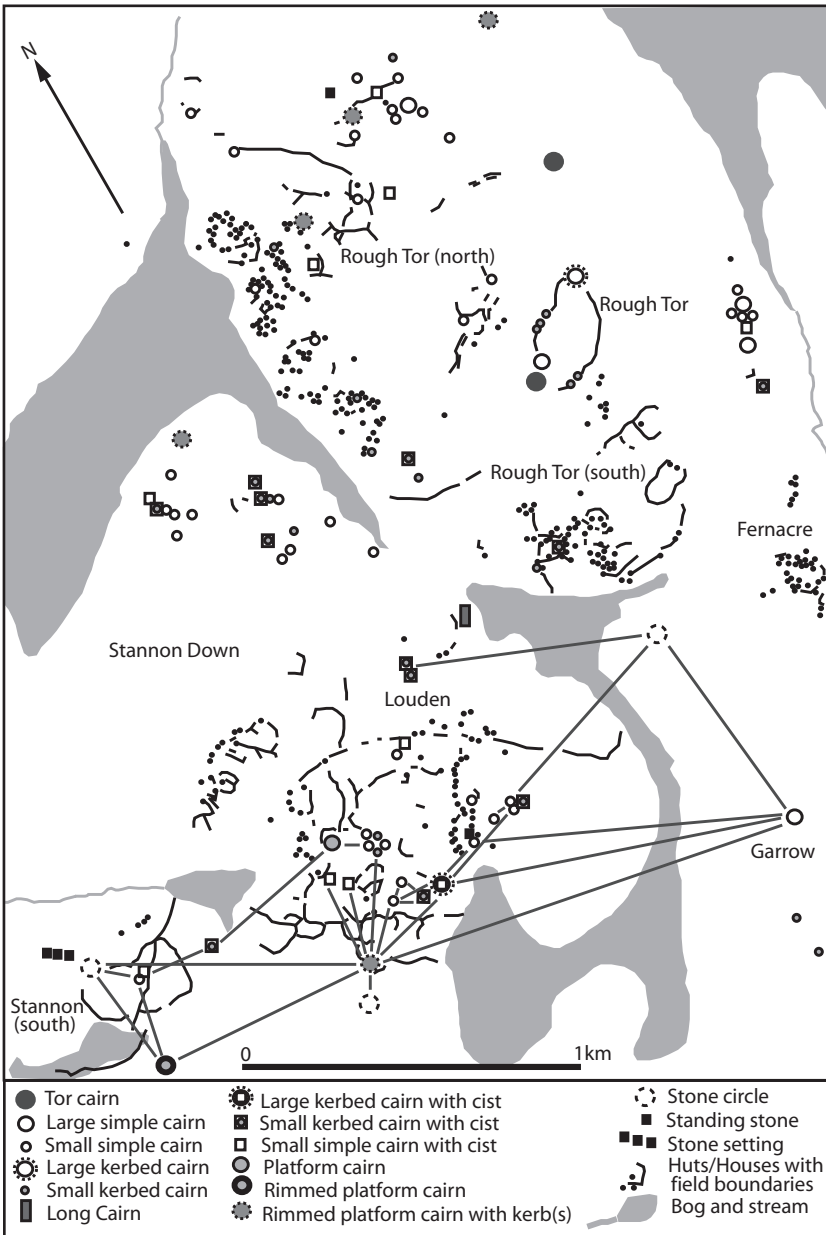


FIGURE 8.15 Intervisibility patterns between the cairns and the ceremonial monuments in the area south of Rough Tor, northwest Bodmin Moor (map based on Johnson and Rose 1994).

prominent tors and other landscape features on Bodmin Moor, it seems clear that they were constructed for different purposes. It is possible that in three cases (Carneglos, Trehudreth Downs, and Craddock Moor) they defined the margins of higher sacred space occupied by cairns and standing stones. These stone rows all run along and beneath higher ground to the east or the south, on which the cairns and standing stones are situated and from which the stone rows are invisible. They mark transition points one would have to cross in order to climb up to the monuments beyond them.

In another four cases (Leskernick, Cardinham Moor, East Moor, and Buttern Hill), the stone rows may themselves have been at the centres of sacred spaces. The Leskernick row seems to be a clear-cut case, running up toward two circles and a cairn from the east. The row on Cardinham Moor, linking areas of higher ground with tors to the west, stands in splendid isolation from other monuments, while the East Moor row links Fox Tor with an area of higher ground occupied by two large cairns. The stone row at the foot of Buttern Hill linking two bog areas seems far removed from the invisible cairns set on the top of Buttern Hill to the east. It is of great interest to note that it is only in those cases where the rows may have formed centres of a ritual space that what I have termed 'perspectival effects' occur in relation to the wider landscape. In three cases (Cardinham, East Moor, and Buttern Hill), the stones are higher and more massive with, in the first two cases, significantly longer gaps between them (10 m or more) than is the case for the other stone rows, with large numbers of smaller stones with shorter distances between them (see Table 8.7). In other words, the stones of which these rows are composed more closely resemble those used to construct stone circles. These stone rows, whether one is looking out from their terminal ends, or from anywhere along them, and whether with reference to contemporary or later monuments or settled areas, appear to be rather isolated monuments, central lines across sacred spaces, and in some cases, as already discussed above, serving to link topographically defined spaces, such as bogs and areas of higher ground. They would appear to be the linear centres of these sacred spaces rather than their boundaries, focal lines within ritual areas that both linked them and, by virtue of their linearity, divided them.

However, the builders of Carnac would not be impressed! By only a very broad stretch of the imagination could any of them be termed monumental. They are, in this respect, very similar to the stone rows of Exmoor, discussed in Chapter 7. Only three of them have stones exceeding knee height, and even with good maps they are difficult to find today. They would not have been highly visible markers in the landscape, even when freshly erected. Today, with most stones fallen or only visible as turf-covered stumps, their impact on the landscape is negligible. None are located on the highest points in the

immediate surroundings. When they run up slopes, they never terminate at the top, but some way down. If they were never intended to be impressive monuments, visible for long distances, their main purpose would seem to have been mnemonic, to confirm where one was—at the margins or centre of a sacred area—and that this area of ritualized geographic space (bog, stream, tor, or area of higher land) was linked to another, providing a tangible cognitive map of Bodmin Moor.

Cairns and the Landscape

Over 350 cairns are now known on Bodmin Moor (Johnson and Rose 1994: 34), substantially increasing the numbers documented from an earlier study (Trahair 1978). A wide variety of structural features have been noted. The cairn mounds may be bow-shaped, slightly domed, or flat-topped in the centre or occur on platforms. Orthostatic or boulder kerbs may delimit the mound or be set inside it, be contiguous or open in plan. In some cases, several kerb rings may be set inside the mound. Internal cists may be centrally placed or offset, above the mound material or sunk into the ground, may originally have been visible or concealed by the cairn material. Some cairns have tors, 'grounders' (large earth-fast boulders), or, occasionally, standing stones as central foci (Johnson and Rose 1994: 34).

The majority of the larger cairns over 10 m in diameter lie on major watershed-plateaus, hillslopes, and hillcrests (*ibid.*: 41) and, as already noted, some distance away from settlement areas and the ritual spaces defined by the presence of stone circles and stone rows. Two or more structurally different cairn forms—for example, kerbed, tor, and platform cairns—may be found in the same group, and there appears to be no major difference among cairn forms in different parts of Bodmin Moor.

Trahair in his survey of 225 (generally larger) cairns found that 60% were on hilltops or ridges. Twelve percent were sited in false crest situations, so that the cairn appears prominent on the skyline when looked at from a distance but is not itself sited on the hilltop. The remaining 28% were inconspicuously located on lower or gently sloping ground (Trahair 1978: 4). Barnatt (1982: 85–86) similarly found a strong relationship between cairn size and topography, with 79% of the large cairns being found in prominent positions and 90% of the smaller ones in low-lying locations.

It is, however, impossible to provide any more meaningful generalizations regarding cairn location for Bodmin Moor as a whole, since their specific siting is intimately related to the character of the local topography, the presence of other classes of monuments, and the history of settlement and landscape use. I consider two areas in detail.

THE CRADDOCK MOOR AREA On Craddock Moor 32, cairns have been documented, along with one stone row, an 'embanked avenue' (possibly a double stone row), four stone circles, three menhirs, and the Stowe's Pound ceremonial enclosure (Figure 8.10). The cairns, as elsewhere on Bodmin Moor, fall into two fairly clearly defined groups: seventeen small circular structures 1 m or so high and no more than a few metres in diameter, and fifteen larger and much more monumental sites ranging in diameter from 11 m to 34 m. The larger and smaller cairns differ significantly in terms of their locations in the landscape, degree of visibility, and relationship with other monuments and prominent landscape features.

The locations of the small cairns are all inconspicuous. They are found in low points in the landscape, on sloping ground with the land rising up beyond them in two or more directions. The majority are clustered around an embanked avenue. With the exception of a few of them (see Figure 8.10), none of the large cairns are visible, and they are all out of sight of the stone circles. From none of them can the visually most impressive tor in the area, the Cheesewring, be seen, and at most it is possible to see three other tors. They are hidden away both from views over the wider landscape and from the larger cairns and monuments.

The locations of the large cairns on Craddock Moor were carefully chosen both in relation to one another and other types of monuments. They are placed either individually, or in pairs, in prominent high positions on flat or only slightly sloping land, with panoramic views. In most cases, they have a high degree of intervisibility, with up to nine other cairns visible from any particular site, some at a considerable distance—up to 2 km away. They fall into two groups, one being intervisible with the Craddock Moor, and the other, the Hurlers stone circles (Figure 8.10). From one strategically sited pair of cairns (Figure 8.10: Nos. 8 and 9), both sets of circles are visible—the only point marked by a monument on Craddock Moor where this is possible. The only large cairns from which a stone circle is not visible are those two actually within the Stowe's Pound enclosure. It is possible to see some of the smaller cairns only from *one* location with large cairns (Figure 8.10: Nos. 14 and 15). Up to six visually prominent tors in the landscape can be seen from the larger cairns, with Stowe's Pound and the Cheesewring dominating views from nine (Figure 8.12), Tregarrick Tor from four, and Sharp Tor from two. As is usual on Bodmin Moor, they are located at a reserved distance from the stone circles, 200 m or farther, and are usually sited at higher points in the landscape, so that from the cairn site one looks across the Moor and down onto the circles.

Two large cairns at the western and eastern peripheries of the overall distribution are of particular interest. The outcrop of Tregarrick Tor is about 35 m long, 20 m wide, and 2 m to 4 m high. The highest part is the southeast

end, where small stones are piled up against the vertical rock stacks to form a semi-circular tor cairn around 7 m wide and 1 m high. Here there may also be a hilltop enclosure, as noted previously. The Rillaton barrow at the eastern end of the distribution is situated just below the Cheesewring and Stowe's Pound enclosure. In contrast to the Tregarrick Tor cairn, it is a huge artificial cairn—in effect, a humanly produced tor. Visible for miles around, and commanding panoramic views in all directions as far as to the south coast of Cornwall and east to Dartmoor, it is the third-largest cairn on Bodmin Moor. Although much mutilated, it still stands up to 2.7 m high, with a diameter of 34 m. The contrast between these two monuments could not be greater—one a tor encultured with a cairn, the other a huge cairn resembling, in some respects, a tor.

The Rillaton barrow is a short distance to the northeast of the Hurlers circles and is in line with their axis. It is difficult to believe that its siting on a ridge directly above these circles and just below the most impressive tor on Bodmin Moor, the Cheesewring, is an accidental association. The presence of a possible fourth Hurlers circle, sited roughly a quarter of the way between the northern Hurlers circle and the Rillaton barrow, makes intentionality even more likely (Herring pers. comm.) The massive Rillaton barrow just to the south and the three Hurlers circles, clearly visible below from the top of the smaller Stowe's Pound enclosure, reinforce the ritual connotations of the site, a series of spaces set apart from the routines of everyday life. An axis of importance, a line of movement through the landscape, from the circles to the Rillaton barrow to Stowe's Pound seems highly likely, as Barnatt (1982: 187) suggests.

If a SW-NE line between the Hurlers and the Rillaton barrow marks an axis through which people moved through this landscape, then at least three others also seem to be indicated: between the Tregarrick Tor cairn and the other large cairns to its northeast and the Craddock Moor circle; between Tregarrick Tor, cairns 8 and 9, the Pipers menhirs, and the Hurlers circles. A final possible axis of movement links monuments rather than cairns, but none of these are intervisible—the Craddock Moor stone row, embanked enclosure, stone circle, and the Hurlers. It is difficult to imagine how such a striking alignment could occur purely by chance.

During the Bronze Age, in this area, the landscape became increasingly ritualized and marked by monuments. Ways between them were formalized. This was no longer a landscape through which one could move without being constantly reminded of its symbolic potency and significance.

NORTHWEST BODMIN MOOR Northwest Bodmin Moor has the highest concentration of the smaller cairns on Bodmin Moor but with numerous larger cairns also present. The smaller cairns tend to cluster in cemeteries,

sometimes associated with one or two larger ones. The large cairns do not usually occur in pairs, as on Craddock Moor, and are typically situated at some distance apart from one another (see Figure 8.15). Based on a sample of thirty of these cairns in the vicinity of the Stannon, Louden, and Fernacre circles, the locations of the smaller and larger cairns in the landscape do not differ so dramatically as on Craddock Moor. Views from all the cairns are dominated by Rough Tor. There are no significant differences between the larger and smaller cairns according to degrees of visibility across the landscape. Larger cairns may be located on high points with panoramic views, on slopes, or areas of flat moorland plateau at the base of slopes. The smaller cairns are found in the last two locations, but not the first. In other words, a few (two out of seven) of the larger cairns are deliberately sited so as to possess commanding views over the landscape, but the majority of them are located no differently than are the smaller ones. One of the Stannon, Louden, and Fernacre stone circles is visible from every cairn, with only one exception. In five cases, two of these circles are visible from the same cairn, but from only one particularly large and prominently sited cairn can all three of them be seen (Figure 8.15).

From all the cairns between one and eleven, other cairn sites are visible. From the smaller cairn sites, one or two larger cairns can be seen, for longer distances, and up to seven smaller ones more locally. All but one of the larger cairns are intervisible, with another large cairn up to 1 km or more distant, and usually with a number of smaller ones. Smaller numbers of cairns are visible from the circles than the circles are from the cairns, because the cairns are generally positioned at higher points in the landscape so that, from them, an observer looks down to the circles. The cairns are set at a reserved distance from the circles, especially in the case of Fernacre, where only one possible small cist occurs within a 500-m radius. At the Louden circle, all but one particularly prominent cairn (the only one visible from the circle itself) within 500 m are situated to the north of a major Late Bronze Age field boundary. At Stannon, the two large cairns within 500 m of the circle are situated well up a slope and separated from the circle itself by a substantial bog area. The larger cairns here do not seem to obviously mark paths of movement across the landscape, as in the Craddock Moor area, and are much more closely associated with settlement areas and field boundaries (see the discussion below). In both areas, the cairns mark important transition points situated on the margins of the sacred spaces connected with the stone circles. In the Craddock Moor area they may mark ways of movement through the landscape, but in the Rough Tor area this is less obvious. This arrangement reinforces the impression that the cairns were systematically established in relation to the circles.

Tor Cairns and ‘Grounder’ Cairns

There are at least fifteen cairns on Bodmin Moor where natural rocky outcrops and stacks form the focus of the cairn, or are directly on top of the cairn. Four of these are located in the southeast part of the Moor, the remaining eleven in the northwest of the Moor (Figure 8.16).

Various forms of these cairns can be distinguished:

1. They completely encircle a rock stack as the central focal point. Showery Tor is the most dramatic example (Figure 8.4).
2. Some are semi-circular in form, enclosing part of the rock stacks as at Tregarrick Tor, discussed above.
3. Others may be placed on top of a prominent rocky eminence as at Rough Tor and at Brown Willy, where a cairn marks the highest point on Bodmin Moor.
4. A few may almost completely hide and envelop a series of rock stacks, as at Tolborough Tor.

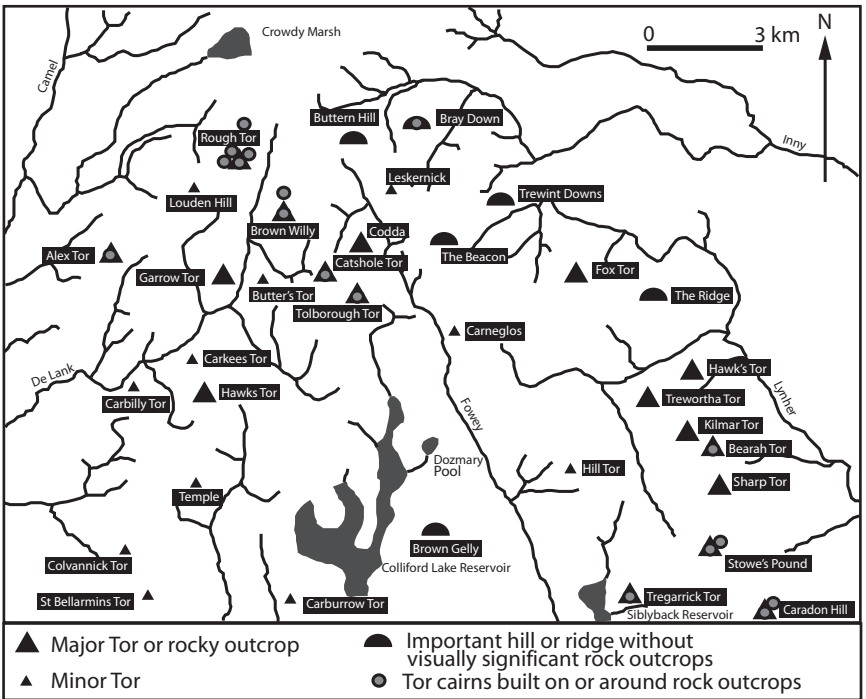


FIGURE 8.16 Distribution of tor cairns on Bodmin Moor.

Because of the high locations of these sites and the presence of jagged rocks, the cairns are all visually prominent landscape markers.

In addition to these tor cairns, there are a number of well-documented examples of grounder cairns in which large earth-fast boulders form the central focus of the cairn or are incorporated within it. Grounder cairns are found both high up on ridges and hill summits and in lower lying locations. How many of these actually exist is impossible to determine, since the boulders are usually partly or completely concealed and are visible only in cases where the covering cairn material has been mutilated or removed at a later date.

Excavation of a number of cairns on Bodmin Moor have shown them to be constructed over grounders, or a large stone in the case of cairn IVB at Colliford, which had been especially moved to the centre of the area where the cairn was constructed, as if to resemble a grounder (Griffith 1984: 72). But the most dramatic example comes from the excavation of cairn I at Caerloggas on the nearby St Austell granite uplands 20 km to the west of Bodmin Moor. This was a ring cairn 25 m in diameter, with a flat internal area focussed on a remnant tor. The initial phase of construction involved the definition of the area around the tor by a shallow ditch to the south and the west, with a causeway across it. Four small grounders were used to create a small 0.9-m-wide entrance gap into the central area. Later a bank was constructed within the ditch consisting of turves laid over a ring of granite blocks. This ran across the first entrance, and a new one was created to the south, 3 m wide and flanked by enlarged terminals. A ring of posts was erected on top of this bank. Another post was erected in the middle of the entrance, and a line of seven in the interior of the enclosure probably formed part of a screen obscuring the tor from the view of anyone standing at the entrance. In a third phase of construction, the bank was heightened with a 0.3-m high band of yellow clay and another row of posts erected on top. In a fourth phase, this bank was heightened yet again, this time with black gritty soil, and was capped with a cairn ring two stones high. These may have been built up around the base of the earlier posts, since the stones did not overlie the post holes (Miles 1975: 24–28).

In connection with the earlier phases of activity at the enclosure, a grave-shaped pit had been dug to the northeast of the tor, and in it offerings had been deposited: seventeen flints, fourteen white pebbles, a quartz crystal, an incised slate, a burnt and broken killas (clay slate) pebble, two unused killas pebbles, a tourmaline pebble, and two fragments of burnt long bones (*ibid.*: 26). Other finds from the interior, also clustering around the central tor, include parts of a decorated bronze dagger, seven pieces of glassy tin slag, an amber fragment, serpentine stone bead, eighty-eight white water-worn quartz pebbles, some with a highly polished surface produced by handling, four quartz crystals, stone tools, and unused pebbles. These were deposited

on the site and were not incorporated as part of the project of heightening the cairn ring (*ibid.*: 32).

Clearly, this tor cairn was a ceremonial enclosure, with the tor as the central focus, below which a dedicatory burial of artefacts and bones had taken place. Access to the enclosure was both restricted and remodelled. The narrow entrances, internal screen, and successive heightening of the surrounding cairn ring surmounted with posts, probably supporting a fence, all betray a concern for secrecy, to hide the activities taking place inside the ritual arena from observation from the outside, the implication being that only certain individuals or groups were allowed to enter. This enclosure may have been in use for sixty years or more. Each new construction phase bounded it off more and more from the outside.

The deposits are of a highly symbolically charged nature—a grave beneath the central tor containing white quartz, incised and clay slate, beach flints, and tourmaline pebble but only two burnt long bones, the symbolic association of slag and metal (fire) and water-worn pebbles. Some of the objects—dagger, amber (probably from the Baltic), and stone bead (from the Lizard)—are of an exotic nature from far-flung locations. Finally there is an obvious concern with colour—the yellow ring of clay capping the enclosure, the whiteness of the quartz, the red amber, and the tourmaline pebble.

The cairns with rock stacks or large boulders forming their central foci were clearly of great significance on Bodmin Moor during the Bronze Age. The most prominent visual landmarks of all, the granite tors, were encultured through the stacking up of stones around or on them, and boulders acting only locally as landscape markers and orientational foci were built into and concealed by cairns. In the case of the tors, a natural outcrop was enhanced, controlled, domesticated, as part of a whole series of ritual activities. In both cases, cairn location, quite literally, built on natural features marking the landscape.

Yet a choice of which boulders to conceal, and which tors to mark out, was always involved. A large number of prominent rock outcrops do not have surrounding or enclosing cairns, and there are many, many thousands of prominent boulders present on the Moor not covered by cairns. The most symbolically significant points in the landscape must have been emphasized, and the reasons for this can be explained in terms of historical precedent. Those areas of the landscape already marked out with monuments and enclosures during the Neolithic received special emphasis through the later construction of tor cairns, whereas prominent tors on ridges and hills without such ancestral associations (for example, Trewortha Tor and Kilmar Tor in the southeast, St Bellarmin's Tor and Colvannick Tor in the southwest, Fox Tor in the northeast) do not. The concentration of tor cairns in or near to the two

early hilltop ceremonial enclosures, Rough Tor and Stowe's Pound enclosures, can be explained in this manner. They also occur in the two areas of the Moor where the majority of the stone circles are clustered. There also appears to be an association with the presence of earlier Neolithic long cairns. The Loudon Hill long cairn is sited just below Rough Tor; the Catshole Tor long cairn is sited between the tor cairns on Catshole and Tolborough Tors, and its long axis is directly orientated toward the rock stacks encircled by the Catshole Tor cairn. The Bearah long cairn is situated a few hundred metres to the south of a tor cairn on the eastern end of the rocky ridge of Bearah Tor.

The Rough Tor enclosure (Figure 8.8) seems to have been substantially altered and remodelled during the Bronze Age, transforming its significance. Part of this remodelling involved the construction of the Tor cairns. Small cairns also occur on either side of the main entrances, which may themselves have been elaborated. Passing into the Rough Tor enclosure, one has to move between structures associated with death before entering the interior space.

Apart from five marker cairns around the two main entrances, three large cairns surmount, and partially surround, the top of Rough Tor itself; another crowns Little Rough Tor, and a fifth Showery Tor, down-slope and across a shelf of land, 300 m to the northeast of Little Rough Tor at the end of the Rough Tor ridge. This concentration of cairns built around and on tors is unique on Bodmin Moor, indicating the great ritual significance of this area. Showery Tor (Figures 8.4 and 8.13) is the largest and most impressive cairn on Bodmin Moor. The cairn, up to 37 m in diameter, consists of a ring of stones up to 10 m wide in the best preserved section and originally at least 3 m high on the outside, encircling a most unusually weathered rock outcrop, reminiscent of the Cheesewring at Stowe's Pound, forming a huge sculpted 'altar' at the cairn centre. The little Rough Tor cairn, up to 20 m in diameter and 5 m high, is piled up on and around a natural rock stack crowning the summit of Little Rough Tor. On the summit of Rough Tor itself, there are an additional three cairns built on and around the rock stacks. The largest and highest is still up to 18 m in diameter and over 1 m high today. Immediately below it, to the south, more cairn material encircles the base of the rock stacks, 7 m above which the summit cairn was built. About 20 m down-slope to the northeast, another smaller ring of cairn material is built up on a small terrace above a series of lower rock stacks forming part of the summit of Rough Tor.

The Rough Tor summit itself has particularly unusual weathered rocks. On the eastern and southern sides there are cave-like structures penetrating into the rocks running in effect beneath the pair of summit cairns. These are visible only as one moves up to the base of the summit itself. Climbing up to the two summit cairns from the northeast, the easiest and most obvious means of approach, one passes two natural tunnel-like structures up

to 20 m or so in length, through which the landscape to the north is visible below. These two summit cairns are thus sited and built among rock stacks, above 'caves' and 'tunnels' in the rock, further emphasizing their significance.

Looking out from the highest summit cairn on Rough Tor, one sees the entirety of the enclosure together with all the other cairns on the hilltop summit, the only point at which this is possible. Below, to the south, the Fernacre circle is clearly visible. The only other cairns from which this circle can be seen are the two small 'marker' cairns at the southern entrance. On a clear day, and there were probably many more during the Bronze Age than there are now, the Stannon and Loudon circles are also visible from this *single* point.

The experience of landscape thus culminates on the summit of Rough Tor, from which the three stone circles and some of the larger cairns surrounding them could be seen. The process of learning to see the landscape and to understand it was clearly different, according to whether one entered the Rough Tor enclosure from the north or the south or approached it from Showery Tor. Moving was a process of revelation, with more and different cairns coming into view, with a final ascent to the summit involving passing fantastic-looking caves and fissures, until the three circles become revealed in the distance below.

Clearly, the construction of tor cairns represents a very different type of symbolic relationship to the rocky outcrops than that of the Neolithic. Although the Neolithic long cairns make reference to them at a reserved distance, they become enclosed, built over, and bounded off during the Bronze Age. The emphasis on the relationship between rocks and monuments is further and deliberately emphasized, and in a manner that can hardly be described as discrete. In contrast to the Neolithic, there is a much stronger will to *visibility* with cairns found in all the very highest locations in the landscape. There is a concern with *hiding* some of the smaller tors, as at Caerloggas. Other larger and more prominent tors are surrounded by stones around the base, thus serving to emphasize the living rock as a ceremonial focus, or the tors may be built on, or the outcropping rock be incorporated within, the cairn and be visible only in outer parts of the cairn ring, as at Tolborough and Alex Tor. The emphasis seems to be to capture, appropriate, and control the powers of the rocks, which first become materially marked out through monument construction in the Neolithic. The cairn ring surrounding Showery Tor is unbroken, and there is no sign of any possible entrance. To reach the central rock would require clambering over it—a practice that likely would not be possible for everyone. Whereas in the Neolithic the tors constituted a series of symbolic resources whose use and veneration was available to all, during the Bronze Age access to, and use of them, became far more restricted. Appropriating the tors and

controlling access to their embedded spirit powers and ancestral associations became part and parcel of the exercise of power and social control.

Cairns on Ridges

Encircling a tor, or enclosing a boulder, was one way to emphasize and utilize features of the landscape. A second was to use the stone circles and stone rows with their particular symbolic relationship to topographic boundaries, tors, and the perspectival effects engendered by moving between or along them. Another was the location of cairns in prominent positions on ridge spines running across and breaking up the landscape. These, like the tor cairns, are visible for miles around when viewed from either side of the ridge. Some of the cairns in these locations, if not built so as to enclose rock outcrops, utilize or 'refer' to them in a different way by (1) either being constructed in line with a spine of outcropping rocks (2) or, where no such rocks occur, by reproducing a similar effect through the imposition of the cairn form, breaking up a hill or ridge with otherwise smooth contours.

The locations of cairns on the ridges of Caradon Hill, Bearah Tor, and Trewortha Tor fall into the first class. Here cairns are aligned along the spinal ridges of the hills, their orientation in relation to one another following the ridge and points to the rocky outcrops. The nineteen cairns on Caradon Hill run in a staggered SW-NE row up and along the spine of this very prominent hill to the extreme southeast of Bodmin Moor. In this group, two cairns at the southwest end of the group also incorporate low tors. On the Bearah Tor ridge, two cairns are aligned at the western and eastern ends of a rocky spine, including six major stacks of outcropping rocks. As already noted, the eastern cairn is built up and surrounds one of these rock stacks.

The five cairns running along the ridge of Brown Gelly are the best example of the second situation, in which there are no prominent stacks or rock outcrops breaking up the skyline. The cairns are arranged in a semicircular arc along the top of a ridge. The southernmost and northernmost cairns are sited on the edges of the ridge at a point where the land begins to fall steeply away. Approached from the north or the south, only these cairns are visible, the three intermediate cairns sited on the flat ridge top coming into view only when they are reached. However, all five cairns are prominent, when seen from a distance, from either the west or the east across the whole of Bodmin Moor. They must have been intended to have been seen as a group from these cardinal directions. These five cairns break up the smoothed contours of the Brown Gelly ridge to, in effect, analogically *resemble* or *simulate* tors. There is another relationship of interest here. Down-slope about 100 m to the south of the southernmost cairn, a rock outcrop, inconspicuous from

a distance but locally significant, the only one on Brown Gelly, occurs. Both cairn and tor are intervisible, and the specific siting of rock outcrop and cultural monument are clearly related. From the tor, only the southern cairn is visible. When one walks from tor to cairn, it is only at the point where that cairn is reached that the others come into view, as well as two of the most prominent landmarks in the northwest of Bodmin Moor, Rough Tor and Brown Willy. The passage from rock outcrop to cairn incorporates precisely the same perspectival effects in relationship to prominent landscape features as encountered in movement along some of the stone rows or between the stone circles.

These cairns, aligned along ridges and in relation to rock stacks, performed two purposes in relation to the landscape. They represent paths of movement through which the landscape was encountered and became known. The rows of cairns set out in lines across the landscape resemble the stone rows in their educative purpose, whereas their circular form resembles that of the stone circles. They also served, at a distance, as important orientational foci, like the tors, artificially breaking up and enculturating the land. They, then, both acted immediately on people moving between them and at a distance over wider tracts of the Moor.

Cairns, Ritual, and Landscape

Although a great many cairns from Bodmin Moor have been dug into and plundered in the past, there are only four nineteenth-century excavation reports, which are not that informative, and the majority of the find material is now lost (Trahair 1978: 12–13). Funerary urns were recovered from two of these excavations. A third, that of the Rillaton barrow, the second largest on the Moor and situated just below the Cheesewring and northeast of the three Hurlers circles, revealed one of the richest Bronze Age grave-good assemblages from southern England. A large north-south orientated cist was discovered in 1837, with the remains of an extended skeleton with a clay pot by the breast, covered by a stone slab leaning diagonally against the cist wall. Inside the pot was a small biconical cup of beaten gold. The other contents of the cist included a bronze dagger, a metal rivet, pieces of ivory or bone, and faience beads. The off-centre location of the cist in the outer edge of the east side of the cairn and its construction above the old land surface, 1 m below the top of the c. 2.7-m high cairn, suggest that it was not a primary feature but inserted later. The grave goods indicate an early Bronze Age date (Borlase 1872: 37; Hencken 1932: 69–70). This is the only *inhumation* grave known from Bodmin Moor. This point of contrast is replicated in the richness of the grave goods, few or absent in connection with the cremation graves, discussed below.

Since 1939, a further 25 cairns or barrows on, or in the immediate vicinity of Bodmin Moor, have been partially or completely excavated (Table 8.9). Of those completely excavated, there was certain or possible evidence for burial at only eleven sites (48%), indicating that a funerary purpose was not the reason for building many of them. Even in cases where barrows possess burials, these rarely appear to be their primary significance. Cremation, with bones of a single individual being deposited in an urn or a grave pit, was the dominant rite. Excavations of two barrow cemeteries at Davidstow Moor (wartime excavations by Croft Andrew published by Christie 1988) and Colliford (Griffith 1984) have demonstrated considerable variation in the internal structure of the mounds and the nature of the deposits from localised groups of sites (see discussion in A. M. Jones 2005).

At Davidstow, each of the ten certain barrows had a distinctive construction, and at least two had been successively modified over long time periods. The site of cairn XXVI was first utilized during the late Neolithic, in the last centuries of the third millennium B.C.E., and its use continued until the mid-second millennium B.C.E. Use is first attested with sherds of Grooved Ware pottery and flintwork found on the old land surface and a charcoal-filled pit or posthole underlying the southeast part of the barrow site. A second phase of activity involved the erection of a free-standing stone or timber circle about 9 m in diameter with access through an entrance on the southwest. A central pit was dug at approximately the same time, possibly containing a cist with a cremation and covered with stones, including a 38-kg quartz lump. Associated with the timber or stone circle were a series of forty notched or perforated stones, one resembling a human face. Christie argues that 'the association in Phase 2 of a circle with the holed and notched stones strongly suggests the concept of a burial or burials within a house-like structure, symbolic in that the thatch roof-weights, if that is what they were, may have been re-used and did not weigh down an actual roof' (Christie 1988: 129). In Phase 3, another burial pit was dug in the centre of the circle, and in it were deposited a late beaker burial containing cremated bone and charcoal. Sometime during phases 2 and 3, a number of other pits, 'troughs', hollows, or stake holes appear to have been dug, some containing charcoal and grey clay filling. The timber or stone circle was removed, a small inner cairn raised up over the burial pits and surrounded by a cairn ring 1.8 m wide and a continuous ditch dug around it. Finally, the central area of the cairn was mounded over.

Barrow I at Davidstow was carefully laid out from a central point from which a shallow marking-out trench 26 m in diameter was constructed. Within this, a stake circle of c. 21 m diameter was constructed, with a possible entrance on the southeast side. Within the area of this circle, six heaps of charcoal were deposited on the west side, and associated with them were

Table 8.9 Major features of barrow or cairn construction and deposition recorded from excavations undertaken on or in the vicinity of Bodmin Moor since 1939.

Barrow Name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Reference
Davidstow Moor I	+	T	-	-	-	-	?	-	+	+2 C4	+	P	+	+	PL	Christie 1988
Davidstow Moor II	+	T	-	+	+	QC	-	-	-	-	-	-	-	+	L	Christie 1988
Davidstow Moor III	+	T	-	+	+*	QC	+	-	-	-	+	-	-	+	L	Christie 1988
Davidstow Moor IV	+	T	-	-	+	-	-	-	-	-	+	-	-	-	-	Christie 1988
Davidstow Moor V	+	T	+	-	-	QCT'	-	-	-	C CP1	?	-	+	+	PL	Christie 1988
Davidstow Moor VII	-	-	-	-	+	C?	-	-	+	-	-	-	-	+	L	Christie 1988
Davidstow Moor XIX	+	T	-	-	-	C?	Pit	-	+B	-	-	-	-	-	L	Christie 1988
Davidstow Moor XXIV	+	TS	-	-	-	QL	Pot	-	+B	+1 Q1	-	-	+	+	PLH	Christie 1988
Davidstow Moor XXV	-	T	-	-	-	-	-	-	+	+1	-	-	-	+	L	Christie 1988
Davidstow Moor XXVI	+	?	+	+	-	IC?	Pot +Pit	+	+B	+3 C1	+	S	+	+	PLH	Christie 1988

Barrow Name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Reference
Stannon 1	-	S	-	-	-	SS	-		+	-	-	-	-	-	L	Harris et al. 1984
Stannon 2*	-	S	-	-	-	-	-		+	-	-	-	-	-	-	Harris et al. 1984
Stannon 3	-	S	+	-	-	ISR	Pot(3)		+	+B	-	-	-	-	PL	Harris et al. 1984
Colliford II	-	TS	+	-	-	ISR	-		+	C1 CWP2	-	-	-	+	L	Griffith 1984
Colliford IVA	+	T	+	-	-	-	-		-	-	-	-	-	-	L	Griffith 1984
Colliford IVB	-	T	+	-	-	-	-		-	-	-	-	-	-	L	Griffith 1984
Colliford IVC	-	T	+	-	-	-	Pit		-	+B	-	-	+	-	PL	Griffith 1984
Tichbarrow**	+	TS	+												H	Trudgian 1976
Otterham	+	TS	-	+	-	-	Pit?	?	+B?	-	+	P	-	-	-	Dudley 1961
Tregullund	+	TS	+	+	-	ISR	Pit?	+	+B?	C1	+	P	+	+	PL	Ashbee 1958
							Pit-S			CQ1						

(Continued)

Table 8.9 Continued.

Barrow Name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Reference
Fore Down	-	TS?	-	-	-		Pot	+					-	-	PLM	Christie 1988
St Neots	+	S	+	-	-	ISR	-		-	-	+	-	-	-	-	Wainwright 1965
Cocksbarrow	+	T	+*	-	-	ISR	Pit	+	+B	+2 Q1	+	P	-	+	PL	Miles 1971; 1975
Crowdy Marsh	-	TS	-	-	-	-	-		-	-	-	-	-	-	-	Trudgian 1977a
Clitters Cairn**	+	S	+													Brisbane and Le Clews 1979
Leskernick 5	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	Tilley et al 2000
Stannon 6	-	TS	+	-	-	T	-	-	-	-	+	+	+	+	PL	Jones 1998
Stannon 2	-	TS	+	-	-	-	-	-	-	-	+	-	+	+	L	Jones 1998

broken pots, worked lithic material, and burnt wooden (agricultural?) implements. One of the charcoal deposits contained tiny fragments of calcined bone, probably human. A second phase of activity involved the construction of a small central mound of turf sealing these deposits. This was covered over and surrounded by a second mound, around which a double stake circle was set, forming a palisade around the monument.

While barrows XXVI and I in the Davidstow cemetery were clearly multiphase sites starting out as, initially, open sites with well-defined entrances, evidence from seven other barrows in the same cemetery suggests either a single or much shorter phase of ritual use and construction. Two examples are discussed here. Barrow III contained a central cairn about 1 m in diameter, constructed mainly of quartz stones set on the old land surface. In the upper level of the cairn, a small cremation deposit of calcined bones from one individual, possibly once contained in a leather bag, had been deposited. These bones consisted of teeth, but no skull fragments, a femur and metatarsal head together with nine non-human bone fragments, one of which was identifiable as a pig scapula. Two stones of highly micaceous fine-grained granite, especially chosen for their glitter, and a piece of a quern stone were associated with this cremation. A 4-m-diameter turf mound was constructed over the quartz cairn and a bank with external ditch a further *c.* 2.5 m beyond the mound periphery. The ditch was continuous, but the bank was interrupted to form an entrance on the eastern side.

Barrow V was 18 m in diameter, consisting of a platform mound of turf and yellow clay construction with an external kerb. There was no burial deposit, but seven features were recorded sealed underneath the barrow, representing initial ritual activity: a cairn on the eastern side consisting of twelve pieces of quartz overlying a shallow depression containing charcoal and white clay, a low cairn on the southeast side consisting of slate and some quartz covering charcoal and carbonized timbers of an upright post, a charcoal-filled pit, a large post hole immediately to the southeast of the cairn, a miniature collared urn in a pit, also from the southeast of the cairn area containing fat and resin, a fallen orthostat and socket on the western side of the cairn, and a holed stone by the kerb in the southeast.

The Colliford cemetery consisted of three barrows, A, B, and C, set in a north-south line along a low spur a short distance apart in a rather inconspicuous setting west of the St Neot river. The excavator notes that they were readily visible in the landscape only when viewed from a distance of *c.* 50 m to their west or from near a fourth barrow situated 300 m to the northeast and on the other side of the river (Griffith 1984: 84). The two southern cairns (B and C) were less than 10 m in diameter, and the largest and northernmost, 17 m in diameter, was set at the tip of the spur. The largest and most striking barrow did not cover a

burial, but there was possible evidence for a cist in the middle barrow B, and a central cremation was recovered from the southernmost of the three.

The largest cairn was constructed as an inner stone cairn with turfstack and outer walling. Before construction of the cairn charcoal, entirely from mature oak, had been scattered on the old land surface in several substantial concentrations. There were no traces of burning in situ, and this material must have been derived from elsewhere. The old turf surface was also scattered with streaks of red material varying in colour from brown to scarlet and unlikely to be of natural origin.

Barrow B was built over a large granite stone that had been moved to the barrow site before the cairn was constructed, thus constituting an artificial 'grounder' or central 'tor'. Just to the east of this central stone, remains of a possible cist were recovered. The old ground surface, as at barrow A, was streaked with red material.

The old land surface under Barrow C was also streaked with red material. At the centre was a small stake hole, probably used for marking out the cairn periphery, and to the east a pit cut into the old land surface filled with charcoal and cremated bone. The sides of the pit showed traces of scorching, indicating that the bone and charcoal had been deposited hot. Around this pit were several charcoal scatters. Within a turf stack constructed over the pit, an inverted small decorated pot was recovered. Above the turves a stone capping had been provided.

The fourth excavated cairn at Colliford was more structurally complex. The old land surface had been completely stripped and was covered with flecks of charcoal and some flintwork. Four pits had been dug into the subsoil beneath the cairn. Three were sealed with stones and had a fill of oak charcoal and wood fragments. This ritual area was then partially sealed with a layer of grayish clay and two cairn rings constructed. The area within the inner cairn ring was infilled with five discrete layers of charcoal, loam, and stones. Covering all these features a stone cairn was heaped up.

The excavations at the Davidstow and Colliford cemeteries give a good indication of the structural variability of the cairns and the types of deposits found in them. Of the ten Davidstow cemetery cairns, five contained cremations, three were multiphase sites, seven covered pits, eight quartz deposits and shiny granite stones, five charcoal and/or fire deposits. Most covered small scatters of worked lithics. These are all recurrent features recorded from other excavated cairns. Apart from the Rillaton Barrow find, metal has been recorded from only one of these excavations, that at Fore Down, St Cleer, which contained a riveted dagger. Taking into account other excavations of barrows on or around Bodmin Moor (Table 8.9), one can make the following general observations:

1. Only some of the barrows were specifically intended for burial. These are most usually the smaller cairns. While burial may have taken place in the larger cairns, this does not appear to be their primary function but an element in a much more extensive series of ceremonial rites. Both the largest barrows in the Davidstow and Colliford cemeteries had non-sepulchral functions. The bulk of the population did not receive burial in a cairn, but there is little indication that those who did constituted an elite group.
2. Burial of a single individual either in a pit or a pot within a pit was the normal practice. All except one are the cremated remains of mature adults of reproductive age. Biological sex is not possible to determine, and young children do not appear to be represented. The major exception is Stannon cairn 3, in which the cremated remains of three individuals were deposited in two distinct layers in a funerary urn. Secondary use of the cairns for additional burials is documented only at one site, Tregullund. The bones recovered from the cremations do not represent all body parts, but only a selection, most usually skulls and long bones, a continuation of earlier Neolithic traditions of the formal deposition of selected body parts. Grave goods associated with these cremations are few and highly variable and appear to be token depositions.
3. Most cairn sites seem to have started as open sites in which a variety of activities took place, including fires, pit digging, the deposition of large quantities of charcoal, wood, lithics, and quartz piles. In a number of cases, these ceremonial areas are enclosed and defined with stake circles and/or stone settings. The later construction of cairns and turf mounds was used to seal the ceremonial area and create a noticeable marker in the landscape serving as a visible memory of the activities that had taken place. Many burials, where they do occur, are connected with this stage of the life cycle of the site rather than the initial one.
4. The central ritual focus at a number of sites appears to have been not a burial but stones (either occurring at the site or taken to it) along with charcoal-filled pits, quartz piles, and in some cases wooden posts, stakes, and stone orthostats. Mature oak almost exclusively makes up the charcoal deposits found underneath the cairns, indicating the symbolic significance of this tree. Both quartz and charcoal from mature oak timbers were deliberately buried in a manner metaphorically analogous to the human remains. A chain of landscape signifiers would seem to have linked oak, quartz, and human bone with fire, acting as an agent of mediation and transformation. At the cremation pyres, fire acted to transform the green of oak into black charcoal, wood whose life had been terminated, human flesh into white calcined bones. These

were deposited with white quartz, perhaps a material metaphor of the 'bones' of the land itself, to which living substance was being returned in a transformed state. In the process, both the individuality of the trees and the human body were being reduced to ancestral substance with regenerative powers.

5. Within any particular barrow group, there was probably always one barrow site in use for ceremonial activity. Barrows were perhaps being used cyclically, with each site changing its function along with its structure. Once the mound had been built, sealing off the ceremonial area, a neighbouring site would begin to be utilized (Barnatt 1982: 81). Cairns and barrows began to be constructed from the earlier Bronze Age and were used for over a millennium. Some cemeteries, such as the one at Davidstow with late Neolithic Grooved Ware sealed beneath barrow XXVI, appear to have been in use for as long as a millennium. Others, such as those in the smaller Colliford cemetery, appear to have been used much more briefly.
6. The form of the cairns and the activities taking place at them appear to link all the most important features of the contemporary natural and cultural environment of Bodmin Moor and beyond—the rocks, sea, and sky—emphasizing a continuum between them. They incorporated boulders and were built on or around tors; they ran lineally on ridges and between prominent landmarks; the pits beneath them perhaps represented the fissures, clefts, and 'caves' in these rocks. The layering of the mounds with different types of materials—and the inclusion of shiny granite and white iridescent quartz, black loams, and yellow and grey clay—indicates a concern with both the tactile qualities of raw materials in the landscape and colour symbolism. The widespread constructional use of granite, quartz, clay, and loam brought together at the barrow site highly significant elements of the surrounding natural landscape. The most significant (ancestral: a metaphor for the lineage?) tree, the oak, was incorporated in charcoal and wooden deposits. Worked and modified stone tools and objects were made from the slates, granites, and greenstones of the Moor, and beach flint and pebbles were incorporated from the coast (Healy 1988: 142–146). The domestic world of life in the settlements is represented by the thatch weights, agricultural tools, the cleared trees, and pottery.

Dividing the Land

Johnson and Rose describe field systems on the Moor as 'typically curvilinear and accreted, having developed organically from one or more foci' (1994: 59),

although in some areas such as East Moor the layout is much more regular and planned (Brisbane and Clews 1979; Johnson and Rose 1994: 63–64). Two main phases of land division may be distinguished:

1. The development of settlements, farms, houses, and accreted curvilinear fields with large-scale cultivation, and possibly with a substantial pastoral component during the earlier Bronze Age.
2. The construction of large-scale boundaries that divided the area into blocks during the later Bronze Age. Within each block, there are a series of houses and enclosures showing evidence of cultivation, but the pastoral component of the economy may have substantially increased. These large-scale land boundaries sometimes overlie the earlier curvilinear field boundaries. They appear to be well-developed only in the northwest and northeast of Bodmin Moor (East Moor). There are few in the southwest of the Moor and only one (running up to Bearah Tor) in the southeast. Even in the northwest of Bodmin Moor they are absent from substantial areas (Figure 8.13). In some cases, they cross-cut and partly incorporate the earlier, smaller, and shorter and more sinuous and less regular field boundaries and enclosures. Unlike the earlier boundaries, they are not intimately related to the characteristics of the land—the type of slope and nature of the terrain at a very localised level—but cut across the topography, dividing it into clearly defined areas. They typically join natural boundaries in the landscape running up and across slopes between bogs and streams or running between bog and stream margins and areas of higher ground with exposed clitter and rocks. They thus utilize and join natural boundaries in the terrain so as to clearly define landscape blocks or areas. It is interesting to note that they occur in the most densely settled, and arguably the most symbolically significant, areas of the Moor in the later Bronze Age. Natural boundaries in the landscape—streams, ridges, bogs, tors, and rock outcrops—embedded in social memory, would appear to have sufficed elsewhere.

Although probably constructed at the same time as the Dartmoor reave systems discussed by Fleming (1978, 1983), they do not appear to be comparable, being much shorter (1 km or less) and defining much smaller areas of land. It would be difficult to make out a case that they defined social territories. Johnson (1980: 163–164; Johnson and Rose 1994: 73–76) discusses a number of possible economic functions of these land boundaries: to act as inter-farm boundaries or to define and control cattle movements and access to grazing land in a situation of increasing pastoralism. Rather than being used to define land rights, or

to control animals, I argue that their primary purpose was to control and mark out access to crucial symbolic and ritual resources in the landscape: large cairns and stone circles.

Figure 8.13 shows the boundaries and major monuments—stone circles and large cairns over 10 m in diameter in northwest Bodmin Moor. Looking at these land boundaries, one notes that each serves to incorporate a single monument (cairn or stone circle) or a number of monuments (a few cairns or cairn and stone circle) of major importance. To give some examples: Alex Tor with its massive surmounting tor cairn is enclosed by two boundaries that run up and cross the slope on both sides of the tor. Small areas with houses and fields occur a short distance away down the slope to the west. Land boundaries to the south and the north of Alex Tor define areas with a cairn or a number of cairns. The Stannon stone circle is already effectively enclosed by bogs and streams on three sides. A land boundary to the southwest of the circle runs along a break of slope cutting off the flat plateau area in the middle of which the circle is located from higher ground with cairns and the Louden Hill stone circle. Part of this boundary was excavated in 1991. It was a substantial stone-faced wall, probably stock proof, on the line of an earlier timber fence (Herring pers. comm.). The settlement areas to the south and the west of Rough Tor are bounded off from one another by a number of substantial boundaries that run from the clitter on the lower slopes of the Rough Tor summit to lower-lying bog areas. The boundaries here would seem not only to have divided settlement areas but also served to mark out and lay claim to access to the Rough Tor summit itself with its massive tor cairns and important ceremonial enclosure. Two successive processes would seem to be at work here: first, the marking out of the tors and hilltops through the construction of the cairns as ritual foci; second, the subsequent enclosure of these sites in landscape blocks. On Rough Tor, the cairns had probably already been built with reference to the incorporating walls of an enclosure dating back to the Neolithic. In the later Bronze Age, other cairns and the stone circles subsequently became incorporated within enclosure systems running up to natural boundaries and landscape markers. Access to monuments as a result became increasingly controlled and formalized.

In other areas of Bodmin Moor, a rather different process occurred, in which cairns themselves became incorporated within, rather than surrounded by, boundary systems. Bearah Tor consists of a chain of six main rock outcrops. The most easterly of these is marked by a tor cairn. Beneath the westernmost outcrop, another cairn, now badly disturbed probably by modern quarrying, was built up away from where the field boundary runs cutting across the moorland toward the bottom of a slope. One gap through it is positioned next to another cairn 5 m to its south. Here three cairns are linked by a boundary system, running up and continuing the west-east line formed by the Bearah Tor chain of rock outcrops.

On East Moor, two major phases of the development of land boundaries and enclosures can be distinguished (Brisbane and Clews 1979; Johnson and Rose 1994: 63). Here a series of settlements and fields extend along sloping land on the edge of a moorland plateau divided up by streams for 3.5 km. Seven settlements lie within the 300-ha area, and there are two large cairns and the Nine Stones stone circle (Figure 8.17). The latter is set in a flat and low-

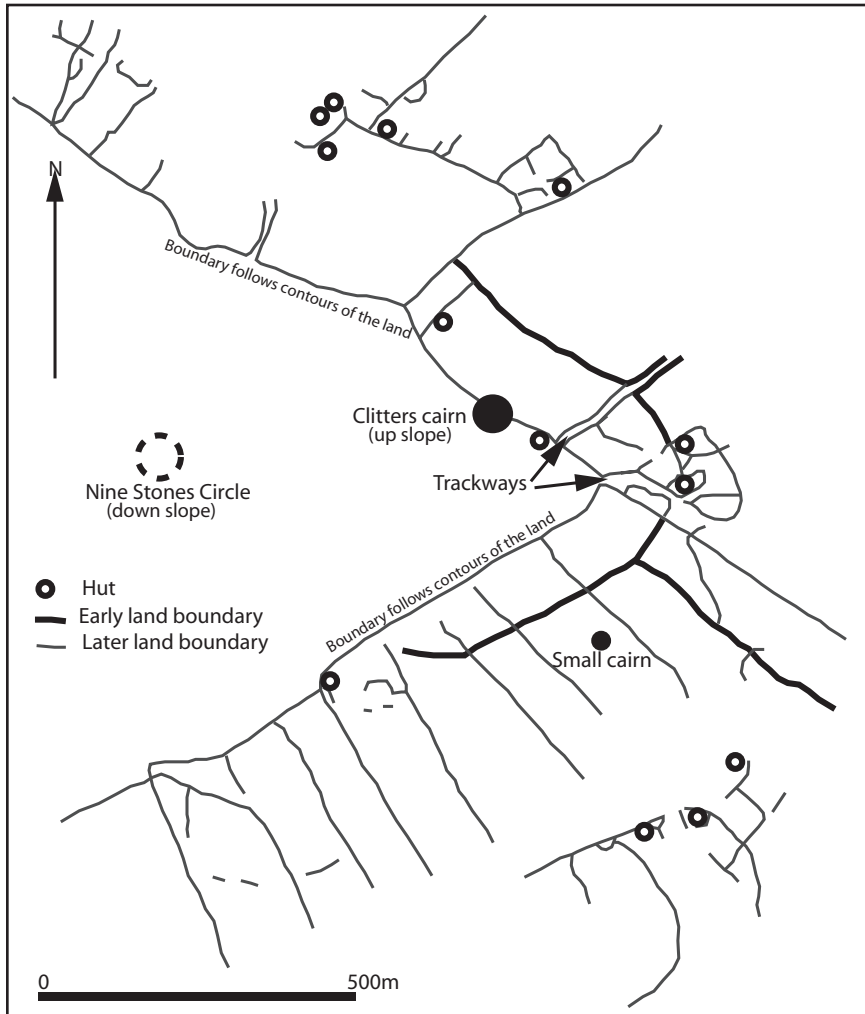


FIGURE 8.17 Land boundaries, houses, monuments, and cairns in the East Moor area of Bodmin Moor (map based on Brisbane and Clews 1979 and Johnson and Rose 1994).

lying moorland plateau area well below the ridges on which the settlements and cairns are located. Excavations (Brisbane and Clews 1979) have demonstrated that Clitters cairn is older than the field boundary that now runs up to it and incorporates it. Careful field observations have shown that the earliest large-scale field boundaries divided the area into tracts of land separating the two cairns from each other (Figure 8.17). With later boundary development, the land became increasingly parcelled up, and Clitters cairn became incorporated in one of the boundaries. When this process occurred on East Moor is not possible to tell—it was probably a late development in which the ritual power and importance of the cairns were used to symbolically strengthen and legitimise boundaries cutting up and redefining access to the landscape.

CONCLUSIONS

Ever since the first human encounter with Bodmin Moor in the early Mesolithic craggy rock outcrops and their contrastive relationship to other elements—streams and bogs, plateau areas and rounded hills—played an extremely important metaphoric role in the structuring of personal experience. Learning about the landscape was part and parcel of the process of understanding oneself, the social world and the entire cosmos. During the early and middle Neolithic, sacred places began to be physically marked and referenced through the construction of cairns and hilltop enclosures, but knowledges of the significance of these places remained relatively unstructured as the small groups of Neolithic hunter-fisher-gatherers moved through the landscape. During the later Neolithic, and throughout the Bronze Age, in tandem with the first permanent settling of the Moor, there was a dramatic increase in both the numbers and the forms of monuments that were constructed. The day-to-day rhythms of social life altered significantly in that they now became bound up with permanent place-bound dwellings rather than seasonal movements across wide tracts of land.

During the Bronze Age, two main competing centres of social power may have developed on Bodmin Moor: the Rough Tor area in the northwest and the Stowe's Pound area in the southeast. There are a number of reasons for suggesting this:

1. The presence of ritually important hilltop enclosures dating back to the Neolithic, which became successively modified.
2. The concentration of tor cairns in these areas and the presence of the two most impressive tors on Bodmin Moor: the Cheesewring and Showery Tor—the former incorporated into the Stowe's Pound enclosure, the latter encircled by a ring cairn.

3. The presence of the two largest cairns on Bodmin Moor—the Rillaton barrow with its rich grave finds and Showery Tor.
4. A concentration of stone circles—Fernacre, Stannon, and Loudon Hill all—within 2 km of Rough Tor, the three Hurler's Circles, and the Craddock Moor circle near to Stowe's Pound.
5. The presence of exceptionally large numbers of barrows and barrow cemeteries. Caradon Hill with seventeen barrows running in a rough northwest to southeast line, two of which incorporate tors, is the largest lineal barrow cemetery on Bodmin Moor; fifteen other large barrows including the Tregarrick Tor cairn are located in the immediate area of Stowe's Pound. Rough Tor has the densest concentration of both large and small cairns around it anywhere on Bodmin Moor, as well as settlements.

The presence of exceptionally rich burials, such as that of the individual interred in the Rillaton barrow, strongly suggests the existence of a small, but significant, social elite associated with these places. The most important resource appropriated locally to maintain the authority of this social elite is unlikely to have been either land, crops, animals, or raw materials such as quartz or tin—readily accessible to all and very cumbersome to control. Controlling flows of exotic exchange items also seems unlikely to have been important in an area such as Bodmin Moor, which appears to have been of peripheral significance in the Bronze Age regional economy. Virtually all the prestigious items known from Cornwall in the Bronze Age are confined to coastal areas to the south and the west (Christie 1986). Knowledges deemed essential to the reproduction and well-being of the social group were, by contrast, unlimited and quite easy to control and manipulate. One form this knowledge took was that embodied in the cultural significance of the landscape, mediated through monuments and their potent structuring effects on the biographies of individuals, groups, and collectivities. The landscape provided a primary medium through which power was reproduced. The ritually and symbolically effective placing of monuments in the landscape became of vital significance in the creation, reproduction, and articulation of authority, in a relationship between ritual specialists and those who were led and instructed. One of the purposes of using and visiting these monuments was to inform and embed in the mind a sense of awe and wonder of the significance of the place and its ancestral connotations, the events which had taken place there and the telling of myths recounting the spirit powers inhabiting it. This entailed an ever-increasing emphasis on creating, maintaining, working, and re-working an intimate network of relationships between monuments and the topography. It was a process in which earlier social practices and attitudes to the land

become transformed and appropriated. Throughout the Bronze Age, the landscape underwent a constant process of structuration in relation to both the numbers and the architectural forms of the monuments being imposed on it. As each new monument was constructed, it became more and more socially embedded as part of an all-encompassing system of ritual knowledge. The Neolithic past was actively appropriated so as to naturalize and legitimize the present. This may have involved the remodelling of the Rough Tor and Stowe's Pound enclosures through extending and modifying their entrance ways and by means of cairn construction. Tor cairns were built on or around those rocks referenced at a distance by the Neolithic long cairns.

The stone circles and stone rows variously acted so as to mark out or link sacred areas, or their margins. Ceremonial movement along, around, and between them entailed passing transition points and the revelation of perspectival effects in relation to important topographic elements of the landscape beyond. The relationship between the stone circles and the stone rows and the landscape was undoubtedly complex, and there was no single set of meanings associated with all of them. The circles were set in sacred spaces devoid of settlements or cairns, bounded by streams and bogs over which one had to pass to move between them. Most were symbolically linked with a neighbouring tor at a local level, usually to the north, but were also specifically sited so as to relate to a wider symbolic geography of the landscape, and particularly to important visually prominent tors farther away. The precise setting of many of them seems to be planned in relation both to other circles and to important tors and hills. Some circles incorporate basic solar alignments in relationship to these tors. Moving between them involved important changing perspectival effects in relationship to symbolically charged places such as Rough Tor. All these features formed part and parcel of the selective structuring of the experience of the landscape for the people who were led into them, left them, and followed in processions between them. Some stone rows linked together sacred areas, others defined their centres or margins. The experience of being taken along some of them engendered striking perspectival effects in relation to the wider topography.

The topography and its significance were thus reworked by these monuments when people were led along them, or were taken into the specific and restricted spaces they served to define. This simultaneously entailed a closing down and restriction on the visibility of the landscape and options for movement through and knowledge of it. The single entrance to the Stripple Stones circle-henge may simply represent and formally mark on the ground what happened in the other circles: there was a single way to approach this monument and to leave it. A possible change through time from the construction of irregular to regular circles suggests an increasing concern for symmetry

and control. While the irregular circles, with their flattened arcs to the north, emphasized the importance of this cardinal direction, with the tors beyond acting as a focus and backdrop for ceremonies, the regular circles no longer physically mark this on the ground. Such knowledge existed only in thought and had to be transmitted by some and learned by others.

Natural boundaries in the landscape, particularly marsh areas and water-courses, always seem to have been important in defining the margins of sacred spaces. In the late Bronze Age, as well as particular *places* (cairns, tors, stone circles, and so on) being of especial significance, marked out by monuments, and surrounded by sacred areas delimited by marsh, stream, and tor, it also became important to formally delineate and bound off other spaces in the landscape lacking such topographic reference points. Linear boundaries were strung out between rocks and streams or along ridges, and in some cases derived additional symbolic potency and power by incorporating cairns.

From available radiocarbon dates, many of the cairns appear to have been constructed from c. 2200 to 1700 B.C.E. (Christie 1988: 164). Because radiocarbon dates for all but one of the stone circles and rows are lacking, their temporal relationship to the cairns is uncertain. What does seem to be apparent is that the cairns embody in their positioning, construction, and use similar structuring principles. Being both aligned in rows, along which processions would take place, and covering circular arenas used for display and deposition, the cairns make obvious metaphorical reference to the stone circles, the circular stone houses, and the stone rows.

The cairns display an almost obsessive concern with circularity, enclosure, and boundedness, effected by various means—the construction of kerb stones, inner and outer rings of stones, stake and post circles, ditches, and banks. Burial is all about metaphoric containment—bones in pots in pits surrounded by fences or cairn rings finally heaped over with stones or turves. This emphasis on circularity and enclosure with entrances, where they occur, in the southern sector of the cairns links the cairns with the stone circles, as does the use of quartz in both (deposited in piles under the cairns and used to cover the area enclosed by the central Hurlers stone circle). Excavation of the Stripples Stones circle henge revealed four pits near to the centre stone and quantities of charcoal and oak timbers from the ditch (Gray 1908), structures, and types of deposits also featuring so prominently at the cairn sites.

The stone circles and stone rows indicate a concern with processions and specific paths of movement through the landscape, of serially ordering and arranging activities and events. The frequent linear arrangement of the cairns in the landscape and the fact that many, such as those at Colliford, would be prominent only from specific positions in the landscape, especially other barrow sites, betrays a similar concern, as do the arrangements of stake and post

circles, ditches, and banks with proscribed entrance ways. The Cocksbarrow cairn (Miles 1975: 58–60; Miles and Miles 1971) provides a particularly striking example. Here an initial phase of construction consisted of a double circle of at least eighty-seven posts with an entrance on the southeast side marked by a yellow clay floor. Inside three (perhaps four) posts were set up to mark the cardinal positions. Later the site was remodelled: the ring of posts was removed and a wide bank constructed of turves with stone facing on both sides. An outer gap enabled entry onto the turf bank, but movement along it was possible only in a clockwise direction because of a blocking wall. Only when one was opposite the outer entrance did a second gap allow entry to the small central area of the cairn.

In the Mesolithic and the Neolithic, the primary symbolic connections were between the sea, the inland lake of Dozmary Pool, and the tors. During the Bronze Age, the landscape of Bodmin Moor becomes, quite literally, filled with cairns. Some were very conspicuous and meant to be seen from certain cardinal directions for miles around, thus emphasizing links between the land and the sky. The eternities of the land, oak, and stone were integrated by the cairns, in intervisible constellations. Some cairns were less prominent and had a more localised significance. Broadly, and as excavations have demonstrated, a division can be drawn between those monuments (generally those in less conspicuous positions) that had burials as their primary focus and those whose importance was to act as cultural and social markers and centres for ritual activity in the landscape in which burials were not made, or were only of secondary significance. The larger and more important cairns incorporated, or perhaps substituted for, many of the ceremonial activities that took place at the stone circles, but the major distinction may simply have been between a monument communally used in a series of ceremonies linking different social groups (the stone circles) and one more intimately related to rites relating to individuals within a single community: the cairn and cairn cemetery.

Unlike the stone circles and the stone rows, the cairns were built in the hundreds. They crowned the ridge and hilltops, resembled, encircled, incorporated, and hid the tors. Knowledge of the landscape became bound into them. Through time they became the most significant permanent sacred reference points in the landscape of Bodmin Moor, usurping the social role that the tors had previously played, a cultural triumph over the sleeping powers of the rocks.



CHAPTER NINE

SUPERNATURAL PLACES IN WEST PENWITH

We have in Cornwall Rocks of that grandeur, remarkable shape and surprising position, as can leave us in no doubt but that they must have been the Deities of people addicted so much to the superstition of worshipping Rocks. (Borlase 1754 [1973]: 171)

West Penwith, the western-most peninsula of mainland Britain, is virtually an island surrounded by the sea on three sides, with the indented Hayle estuary and the lowlands of the river Hayle and Red river and Marazion marsh to the east, where the distance from coast to coast is only 6 km (Figure 9.1). The island character of the peninsula is readily appreciated when one stands on the summits of many of the rugged hills, particularly in the north. Roughly 20 km long from west-east and 8 to 12 km wide, West Penwith is one of the few places in Britain from which the sun can be seen to have a watery death and birth at important points in the solar calendar. From this basic observation, without any need to further allude to complex geometry or astronomical

alignments, one can suggest that elemental cosmological themes of fire, water, stone, birth, death, and the regeneration of life had a particular resonance and symbolic power among the prehistoric populations.

This is also the only point in southwest Britain at which granite outcrops reach the sea. From St Ives to Penzance, roughly 50% of the coastline is made up of granite. The rest consists of heavily metamorphosed rocks of Devonian Age. Elsewhere, the granite is confined to inland areas, such as Bodmin Moor and Dartmoor, with the exception of a small area on St Agnes Beacon in north-west Cornwall. An elemental clash between the hardness of the granite and the power of the sea forms some of the most rugged and dramatic coastal scenery in Britain. In the northern part of West Penwith, a series of moorland hills face the sea in a series of rock-strewn ridges, crowned by tors (fantastically weathered rock outcrops) and deeply dissected by numerous small streams. These hills are never more than a few kilometers away from the coast, and at Bosigran they rise immediately above it to the summit peaks of Carn Galver (249 m), which together with the neighbouring hill, Watch Croft (252 m), are the highest points. Carn Galver, the only rocky tor to rise directly out of the

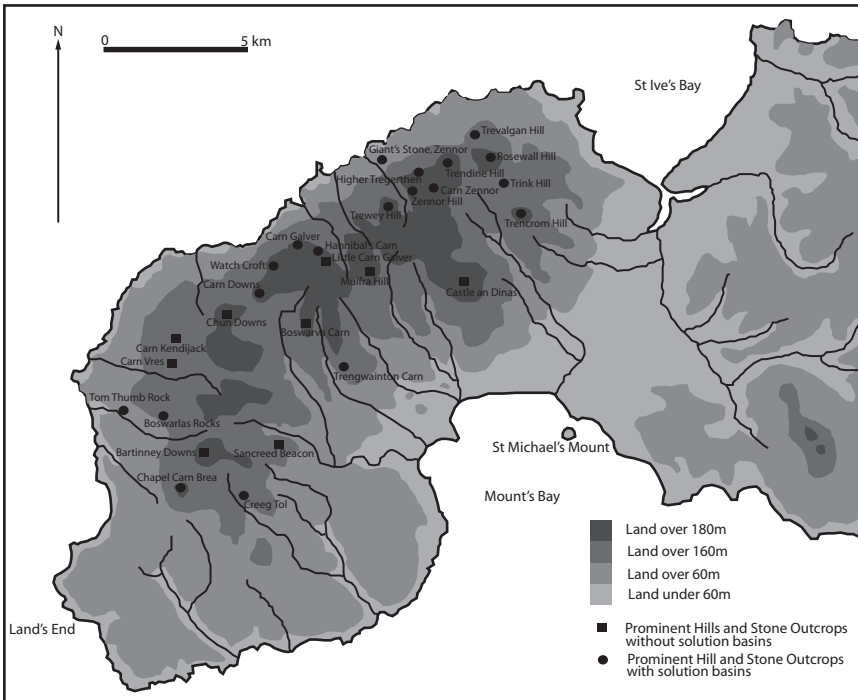


FIGURE 9.1 West Penwith: prominent hills and stone outcrops with solution basins.

sea, would have had a special significance in local cosmologies by virtue of this singular relationship. It was a hill linking the sea with the sky, the underworld in which the fiery sun sets, with the heavens. Elsewhere, the treeless northern hills are separated from the coast by a narrow band of flattish cultivated land. The southern part of the peninsula, south of a line drawn between St Just and Penzance, contrasts markedly with that to the north because of the absence of coastal hills with rocky outcrops, being punctuated only by the lower and more gentle rounded hills of Chapel Carn Brea (198 m), the westernmost hill of the peninsula, Bartinney Downs, and Sancreed Beacon, apart from the dramatic rocks forming St Michaels' Mount to the east.

The most visually striking and dramatic of the northern hills with rock outcrops are Carn Kenidjack and Carn Galver (see Figures 9.1 and 9.2). Both punctuate the skyline and can be seen from a considerable distance away from many of the Neolithic and Bronze Age monuments. There is little doubt that these two were the paramount sacred hills of the northern part of West Penwith. Other hills with notable craggy tors are Zennor Hill, particularly striking when seen from the west, Zennor Carn, Trendrine Hill, and Rosewall Hill. The other hills in the north of West Penwith, although often boulder strewn, either lack any visually impressive rock outcrops (for instance, Mulfra Hill and Chun Downs) or are small and of only local significance (for example, Watch Croft and Carn Downs).



FIGURE 9.2 View to Carn Galver looking north from the interior of the Boskedan stone circle.

SUPERNATURAL STONES

The striking feature about granite is the manner in which the rock weathers to form the fantastically shaped tors and rock stacks. The manner in which these form and the individual shapes and characteristics of the tors depend very much on the qualities of the granite itself, such as it being coarse or fine grained, and the particular disposition of the jointing patterns. These also determine the presence, or absence, and shapes of the solution basins that characteristically form in the top stones of the uppermost rock stacks (see Figures 9.7, 9.9, 9.15, 9.18). On the sides of the rocky outcrops, the horizontal and vertical joints in the granite, enlarged by the freeze-thaw action of ice, particularly during the periglacial, and by water, may weather into a series of very regular horizontal blocks that may appear to be like massive walls. Striking examples in West Penwith occur on Zennor Hill and Trendrine Hill (Figure 9.3). The uppermost rocks are frequently round, forming piles of laminated stacks where running water has smoothed and enlarged the joints and cracks. Such stacks are particularly prominent on Zennor Hill, Carn Zennor, and Rosewall Hill. They may ultimately develop into logan or rocking stones. These logan stones may also be found in more low-lying and coastal locations. Notable examples include the Giant's Stone north of Zennor, an oblong block 5.5 m long and 1 m thick, with



FIGURE 9.3 Rock stack resembling a wall on the western side of Trendrine Hill.

three deep solution basins with eroded lips on its uppermost surface, and the logan stone at Treryn Dinas on the south coast (Figures 9.4 and 9.19).

The high rock outcrops are frequently characterised by the presence of deep fissures, runnels, voids, and chamber-like spaces. In West Penwith, the most dramatic examples occur on Zennor Hill and Carn Zennor, Rosewall Hill, Trevalgan Hill, and Trendrine Hill (Figure 9.5). Slabs that have toppled from the top of the rock stacks may rest horizontally or vertically against their sides, thus creating slanting roofed chambers large enough to enter and walk through. In West Penwith, notable examples can be seen on Zennor Hill and on the eastern side of Trevalgan Hill, where an enormous slab 5 m long and 3.5 m high rests against the side of a round rock outcrop on the uppermost surface of which is an oval, 70 × 50 cm water-filled solution basin (Figure 9.6). Carn Kenidjack and Carn Galver, although deeply fissured and most visually impressive on the skyline, lack such chamber spaces and massive collapsed slabs. The distinctive notched rock stacks at the southern and higher end of Carn Galver have pronounced vertical and diagonal fissures, giving the impression that this end of the hill has been violently thrust up out of the ground.

Solution basins forming in the uppermost tor stacks through chemical weathering processes of the granite occur on many of the high hills with rock outcrops (see Table 9.1 and Figure 9.1). Mildly acidic rainwater weakens the



FIGURE 9.4 Giant's Stone, Zennor.



FIGURE 9.5 Cleft in the rocks on the summit stacks of Trendrine Hill.



FIGURE 9.6 Collapsed block and chamber space on the eastern side of Trevalgan Hill.

Table 9.1 Solution basins on the principal hills and on isolated rock stacks in West Penwith. Map numbers refer to Figure 9.1.

Hill/Rock Outcrop	No.	Notes
Bartinney Downs	0	
Bosworlas	11	On top of isolated stacks to south of Boswarva Carn.
Rocks		Heavily eroded and some huge. Noted by Borlase (1754).
Boswarva Carn	0	
Carn Downs	7	Five on N outcrop; two on southern.
Carn Galver	8	Northern summit area: 4; platforms between N and S summit: 5; S summit: 1. Generally small and irregular.
Carn Kendijack	0	
Carn Vres	0	
Carn Zennor	25+	Spread across six areas with rock stacks. Some deep and water filled, especially well developed at N end. One stack has collapsed slabs with basins leaning against the W and E sides.
Castle an Dinas	0	
Chapel Carn Brea	1	On displaced slab to the north of the summit.
Chun Downs	0	
Creag Tol	8	On outcrop to the northwest of the Boscawen Un stone circle.
Giant's Stone, Zennor	3	On top of logan stone.
Hannibal's Carn	9	In approximate centre of long linear rock stacks running downslope S-N. One leaning slab has an interconnected series of six forming the roof of a chamber space beneath. An additional three on the tops of jumbled rocks to the N.
Higher Tregerthen	0	One concealed on top of a high stack in garden of house; sixteen on prominent rock stacks to NW, some water-filled, others with deeply eroded lips.
Little Carn Galver	0	

(Continued)

Table 9.1 Continued.

Hill/Rock Outcrop	No.	Notes
Mulfra Hill	0	
Rosewall Hill	9+	Five scattered among outcrops on NW end of hill and one thin slab riddled with channels; one solution basin in stack in middle of hill at S end. Three in laminated outcrops at NE end.
Sancreed Beacon	0	
Tom Thum's Rock	2	On the W side of an isolated granite boulder.
Trencrom Hill	28	Four on lower slopes on W side of hill; two on stacks at N end outside Iron Age enclosure; nineteen on central stacks; three on S hill slopes.
Trendrine Hill	5+	One on S side of summit stacks; one slab honeycombed with hollows to NW of summit; Two on block 150 m W of summit; one with partially eroded base in centre of rock outcrop on W edge of summit area.
Trengwainton Carn	3	On summit stacks.
Trevalgan Hill	2	Deep and water filled on stacks on E side of hill.
Trewey Hill	1	On low grounder c. 200 m N of summit cairn. Far more prominent rock stacks on W side of hill have none.
Trink Hill	1	Hidden in the top of the N end of the Twelve O'Clock Rock, a large rock stack on the S upper slopes of the hill.
Watch Croft	5	All in stacks on W side of hill below summit area.
Zennor Hill	15+	Stacks at far S end: seven, including one eroded through at the base; eight on three other areas with stacks.

feldspars in the granite so that quartz grains become loosened. Solution basins tend to form on rocks with a flat top where the water can collect, rather than run off, or on rocks inclined at only a slight angle. In many cases, they cannot be seen from below and are visible only when one climbs up to the top of the rock stacks and looks down, a hidden feature of the tors. Individual solution

basins have a remarkably artificial appearance, being normally circular or oval in shape with a flat bottom and bevelled edge with steeply inclined sides. They may vary in size from 15 to 20 cm in diameter to 1 m or more. They may be anything from 10 cm to 50 cm or more in depth (Figure 9.7). Typically, those close to the rock edge tend to erode, through time, over the lip of the rock and become open on one side with the water channelled down and out of the basin over the edge. An individual rock stack, depending on its size, may have anything between one and ten solution basins. Usually there are between one and four. Frequently, the basins erode into one another forming an interconnected series of rounded basins and channels that may riddle the entire rock surface, giving it a highly irregular and fantastic honeycombed appearance (Figure 9.8). In cases where the upper rock stack overhangs another below, these solution basins may sometimes erode all the way through the base, rather than over the lip of the rock, creating circular or oval holes. These tend to be very infrequent compared with basins with eroded lips.

Solution basins fill with water, the deeper ones holding water all year round. They are common drinking places for birds of prey. In the bottom, as the softer matrix of the granite dissolves, small quartz crystals collect that can



FIGURE 9.7 Water-filled solution basins in the summit stacks on the northern end of Carn Zennor.



FIGURE 9.8 The central summit stack in the middle of the Neolithic enclosure at Carn Brea, with an interconnected series of deeply eroded solution basins.

be scooped out. On a sunny day, the shallow water can feel surprisingly warm, especially in the spring and autumn, when the air temperature can be cold. When gales blow, the water may be violently churned around in the basins like a whirlpool. In West Penwith, they are most frequent and well developed on Zennor Hill and Zennor Carn. Carn Kenidjack has none, whereas those on Carn Galver are generally small and irregular in form. Examples of solution basins completely or partially eroded through at the base occur only on the western end of Trendrine Hill and the southern end of Zennor Hill. Although solution basins form on the high tors, they also occur on isolated rocks and rock stacks in more low-lying and coastal areas. Notable examples are the logan stone at Zennor, mentioned above, Creeg Tol, a small rock outcrop a short distance to the northwest of the Boscawen Un stone circle in the south, Bosworlas Rocks (Figure 9.9), and the Tom Thumb Rock to the south of St Just. Solution basins also occur sporadically along the coastal cliffs but are usually less numerous and well developed, with notable exceptions at Bosigran, Treryn Dinas, and near St Loy.

Each of the hills of West Penwith must have had its own particular meanings and supernatural associations for the prehistoric populations. These people would have regarded the entire landscape as an ancestral creation. The hills, the tors, and the solution basins would have been variously regarded as



FIGURE 9.9 Solution basins in the Bosworlas Rocks.

the petrified shapes of ancestral beings, or as the result of the actions of the ancestors who sculpted the rocks and created the chambers in them, perhaps as their resting or burial places, and who carved out the solution basins. The caves and fissures in the rocks, and perhaps the water-filled solution basins themselves, may have been regarded as places where the ancestral beings who created the world entered and left it. The tors would thus be potent places associated with the ancestors and ancestral powers. It is likely that different hills were associated with different kinds of ancestors and ancestral work. Carn Kenidjack, lacking solution basins, and Carn Galver, with very few—and neither of which have dramatic ‘caves’ or fallen slabs creating chambers but whose rock stacks are highly visual, scraping the sky—would have had a very different significance from Zennor Hill or Trendrine Hill. The special relationship with the sea at Carn Galver has already been noted. The unusual hooting of the winds through the peculiarly weathered stacks of Carn Kenidjack, commented on time and time again in guide books and in popular and ‘mystical’ literature, was perhaps recognised as ancestral voices.

The potential significance of the peculiarly weathered rock stacks, the logan stones, and the solution basins to the prehistoric populations was first commented on by the Rev. William Copeland Borlase (1973 [1754]), the founder of Cornish archaeology, whose work has subsequently been ignored,

or ridiculed, by subsequent generations of more empirically minded archaeologists interested only in 'cultural' places. Borlase remarked on the fantastic forms of particular tors such as the Cheesewring on Bodmin Moor and the Bosworlas Rocks (Figure 9.9), and he argued that they must have been sites of worship and places where Druidic orators would have made pronouncements. He also noted that on the Cheesewring, on logan or rocking stones, and on numerous other rocks, basins occurred. Such was their size, shape, and regularity that he concluded that they must have been carved (*ibid.*: 241–242). Dismissing fanciful arguments that they might have been used for collecting salt from sea water, or for grinding ore for tin, or that they might have had deities erected in them, or had been places where sacrifices took place, or where sacrificial fires were lit, he interpreted them instead as having been connected with the purifying qualities of water: 'the purest of all water is that which comes from the Heavens, in Snow, Rain or Dew; and of this the Ancients were not ignorant' (*ibid.*: 248). The solution basins were designed to collect this purest of water undefiled by contact with the ground. This was sacred water used in purification rites involving cleansing and sprinkling on the body. He explained the interconnecting channels between the solution basins on some rocks as being designed so as to preserve and channel this special water from the sky into collecting vessels placed below their lips (*ibid.*: 255). The more basins that were carved, the more of the sacred water that could be collected: because

catching the Rain and Snow, the little Walls, or Partitions betwixt the Basons, are as necessary as the Mountains on the surface of the earth. . . for these [the rain and snow] fall not perpendicularly, but are driven in an inclined direction, and are therefore very artfully intercepted by these screens which at once stop the rain as it drives, and shelter it from being blown out of the Basons when the Wind is tempestuous. (*ibid.*: 256)

Borlase also noted the hidden character of these rock basins, on the very highest rock stacks and invisible from below:

from these basons perhaps, on solemn occasions, the officiating Druid, standing on an eminence, sanctified the congregation with a more than ordinarily precious lustration, before he expounded to them, or prayed for them, or gave forth his decisions. This water he drank, or purified his hands in, before it touched any other vessel, and was consequently accounted more sacred than the other holy water. To these more private basons, during the time of libation, the priest might have recourse, and be at liberty to judge by the quantity, colour, motion,

and other appearances in the water, of future events, of dubious cases, without danger of contradiction from the people below. (*ibid.*: 257)

He also suggests that the water in the basins might have been mixed with mistletoe, oak leaves, or other substances and that the rocking motions of logan stones could be used to agitate the contents of the basins. Shorn of the references to Druids and the idea that these basins were carved by people, Borlase's interpretations of the potential symbolic significance and use of the solution basins are of great importance. The Neolithic and the Bronze Age populations would no doubt have shared Borlase's view that they were carved but would have regarded this as ancestral work. Their use in libations and ceremonies connected with the purest water of all, that falling from the heavens, seems entirely credible.

DOLMENS

In their discussion of the shapes and forms of rock formations in Cornwall, Bradley (1998, 2000: 110) and Tilley (1995: 14, 1996a) have noted how they may bear an uncanny resemblance to the forms of dolmen chambers in some cases, but the point has perhaps been made the wrong way round. It is not that the tors look like dolmen chambers but that the dolmens look like tors. This difference in wording is highly significant for their interpretation, because it allows us to suggest that the dolmens were modelled after the tors. The tors were not only a source of inspiration, but the dolmens were constructed in the form of tors. In elevating large stones, these people were emulating the work of the ancestors. Furthermore, the stones from which the dolmens were built were taken from the tors. The dolmens, in effect, were the tors dismantled and put back together to resemble their original form. Once constructed, they could themselves be tors, something emphasised by the landscape setting of some of them on hills that lacked tors.

In relation to the distribution of portal dolmens around both sides of the Irish sea, Bradley raises an interesting question. In some areas, as in Cornwall, they occur in areas with granite outcrops; in other cases, they do not. If the Cornish examples had been modelled after the tors, this would perhaps suggest that these examples are the earliest ones, which is unlikely, leading to the suggestion that

for the people who lived there in the Neolithic, some of those rock formations would have looked like megalithic tombs. . . [they] interpreted the landscape according to their understanding of tomb architecture. . . . Some of these geological formations were so reminiscent

of the tombs built around the Irish sea that they were actually interpreted as ancient buildings. As a result, newly constructed tombs emphasized those links. (Bradley 1998: 20)

The link between tomb architecture and tor architecture remains. The question becomes whether the inspiration for the architectural form of the dolmens of West Penwith was drawn from the tors or from earlier dolmens built elsewhere. The answer depends on the validity, or otherwise, of the category 'portal dolmen' but, more crucially, on the notion that similarity in form implies the same sets of ideas and associations. Both tenets are questionable (Tilley 1999b: Chapter 3). The dolmens of West Penwith may look similar, in some respects, to those built elsewhere, but the manner in which they were understood would have been a local matter.

We now consider some of the better preserved and documented examples from West Penwith.

The dolmens (Quoits) of West Penwith are all situated in the northern part of the peninsula in a scattered 8-km west-east band, in close proximity to the highest hills, with the most prominent rock outcrops with solution basins a short distance (2–3 km) from the sea to the north (see Figure 9.10). There is considerable variation in their landscape settings. What links them all is that they are individual variants on the basic form of a small box-like chamber lacking any obvious entrance way, surmounted by a single massive capstone. Chun Quoit, the most westerly of the group, is situated 300 m from the summit on the northwestern side of a prominent rounded hill lacking any rock outcrops. The chamber is basically a square box measuring 1.7×1.6 m (Figure 9.11). The longer side stones are orientated NW-SE. The massive rounded capstone (3.4×3 m) raised 1.65 m above the chamber space is identical in form to numerous examples seen today surmounting the tops of certain tor stacks in the northern part of the peninsula. It has a distinctive well-developed and water-filled eroding hollow about 10 cm wide and deep toward the northern end of the stone, an incipient solution basin. From Chun Quoit can be seen the two most dramatic hills with rock outcrops in north West Penwith, Carn Galver, 3.2 km away to the northeast, and Carn Kenidjack, 1.75 km to the southwest. The long side stones of the chamber mirror the spatial relationship of the dolmen to these two hills. Carn Kenidjack is orientated in the direction of the midwinter sunset, which, according to observations made by Cheryl Straffon, appears to set in the top of a notch on the outcrop (Straffon, cited in Devereux 1992: 177). The dolmen is thus visually linked with a wider geography of the tors and with an important point in the solar calendar. Chun Quoit is prominently positioned so as to be visible from long distances away from the north and west. The stones were almost certainly taken from the summit

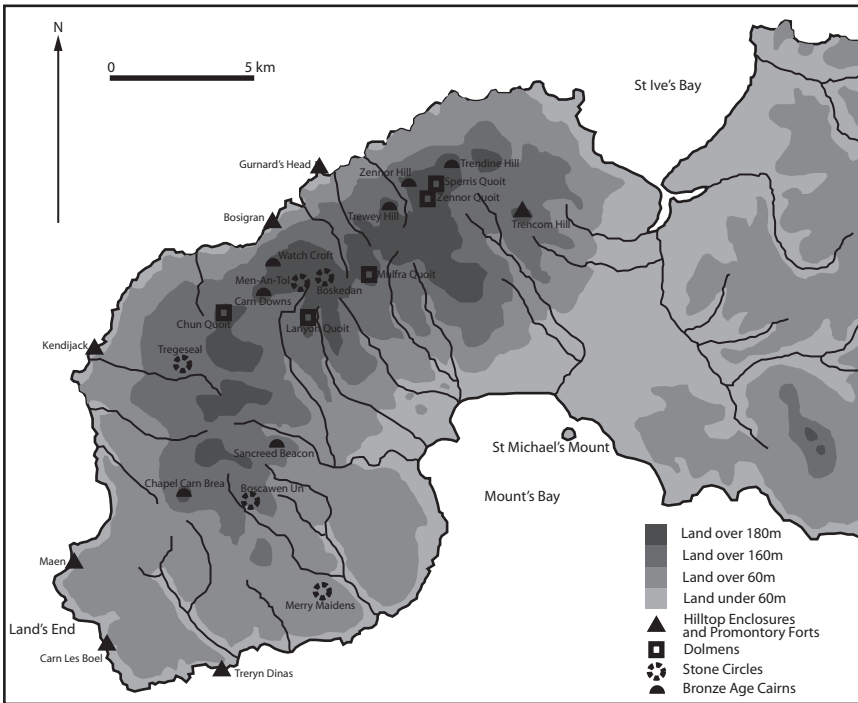


FIGURE 9.10 Places discussed in the text.



FIGURE 9.11 Chun Quoit.

of Chun Downs, where low rock outcrops must have existed, now concealed by the extensive remains of the Iron Age hillfort of Chun Castle. The appearance of the Quoit, when seen from a distance, effectively mimics a rounded tor stack on the upper slopes of the hill, in precisely the same position as such tor stacks frequently located on other hills.

Mulfra Quoit is situated on the eastern slope of a rounded wide-topped hill 400 m from the exact summit. Like Chun Quoit, it is extremely prominent when seen from some distance away to the west or the east, breaking the skyline like a tor. There are no rock stacks on this hill, and at least the capstone may have been transported here some considerable distance (1–3 km) from one of the nearest hills with rock stacks, where such a massive slab would be likely to be found, to the northeast or the northwest of Mulfra Hill. The capstone of Mulfra Quoit, measuring 3.6×3 m is thin, flat, and rectangular in form, contrasting markedly with the Chun capstone, and much lighter. Such a stone is likely to be a slipped slab found near to the summit area of a tor, perhaps even originally forming a natural chamber with a leaning ‘roof’ set against the sides of the upper tor stacks. Like Chun Quoit, Mulfra Quoit was a sealed box subsequently enclosed by a circular cairn, perhaps surrounded by a low kerb. The chamber (2.0×1.5 m) is more rectangular in form, with the long side slabs having their long axes orientated NE-SW—that is, the direct opposite of Chun Quoit. Carn Galver is prominent on the skyline 2.4 km to the northwest and St Michael’s Mount 8 km to the southeast. This NE-SW orientation of the two most prominent hills seen from the dolmen is the same direction of the original long axis of the capstone, which has now fallen to ‘face’ toward Mount’s Bay.

Zennor Quoit (Figure 9.12) is the largest and most massive of the West Penwith dolmens. The flat, thin, and rectangular capstone, measuring 5.5×2.9 m, now slipped, originally stood 2.7 m high, covering a small enclosed chamber box and an antechamber, with its entrance orientated toward the east. This dolmen situated in a flat area of high open moorland is not highly visible in the landscape. It is roughly equidistant from two parallel ridges: Zennor Hill 1.7 km to the northwest and Zennor Carn 1.4 km to the northeast. It is from one of these two ridges, broken by numerous dramatic rock stacks, that the stones must have been collected—probably from the former, where they are more numerous and more massive. The tip of Carn Galver is visible 4.8 km to the southwest, but Zennor Hill, the presumed stone source, with its unusually weathered rock stacks, is visually dominant on the skyline. To the east side of the central summit area of this hill, in the rock stacks there are a series of deep cave-like fissures, up to 1.5 m high and 1 m wide, through which one can walk. Here there is a large, toppled, leaning slab, 3.3 m long and 1.2 m wide, strikingly similar in shape and size to the blocking stone on the eastern side of the chamber of Zennor Quoit.



FIGURE 9.12 Zennor Quoit.

Sperris Quoit is situated directly to the south of the southernmost rock stacks running along the ridge of Carn Zennor. Although now fragmentary, it appears to have been similar in form to Zennor Quoit but with an antechamber facing south, with the long axis of the capstone being the same as that of the ridge beyond to the north. This dolmen is even more concealed in the landscape than Zennor Quoit, and Carn Galver is out of sight. The stones used to construct it were undoubtedly taken from Carn Zennor, a short distance to the north.

Lanyon Quoit takes its N-S linear axis from Carn Galver and can be contrasted with the other dolmens of West Penwith by its elaboration and incorporation into a long cairn. The flat rectangular capstone measuring 4.2×3.2 m and originally at least 1.8 m high above the chamber space is orientated north-south, as is the cairn. Situated in the middle of a flat ridgetop, it is prominently sited with the twin peaks of the southern summit area of Carn Galver being visually dominant on the horizon 2.25 km virtually due north. Since there are no rock stacks in the vicinity, the capstone, at least, must have been transported here from some considerable distance.

It is striking that, unlike Bronze Age cairns, none of the dolmens incorporate rock outcrops within their structures (see below). The stones instead were transported away from the rock outcrops to create the dolmens, and the dolmens in turn referenced and referred back to the tors at a distance. Sperris

Quoit is closest to a rock outcrop but is situated on a flat, relatively stone-free area, about 50 m to the south of it (Figure 9.13). This is the southern end of Carn Zennor, forming a north-south chain of six areas of rock outcrops, the tops of which are peppered with solution basins of various sizes and forms. The tomb is situated immediately south of the only rock stack at the far southern end of the hill that has solution basins on the surface of a large slab angled to the north, and is thus not visible from the dolmen. The people who built Sperris Quoit, and the other dolmens, took their building materials from the tors and copied their forms. The hills and tors themselves would have been ceremonial foci, visited but not substantially altered. None of the dolmens are on hill summits. Ceremonial pathways must have led up from the dolmen chambers to the ancestral chambers and solution basins on the tops of the highest hills, at which rites would have been performed.

STONE CIRCLES

Six certain stone circles are documented from West Penwith: a pair at the Merry Maidens, another pair at Tregeseal, and single circles at Boscawen Un and Boskedan (see Figure 9.10). They are all of similar size, varying from 21 m



FIGURE 9.13 The remains of Sperris Quoit (*foreground*) beneath the rock stacks forming the southern end of Carn Zennor.

to 24 m in diameter and are true circles except for Boscawen Un, which is slightly wider across its west-east axis. All are situated near to the sea, with distances varying from 1.5 km at the Merry Maidens to 4.5 km at Boscawen Un. Two of these places are in the south of the peninsula and two in the north on the high moorland. Despite their proximity to the coast, proximity was not a primary reason for their siting. The sea is visible only from the Boskedan circle. All, however, have a strong relationship with the principal hills, with rock outcrops on the northern moors, Carn Kenidjack, and Carn Galver. From Boskedan, the skyline is dominated by Carn Galver, 1 km to the northwest (Figure 9.2), and the profile of Carn Kenidjack is prominent in the distance 5 km to the southwest. Barnatt has noted that the two highest stones on the northern side of this circle, almost 2 m high, would originally have flanked this hill when observed from the centre of the circle (Barnatt 1982: 165). A menhir a short distance to the northwest of the circle, a cairn placed next to it immediately to the SSW, and a series of cairns situated on a slight ridge to the northwest all indicate an orientational axis and processional route to Carn Galver from the circle (*ibid.*: 70–71). This is also the direction of sunset at the summer solstice.

From the pair of circles at Tregeseal, the profile of Carn Kenidjack completely dominates the horizon only 600 m to the north. From the surviving eastern circle at the Merry Maidens, the tip of Carn Galver is visible 11.75 km to the north. Carn Galver would not have been visible from the destroyed circle of the pair situated a short distance down-slope to the southwest. Here the distribution of menhirs and cairns in the vicinity of the circles indicates processional movement from the southwest to the northeast, during the course of which, upon entering the eastern (extant) circle, the tip of Carn Galver would have been revealed. The stones in this circle are graded in size, with the tallest ones to the SSW and the shortest ones to the NNE—that is, in the direction of Carn Galver, which, as at Boskedan, would have formed a dramatic backdrop for ceremonies.

Boscawen Un contrasts with the other circles in that the only hill visible is Chapel Carn Brea to the west. But this circle has five distinctive features and associations that may nevertheless link it with Carn Galver. On the southwest side of the circle is a distinctive white quartz stone with cavities full of crystals. This is one of the largest stones in the circle. Another distinctive feature of the circle is the central stone placed to the southwest of the centre of the ring. Since the circle was first documented, this stone has been recorded as it is today with a distinctive leaning angle to the northeast. In the 1860s, exploratory digging around the base of this stone led to the conclusion that it had been ‘carefully placed in its leaning position,’ and it is unlikely that it was ever meant to stand upright. This stone has two recently discovered carved-axe-head designs

low down on its northern face (McNeil Cooke 1996: 189). In the northeastern quadrant of the circle, there is now a jumble of three enigmatic slabs, possibly the remains of a burial cist. An excavated barrow immediately to the southwest of the circle (now destroyed) was found to be constructed of a large ring of kerb stones surrounding a large central grounder (substantial earth-fast stone) about 3 m square. Borlase states that this rock is natural, and was never moved. Its upper face is smooth, and in it has been sunk a cavity 1 foot 6 inches long, by 1 foot 1 inch broad. 'This upper part of the rock,' observes Mr. Blight, 'appears originally to have been exposed to view' (Borlase 1994 [1872]: 219–220). The 'sunk' cavity in the stone was almost certainly a solution basin (see additional discussion below). A short distance to the northeast of the circle but not visible from it, is a tall menhir. All these five features seem to indicate the importance of a rough SW-NE axis in the landscape, and Carn Galver is situated to the northeast of the ring just as it is to the north or northeast of all the other circles in West Penwith.

The stone circles, with their much smaller stones, are likely to have been built with material readily available in their immediate vicinity rather than with material taken from the high tors. The tors formed a visual backdrop (but not at Boscawen Un) to the ceremonies taking place in them. Processional ways must have led up to the tors linking the sacred geometry of the stone circles to the supernatural geometry of the rocks and solution basins. At Boscawen Un, the nearby Creeg Tol outcrop, visible from the circle 250 m to the northwest, with eight solution basins hidden on its uppermost stones, could have formed one such ceremonial focus for processions. In this respect, it is interesting to note that St Michael's Mount, a rock outcrop that must have had considerable symbolic significance in the past, as it does today, is visible to the east from the top of Creeg Tol but not from within the circle. Such processional movement would link not only the circle with the outcrop but also the cairn with its encircled stone and solution basin with the outcrop, its solution basins, and the dramatic form of St Michael's Mount and the sea.

THE MEN-AN-TOL

The Men-An-Tol (Figure 9.14) is a unique monument consisting of an uprighted, circular, holed stone slab with two 1.2-m-high stones set *c.* 3 m away to the northeast and southwest, and another fallen stone at the base of the southwest upright. The holed stone is 1.1 m high, 1.2 m wide, and *c.* 28 cm thick, with a hole 46 cm in diameter. The southwest face of the stone is virtually flat, whereas the northeast face has a distinctly bevelled edge. It has been variously suggested that these stones formed part of a circle here (Preston-Jones 1993) or the remains of a chambered



FIGURE 9.14 The Men-An-Tol.

tomb. Neither explanation appears to be very convincing. It would seem to be best to maintain that this monument is a distinctive stone setting associated with the Boskedan stone circle, which is skyline sited and visible from the Men-An-Tol stones on top of a hill 750 m away to the ENE. Carn Galver, not visible from the site, is situated 1 km due north. Chun Downs, but not Chun Quoit, is visible through the hole, large enough to crawl through to the southwest. The overall axis of the Men-An-Tol stone alignment is NE-SW, the direction of the midsummer sunrise and midwinter sunset.

Te holed stone almost certainly rested originally in a horizontal position on the very top of a tor stack, with its flat southwest side forming the flat bottom of the basin and the bevelled northwest side being the uppermost eroding surface, holding water until the base eroded through. This suggestion has previously been made by McNeil Cooke (1996: 83). Thus the Men-An-Tol holed stone, set upright, is a direct inversion of the original position of the stone in its natural state. A form that once held water has now become dry and transformed into a material metaphor for the setting and rising sun. This conceptual transformation is strengthened by the stone's alignment to the rising and the setting of the sun at important times of the year. The nearest rocks with

solution basins of the requisite size and form to the Men-An-Tol occur on the southern end of Zennor Hill 4.75 km to the northeast. Here there is an example, completely eroded through, of slightly larger dimensions: 50–80 cm in internal diameter and about 30 cm thick (Figure 9.15). The overall alignment of the stones might thus also be making reference to the source, or origin, of the holed stone in the complex, a mnemonic statement.

Holed stones of the type used at Men-An-Tol and found on Zennor Hill are extremely rare. In almost all instances, solution basins erode through the sides before eroding straight through the granite laminate. Note also that the main process of erosion effectively ceases when water can drain out of the basin. Large eroded-through basins are therefore very special and almost certainly of great antiquity. The Men-An-Tol needs to be considered as a very special stone that has been curated in a uniquely meaningful way.

Other examples of holed stones have been recorded in West Penwith. Russell (1971) lists about eighteen examples, including a stone setting of four stones a short distance to the northeast of the Tregeseal circle. The holes are much smaller than the Men-An-Tol's (*c.* 15–20 cm in diameter) and have an artificial (bored) appearance occurring in long stones up to 2 m high. Apart from those near to the Tregeseal circle, most of the holed stones have been moved from their original positions and have been used as gate posts or incorporated into hedges and buildings. The holes sometimes occur near to the



FIGURE 9.15 Eroded-through solution basin on the southern end of Zennor Hill.

tops of the stones, as is the case in one example just to the north of the Merry Maidens stone circle, or near to the base, as in the examples near to Tregeseal. Here a fifth holed stone to the northeast of the others has definite modern drill marks. The antiquity of all these stones appears to be extremely dubious. The only direct equivalent to the Men-An-Tol in Cornwall is the Tolvan stone at Gweek, toward the northern end of the Lizard peninsula. This is a triangular-shaped slab 2.3 m high and 2.2 m wide at the base with a 46-cm diameter hole. Today this stands isolated but might have been related to the remains of a barrow to the northeast. The form of the hole, and that of the slab, makes it very likely that this stone, too, was originally an eroded-through solution basin.

The Men-An-Tol, the stone circles, and the dolmens of West Penwith all relate to and reference the rock outcrops in various ways as outlined above. The slabs forming the roofs of the dolmen chambers and the Men-An-Tol must all have been taken from the hills with rock outcrops, sometimes involving the transportation of massive stones some considerable distance. The sources of the stones would have been known and remembered; thus a particular dolmen could have been associated with a particular hill and particular places on that hill. The dolmens all occur in the area of West Penwith, with the most rugged, impressive, and stony hills on which solution basins occur. The massive capstones covering chambers of diminutive size were meant to be visually dramatic statements, in which the populations were copying and making reference to ancestral work. On the hills lacking tors, these tombs became the tors. The artificial chambers mimetically related to the 'natural'—that is, ancestral or supernatural chambers in the tors. Their physical locations away from the tors and stone stacks emphasised their presence in the landscape in ways that did not compete with ancestrally significant places. As time passed, the dolmens themselves likely became regarded as the work of the ancestors, so that during the Bronze Age they would have had a very different, but no less relevant, significance than in the Neolithic. The ceremonial foci of the late Neolithic and the early Bronze Age, the stone circles, and stone settings such as the Men-An-Tol all reference the visually most dramatic tors at a distance. Processional pathways must have led from them to the tors. The tors became, for the first time, places among which the dead were buried and foci for the building of cairns, which were intended to enhance the tors' significance and tap into and appropriate their ancestral powers.

BRONZE AGE CAIRNS

The association among height, the tors, solution basins, ancestral forces, and spiritual powers became substantially altered during the course of the Bronze

age. In the Neolithic of West Penwith, these stones were too powerful to build among or to dwell in, but during the Bronze Age, cairns began to be constructed on the hilltops, among and around the rocks and solution basins. Dramatic examples of this practice occur on Watch Croft, just to the north of the Men-An-Tol stone setting and visible from this stone setting, on Zennor Hill, Trendrine Hill, Carn Downs, and Chapel Carn Brea. On Watch Croft, one massive cairn was built on the very summit of the hill that lacks any tors. On the western edge of the summit area, another cairn was built. This cairn incorporates within its structure a series of grounders. The most massive of these is to the north and enclosed and surrounded by the kerb of the cairn. This grounder is 4.5 m long, 1.5 m high, and has a water-filled solution basin on its uppermost surface measuring 20×30 cm with a depth of 15 cm. This cairn was dug into by Borlase (1994 [1872]: 248 ff.). At the time of his excavation, the stone with the solution basin was 'uncovered'. Judging from the amount of cairn material at present within the cairn, and that surrounding it, having been dug out, this stone was never completely covered. Its uppermost surface, with the solution basin, was meant to be seen (Figure 9.16). At the centre of the barrow were 'two natural rocks, one resting on the other, and sloping downward toward its eastern end. This slanting rock was about 4 feet square; and when found was covered with a black slimy substance' (*ibid.*: 250). From this description, we can suggest that the cairn was built around a low laminated tor stack. To the east of it, there was a cist with a cremation urn. Below this cairn, 14.5 m to the south, there is a line of outcropping rocks forming the edge of the summit area. One of these has a large solution basin that is 40×50 cm and 20 cm deep. To the north of the cairn, again 14.5 m away, there is a flat grounder with a series of three interconnecting solution basins running across the centre of the rock. These are oval shaped and up to 80 cm long. On the same rock, there are three smaller shallow circular basins. This cairn is thus situated between rock stacks and a grounder with solution basins and incorporates a low tor within its structure and a huge stone with another solution basin. This is the only area on Watch Croft where solution basins occur. What is particularly significant is that the cairn overlooks the Men-An-Tol, another culturally transformed solution basin, from which the hill is dominant on the northeastern skyline.

On Carn Downs, a short distance to the west of Watch Croft and the Men-An-Tol, there are two small stacks with steep west-facing sides. The northernmost has five solution basins on and around the summit stack, the southernmost has two. Around the northern stack there is a band of surrounding cairn material incorporating and embellishing the rocks, very similar in form to recently documented cases of tor cairns on Bodmin Moor (Johnson and Rose 1994: Tilley 1995). A directly similar situation occurs at the far northern end of Zennor Hill,

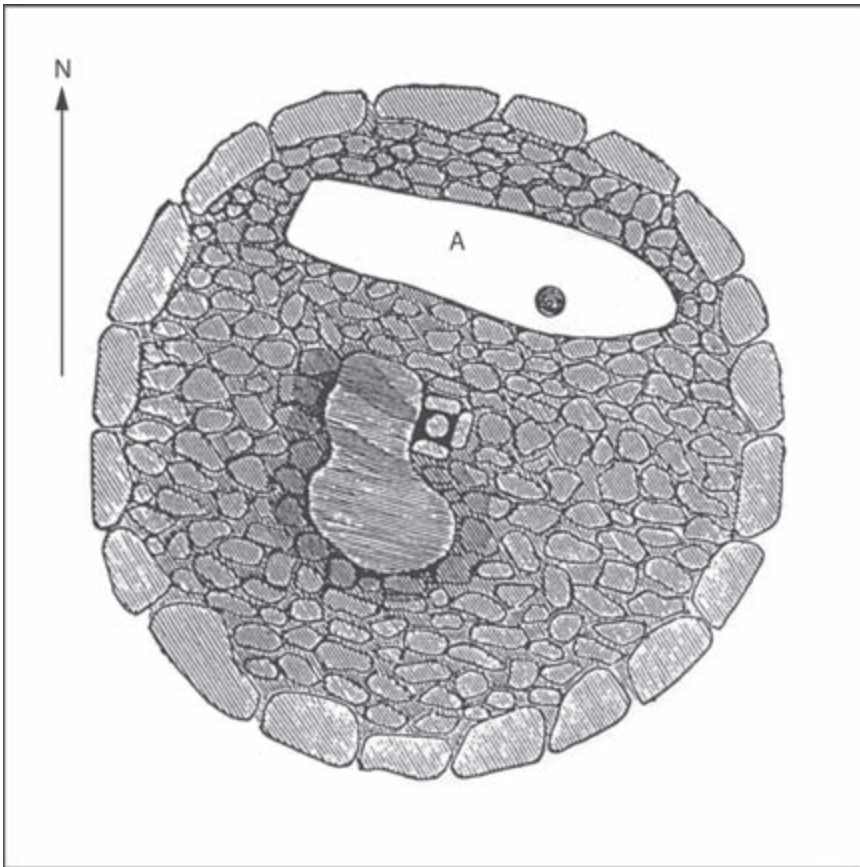


FIGURE 9.16 William Copeland Borlase's plan of the Watch Croft barrow; a: groundwater solution basin (Borlase 1872).

where cairn material is thrown up around the western and eastern sides of the rock stacks in a band about 3 m wide. Some of these stones are very distinctive, being black in colour or of white quartz. One solution basin occurs here on one of the lower rock stacks on the western side but outside and below the band of cairn material. Tor cairns of this character have not been previously documented in West Penwith.

The higher summit area of Zennor Hill to the south has a series of five out-cropping rock stacks. In the third stack from the southern end is a distinctive propped stone and adjacent to it a large block 3.5 m wide, 5 m long, and 2.5 m high, with four interconnecting solution basins on its uppermost surface. To the north of this and built up against the stack is a 2.3 m long and 1.3 m wide

cist of probable Bronze Age date, with its capstone missing. Here, again, there is a clear relationship between solution basins, cist burial, and the rock stacks.

On the summit of Trendrine Hill, there are two large adjoining cairns mainly made from small granite stones. Immediately to the north of the northern cairn there is a series of rock stacks orientated in a west-east line and highly visible from the land below to the north. This rock outcrop consists of a series of fissured slab-like blocks. At the eastern end, two outlying rocks create a wide chamber space 8 m long, 1.5 m wide, and 3.5 m high in the middle, open to the sky. This is a sheltered, quiet architectural place away from the prevailing south-west wind, contrasting with the open aspect of the cairns above (Figure 9.5). The edge of the northern cairn is indistinct but appears to be built up against the southern side of the rock stacks at their western end. It is built over and incorporates a series of rock stacks visible on its western side. On its eastern side, 3 m distant from the cairn, is a low rock with one shallow water-filled solution basin. The adjacent southern cairn has a retaining wall of very large stones incorporating a 'natural' rock. A few metres to the southwest there is another low rock stack. To the west of the summit, the land is flat and broken up only by a series of low slabs and grounders. One of these, situated about 100 m to the northwest and clearly visible from the cairns, is honeycombed with a series of shallow solution basins. On the western end of the summit area of Trendrine Hill, about 250 m distant, there is another rock outcrop with a north-south long axis. In the middle, there sits a very distinct scalloped stone with a hidden deep solution basin in its centre that has partially eroded through at the base. This stone appears visually distinctive from the cairns.

Situated on the upper northwestern slope of Chapel Carn Brea there is a low, rather inconspicuous rock outcrop. Immediately up-slope of this outcrop, a cairn 10 m in diameter has been constructed conjoined to the rock outcrop by a series of blocks and grounders and itself incorporating grounders on its northern and western sides. The northern face of this outcrop is 9 m long and 2.4 m high, but it is only really noticeable down-slope to the north. This outcrop is deeply fissured on the western side—big enough to walk through up-slope to reach the cairn. In the centre of the outcrop there is a rounded slab, 1.3 m high and 1.5 m high, up-ended and supported by a rectangular block 2.2 m long. On the top is an irregular solution basin 60 cm in diameter and between 10 and 20 cm deep. This rock must have been dislodged from the top of the rock outcrop and set up here immediately below the cairn hidden behind by the rock face (Figure 9.17). This may be a shrine directly connected to the cairn, with a natural passage way through the rocks to reach it.

All these examples demonstrate a very clear relationship between the supernatural geology of the hills and the siting of the cairns in relation to 'chambers' rock stacks, fissures, and solution basins. There are indications



FIGURE 9.17 The rocky outcrop on the northern side of Chapel Carn Brea in front of which (centre) is an upright block with a solution basin.

from accounts given in the West Penwith survey (Russell 1971) that the incorporation of rocks in cairns appears to have been the norm in upland areas of West Penwith at least, rather than something we might consider unusual, special, and peculiar. Good examples occur on the summit of Trewey Hill and on Sancreed Beacon, where rock outcrops exposed at the cairn edge, forming part of the kerb, and in the centre make up at least 75% of the cairn structure. The ring cairn at Boscawen Un, with its solution basin, indicates a more widespread distribution throughout West Penwith.

HILLTOP ENCLOSURES AND PROMONTORY FORTS

West Penwith has no certain hilltop enclosures dating back to the Neolithic or the Bronze Age. Carn Galver and Trencrom hill have been suggested as possible candidates (Mercer 1986: 51), but neither has any convincing structural evidence of proven Neolithic date comparable with the enclosures at Carn Brea (not to be confused with Chapel Carn Brea) and Helman Tor (Mercer 1981, 1986a), or Stowe's Pound and Rough Tor on Bodmin Moor (Johnson and Rose 1994; Tilley 1996). Carn Galver has very few solution basins in the

summit stacks, whereas Trencrom Hill has one of the highest frequencies in West Penwith (see Table 9.1). Here a single Iron Age rampart runs up to and between rock stacks on the hill summit in which there are numerous solution basins. It may well conceal an earlier Neolithic structure. What is fascinating about all the Neolithic and Bronze Age enclosures elsewhere in Cornwall, and what links them all together and to the present discussion, beyond structural evidence such as the use of orthostatic walling, is that they all occur on hills and among tors covered with solution basins. In fact, Carn Brea, Helman Tor, Stowe's Pound, Rough Tor, and Trencrom Hill, undoubtedly important foci for ceremonies and processions, have the highest concentrations of solution basins anywhere in Cornwall. At Carn Brea, the central summit of the hill is surrounded by the innermost of a series of three enclosures consisting of circuits of ditches, banks, and walls. The walls here run up to and between a series of rock outcrops with many well developed solution basins. The most prominent feature of the summit is a massive leaning block measuring about 6×5 m, 0.7 m thick, angled to the north and riddled over its entire surface with a series of interconnected solution basins eroding over the sides and up to 40 cm deep (Figure 9.8). The supporting rocks, with deep fissures and clefts, together with the uppermost stone look assembled. Bradley remarks on the overall resemblance to a megalith (Bradley 2000, Fig. 33), but the most remarkable and striking feature of this rock formation is the presence of the solution basins, which he does not mention. Mercer (1981) does not mention the rock at all, despite the fact that it is the most impressive feature of Carn Brea, presumably because it is deemed 'natural' rather than 'cultural'.

The promontory 'forts' of West Penwith, like the inland hillfort of Trencrom Hill, may perhaps date back to the Neolithic or the Bronze Age, as Sharpe (1992) has suggested, maritime equivalents of the hilltop enclosures. Even if no structures had been constructed, then these places were almost certainly visited and used and of great symbolic significance. The six certain known promontory 'forts' (see Figure 9.10) all occur in dramatic locations (Herring 1994), and in all cases a defensive function for the ramparts and ditches is difficult to sustain. At Kenidjack, the ramparts run from steep gullies on the northeast and southwest sides of the headland to terminate at a central spine of rocks rising above them, along which one can walk with unimpeded access to the interior. At Carn Les Boel and Maen, the inner ramparts similarly serve only to define an interior rocky space, whereas at Bosigran a single stone wall encloses a series of exposed rock stacks with more than thirty well-developed solution basins. The enclosed land here is very steeply sloping, with extensive granite pavements. The cliffs below these uppermost rock stacks plunge 50 m or more to the foaming sea below. It seems highly significant that no solution basins occur on the numerous stones and stacks outside the enclosure wall.

By far, the two most dramatic headlands with promontory forts are Gurnard's Head on the north coast and Treryn Dinas on the south. The ramparts in both cases define and enclose these rocky headlands. Those at Gurnard's Head are slung across a narrow neck of land, with steep drops to the sea to the west and east, with the land rising above them to the south. They demarcated the headland but could have had no defensive significance. Exactly the same situation occurs at Treryn Dinas. Here the innermost rampart is again strung across a narrow neck of land, with the land rising steeply above it to the north. What it encloses is, again, a series of dramatic rocks. These places were, as Herring puts it, 'objects of display'—symbolic capital (Herring 1994: 54). Small house platforms are documented from Gurnard's Head, Treryn Dinas, and Kenidjack, but their size and the extreme exposure of the sites indicate only seasonal or periodic occupation.

At Treryn Dinas, the granite is predominantly vertically jointed, and there are a series of fantastic rock formations with towers and pinnacles, some of which resemble menhirs, solution basins, and the famous logan or rocking stone, one of the Rev. William Borlase's 'rock deities', so finely balanced that it could be easily rocked—less so now since being tumbled and replaced after a public outcry by Lieutenant Goldsmith in 1824. (It is perhaps worth noting that, although quite a large number of rocks are referred to as logan stones on maps and in topographic accounts, very few of them actually rock.) If the Iron Age wall is defending anything, it is these stones (Figure 9.18). Finds of large



FIGURE 9.18 Rocky outcrops enclosed by the inner rampart at Treryn Dinas with the logan stone (centre right block).

sherds of a Bronze Age cremation urn, together with small pieces of charcoal and calcined bone and an Iron Age sherd eroding out of the rock clefts leading up to the logan rock, indicate their use both as 'natural' burial cists and places where offerings were made (Herring 1994: 54; Sharpe 1992: 66).

The rocks at Treryn Dinas are of granite; those at Gurnard's Head are heavily metamorphosed rocks of Devonian Age (Goode and Taylor 1988). The shales have dramatically contorted bedding planes. In places, especially on the more heavily weathered western side of the headland, the rocks are soot black, giving the appearance of having been burnt. The rock itself, along certain bedding planes, bears an uncanny resemblance to charcoal in form and consistency. Considered to be a work of the ancestors, this was a headland symbolically linked with the themes of fire and water discussed above. This place must have carried a heavy symbolic charge throughout prehistory, but it appears that it was only during the later Bronze Age or Iron Age that the special character of the rocks became physically demarcated.

CONCLUSIONS

Compared with the construction of dolmens in the Neolithic there is a relative diminution in scale in the late Neolithic and the Bronze Age. The stones used to construct the stone circles and the cairns were, relatively speaking, quite small compared with the massive dolmen stones. The Men-An-Tol holed stone would have been relatively easy to transport. This diminution in scale can be explained in relation to how people were thinking about and relating to the rocks. In the Neolithic, people were making an effort to replicate ancestral work, moving away and erecting massive stones, attempting to duplicate the tors and their chambers at a distance. This attempt to replicate the work of the ancestors required visual monumentality and the massive capstones of the dolmens: nothing else would be sufficient.

In the Bronze Age of West Penwith, the sacred geometry of the stone circles related back to the places created by the superancestors, the tors and their solution basins. In building cairns, rather than trying to replicate the forms of the rocks and tors, people shifted their effort to enclosing and appropriating the rocks and tors by building structures in and around them. These structures did not need to be massively monumental, precisely because they were meant only to enhance, emphasise, and make reference to features that the ancestors had themselves created. In the Neolithic, the relation to landscape was mimetic. People created pale reflections of the tors in their ancestor houses set apart from them at a distance. In the Bronze Age, this relationship changed and became additive and incorporative as well. This change allowed

the ancestral powers associated with the rocks to be both directly appropriated and controlled, through restricting access and emphasising direct group or individual control and ownership of the rocks. Demarcation and control of the rocks continued into the Iron Age, with the construction of Trencrom Hill and the promontory forts.

This change in a relationship to the rocks can perhaps be considered in relation to a change in economic practices. During the Neolithic, hunting, gathering, and especially fishing sustained these populations. The role of the last activity in the Neolithic economy of the Scilly Islands and West Penwith has been stressed by Clark (1977) and Ashbee (1982). In the early Bronze Age, the economy changed to one based on herding and gardening. It is during this period that the narrow coastal strip of north West Penwith was divided into small accreted fields associated with small farmsteads. This economic change must have been associated with a change from fuzzy and mobile boundaries to much more demarcated territorial and social ones. A concern to control the land was linked to a concern to control the rocks and bury one's ancestral dead among them. This process continued into the Iron Age.

The incorporation of solution basins within cairns as at Watch Croft and Boscawen Un, or the placing of cairns in their vicinity, during the Bronze Age may be all about connecting the purity of rain water, with death rites involving a requirement for purification in relation to the potential pollution of death. The circular form of many of the basins in turn connects them with the circularity of the sun, which dies a dramatic fiery death in the sea every day in the west, only to be reborn perfectly formed in the cool air of the eastern morning. Water is thus conceptually connected both to death and the regeneration of life. It both extinguishes fire and gives birth to it. Given that cremation appears to have been the primary burial rite, we note this general metaphorical connection with particular interest. The symbolism of the enigmatic Men-An-Tol may be to do with objectifying, in a material form, this metaphorical link between water and fire and the birth and death of the sun.



CHAPTER TEN

CONCLUSIONS

In this concluding chapter I first draw some general comparative observations in relation to Chapters 2 to 9. In the second section, I respond to my critics, and finally, in the third section, I suggest ways forward, or avenues for research, in the general development of a phenomenological perspective on landscape in the twenty-first century.

WRITING PREHISTORY FROM THE STONE

I am well aware that the approach taken in this book, to rewrite prehistory in relation to the rocks, might be regarded as a very simple type of determinism, in which the claim being made is that geologies and topographies determine consciousness, meaning, and action. Such a response to the text, as discussed in Chapter 1, would amount to a reductive travesty. The differing geologies and topographies of these landscapes each provided very different sets of raw materials and possibilities for monument construction, but what is more

important is that they invited a *creative* response. We cannot predict what this might be in advance. It requires unraveling through considering the manner in which the rocks and their topographies relate to the monuments and their morphologies and their locations.

When I started to work in the Stonehenge landscape (Chapter 3), I had just completed my study of the northern edge of Cranborne Chase (Chapter 4). The distance was short, no more than 12 km northeast from the eastern end of the Ebbles-Nadder ridge to Stonehenge itself. One might easily walk this distance in a day. I brought with me all my expectations and experiences of another chalk landscape, even the same kind of recording form, essentially a check list of things to observe: Could one see the bottom of a nearby coombe from a barrow, and so on. But this approach proved to be completely unsatisfactory. Everything was different. There were no cross-ridge or spur dykes. Instead, there were long and sometimes meandering land boundaries crossing from river to ridge and down again. The coombes were mostly shallow and indistinct. Gone were the dramatic scarp edges. The same kinds of prehistoric monuments were found here—long barrows and round barrows—but in considerably greater numbers, and their relationship to one another and the topography was very different. And then there was the unique monument of Stonehenge and Durrington Walls, the largest henge in Britain. This was built around a coombe running down to the Avon, and Stonehenge itself was situated near to a very unusual coombe (discussed in Chapter 3). There were similarities and differences that could be investigated. No predictive model based on one landscape works for another. Individual interpretations of the places and the monuments considered in the different study areas have been made in the individual chapters. The intention here is to make some general comparative observations linking geologies, topographies, and identities.

A consistent theme arising from the individual case studies is the significance of particular hills or ridges in relation to monument location. In the Stonehenge area, the pebble-capped and topographically differentiated Beacon Hill Ridge was of particular importance, together with Sidbury Hill. The former, in particular, is visible from all but one of twenty-five long barrows and the vast majority of the hundreds of round barrows located in its vicinity. But here no Neolithic long barrows or Bronze Age barrows are located on the highest summits. On the northern edge of Cranborne Chase, long barrows reference the highest points but are situated some distance from them. By contrast, the ridgetops and their spurs are marked by round barrows throughout their length, a pattern more or less replicated along the South Dorset Ridgeway. On the East Devon Pebblebeds, one distinctive coastal hill, High Peak, with a probable causewayed enclosure, is visible from all the round barrows, wherever they are situated in the landscape. Again, no barrows occur on the summit or

its surroundings. On Exmoor, there is an absence of topographically distinctive hills that all or many monuments might relate to. Linear groups of round barrows run along the tops of some of the high ridges, particularly along the southern parts of the Moor, but are absent on other equally suitable ridges or summit areas. Here, as in East Devon, there is an absence of long barrows. On Bodmin Moor, two prominent hills with jagged rock outcrops and hilltop enclosures of probable Neolithic and Bronze Age date dominate, with many barrows clustering in their vicinity or in sight of them. Here two of the three Neolithic long cairns reference localised rock outcrops in their vicinity. None of the chambered tombs of West Penwith directly reference the rocks in this manner, and no particular hill summit here seems to have had paramount significance. So in some cases, as in East Devon and around Stonehenge, and on Bodmin Moor, it is particular hills or short ridges that are of significance. In other cases, such as the northern edge of Cranborne Chase and the South Dorset Ridgeway, each stretching for 15 km or more, the entire ridge was of great significance. On Exmoor and West Penwith, relationships among monuments, hills, and ridges are much more localised in character. In some cases, as in the East Devon study (Chapter 6), gaps through hills and ridges may be as significant, if not more significant, than the hills and ridges themselves. In Chapter 4 the discussion of the Ox-Drove ridge emphasises the importance of a situation in which a coombe virtually cuts the ridge but stops just short.

Another significant point is the importance of water and water courses and coombes or dry valleys in terms of the manner in which they break up and divide the land but also bring it together, acting as both boundary and bridge. Walking along these places in the landscape affords one a completely different experience of the landscape. In an area such as the Stonehenge landscape, one can walk along Stonehenge/Lake Bottom and hardly encounter a single barrow in a landscape filled with them. On the northern edge of Cranborne Chase, the perspective is the same. Springs, confluences, valley and coombe heads are all significant places in relation to the locations of monuments in the chalk and pebble and sandstone and slate landscapes considered in the book, as is the process of crossing wet or boggy areas, discussed in Chapter 8.

Places where water collects, falling from the heavens and filling the solution basins of the high tors, were of great significance in the granite landscapes of Bodmin Moor and West Penwith. The coastline, a liminal zone between the sea and the land (see discussions in Helskog 1999 and Scarre 2002), was of great significance in relation to the location of monuments in South Dorset, East Devon, and West Penwith but appears to have been of little significance on Exmoor—at least in relation to the locations of the lithic monuments. Part of the significance of the coast, as discussed in Chapter 6 in relation to the inland Pebblebed heathlands and their cairns and in Chapter 9 in relation to

promontory hillforts, was that it provided a place, sometimes the only place, where a prehistoric 'geologist' (cosmologist) could inspect the rocks, see what was under his or her feet. The coast is a place where the sun may be seen to either rise or set into the sea, die and be reborn from a watery underworld, and this is discussed in relation to an experiential understanding of the world in Chapters 6 and 9. Inland, the manner in which it rises and sets behind hills or monuments on auspicious days of the year, such as midsummer, the equinoxes, and midwinter, is emphasised in Chapters 3, 4, and 6.

Coastal landforms have been the main point of departure for the study of monument location here, but in the future a subtle and more nuanced discussion might be developed in relation to the flows and directions of rivers into the sea, the tides, eddies, sand banks, and currents and their convergence, which have recently been shown to be of great significance in various ethnographic studies (for example, McNiven 2008; Morphy and Morphy 2006). A consideration of seascape, including its formation processes and chronology, needs to be developed to complement an understanding of landscapes.

The coast is, of course, significant in that it is here and usually only here that pebbles are found. Thus is interesting to note that the two largest concentrations of Bronze Age round barrows in England occur on and in the vicinity of chalk hills capped with pebbles. Is this mere coincidence? It may well have been this particular geological combination of dramatically contrasting stones that was of special significance, as opposed to a landscape consisting solely of one kind of rock: chalk, granite, pebbles, sandstone, or slate.

It can be suggested that in some cases the highest and most significant hills in the landscape, as in the Stonehenge area and in East Devon, were too spiritually powerful to have any monuments located on their summits during the Bronze Age. This is the case earlier, during the Neolithic around Stonehenge, but not in East Devon. In all the landscapes considered in this book where Neolithic and Bronze Age funerary and ceremonial monuments both occur, the round barrows are consistently located higher up on the ridgetops or on the very highest points, and the Neolithic monuments are at a reserved or safe distance. So on Bodmin Moor, tor cairns are built up and around some of the highest hills with rock outcrops, unlike the long cairns, and a similar practice takes place in West Penwith and along the South Dorset Ridgeway and along the northern edge of Cranborne Chase. This may be understood as a fundamental difference between monuments that reference aspects of the rocks and their topographies and those that actively appropriate them and their powers in various ways through being constructed on, in, around them—being situated on the highest hill or part of the ridge in south Dorset and on Cranborne Chase, built in and around rock outcrops on Bodmin Moor and West Penwith or among dolines along the South Dorset Ridgeway.

The whiteness of chalk has, of course, long been noted as providing a resource for constructing monuments that would have been highly visible and dramatic in the landscape. Through building monuments out of turves stripped from the surroundings and then capping these monuments with chalk, as in the Stonehenge area, provided the means to invert the world—turn it upside down. In East Devon, cairns constructed out of bright multicoloured pebbles, when freshly constructed, would also have been strikingly visible and in a continuous state of transformation, according to the light and the season of the year and whether the weather was wet or dry. This was another means of appropriating powers residing within the land itself into the cultural form of a monument. On Bodmin Moor and West Penwith, this approach involved using and incorporating rocks taken from the tors and their surroundings in various ways. By contrast, on Exmoor the stones used to construct the stone settings in all probability came not from the high points in the landscape but from the valley sides and bottoms.

An enormous contrast exists between sandstone and slate landscapes and those of granite. One is an inversion of the other. The way to orientate oneself in the granite country of Bodmin Moor and West Penwith is by reference to the high points of the tors. On Exmoor, it is the valleys that are memorable and that tell you where you are, and it is here, rather than on the tops of the hills, where the rocks are exposed. To some writers, such as Richard Blackmore (author of *Lorna Doone*, the novel that made Exmoor famous), Exmoor is the female landscape, looking as if everywhere it 'had a woman's hand on it' (Blackmore 1997: 286), with granite being the contrasting male landscape. The literature is replete with such a gendering of landscape, and both literary writers and New Age spiritualists have consistently linked chalk landscapes with the female body. But if instead we envisage the Exmoor landscape as a kind of body, the ridges and hills represent the outside of this body, with its mantle of earth and vegetation, and the valleys represent interiority—ways into the body that is the land. So, the contrast is between being outside or on top of this body (moor) and being inside the moor, with interiority implying intimacy. This perspective might also be applied to chalk landscapes. From the tops of the hills and the ridges, the outside world, areas beyond the moor, are visible, while the valleys signify being part of and inside the corporeal body of the moor. This contrast between exteriority and interiority, being inside or outside the body that is the land also relates to chalk country and the dramatic contrasts between ridgetop and coombe discussed in Chapter 4. As is the case on Exmoor, it is the coombes, as opposed to the ridgetops, that are distinctive and differentiated. Here, and on the South Dorset Ridgeway and in the Stonehenge area, the locations of the round barrows are related both to the ridgetops and to the coombes. They are metaphorically both inside and

outside the body of the land. By contrast, in West Penwith, Bodmin Moor, and Exmoor they are predominantly outside this body, related to rock outcrops, high ridges, and hills.

Although round barrows cluster in relation to stone circles in some areas of Bodmin Moor, this arrangement is highly variable, and it cannot be compared with the great barrow arrangements in the vicinity of Stonehenge and their intervisibility with this monument, discussed in Chapter 3. The uniqueness of Stonehenge relates not just to the sheer size of the stones and their exotic and distant origins but also to the manner in which it provides a focus for the construction of the later round barrows, which occurs nowhere else. Thus, it is interesting to note that, of all the very different and contrasting landscapes considered in this book, the landscape around Stonehenge is the least dramatic and differentiated. The coombes are generally shallow, the ridges gently rounded. The escarpment edge of the Beacon Hill Ridge cannot match the sheer drama of that encountered along the northern edge of Cranborne Chase or that of the South Dorset Ridgeway. Rocky outcrops are absent, as is much surface stone in the form of sarsen. The construction of the monument can be regarded as a form of compensation for the deficiency of material and symbolic resources in the landscape in which it is located. Like other monuments elsewhere, aspects of its architecture have a mimetic relationship to the local topography. But once it had been constructed, the monument itself became the paramount focal point in relation to which barrows were located. Nothing similar occurs anywhere else, from Stonehenge to Land's End. A dialectic is at work between Stonehenge and the great Bronze Age barrow cemeteries that surround it: Monument relates principally to monument. Elsewhere, the principal dialectic remains unchanged from the Neolithic to the Iron Age and is between monuments, their geologies and topographies, and their relationships to other monuments, past or present. At Stonehenge, 'culture' largely seems to have replaced 'nature' in the Bronze Age in structuring both the landscape and the identities of the people living in it.

All the different landscapes considered in this book posed their own geological and topographic problems for the people who inhabited them and sought to understand how they had come into being. Some of these problems were shared, others unique to the particular locality. A common problem to those who dwelled on the chalk was the absence of surface water but the presence of coombes that were recognisably dry or dead rivers: Why did the waters no longer flow? Another common problem was the presence of flint bones wherever they dug into or tilled these landscapes. Pursuing a little further the anthropomorphic metaphor of landscape as body, one might conceptualize chalk landscapes with their dead rivers and their flint bones as landscapes that were in some senses either dead or dying themselves, or that were associated with death. A very common anthropomorphic understanding of landscapes

found worldwide in many different cultures is that the rivers and streams represent the flow of blood in the arteries and veins through the body. If this flow stops, the body becomes a corpse.

A problem for the people of the Stonehenge landscape, not shared with people inhabiting the other chalk landscapes discussed in the book, was the presence of sarsen stones, so different from the chalk, in the coombes. Another problem common for these people and for those of South Dorset was the presence of pebbles on the ridgetops next to the sky—pebbles normally found only on the beach anywhere else. In South Dorset, a related problem was the presence of dolines, or solution hollows, among these pebbles. Here, the coastal presence of the great sweep of the Chesil Beach and its lagoon linking Portland to the mainland required an explanation. In East Devon, a similar problem was considerably magnified: How was it possible that the entire inland landscape was made up of brightly coloured pebbles? How could the great band running through the red cliffs by the sea be understood? On Bodmin Moor and West Penwith, the major problems requiring an explanation would have related instead to the form and character of the rocky tors: How could their fantastic forms have been created, as well as the caves and the runnels and the ‘tombs’ within them, and the hidden solution basins on tops of the rocks? In contrast to all the other landscapes, to live on Exmoor may have been relatively unproblematic. Here, the pebbles were found only where they were supposed to be found—on the beach—and the streams still flowed down the valleys, and the topography, with few exposed rocks except along the valley sides and no very distinctive hills, was fairly similar everywhere.

Of course, we will never know the content of the mythic stories that would have been told to explain these geologies and topographies so that people who dwelled in relation to them could make sense of their lives. Part of the solution in all cases must have been to explain all these things in relation to the past. Clearly, the pebbles or dry rivers or the rocks themselves were not contemporary creations. They were products of events and processes that had taken place in the past, of the ancestors, of the gods or ancestral forces, a legacy of the past for the living, something that was both dangerous and that had inherent power as an ancestral creation. Part of the solution to the problems of how the landscape came to be this way and how to tap into and relate to the ancestral creations and powers within the land was to objectify the spirit of place in the construction of monuments through the eleven different kinds of dialectical relationships listed in Chapter 1 (see pp. 38–39). Sometimes one of these relationships might have been sufficient. In other cases, a number of them might have been employed in tandem and, as discussed in a number of the individual chapters, that which had been marked or mimicked or referenced, incorporated or substituted or changed through time.

The mythic origin stories could then have been told in relation to the forms of the monuments themselves and in the process of moving around and inside them and locating them in particular places in the landscape when different topographic features came into or out of sight or where one's perspectival relationship to the surroundings changed. Various examples of this are discussed throughout this book. Here it is interesting to note that the kinds of perspectival effects that were created in relation to the Bodmin Moor stone rows and circles seem to be completely absent in relation to the Exmoor stone rows, circles, and stone settings—which marked out different areas of the landscape as significant—but moving along them or around them did not give rise to a sequencing of visual effects. In part, this arrangement simply relates to the lack of topographic diversity of the hills and ridges of Exmoor. Here, as was the case on some of the hills of Bodmin Moor, the building of a summit cairn or cairns in the Bronze Age was an act of construction that differentiated the land. The populations of Exmoor, unlike those living on Bodmin Moor, had no tors. Perhaps the act of building cairns on the summit of Dunkery Beacon and elsewhere was their attempt to make reference to or to mimic another landscape altogether.

All the different landscapes were visually connected from the high points. You could see one from the other, and the populations living in these landscapes would have been well aware of the presence of people living in different worlds. The presence of similar monuments in these different landscapes—long cairns or barrows, stone circles and stone rows, round barrows, and so on strongly indicates commonalities as well as differences in the identities of the populations who constructed them. In the Bronze Age, there is both the shared idea of the appropriateness of round barrows and round cairns. The geometric form of the circle provided a template for understanding the world (Bradley 1998), and on Bodmin Moor and in West Penwith and elsewhere we find circles within circles within circles, in the form of rings of cairns on the hills, stone circles, circular houses, and circular post rings within these houses (see Bender, Hamilton, and Tilley 2007).

As discussed throughout the book, there are both generalised and locally specific factors at work in the locations of individual monuments. Sometimes the landscape locations are similar for the same class of monument. In other cases, they are very different and obviously related to the contingencies of the local topography and the presence of earlier or contemporary monuments. This situation means that, if we are looking for perfect and consistent patterning, we are almost always likely to be disappointed. The location of monuments is always likely to have been both creative and improvised rather than the application of some kind of rule. For example, in some cases, as at both the eastern and western ends of the South Dorset Ridgeway, there is a very close

relationship between the locations and landscape settings of long and round barrows. In other cases, as along the northern edge of Cranborne Chase and in the Stonehenge area (Tilley unpublished research), this is not the case.

In Chapter 2, I argued that the largely post-Mesolithic removal of forest cover had a profound effect on the sensory experience of landscape. In a more open world, monument construction and social strategies of visual control and manipulation made sense in a manner in which they did not in a forest world. It was this sensory revolution that gave birth to a new and increasing emphasis on monumentality throughout the Neolithic, the Bronze Age, and the Iron Age. In a landscape without monuments, the earliest to be constructed could have been related only to the contours and the flow of the land itself, and to 'natural' places that may already have been significant in the Mesolithic. But, of course once monuments were in place, and became of the place, part of the past rather than part of the present, the situation became far more complex in terms of where and why particular locations were chosen rather than others and whether the presence of earlier monuments was acknowledged or not in terms of, for example, orientational relationships, skyline sighting, false cresting, and so on, something that is explored throughout the book.

Forest clearance must have been carried out in some areas on a massive scale. Palaeoenvironmental evidence for the Stonehenge landscape indicates its increasingly open character during the Neolithic and the Bronze Age, as discussed in Chapter 3. The same appears to be true for Bodmin Moor and Exmoor (see Chapters 7 and 8 and discussion in Herring 2008). As Herring points out, this could have been maintained only through fairly intensive grazing of large herds and flocks of cattle and sheep. Furthermore, he notes 'for those who created this newly open world, the ability to see downland rolling into downland, with distant tors poking over the backs of closer ones, would have been a source of wonder and pleasure. It is not surprising that they worked with this quality when designing their landscapes' (Herring 2008: 86).

The golden thread running throughout this book is that the relationship between peoples and their landscapes throughout prehistory was deeply anthropomorphic and animistic. People "thought" the landscape through their own emplaced and palatial bodies. The landscape to them was a kind of body, and this body was imbued with spirit powers. It was not dead or inert but alive and animated, and so constructing monuments and dwelling in these landscapes involved tapping into and harnessing spirit powers that might both empower the living and be a source of fear. This way of thinking was not extraordinary but part of daily life. To know the world was to know this and the myths and creation stories explaining how this world had come into being and had obtained its present form. The construction of monuments for the living and the dead was one way of objectifying creation myths in material

form and thus telling these myths not through words but in the medium of an enduring material form. There would have been people who knew the stories and people to whom they were told; there would have been people who knew the correct way to encounter the landscape and people who would be led. Experiences of landscapes and places within the landscapes were structured through monument construction and movement along, around, and between these monuments. Unequal relations of power could thus be reproduced in this manner through structuring encounters and patterns of social inclusion and exclusion, and they might also, of course, be subverted.

That pattern is, in part, a geological and a topographic pattern. To live in a chalk landscape, or a landscape of pebbles, or a granite landscape necessarily provided and still provides in the present a material grounding for very different forms of perceptual and sensory experience of place. A person accustomed to the chalk had a different embodied identity to someone living in a landscape of granite tors, simply because the powers of place were so different. Personhood, biographies, and identities were not in any simplistic sense determined by the very different geologies and topographies. These rather provided different material resources and opportunities that might be exploited and suggested different kinds of creative responses. The construction of cross-ridge and spur dykes toward the end of the Bronze Age in *some* areas of chalk country with deep and dramatic coombes and steep escarpment edges made perfect social and symbolic sense in relating people to the landscape. Such monuments would have made no sense at all on the granite uplands.

Many years ago I read the following paragraph from Barth's monograph on the Baktaman of highland Papua New Guinea:

On rare occasions, peace and political alliance would reach a stability where mutual trust would allow the reciprocal passage of groups of men through neighbouring territories to reach a further circle of second order neighbours; but these were so rare as to produce little knowledge of these more distant territories, and the known world of the Baktaman remained very small. Thus in an easterly direction one may sit on the men's house platform and see landscape, including smoke from garden fires, in unknown territory for which the Baktaman have no name for land or people, while to the north, west and south the known world extends for approximately two days' journey. Detailed knowledge of the countryside is limited to their own and closely adjoining sectors of neighbouring territories; it is significantly wider for men than women and for adults than children. (Barth 1975: 18–19)

This paragraph has always stuck in the back of my mind, and, of course, it is because I wondered whether the Neolithic or the Bronze Age world might

be something at least a bit like that of the Baktaman. Might the known world be so small that one would be able to see in the distance the fires of others without knowing the names of these people? How closely connected were different communities in the Neolithic and the Bronze Age? How localised were their worlds? The various studies in this book suggest that there was a very strong relationship among monuments, places, and landscapes, that individual and social identities were constructed *in place*, by the people of that place, who belonged to that place and landscape. The relationship was intimate and enduring.

However, the different landscapes and communities seem to have been connected by commonalities of practice, alliances, and the exchange of raw materials. The inhabitants did not live in isolated and hermetically sealed worlds. The magical power of desired resources—and their sources and properties—linked different people largely through maritime and riverine routes of communication over long distances. The movement of things that we can identify in the archaeological record does not, of course, necessarily imply that people traveled to the source—to, for example, the Isle of Portland to obtain chert, or to Beer Head to obtain flint, or to Cornwall to acquire ground stone axes or the material with which to make them. The supply of copper and tin no doubt linked the Bronze Age populations of Bodmin Moor and West Penwith with those living on the East Devon Pebblebeds and those living on the chalk downlands. By contrast, the populations of Exmoor may have been both relatively small and isolated. Long after domesticates had been adopted elsewhere and gardens were being cultivated and tilled, hunter-fisher-gatherer groups may have never substantially changed their lifestyles on Exmoor, and the peculiarity of their minilithic monuments and stone settings may be a reflection of that, although these groups would have been well aware that stone circles and stone rows formed a standard repertoire of monuments found elsewhere, some of which on Dartmoor might be only a few days' walking distance.

How many Neolithic or Bronze Age people from West Penwith or Bodmin Moor might have visited Stonehenge is not the kind of question that we can realistically answer. We know that certain, and probably exceptional, individuals came from a great distance away, for example, the so-called Amesbury Archer from the Alps (Fitzpatrick 2002). The transport and erection of the blue stones from South Wales was a major feat of organisation linking different places and landscapes, but again this seems exceptional. To what extent pastoralism and more localised movement were widespread during the Neolithic and the Bronze Age has been the subject of a lengthy and continuing debate (Parker-Pearson 2008), as has been the role and the importance of domesticates as opposed to hunting, fishing, and gathering in local Neolithic and Bronze Age societies (see Bradley 2007; Thomas 2008a).

What has always struck me about such debates is their essentially abstract and generalised nature, and ultimately, in a non-pejorative sense, their *imaginary* character as exercises in peopling the past. But they all too often tell us so little about how people inhabited an actual landscape, partly because of evidential problems, partly because they are paper-based discussions in which that past has already become dematerialised as words and diagrams and maps in texts. There is an alternative and, I maintain, altogether more grounded way to imagine the past in the present. In carrying out the fieldwork for this book, I was struck by the manner in which the landscape itself changes so radically within a very short walking distance. In relation to the Pebblebed landscape of East Devon, discussed in Chapter 6, I walk from where I dwell toward the east, crossing the river Otter, climb up the East Hill Ridge, and pass over its flat top. I leave the smooth multi-coloured pebbles behind, walk over red sandstone, which I can see exposed in the river cliffs, encounter brittle grey and yellow chert and small cairns made of the same material. I descend to the valley below. My journey takes several hours. The topography is now totally different. Ahead is a ridge very different from the ridge that I have just passed over. The aspect of the East Hill ridge seen from the east is a ragged affair, broken up by numerous valleys and spurs. Seen from the west, the line is smooth, continuous, and unbroken. I have entered a very different sensuous and experiential world. I feel lost and uneasy in this landscape that I have not walked or studied. My relationship to the earth and the sky has changed; all the landmarks and watercourses that were familiar to me have gone, my knowledge has vanished. In order to dwell here, rather than over there, I need to find myself again, establish a new embodied relationship with place, establish a new kind of identity with the land. I have maintained throughout the book that something of value can also be inferred from this kind of view of the people of the past, an imagining taking place through the medium of the body rather than through a text.

The principal focus for discussion in this book has been various types of monuments in the landscape, and the reason for this focus is the almost complete absence of settlement evidence in all the areas considered apart from Bodmin Moor (the settlement evidence is extensively discussed elsewhere—Bender, Hamilton, and Tilley 2007) and in some parts of Exmoor, where no excavations have been undertaken. The origins of the materials used to construct these monuments have also been considered. But such a perspective could be taken much further. In particular, more attention needs to be directed toward the origins of the raw materials and artefacts deposited in them and the manner in which the act of deposition itself drew together and articulated various places in the immediate and more distant landscapes, a theme that

is recently being explored and developed in detail in a variety of ways (for instance, Goldhahn 2008; Hind 2004; Jones 2008; Lewis 2007; McFayden 2008; Nowakowski 2007; Tilley 2004: 87ff.; Woodward 2002: 100ff.) and that might result in the production of a parallel book relating the 'inside' to the 'outside' landscape referents and relationships of monuments and the manner in which they relate to the paths of movement of individuals and groups and their relational identities.

A REPLY TO MY CRITICS

In recent years, there has developed quite a wide-ranging number of reviews and critical responses to a phenomenological perspective on landscape. These range from individual book reviews (for example, Bradley 2000a; Cummings 2004; Fleming 1995; Gibson 2005; Hummler 2008; Ingold 2005; Jones 2007a; Pocus 2001) to critical review articles discussing a phenomenological perspective in general (for instance, Brück 2005; Fleming 1999, 2005, 2006; Thomas 2006) to shorter or longer passages, comments, or asides in various books, articles, and edited volumes (for instance, to cite just a few examples, Barrett 2004; Bender 1998: 78ff., 2000; Brück 2001b; Chadwick 2004; Criado Boado and Villoch Vazquez 2000; Cummings, Jones, and Watson 2002; Cummings and Whittle 2004; contributions in David and Thomas 2008; DeBoer 2004; Exxon et al. 2000; Fowler 2004; Hamilakis 2001; Herring 2008; Hodder 1999: 136ff.; Karlsson 1998: 173ff.; McFayden 2006; Meskell 1996; Pearson and Shanks 2001: 156ff.; contributions in Scarre 2002; Skeates 2008). These responses, not surprisingly, have been extremely diverse, ranging from enthusiastic to derogatory in tone. Some take the form of criticisms of specific interpretations of landscapes, monuments, and places. Others are quite broad discussions of general theoretical issues, such as the relationship of subjectivity and objectivity in research, the status and the role of the individual in the past and in the present, and discussions of empathy, embodied experience, gender, and politics. Landscape studies in archaeology seem to have rapidly developed from a somewhat sleepy and uncontentious area of field research (see Bruno and Thomas 2008; Fleming 2006: 267) into a major intellectual battleground through which the past and its relationship to the present has become debated. I have responded to some of the more general philosophical and conceptual issues raised in these reviews and commentaries in Chapter 1 and elsewhere (Tilley 2004a, 2004b, 2004c, 2005a, 2005b, 2008).

Below I make some additional remarks, and in the third section, I extend and develop both the gist of my critical reactions and my general perspective.

A Romanticised White Wandering?

One general criticism has been that much of the fieldwork I have undertaken has been a kind of romantic wandering of the landscape in the spirit of Coleridge and Wordsworth: 'When Tilley describes his walk along the Cursus, for example, there are only three actors involved in the scene 'the author, the Cursus, and the physical landscape' (Brück 2005: 63), Chadwick finds that my 'solitary strolls and musings were very much in an appropriating, antiquarian tradition' (Chadwick 2004: 22). According to Hummler 'the modern landscape fanciers come across as Romantics, pursuing vistas because the tors and the hills are still there but the people have gone. And all is couched in a portentous style crossed with touchy-feely verbiage' (Hummler 2008: 1157). Her alternative insight for the study of landscape is that it wouldn't have mattered at all, because the people probably had 'raging toothaches' and 'boils on their necks' and wore wet clothes. I leave it to the reader to assess for themselves the analytical rigour of such a statement and its usefulness for our understanding of the past. I believe that the poetic understandings of Coleridge and Wordsworth, and the work of novelists and topographic writers in a literary mode (see Chapter 1 and sectional introductions to Parts II–IV of this book), offer a significant interpretative resource for landscape studies and that poetic metaphor can provide striking insights simply not available in deadened literal prose. To write in metaphors is to view the world afresh, create new imaginative insights, construct a new past in the present. So, in response, my position is simply to reverse the terms of the debate. The absence of a 'poetic' approach simply produces a past that is irrelevant to all of us, something that does not make it worthwhile reading about.

Some of my fieldwork has indeed been undertaken in a solitary fashion. The reason for this has been deliberate and methodological. It was a way of attempting to bracket the contingencies of the present to achieve a sense of immersion in the landscape, a way of walking and experiencing the past in the present in the spirit of participant observation in anthropological field research. It was one way of facilitating the production of a phenomenological account. More recently, working in the landscape with Wayne Bennett, the approach has become dialogical in character, in the sense that it involves a mutually constitutive bodily immersion through which dialogues arise between us. I am quite prepared to admit that I did describe a 'depopulated' Dorset Cursus (Brück 2005: 63). I did not write about the personalities of individual men, women, and children or concern myself with precisely which of their variable and relational identities might be in play when walking along it: tried to both imagine and put into words what they *might* have been thinking or doing. Nor was I able to say how many were taking part: twenty, thirty,

two hundred or whether this number radically altered according to whether it was November 21st or August 2nd. To attempt to do so could amount only to empty speculation, for which I would quite rightly be criticised. The people are gone and cannot be resurrected in this simplistic manner. Brück's demands that I might do so are not all that helpful. People and their different and parallel social identities as 'daughter, mother, sister, farmer, weaver' are invoked in relation to the ambiguity of depositional evidence but still remain conspicuously absent in Brück's own accounts of monuments, such as Mount Pleasant henge (Brück 2001b: 63).

A somewhat related general criticism is that my perspective on landscape is irrevocably biased, both by my gender and my sexuality (Meskell 1996: 6–9). It is, after all, the perspective of a white, middle-class, heterosexual male—and we can now add middle-aged. I plead guilty to these obvious personal deficiencies, but here simply note that Vicki Cummings (2002) has made similar observations to my own in relation to the megalithic monuments of southwest Wales and has come to similar conclusions with regard to the significance and power of their landscape settings.

A more pertinent criticism of my approach is that it depends on anachronistic universalist assumptions with regard to concepts of the self and identity. The kind of body I posit ignores the cultural multiplicities of the manner in which the body itself is an artefact and culturally constructed (Brück 2005: 58ff.; Fowler 2004: 11ff.; Hodder 1999: 136; Pluciennik 2002: 174). I accept entirely that the body is culturally constructed, that this perspective is culturally variable, and that it is important. I also think that relational models of the manner in which personhood is constructed in a social and symbolic field have much to offer in contrast to modernist conceptions of the individual self as a discrete centre of consciousness and awareness (Shanks and Tilley 1987n: 70ff.; Tilley 1990b: 313ff.). However, advocacy of such a perspective poses enormous practical difficulties in interpreting prehistoric landscapes and monuments when, in most cases, suitable high-quality evidence with which to work is entirely lacking.

The body invoked in my studies is universalist in the sense that it has a distinctively human perceptive apparatus: binocular vision and so on, an upright two-legged posture when walking. This is all that I share with prehistoric persons, male or female, and it is surely something to work positively with. If the prehistoric people were not disabled or sensorily impaired, they would have been able to see from a particular point in the landscape something—for example, a hill, or a river cliff, or a monument on the skyline—behind which the sun set on the shortest day of the year, something that I can still see now. Or they would also have been able to recognise the tactile and colour contrasts between granite and chalk, or smell the sea salt. This claim is really

rather limited, and neither Brück nor any other commentator has been able to provide any convincing philosophical or evidential grounds to dispute it. Even though one can readily acknowledge that there are indeed distinctive gaits and ways of walking, a bipedal posture is common to all (see Ingold and Vergunst 2008; Tilley 2009).

Contra Brück (2005), I make no claims whatsoever to have any empathy with prehistoric populations, which is exactly why I don't want to go around pretending to understand something from the point of view of a female Neolithic weaver with twins or, to give an example from Hodder, a 'priest' (he doesn't specify the relevant gender, age, or emotional state of such a person). And I admit that, while crossing the Cursus, I am quite incapable of recognising the presence of a 'now invisible community boundary' (Hodder 1998: 136), which would affect the manner in which it might be understood from the point of view of the female Neolithic weaver burdened down with twins, and according to Hummler, suffering from toothache and multiple boils on her neck, and wearing sodden clothes, walking along it in the pouring rain. Only a few square metres of the over 10-km-long Dorset cursus monument have ever been excavated (Bradley, Barrett, and Green 1991: 43ff.), and I therefore find the absence of any consideration of 'hidden community boundaries' in Hodder's recent account of the extensively excavated settlement of Catal Hüyük somewhat surprising (Hodder 2006).

Brück's entire article is riddled with contradictory statements and perspectives, perhaps because hers is a general review that incorporates views other than her own. For example, she points out, as have many others, that the fact that something is visible from some point does not necessarily mean that it is significant: Any association may be accidental (Brück 2005: 51–52; see also Criado Boado and Villoch Vazquez 2000; Fleming 1999). The corollary, of course, is that if you can't see something, this does not necessarily imply that it is insignificant. Both points may readily be accepted. Identifying consistent patterning is often the only way we have of suggesting 'adequacy', and such identification is very much a feature of the work presented throughout this book. On the one hand, Brück demands to know precisely how observations can be verified and evaluated *adequately*, in a deeply empiricist sense. On the other hand, she puts forward no suggestions with regard to precisely how 'adequacy' might be assessed, and the reason is, of course, is that there are no such absolutes to which we might cling. She notes, in relation to Watson's research, that all stone monuments have some kinds of acoustic properties, so we need to be wary of making too much of this: a point that amounts to a kind of unconstructive nihilism.

The point to be made is that Brück seems to want some kind of absolute standard of 'adequacy', while at the same time she rightly warns us that

all representations are partial and not 'objective' methods at all. She is both enthusiastic about the use of new methods for spatial analysis, such as GIS (Geographical Information Systems), while warning us of their dangers; she sees both the positive aspect of developing an archaeology of the emotions proposed by some (for instance, Meskell 1998; Tarlow 2000) while being wary of them. Despite such 'neither/nor' criticism, which in the end doesn't advance us very far, on the whole she appears to be broadly sympathetic to the development of a phenomenological perspective and has readily adopted aspects of it, such as an interpretative emphasis on metaphor, in her own interpretative work (Brück 2001a).

This approach may be contrasted with the views of Fleming. Clearly, in the views of some commentators cited above, my interpretations have been limited and lacking, because I have failed to take fully on board the cultural and historical relativism of the human body itself and have downplayed, or not adequately dealt with, the sheer diversity of human subjective experience in terms of the construction of social and gendered identities in the landscape.

Fleming's rhetorical representation of a phenomenological perspective is virtually the mirror image of this point of view, and he seems to have started a minor cottage industry in Wales producing sustained negative appraisals of the overall perspective (Fleming 1995, 1999, 2005, 2006). I have been reluctant to directly respond to these or other criticisms for three principal reasons: first, an unwillingness to let such criticisms set a particular and unacceptable conceptual agenda for the debate in terms of which any particular response inevitably has to be framed; second, because I thought it might be useful to let readers make what they like of it; and, third, because I am aware that once a text becomes part of the public domain, people are bound to respond to it (represent or, from my point of view, perhaps misrepresent) it in various ways. I have lost control, and others will read into and out of my texts things that I intended and much else that I did not. But, of course, this strategy runs the risk of acquiescence—that in some way I accept the criticisms as valid and am unable to respond.

Fleming argues that the megalithic monuments of southwest Wales discussed in *A Phenomenology of Landscape* (Tilley 1994) are not a good data set to analyse, apparently because they are 'diverse in character', a somewhat strange statement, since most European megalithic monuments, when considered in detail, are equally diverse (see, for example, Tilley 1999a and Chapter 9, this volume). According to Fleming, the heterogeneity of these monuments does not therefore imply that their builders had any 'common mindset' (that is, any kind of relationship at all to their surrounding landscape) (1999: 120). Instead, he suggests that this diversity in the form of the monuments might relate to variations in architecture in relation to rituals involving the manipulation of

ancestral bones, a point with which I would entirely agree, since I put forward a similar argument in relation to Swedish megalithic tombs (Tilley 1996, 1999b). But, however diverse the localised rituals and architectural forms of the monuments might be, this does not imply that there might not be more generalised principles at work regarding their locations in the landscape— which is what I was trying to discover. Fleming pours scorn on the idea that Carn Ingli was a significant landmark in relation to the location of some of these monuments, despite the indisputable fact that it is the most prominent hill in the area with by far the most impressive and dramatic rock outcrops. And he elsewhere actually makes a similar point, noting from historical sources that ‘Carn Ingli was the “hill of angels”, definitely a liminal place for the Irish saint Brynach’ (Fleming 1995). He remarks that many sites may have been destroyed (*ibid.*: 120), so that the sample remaining is biased, supposedly undermining any positive conclusions regarding site location. He also states another truism: that in many cases there is some uncertainty in the original form of the monuments, especially with regard to their surrounding cairns. Such comments are true of the archaeological record virtually everywhere. The logical conclusion to Fleming’s position would seem to be to impose an embargo on any archaeological research or interpretation at all!

He then argues that there is no relationship between the megalithic monuments of southwest Wales and the rocky outcrops, because some monuments are built alongside and against them, others up to a few hundred metres away, and in the case of some individual monuments, such as Carn Wen, the monument is built against a rocky outcrop while Carn Ingli is also dramatically visible on the skyline. That a localised rocky outcrop and a more distant prominent hill might both be mutually significant is apparently an unacceptable statement. It appears that there is no place in Fleming’s worldview for multiple landscape features to be significant in relation to monument location. Similarly, one must apparently choose between *either* rivers being significant *or* rocky outcrops and hills in relation to the location of other monuments (*ibid.*: 121). And, again, when one considers where the long axis of a cairns points or directs one’s view out across the landscape, the fact that in some cases this might occur in relation to the higher, the lower, or both ends of the cairn is again apparently unacceptable (*ibid.*: 123). Yet, at the end of his highly critical paper, Fleming directly contradicts the position set out earlier, valuably listing a whole series of different factors that *might* relate to the locations of megalithic monuments.

In relation to the long cairns of the Black Mountains of southeast Wales, in which case I argued that the orientation of the long axis of the cairn might relate to more distant landscape features such as river valleys and ridge or spur ends, Fleming suggests some other ridge ends toward which the long axis of

the cairns *might* point, implying that this in some way contradicts my observations of the ridges to which they actually point or seem to be orientated toward (*ibid.*: 121)! He furthermore suggests that some of the axes of the long cairns point slightly off the ends of the ridges rather than directly to them with geometric precision. This may well be the case. My observations were suggesting that the general orientation to the ridge end was significant when seen from along the cairn axis. Like the Neolithic people, I was not concerned to draw pencil lines on maps to somehow verify the observation or use precision surveying equipment to establish the point, and to do so may indeed be entirely misleading. What is significant here is the embodied perceptive eye rather than the anachronistic disembodied perspective of the machine (cf. Cummings, Jones, and Watson 2002), which certainly appears to be counter-intuitive when we are dealing with a Neolithic rather than a twenty-first century world. Some of the associations between long barrow orientations and distant spurs that I made may well be somewhat inaccurate by the standards of modern surveying equipment, but I would wish to claim that they may alert us to relationships and associations to which such precision technology might be blind, and its use entirely misleading; the machine and the map have been allowed to dominate rather than embody human experience.

This perspective essentially is my reaction to GIS, although I do not want to dismiss it altogether. Such a technique can be useful in situations where the contemporary present obscures visual fields possible in the past, which is the manner in which it is employed in Chapter 3. The problem with much use of GIS is that there is already a tendency to use it as a substitute for phenomenological fieldwork altogether, or as something that comes first rather than last (for instance, Anderson and Stoddart 2007; Exxon et al. 2000). GIS provides a dumb, indeed surreal, view of landscape in which everything is equally visible and therefore equally important—which is clearly never the case—and, of course, it can cope only with the visual rather than with other forms of sensory experience. Like any other mathematical technique, it is terribly impoverished and inevitably makes inhuman assumptions in the form of the modeling that is involved. In short, it is incapable of providing an embodied encounter with a landscape, or a monument, a feeling for the place in which the place itself exerts its agency, exerts its own powers in relation to human perceptual experience. And part of that is the human capacity to take memories from one place to another, to situate and to sequence them in relation to different encounters and paths of movement (Tilley 2008).

Six years later, Fleming once again felt the need to repeat many of these criticisms, but this time in the wider context of an attack partly directed to the subsequent research of Cummings and Whittle (2004), which also considers, in part, the megalithic monuments of southwest Wales and the Black Mountains;

Fleming extended, developed, and constructively evaluated and criticised some of my own approaches and reflections (Fleming 2005). Here Fleming similarly disputes the veracity of many of the observations made by Cummings and Whittle, preferring his own. He ends up dismissing the entire approach taken as 'ethnographically based rhetoric.' Again, multiple possibilities regarding the significance of monument location and architectural features appear to be the main problem. Sometimes Cummings and Whittle recorded too much, too many possibilities of what may be significant in the location of specific monuments, and so are found wanting. In relation to other monuments, however, they apparently recorded too little—for example, a rock stack or an island that Fleming had observed somewhere but is not mentioned in their analysis. After reading a few pages of this diatribe, one gradually realises that nothing would actually satisfy Fleming, because his critique is overwhelmingly negative and destructive in intent. For example, he specifically criticises the observations made by me, and Cummings and Whittle subsequently, that if some monuments had been sited a few meters away from their actual locations, important hills or rocky outcrops would no longer be visible from them. He writes that the same might be true of the positions of road signs or grazing cows in the landscape. This may indeed be the case, but this vacuous rhetoric can hardly be taken as a serious criticism of the general approach.

The phenomenological approach has, according to Fleming, taken the study of ceremonial monuments virtually back to 'pre-Enlightenment times'. His criticisms seem to demand, instead of a nuanced and multifaceted perspective on landscape, a simple black-and-white perspective in which there can be only one reason why a specific location might have significance rather than many, only one way of observing the landscape from a monument, and only one feature in the surrounding landscape that might be significant, if any are at all, which he consistently doubts. It therefore comes as little surprise that the one positive suggestion given by him as to why some megalithic monuments are located near to rocks is simply that the rocks offered ready sources of building stone!

In relation to my interpretation of the Maiden Castle bank barrow as 'a beach in the sky' (see Chapter 5 this volume), Fleming (2006: 274) is naturally incredulous at the very use of the metaphor. He might, of course, have critically called into question the theory of metaphor and material forms as solid metaphors acting in a distinct way from linguistic metaphors, put forward in my book (Tilley 1999a). He could have put forward a theoretical argument explaining precisely why the notion of metaphor has no place in archaeological writing or interpretation. Instead, he prefers to discuss just how much shingle there might have been on the Chesil Beach during the Neolithic, wondering, but not concluding, whether it appeared exactly the same then as today. My argument was based not on whether the beach looked *exactly* the same then

as now, but rather on a general resemblance between the overall morphology of the beach and the bank barrow and more generally the course of the Ridgeway itself and the pebbles on its summits—an argument that he is unable to challenge. Fleming finds the interpretation dubious but has no alternative argument.

The overall perspective on landscape taken by Fleming in relation to a phenomenological position stressing the significance of features of the 'natural' landscape in relation to monument construction is in fact highly ambivalent. On the one hand, he seems to disparage the entire idea that landscape features had any significance at all. On the other hand, he consistently makes interesting individual observations—for example, pointing out the potential significance of the presence of a spring near to the St Elvis megalith in southwest Wales, not mentioned either by me or by Cummings and Whittle, and making other similar observations, for instance, that specific stones might have been venerated in situ and so on. But most of Fleming's critique remains resolutely negative and yet offers no alternative. Ultimately, his is a voice of silence telling us nothing about the megalithic monuments of Wales, or the Maiden Castle bank barrow, other than the fact that from his perspective they will always remain inexplicable. This is the logical outcome of the point of view of someone who believes that archaeology has been well served over the years by a 'combination of empiricism, logical positivism, and critical skepticism'.

In his latest critique, Fleming substantially broadens the attack. He labels the approach being taken to landscape archaeology by me and others as 'post-processual landscape archaeology' (Fleming 2006). He disparages Bender (1998) for the argument that there is much that is deeply political involved in the study and interpretation of landscapes, and he claims that the scholars that he chooses to label *political* have 'given themselves permission to say more or less whatever they like' (*ibid.*: 268). If this were really the case, there would indeed be little or no necessity for doing fieldwork, which provides the entire basis for an interpretative phenomenological approach. The reality is that Fleming clearly does not appreciate what I and a host of other scholars who are criticised in his article (for example, Bender 1998; Edmonds 1999; Edmonds and Seaborne 2001; Thomas 1993, 1996; Cummings and Whittle 2004; contributions in Chadwick 2004) have written as being valid prehistory. Throughout his critical writings, Fleming never engages seriously with philosophical, theoretical, or conceptual issues. This is why it is possible for him to regard empiricism and positivism as being more or less the same. For him, they just provide 'useful heuristic principles'. In fact, of course, they are distinct philosophical positions, bringing with them an entire conceptual and methodological apparatus of which he appears to be entirely unaware. Clearly, Fleming either does not take any philosophy or theory seriously or at the very least cannot be bothered to engage with it and

its implications (cf. Brück 2005; Karlsson 1998). For him, academic research appears to be just a matter of common sense or, more specifically, his own unreflective understanding of what constitutes common sense. From this anti-philosophical and anti-intellectual position, he has no time and patience with fancy theories, interpretative texts, and dubious metaphors.

For Karlsson, however, I fall short because the

interpretations are fixed within the framework of an anthropocentric and calculative, post-Socratic metaphysic, while the material culture is approached solely as beings and while Being is forgotten and is therefore viewed as synonymous with the presence of the actual beings. At the same time, the material culture is also approached as . . . passive phenomena that are centered on the thinking of the interpreting subject . . . there is no awareness of the ontological difference and the crucial unity of Being (as-history) and human thinking. As a consequence, the crucial and fundamental question, *Why are there beings, rather than nothing?* is never brought forward in relationship to the actual megalithic tombs, which means that there are no reflections on the negative dimension (Being) of the beings in question. (Karlsson 1998: 250)

Karlsson's argument is rooted in the later philosophical writings of Heidegger, with which I have a number of misgivings. However, there is a quantum leap between these philosophical concerns and the kinds of criticisms that would reduce archaeology to a simple technicist process of recording and observation and that might regard phenomenological archaeology as useful only in so far as it can be reduced to the status of just another kind of recording methodology. Used in this way, which is how the perspective has frequently been adopted, there is no need for further philosophical engagement.

Karlsson, unlike some other commentators, is deeply attentive to the texts that he reads, and he obviously raises profound and difficult metaphysical questions. These questions may be contrasted with the lack of any significant philosophical reflection in many of the critiques cited above. Karlsson's book discussing the Fjälkinge 9 passage grave in southern Sweden and Pentre Ifan in southwest Wales was written prior to my subsequent discussions of metaphor and a phenomenological perspective (Tilley 1999a, 2004, 2008), wherein the relationship between Being and thinking is addressed in a different manner from that found in the earlier works that he cites, and some of the points made are partially addressed in the summary discussion below. But to do justice to his concerns requires another book about landscape altogether.

I also, of course, happily acknowledge that the approach seems to have been rather influential and that many others have been broadly sympathetic

or indeed enthusiastic. Fleming's view that none of my studies has contributed anything of positive value to an understanding of prehistory may be contrasted, for example, with that of Cummings and Whittle (2004) and many others cited above. who, while not being uncritical, build on some of my work (see *The Times Higher Educational Supplement* 23–29 April 2009: 34–35). Bradley underlines the veracity of my fieldwork in relation to South Dorset and 'a level of documentation that should satisfy the most orthodox field archaeologist' (2000a: 204) and metaphorically considers *Metaphor and Material Culture* (Tilley 1999a) to be a 'landmark in material culture studies' or 'a milestone in the integration of archaeology and anthropology' (*ibid.*). Bradley has very usefully extended the overall perspective in a consideration of a whole series of 'natural' places not discussed in this book, places with votive deposits or hoards, quarries and axe production sites, and has emphasised the significance of the origins of raw materials in the landscape and the manner in which they were gathered together in monuments. In this manner, he cogently suggests that places can be artefacts and that monuments can be landscapes (Bradley 2000a and see also Fontijn 2008). Herring, with twenty-five years of fieldwork experience and an unparalleled knowledge of the area, has underlined, in a fascinating new analysis that includes a study of another stone row that he recently discovered (Herring 2008), the importance of my observations of stone rows on Bodmin Moor and has emphasised other aspects of their relationship to the landscape that I did not consider or record.

Fleming's critiques are essentially a rhetoric of self-making in which my approach becomes constituted as Other. In literary terms, this rhetoric amounts to a parable of good versus evil. His chief debating tactic is simply to assert the validity of his own ordinary everyday 'commonsense' pragmatic empiricism and use it as a measuring rod against which other approaches are inevitably found to be invalid. Anything that goes beyond a discussion of 'facts' becomes for him hyper-interpretation. The best kind of interpretation would appear to be as little of it as possible, and therein resides the *irresponsibility* of the position he advocates, because, in my view, if archaeology is not, in the future, principally about interpretation, it is nothing and has no value, a view that I seem to share with most of my colleagues.

A MANIFESTO FOR PHENOMENOLOGICAL LANDSCAPE STUDIES

I regard the perspective that I am trying to develop as representing a middle way between a form of hyper-relativism espoused by some researchers and the

kind of nihilistic empiricism found in Fleming's critiques, which encourages the view that all archaeologists can do is document facts, whatever these might be deemed to be, and provide some kind of inventory of the past while refraining to provide an interpretation of it. The kind of research I have been advocating asserts limited commonalities between bodies past and bodies present, a shared perceptive apparatus of the world through the senses, a common way of understanding the world through a process of dwelling within it, and ways of movement through it, and it posits a shared form of metaphorical human reasoning. These are existential propositions that stress common aspects of human Being. While human cultures have an almost infinite diversity, they also share important attributes of our common humanity. Through my body I can therefore approximate some types of human perceptive experience, which would be impossible to do if I were a rodent or a dog. This point is also political, since an emphasis on shared human perceptions and types of experiences runs counter to any form of racism, nationalism, gender bias, or other forms of exclusionary politics. This approach forms a starting point for making empirical observations, for an interpretative understanding of the world out there. What I share with other human beings either in my own culture and society or with others is, of course, limited, and such limitation certainly constrains what it is possible to say in relation to the obvious evidential limitations of archaeological information. The materiality of archaeological remains, the traces that survive today, sets limits with regard to how I am able to interpret them. As a consequence, I am prepared to accept that there are many more aspects of the past than there are of the contemporary world that unfortunately remain quite beyond comprehension, topics about which we might speculate, and nothing more. A student once said to me: 'Don't you get terribly depressed? You'll never know what was really going on!' Indeed, this might provide grounds for depression if there were only one simple holistic social reality out there in the past that I wanted to reproduce some way in my writings and represent as the social reality of the past in the present.

On the whole, however, I remain optimistic about the possibilities for reconstructing the past in the present, yet I have never regarded anything I have written to be a truth about the past, to be the past as it really was, the past conceived as radically separated from the present in terms of the binary opposition: past/present. The whole point of a phenomenological perspective is to go beyond the pervasive binary dualisms such as subject/object, past/present, nature/culture, fact/value—and I might add male/female—of our own modernity and refuse to frame any understanding in terms of these opposed categories. This has been the thrust of various other 'post-processual' writings in archaeology now for over twenty years (for instance, Bapty and Yates 1991; Hodder 1982; Miller and Tilley 1984; Rowlands 1984; Shanks and Tilley 1987a, b; Tilley

1990, to cite some of the older literature only). I do find it rather depressing and somewhat frustrating that more recent critiques, such as some of those mentioned or discussed above, still return us to the same old tired debates framed in terms of binary oppositions. This situation might be regarded, no doubt, as an excellent illustration of Derrida's point about the powers of logocentric thought and the difficulty in trying to transcend them (Derrida 1977, 1978).

Intentionality might seem to be the fundamental concept in landscape research, but any discussion of it is based on a subject/object binary. We might, for example, want to know the reasons why people chose to settle in one place or another, built particular types of monuments where they did, how they moved around the landscape, where they procured, exchanged, and consumed material and non-material resources, deposited artefacts, and so on. It might seem, then, that if we are hoping to interpret the patterns we perceive in the landscape, we must interpret them in terms of intentions or reasons, how past peoples cognised their world: We have to become in some way mind readers. So, as we have seen above, Hodder invites me to think like a priest, Brück is concerned that I haven't taken into account a weaver's perspective, who is also a mother, a daughter, and so on, and Fleming thinks I've said nothing worthwhile about the 'mindset' of megalith builders in southwest Wales, and Meskell suggests this is impossible anyway, because I'm white, middle-class, modern, and male. All these diverse reactions are based on the proposition that we have to try to reconstruct the manner in which people thought about the landscape in order to understand the manner in which they lived in it. The attempts to reconstruct such mindsets in the literature—usually implicit, because particular types of cognitive processes (for example, prehistoric people thought in terms of binary oppositions) are never mentioned—currently range from the extremes of a utilitarian logic of practicality and rationalist efficiency (which appears to be the manner in which Fleming thinks they thought when he tries to account for building megaliths near to rock outcrops), to a symbolic logic without any constraint apart from, perhaps, its own internal coherence. Landscapes and their component physical and social and symbolic mediations either more or less determine what people do, or they are blank slates on which anything is possible to write.

Yet, whatever kind of logic we infer, whether it be these two alternatives or something in between, we are all very bad mind readers. Almost all statements in archaeological publications are replete with standard qualifications; the words 'perhaps', 'could be', 'might be', 'possibly' fill our texts simply because the one thing that we actually think that we can be certain about is that we can't think like prehistoric people and can never know their minds.

This, of course, is only the tip of the interpretative iceberg of mind reading. Besides believing that people have intentions or reasons for their actions, we may

need to consider differences between individual intentions (Hodder's priest and Brück's weaver with multiple personhood) and collective intentions not reducible to the mind of a single person. Then there are the unintended consequences, or outcomes of actions—differences between the reasons for making or doing something—and how they are received and understood by others. Furthermore, differences between discursive consciousness and practical, routinised, or 'habitual' thought may be important (Bourdieu 1977; Giddens 1984).

A classic understanding in anthropological field research is that people frequently say one thing and do another. The reasons for their actions may typically be rationalised afterward and therefore do not provide a reliable guide to understanding why they have acted in one way or another. Fortunately, this is not a problem for archaeologists, because the archaeological record is the outcome of actual practice. Nevertheless, unacknowledged reasons or intentions are often fundamental: People may not be fully aware themselves of what they are doing and why. So any specific intentions that an archaeologist might try and reconstruct from the evidence might often not be the same as those held by prehistoric agents anyway, if it were possible to interview them. To cap it all, intentions or reasons for actions are rarely simple and singular. They are often complex and multiple, and the reasons someone might give for performing the same action can change over time.

So what are the consequences of all this? The first point to note is that there is never likely to be one correct way to understand landscapes in terms of intentions. Landscape interpretation is a complex field, and attempts to identify the actual or originary intentions in the minds of people as to why they built a monument in one place rather than another is an interpretive exercise fraught with difficulties. The meanings we ascribe inevitably are ours rather than theirs, but if we accept the implications of the argument that has been made above, the logical corollary is that the entire idea that we have to try and reproduce in our texts in some manner the kinds of thoughts they might have had is nonsense anyway. So, any attempt to reconstruct the past in terms of trying to reconstruct the intentions of the people of the past is an intellectual dead end, a form of idealism.

We require a different starting point, and that is provided by a phenomenological perspective that does away with mind/body and all the other dualisms mentioned above. We do not have a body that is separate from our mind, the mind *is* embodied, it forms part of the body. We all have embodied minds, and the distinctiveness of our human minds, as opposed to the minds of other species, such as rodents or dogs, is intimately related to the kinds of bodies that human beings possess as a species distinct from others. In other words, the manner in which we think is non-trivially related to the kinds of bodies that we possess.

I have already argued above and in Chapter 1 that I and you share the same kind of body with prehistoric people. Similarly, because our minds, like theirs, are embodied, we share the same kind of mind and may therefore have similar embodied thoughts. Just as we can walk on two legs as they did and have a similar perceptive apparatus, we can also *think* in the same way as they did, and features of the landscape will affect us just as they would have affected them; its mute agency will affect how both we and they experienced the world and thought about it. An embodied mind is a corporeal mind that thinks through the body. I have emphasised the word ‘think’, because I want to carefully distinguish between a process of thinking and having any particular historically and contextually situated thought. Such a particular thought we re-describe instead as a particular intention providing a reason for action—for example, ‘that’s a great place to go and build a long barrow, because it is intervisible with our sacred ancestral hill.’ The distinction being drawn here is exactly the same in character as the one drawn above between a universal human body and a socially constructed human body.

I have argued at length elsewhere that the essence of human thought, its primary and originary form, resides in the distinctively human capacity to think through things in terms of metaphors. These provide an essential way in which all human beings interpret and make sense of their worlds, past or present. Metaphors and metonymy (part-whole relations) allow us to see similarity in difference, to connect the pieces of the world, providing the basis for an embodied interpretative understanding. Furthermore, metaphors are not simply, or even primarily, linguistic in character; they also reside in material forms that may be re-described as material metaphors. Material forms are objectifications of thought and as often as not talk silently about human relationships and identities and relationships with the land in a manner impossible in words (Tilley 2006a). Although both linguistic metaphors and material metaphors vary culturally, all persons in all cultures speak in terms of metaphors, many of which have a bodily basis and in this respect are either non-arbitrary, or constrained (for instance, the foot of the hill, the brow of the hill, the face of the landscape, the redness of a thing relating to blood or its whiteness to milk or semen). This is the essence of what I have described elsewhere as a ‘phenomenological semiotics’ (Tilley 2008).

To be human is to have a particular kind of body and to think in a particular kind of way, through metaphoric means. The essence of metaphoric thought is that it is not binary in character but is an analogic logic in which one domain is made sense of in terms of another. It provides a way of connecting the world, seeing resemblances or similarities in difference. I have made this argument at length elsewhere and argued that metaphors are both the medium and the outcome of a phenomenological analysis. Although we

share with prehistoric populations the capacity to think metaphorically, our way of putting these metaphors into words must differ from theirs. However, we are not dealing with linguistic metaphors but with material metaphors. We can observe their material productions and infer the metaphorical links being made—which is the interpretative strategy undertaken throughout this book. I refer the reader to more specific discussions and the scholarly books and papers cited there (Tilley 1999, 2004: Chapter 1, 2006, 2008). We can thus study and describe the material relations of bodies to landscapes in ways without needing to make reference to specific intentions in the minds of prehistoric people, and then readdress the question of what these landscapes meant to them through undertaking a ‘phenomenological walk,’ a walk of the walk (see Tilley 2008).

The Interpretative Nexus

Figure 10.1 presents the basic interpretative nexus of a phenomenological approach to landscape: the phenomenological triangle. It represents a set of relations between three basic terms: Body, Place, Path. These are all material entities and are not considered as separate, but as dialectically related, as part of one another, while not being subsumed by any other. For the

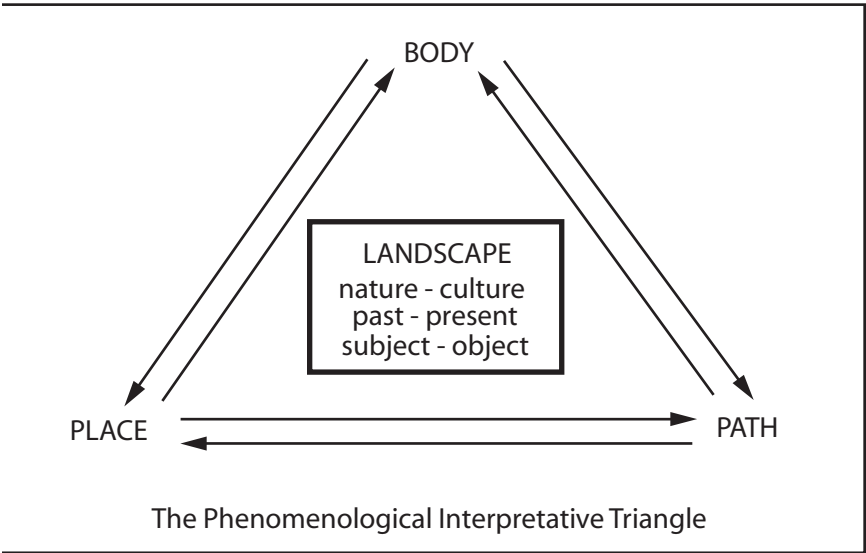


FIGURE 10.1 The phenomenological interpretative triangle.

sake of brevity, I discuss the relationships among these terms as a series of propositions:

- By bodies, I refer to culturally constructed individuals whose personhoods differ while possessing a universal body. Such persons dwell in places, follow paths, engage in the material world and are, in turn, constituted through these processes as material beings. Persons, places, and paths are all mutually materially constituted in landscapes. All have different kinds of agencies and effects on doing and thinking.
- Places gather material persons and material things. They all are linked by paths, and the particular path followed alters the character and understanding of the place.
- To study landscapes is to study material relations between places and paths, which become embodied, part of the metaphorical human mind in the body.
- The metaphorical human mind provides an interpretative basis for making sense of the world, which becomes objectified in material forms. Embodied thought is related to the materiality of human encounters with and experience of places and paths that constitute landscapes.
- Landscapes are thus constituted as a nexus of relations transcending the binary oppositions of nature/culture, past/present, subject/object.

The outcome of such a position stressing these material, dialectical relations is to argue that the archaeologist, by taking his or her body into the landscape and re-experiencing the prehistoric places and paths of movement through it, will understand that landscape in a new way providing a fresh basis for interpreting the nexus of relations between places ('natural' or 'cultural') and the paths that link them. The basis of landscape interpretation is to understand places in relation to one another through metaphorical or analogic reasoning, a form of reasoning derived from the physicality and materiality of the manner in which we encounter landscapes through our human bodies. Through the bodily process of experiencing the landscape, we learn to think in terms of metaphors, to think in the same *style* as prehistoric persons. To think in the same style as they do is a very different matter from trying to think intentionally as they thought. This is because our minds and our bodies inhabit the past in the present and not the past in the past, and we walk that past in the present. Thomas has recently remarked that 'our experience of a place or artifact in its landscape context is of value because the thing itself is more than the product or outcome of extinct pattern of social life. On the contrary, it represents an integral and still-extant element of that pattern' (Thomas 2008a: 305). What Thomas is writing about here is the relationship of

embodied identities, personhood, and time. It is about establishing a reflexive and dialectical relationship with the past and an understanding that the past thing, be it monument or artefact, is also a present thing and is interpreted and understood in our present. Our metaphorical statements are thus part and parcel of the construction of the past in the present, a past that, because it is part of the present and experienced by our own contemporary cultural bodies, is neither past nor present. It is a landscape of the present-past.

CONCLUSIONS: PHENOMENOLOGY AND THE DEVELOPMENT OF FIELD ARCHAEOLOGY

Phenomenological approaches to landscape archaeology remain in their infancy. In some respects, too much has been expected—for example, in unrealistic demands for nuanced and multiple understandings of prehistoric constructions of personhood, demands whose advocates are incapable of achieving in their own interpretative practices. In other respects, what has been achieved may not have been sufficiently appreciated. Little over fifteen years ago, landscape archaeology was, for the most part, simply an unproblematic euphemism for digging holes in the ground and conducting field plans and surveys of sites and monuments, and, *contra* Fleming, I do not want to do anything other than to applaud the importance of this work in the historical development of the discipline.

If we consider the manner in which prehistory is written, particularly in all synthetic works rather than individual excavation or site reports (for example, Barrett 1994; Bradley 2007; Edmonds 1999; Hodder 1990; Megaw and Simpson 1979; Thomas 1999; Tilley 1996; Whittle 2003), what we consistently find is a kind of cherry-picking of significant sites. This usually means that those sites have been excavated, or well excavated, or extensively excavated. The interpreted results of these excavations then become generalised to a particular region or landscape or sometimes the whole of Britain, or even great swathes of Europe. So, generalisations are produced about mortuary practices, the significance of pottery styles, lithics, domestic settlement, and so forth and so on. Such generalisations, of course, necessarily subsume local differences and have to assume that unexcavated sites, which constitute the vast majority, somehow might fit into the pattern. This may, or may not, be the case, given the limitations of what either has been, or can be, excavated. So, in all cases, these outlines of prehistory are a kind of bricolage necessarily based on a tiny proportion of the evidence that might be available for study in an ‘ideal’ world in which everything was excavated and totally documented.

By conducting detailed phenomenological studies of the locations of sites and monuments in the landscape, we may possibly in the future be able to investigate local, regional, and inter-regional similarities and differences in a manner that will never be possible through excavation given financial, practical, social, and political constraints. It is possible to introduce destroyed site locations into the analysis, as well as places where nothing is visible on the ground—flint scatters, votive and hoard deposits, and so on. There is the possibility then of developing from phenomenological field research a much more nuanced and contextualised perspective on landscape that costs much less time and money than excavating every year, in a country such as the United Kingdom, a few thousand square metres of soil. (There are no statistics available, but it would be very interesting to know just how much soil archaeologists shift every year, and at what cost.) Given the protection of ancient monuments legislation, one currently has little possibility of excavating at all in the case of most scheduled or listed sites. In the Stonehenge area, for example, our entire knowledge of Neolithic or Bronze Age mortuary practices is, for the most part, based on barrow diggings undertaken between one hundred and two hundred years ago. The current Stonehenge Riverside Project has been given permission to excavate only a small segment of one, virtually destroyed, long barrow, obviously limiting the kind of new evidence that might be obtained.

We need comparative landscape studies, and there is an enormous amount of field research and experimentation still to be undertaken from a phenomenological perspective. This might provide one future for field archaeology that, in comparison with excavation, is non-destructive and very cheap—in the case of most of the field archaeology covered in this book, whatever its limitations, quite literally the result of the research of one man and his dog. During the mid-twentieth century, Leslie Grinsell was able to visit and record most barrows in Wessex and beyond, providing an invaluable record for the future, given the amount of subsequent destruction, mainly through ploughing, that has taken place (for example, Grinsell 1941, 1953, 1957, 1959, 1983). What might be achieved if a fraction of the funding currently spent on excavation were diverted to phenomenological landscape studies by small teams engaging with and recording the landscape in a fresh way? I would like to think that it might result in a complete revision of our current understandings.

The results of fieldwalking, survey, and aerial photographic documentation and interpretation conducted by the first generations of field archaeologists in the United Kingdom have provided us with a treasure trove of information regarding the distribution of sites and monuments and basic information about their size, morphology, and other features. My own work would not be possible without theirs. For example, I am entirely indebted to the work of

Quinnell and Dunn (1992) for their patient and careful recording of the stone settings on Exmoor, and Quinnell recorded many of the cairns and barrows on Bodmin Moor listed in the Sites and Monuments Register. People such as these are, for the most part, the unsung heroes of field archaeology. I would like to think that the perspective advocated in this book builds on and complements their work. It represents a second phase of field research by returning to the field once more and thinking through the sites and monuments again in a fresh way through a reconsideration of their relationships to one another and the landscapes of which they form a part.

To end: Phenomenological approaches attempt to explore landscapes on the basis of the full depth of their human sensory experience. The process of dwelling in these landscapes and developing an understanding of them is not a value-free exercise. It is part of a radical politics whose imperative is to teach us to respect and to value, love, and cherish the land on which we dwell and the planet on which we live—and to challenge capitalist values in which everything and its worth becomes measured in terms of money, as well as the ‘rationalist’ and calculating logic associated with such an evaluation. It encourages thought about these landscapes that may allow us to emotionally re-connect with them, through an alternative poetic and metaphoric logic, rather than to destroy them. It is to further develop an understanding that, if we destroy these landscapes, we destroy not only our past but also our present and our future. To be a good phenomenologist is to try both to think through and to develop an intimacy of contact with the landscape akin to that between lovers. In so doing, we may develop not only a better understanding of our present-past but also of ourselves and our relationships to others.



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This book takes a new approach to writing about the past. Instead of studying the prehistory of Britain from Mesolithic to Iron Age times in terms of periods or artifact classifications, Tilley examines it through the lens of their geology and landscapes, asserting the fundamental significance of the bones of the land in the process of human occupation over the long durée. Granite uplands, rolling chalk downlands, sandstone moorlands, and pebbled hilltops each create their own potentialities and symbolic resources for human settlement and require forms of social engagement. Taking his findings from years of phenomenological fieldwork experiencing different landscapes with all senses and from many angles, Tilley creates a saturated and historically imaginative account of the landscapes of southern England and the people who inhabited them. This work is also a key theoretical statement about the importance of landscapes for human settlement.

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