Human memory is fragile and finite. We mentally store our experiences as memories. However, memories are easily forgotten, and the retrieval of memories, through the act of remembering, is inexact and faulty. Due to our finite ability to mentally store our memories, human societies have produced a series of devices for storing memory in extrabodily form. These have included notched bone implements, clay and stone tablets, carved stelae, and, at a later stage in history, maps, drawings, photographs, phonographs, and other recording technologies, and, finally, the computer. Each of these offers an increasing capacity for the storage of memory. Each new technology therefore acts as an ever more efficient prop for human memory.
A version of these views can be found in the discourse of a number of disciplines whose purpose it is to debate the development and structure of the human mind – from psychology and cognitive science to philosophy, anthropology, and archaeology. They also represent a kind of ‘folk model’ of memory, which is broadly representative of the experience of memory for the majority of people raised in Western society. The aim of this book is to question the validity of these views, especially as they pertain to the study of material culture. I argue that such views are predicated on a modernist assumption of the differentiation amongst mind, body, and world. In fact, to assume such a distinction throughout the course of human history is to overlay a series of modernist assumptions upon the distant past. In examining the relationship between memory and material culture, the aim is to propose a more complex and satisfying analysis of the relationship between human memory and material culture.

THE CONTENTS OF THIS BOOK

At this juncture it is useful to define the parameters of the discussion. Those who have opened this book expecting to read about the evolution of the ancient mind (e.g., Mithen 1996) or the cognitive composition of the ancient mind (e.g., Lewis-Williams 2002; Lewis-Williams and Pearce 2005) will be heartily disappointed. Although these approaches have their place, I am less concerned with the composition of the human mind and more concerned with the relationship between people and artefacts and how this relationship produces memory.

With an array of studies from disciplines such as anthropology, history, and sociology, the subject of memory has become a hot topic in academia. The subject is comparatively well served in archaeology, with a series of recent books devoted to the subject (Alcock 2002; Bradley 2002) and a number of edited volumes (Van Dyke and Alcock 2003; Williams 2003). Much of that work has focused on what has come to be known as the ‘past in the past’ (Bradley...
and Williams 1998). This is a fruitful strand of research; however, it presents a fairly narrow definition of memory in the past, being concerned mainly with the reinterpretation of ancient sites and monuments in the past over the long term. The subject of memory is vast, and not all aspects of the subject can be tackled in a book of this size. Some topics, such as the cultural biography of artefacts and the issue of monumentality, are comparatively well worn; many other authors have discussed these issues, and to do so again would require at least another volume (or two!). In this volume I touch on these issues only in a tangential manner (biography in Chapter 7; monuments in Chapter 8).

The subject of this book is closer to the set of concerns outlined by Rowlands (1993) in relation to the role of memory in cultural transmission. The intellectual thrust of this book is to explore the implications of Prown’s (1996) point that artefacts are the only class of historic event that occurred in the past but survive into the present. As physical materials, artefacts provide an authentic link to the past and as such can be reexperienced. It is through this reexperiencing that the world of the past, the other, is brought into contact with the present. The contents of this book are a meditation on this point. Given the durability of material culture, what are the implications for our understanding of the role that artefacts play in cultural reproduction?

Given this perspective, it is my contention that an investigation of the subject of material culture and memory involves a reconsideration of a number of key archaeological issues. These include the categorisation of artefacts (Chapters 6 and 7), the archaeology of context and the definition of archaeological cultures (Chapters 5 and 6), the relationship between archaeological chronology and prehistoric social change (Chapter 4), and the definition of archaeological landscapes (Chapter 9). I also deal with the relationship amongst history, memory, and identity (Chapters 3 and 4), and the relationship amongst text, history, and prehistory (Chapters 8 and 9). This volume is less concerned, then, with the approach defined as the ‘past in the past’ but looks instead at how a consideration of
practices of remembrance affects how we examine the reproduction and change of prehistoric artefacts.

The book is divided into two sections. In the first, I discuss the treatment of memory in a host of disciplines and look at ways in which memory can be studied archaeologically. The discussion shifts from the study of memory to the analysis of the practices of remembrance and then discusses how the person is framed by collective modes of remembrance. In Chapter 4, I expand upon this theme and discuss the concepts of indexicality and citation in relation to cultural practice, touched upon in earlier chapters. Chapter 5 discusses this issue by comparing practices of remembrance and personhood in the Neolithic of Scotland and continental Europe. Chapter 6 examines the way in which identities are formed through the manipulation of categories of material culture, whereas Chapter 7 discusses the interrelationships and chains of remembrance pertinent to artefacts in assemblages. Chapters 8 and 9 discuss the important role of inscription and remembrance; in Chapter 8 I discuss the way in which inscriptive practices (the production of megalithic art and the decoration of artefacts) reinforce the relationship between place and memory. In Chapter 9, I focus on rock art in two regions of Europe to argue that rock art plays an important role not only in creating place but also in creating cohesive relationships between different kinds of places in landscapes. In each archaeological case study I pursue the way in which indexical fields work in relation to artefacts, artefact assemblages, places, and landscapes.

I argue that while considerable attention has been paid to the relationship between objects and society, insufficient attention has been paid to the way in which material forms come into being and the extent to which things are interstitial to the process of social reproduction. The mediatory and constitutive force of objects on society is a central focus of my discussion. How people act on objects and how objects can be considered to affect social actions are paramount concerns. In order that we understand social reproduction, we need to know how it is that people engage with objects and how, and in
what manner, objects are used to mediate for people. An analysis of
the role of memory in these processes is therefore key to how we
describe society and define what we traditionally term culture. I am
interested in not only ‘how societies remember’ but also how things
help societies remember.

The societies that I discuss are those of the fifth to the sec-
ond millennium BC (spanning the Neolithic to the Bronze Age) in
Europe. Many of my examples are specifically derived from the Scot-
tish Neolithic and Bronze Age. I make no apologies for discussing
this region of the British Isles as a case study because Scotland repre-
sents one of the richest, yet one of the least studied, regions of Britain
(compared to the prevailing focus on a small region of southern Eng-
land). I chose Scotland because of familiarity: most of my fieldwork
to date has concentrated in this region. However, in what follows,
the Scottish material is placed in context alongside materials found
in other regions of Europe.

EXTERNAL SYMBOLIC STORAGE

One of the clearest and most provocative discussions of the rela-
tionship between material culture and memory comes from the
work of Merlin Donald (1991, 1998). Donald takes an explicitly
evolutionary approach to the cognitive development of the human
mind. He proposes a series of evolutionary phases in the develop-
ment of hominid (or hominin) cognitive abilities which include
the episodic, mimetic, linguistic (or mythic), and theoretic. These
phases are cumulative, and each is associated with new systems of
memory representation. The final of these phases involves the de-
velopment of systems of memory storage and retrieval that are external
to the person. Earlier phases, such as the linguistic and mimetic
phases, are concerned with the information storage capabilities of
the human mind and principally pertain to the changing configu-
ration or ‘architecture’ of the mind. The mimetic phase is related
to mainly nonlinguistic representation, which often includes bodily modes of communication, whereas the linguistic or mythic phase is associated with linguistic representation.

For Donald (1991) the Linguistic or Mythic culture is characterised by early *Homo sapiens* and Theoretic culture utilising External Symbolic Storage typified by literacy, urbanization, and the rise of the state in seventh-century BC Greece. Renfrew (1998, 2) has rightly criticised Donald for the abrupt nature of these phases, which jump from the development of language in the Upper Palaeolithic to the earliest writing. To rectify this, he includes the development of symbolic material culture – itself a form of external symbolic storage – during the Neolithic and Bronze Age as an adjunct to Donald’s scheme. Renfrew’s critique is important because it emphasises the fact that most forms of material culture are mnemonic in character; however, I believe there are more pressing problems with Donald’s scheme, which pertain to the core concept of ‘external symbolic storage’ itself.

On the face of it, the notion of external symbolic storage appears attractive because it seems to capture the sense in which artefacts act to promote human memory and in turn act back on the human subject. It also foregrounds the important point that artefacts act as an external means of knitting societies together. Ultimately, however, there are a series of problems with the notion of externality and with the idea of figuring memory as a form of storage (whether in artefactual form or in the mind). There are also problems with treating the mnemonic role of artefacts as purely symbolic in nature. I address each of these in turn.

### PROBLEMS WITH THE NOTION OF EXTERNALITY AND STORAGE

Donald’s scheme appears to consider the mind as a distinct entity set against the external world. Curiously, despite the discussion of
biology in a number of his earlier phases (especially the episodic and mimetic phases and the transition to the linguistic phase) a consideration of the role of the hominid (hominin) body in relation to the mind is also absent from Donald’s account. The treatment of the mind as an isolated entity has a series of consequences for our understanding both of memory and of the constitution of the person. Furthermore, it has critically important consequences for understanding our mnemonic relationship to material culture.

Donald’s description of the relationship between mind and world relies upon a computational model of the human mind (Lakoff 1987; Thomas 1998, 150). According to such models of the mind, objects existing in the external world are represented to the mind as images. The external world is treated as objective; material things are viewed as ontologically unproblematic – they are simply components of the environment awaiting experience through being sensed by the thinking subject.

This model of the mind emerges with the theories of early modernist thinkers such as Descartes and Locke. Locke, for example, considered memory to be generated by the empirical experience of sense perceptions. Sensations imprint themselves upon the memory. It follows from this that thoughts or ideas are nothing more than actual perceptions in the mind, and the mind has a power to revive perceptions in memory with the additional perception that it had them before (Locke 1997[1690], 147–8). Locke reasoned that after sensation (or perception), the retention of ideas in memory is crucial because it is this that allows us to reflect upon ideas to attain knowledge. Memory is therefore seen as a form of channel, or gateway, which mediates between actual perceptions and the formation of ideas and knowledge. This empirical understanding of how memories are formed has enormous consequences for subsequent understandings of the phenomenon. For example, because memory is figured as an internal mental process, which retains or stores the impression of our perceptions, we tend to treat memory as a kind
of object that itself retains the objects of perception. In this sense Locke (1997[1690], 147) refers to memory as the ‘storehouse of ideas’.

The metaphor of the ‘storehouse’ persists in popular accounts of memory:

I consider that a man’s brain originally is like a little empty attic, and you have to stock it with such furniture as you choose. A fool takes in all the lumber of every sort that he comes across, so that the knowledge which might be useful to him gets crowded out, or at best is jumbled up with a lot of other things, so that he has a difficulty in laying hands on it. Now the skilful workman is very careful indeed as to what he takes into his brain-attic. He will have nothing but the tools which may help him in doing his work, but of these he has a large assortment, and all in the most perfect order. It is a mistake to think that that little room has elastic walls and can distend to any extent. Depend upon it there comes a time when for every addition of knowledge you forget something that you knew before. It is of the highest importance, therefore, not to have useless facts elbowing out the useful ones. (Conan Doyle 1981[1887], 19)

So Sherlock Holmes expounds his theory of memory to Dr. Watson upon their taking up rooms at Baker Street, in A Study in Scarlet. This idea of the mind as a lumber room or physical space in which thoughts are stored as physical entities has remarkable popular appeal. Precisely the same metaphor is employed by Umberto Eco (possibly conscious of its earlier use by Conan Doyle) in his recent novel The Mysterious Flame of Queen Loana (Eco 2005). Upon losing his memory, the protagonist, Yambo, plunders the attic of his family home for the reading matter (comics and books) which influenced his early development. The attic comes to stand for the space of his mind and the books his memories; as cupboards crammed with books overspill, his memories likewise come gushing forth. The metaphor
of memory as a storage container both has popular appeal and is treated as a scientific verity (Johnson 1991).

The predominant metaphor of memory as a container in which a finite set of memories can be stored posits that our memories act as repositories of knowledge, as we saw with Holmes’s exposition. According to this model, for us to remember, some knowledge must be removed (or forgotten) so that other knowledge can be retained (Johnson 1991). Metaphorically, the form that memory storage takes may vary: memory has variously been conceived as a library, as an encyclopaedia with memories stored on numbered or lettered pages, or as a map with constellations of sites placed around the landscape (Fentress and Wickham 1992; Yates 1966).

An important correlate of the notion of memory as container is the idea that representations are objective and that the authenticity and accuracy of knowledge depends upon the clarity of recall. Such a view of memory relates very closely to a conception of knowledge as a series of semantic categories: objective ‘packets’ of knowledge retained by the mind. As we shall see, there are problems with this view. As Fentress and Wickham (1992, 31) put it: ‘memory entails a degree of interpretation. Our memories no more store little replicas of the outside world made out of mind stuff than do the backs of our televisions’.

The notion of memory as storage container and the emphasis upon authenticity and clarity of recall are two major legacies of early empirical descriptions of memory. Donald’s formulation of the mind in relation to body and world would therefore seem to be reliant upon empiricist traditions of thought. It is curious that such a position is adopted, especially when we consider that other strands of contemporary cognitive science explicitly consider the relationship amongst the mind, body, and world. For instance, the analysis of processes of categorisation suggests that it is not helpful to treat the mind as a disembodied entity. Rather, the structure of our cognitive categories indicates that such categories are grounded on what Lakoff (1987, 348) describes as ‘conceptual embodiment’. The fact that the body and mind operate as a unified
system provides an insight into the formation of our most basic categories, as well as more complex metaphors (Lakoff and Johnson 1980). A clear example is the way in which bodily orientation influences the sense of linguistic metaphors. Because our bodies are upright, to feel ‘up’ has a positive connotation, whereas to feel ‘down’ is negative.

In a similar sense, the cognitive scientist Andy Clark (1997) describes a ‘classical’ view of the mind as one that views mind and world to be discrete entities in which the body serves simply as an input device (see also Lakoff 1987, 338–52). Cognition is centralised and memory is viewed as a simple process of retrieval from a stored symbolic database (Clark 1997, 83). The resemblance between these views and those discussed in the context of Donald and the Enlightenment thought of Locke is evident.

As an alternative, based upon practical experimentation in diverse fields such as computer science, cybernetics, and developmental psychology, Clark notes that we may consider the mind in quite a different light. Instead of treating mind, body, and world as distinct entities, he proposes that we treat them as fields of interaction. The mind is best understood as emergent in its interactions with the world. For example, he discusses how recent advances in robotics have dispensed with producing robots with centralised processing units and instead produce robots able to interact and problem solve within their given environments. Their ‘minds’ are problem-solving devices produced in and through these interactions. In a similar vein, drawing on studies in child development, he recounts how infants learn to interact with slopes of differing gradients. Depending upon whether they crawl or walk, the slope is negotiated in different ways. Indeed their negotiation of slopes is action specific. Although they may learn to successfully climb a slope as a crawler, this knowledge has to be relearned as a walker (Clark 1997, 36–7). Knowledge is therefore gained through embodied engagement with the world and is dependent upon contingent interactions amongst brain, body, and world. In this alternative view of the mind, cognition is seen as