The body in the cave

During the Neolithic period in Europe, caves and other underground spaces were used for burial. The evidence for this practice is reasonably well understood but, with certain exceptions such as the Belgian Middle and Late Neolithic (Cauwe 2004), cave burial has usually been regarded as something tangential to the broader narrative of the European Neolithic. Caves are often treated as places for simple expedient burial, perhaps for less socially favoured members of society, when compared to an assumed norm of burial in monuments (see, for example, Schulting and Richards 2002a, 1021). In this book, I will discuss the human remains from British Neolithic caves on their own terms. They were part of a wider European tradition of cave burial. They were also an important strand in the overall diversity of funerary practice in the British Neolithic. By understanding cave burial in the period, we get a much clearer understanding of attitudes to death in all contexts.

One way of describing this book would be to say that it is an exploration of the archaeology and agency of natural places. However, it could also be described as a book about burial in British caves during the Neolithic period. Both of these descriptions are apt, but they reflect different traditions of research in archaeology. Research may be generalising and thematic and address globally applicable topics of past human existence – in this case, the archaeology of natural places and of human and environmental agency. Or it may be a particularising, locally situated investigation of the remains of a particular past time and place - in this case, cave burial in the British Neolithic. Both of these research traditions are important parts of how archaeology works. In this case, I hope that I have integrated general and particular research in a coherent way. This is not a book about agency with a case study about cave burial, nor a catalogue of cave burials with an interpretive conclusion based on actor-network theory. This is a discussion of some different conceptions of agency which I feel are particularly relevant and useful in trying to interpret the archaeology of Neolithic cave burial in Britain. It is not a complete review of the many different archaeological and anthropological uses of the term *agency*, and it certainly does not contain archaeological evidence from every known cave with Neolithic activity.

Of course, the idea that archaeology has something to say about natural places and the idea that animals, places and objects can be thought of as agents are not new. There is an extensive discussion of both of these topics from a range of different perspectives (e.g. Bradley 2000; Ingold 2000; Latour 2005). Similarly, Neolithic human remains from British caves have been reviewed by a number of writers (e.g. Barnatt and Edmonds 2002; Chamberlain 1996; Leach 2006; Schulting 2007). In excavating and researching Neolithic human remains from caves, I have consistently found myself addressing two problems which have provided a link between the general themes of agency and natural places and particular bodies in particular caves.

Neolithic burial and cave burial

The first of these questions is the problem of the relationship between these burials and other practices around human remains in the British Neolithic. Collective disarticulated burial in monuments is a particularly well-studied aspect of Neolithic studies (see, e.g., discussions in Wysocki and Whittle 2000 and Whittle et al. 2007), and two main interpretations of the burial process have been offered. Disarticulation may have been achieved through a multi-stage rite which involved some significant circulation of human bone away from burial monuments. This is often referred to in the literature as secondary burial: see Chapter 3 for a fuller discussion. Alternatively, the disarticulated state of bodies may be largely the result of taphonomic processes following the successive inhumation of bodies at burial sites. I will return to the details of this debate in Chapter 3, but it is clear that very similar arguments can be made about human remains from caves. It should also be borne in mind that Neolithic burial is not confined to cairns, long barrows and caves. From the Middle Neolithic onwards, there is a well-defined tradition of single burial, often associated with large round barrows (e.g. Gibson and Bayliss 2010, 101). Schulting (2007) has also pointed out the diversity of non-monumental burial. Human remains recovered from caves are usually discovered in an extremely fragmentary state. A very careful examination of the possible taphonomic processes is needed before we can draw parallels between cave burial and the range of other documented burial rites in the British Neolithic.

Do caves have agency?

The second question has arisen from a consideration of the nature of caves as spaces. Both Barnatt and Edmonds (2002) and, for Irish caves, Dowd (2008) have discussed the similarities of caves and chambered cairns as spaces. This provides another link between the monuments and caves beyond any possible similarities of burial rite. It is assumed that both caves and chambered tombs would have been thought of as conceptually similar places because they shared an architecture of passages and chambers. Barnatt and Edmonds (2002, 127) suggest that the practice of separating geological and architectural spaces into contrasting classes of natural and cultural entities is itself modern. This is a distinction which we cannot assume was made in the Neolithic. although, it should be noted that, more recently, Dowd (2015, 110) has suggested that caves and monuments were perceived as different to one another during the Irish Neolithic. She points to the different ways that human remains were disposed of in the two types of sites as evidence that they were not perceived as equivalent spaces.

More broadly, Barnatt and Edmonds (2002, 125-127) and Dowd (2008, 311-312) both provide a wider consideration of the phenomenological impact of these constricted spaces. This is an area which has been particularly explored by European scholars; for example, in Mlekuž's (2011) work on the Italian and Slovenian karst. Mlekuž studies the impact of physically inhabiting caves and rock shelters on the bodies of both sheep and shepherds. The cave walls cease to be something which is merely a passive arena within which human and animal actions take place. The walls themselves 'push back'. In a similar vein, Bjerck (2012) has examined how darkness and constriction influenced the placing of Bronze Age rock art in Norwegian caves. These discussions of the power of cave spaces to act on people lead us to a wider debate about whether inanimate objects like caves have agency. It is clear that caves can do things to people; the question is really about whether it is enlightening or convincing to describe this effect as agency. I have explored this debate about the agency of caves previously in relation to later prehistory (Peterson 2018). In that work, I argued that caves would have been understood in the past as possessing agency and that it is helpful to think of them in these terms. However, we also need to be aware of the dangers of treating agency unreflectively. If we reify 'agency' as a social force to the point where it becomes the explanation, then the idea ceases to have any value as a conceptual tool. For this reason, I have suggested, in this book and in the aforementioned work, that we re-phrase the question around cave agency to ask 'how did caves act on people?'

Therefore, this book will attempt to tackle two problems. Firstly, how do cave burials relate to other Neolithic burials? Secondly, how do caves act on people? These two questions belong together because of the way that burial practice links society and environment. If we return to the division of burial practices into either secondary burial rites or successive inhumation, then one of the ways of distinguishing between them is to look at the agent of disarticulation. A secondary burial rite involves repeated interventions from living people. Bodies must be laid out and transported, and often they are physically broken up. Bones must be recovered, sorted and ultimately placed in a final burial site. Through all of these processes, the agency of living humans - the mourners or descendants - is the main driver of the physical process of disarticulation. By contrast, when bodies are placed successively in either a tomb or a cave, then the main agent of disarticulation is a combination of time, the physiological properties of the decaying corpse and the physical properties of the space of burial. This is not to suggest that time and environment are not important in many multi-stage rites, or that people could not interact with successively inhumed bodies during decomposition if they wished. However, human agency is necessary for secondary burial rites, and natural agency is an essential part of successive inhumation. Thinking about the relative contributions of society and the environment to the burial process gives us a common thread to our answers to both of the problems I posed at the start of this paragraph. Cummings (2017, 94) has argued that the 'normal' fate of human remains in the Neolithic was a rite of transformation primarily driven by natural agents such as scavenging animals and bodily decomposition processes. She postulates that most bodies were exposed and scavenged to the point where they were completely broken down and destroyed. From this perspective, what is distinctive about secondary burial or successive inhumation, whether it took place in a cave or a monument, is that it removed a body from this complete transformation and allowed some traces of it to survive. Within Chapter 3, I examine not only the anthropological evidence for the social customs and structures which may have surrounded secondary burial and successive inhumation but also the detail of the processes of bodily decay and cave sedimentation which would have been the natural agents of change. In Chapter 4, I have tried to further draw out the implications of treating inanimate objects as having agency. Caves, material culture, bodies and time are all considered from the standpoint that it is unhelpful to maintain a strict division between living subjects and inanimate objects.

Dated Neolithic human remains from British caves

If we want to analyse burial practices in caves in the Neolithic, our first requirement is data: a selection of cave sites where we know human remains were deliberately deposited during the period. There are many cave sites where Neolithic artefacts have been found alongside human remains; for example, Barnatt and Edmonds (2002, Table 1) list twenty-five such sites from Derbyshire alone. However, the analysis of Neolithic cave burial practice would not be possible without the radiocarbon dates on human bone provided by many different research projects over the past 20 years. These dates are absolutely essential. Previous studies of caves and human bone taphonomy, particularly by Leach (2006, 2008), have shown that radiocarbon dating is the only reliable guide to determining the date of a cave burial. Conventional archaeological assumptions about the integrity of sealed contexts and associations between artefacts and human bone cannot always be relied upon in cave environments. The open texture of many scree deposits and the highly active geological processes within cave systems mean that it is extremely common for artefacts and human bone to be moved, re-deposited and combined in complex ways.

Some of the burials I discuss can be used as examples to reinforce this point. As has been previously noted (Schulting 2007, 586), many of the bones were originally sampled as part of projects investigating the Palaeolithic use of caves. They were submitted for dating because they were thought to be securely stratified in Pleistocene contexts. For example, the burials from Cattedown Cave in Devon have Neolithic dates but were discovered in a breccia deposit beneath a stalagmitic floor (Worth 1887, 110), and they were dated on the understandable assumption that both the breccia and the flowstone above it were *in situ* Pleistocene deposits (Higham et al. 2007, S28–S29). Therefore, if we are to study Neolithic cave burial, only those sites with direct dates on human bone should be considered. While this undoubtedly excludes some caves which were used in the period, a clear comparison with the European data, with burial in monuments and with other cave burials requires the use of absolute dating.

Forty-eight directly dated Neolithic cave sites in Great Britain have been used in this study (see Appendix 1 for the complete list). All of these sites have at least one published radiocarbon date on human bone which, when calibrated to two standard deviations, falls into the Neolithic period. For the purposes of this book, I have taken the view that any date which has part of its calibrated range between 4000 and 2400 BC should be included in the table. There are a further nine sites where Neolithic radiocarbon dates were obtained from the Oxford

AMS facility but which were subject to problems caused by ultrafiltration contamination (Bronk Ramsey et al. 2004; Rick Schulting, personal communication). These sites are Carsington Pasture Cave and Fox Hole Cave, both in Derbyshire; Gop Cave, Flintshire; Happaway Cave, Devon; Ifton Quarry Rock Shelter, Monmouthshire; Ogof Pantv-Wennol, Llandudno; Red Fescue Hole and Pitton Cliff Cave, both on Gower; and Priory Farm Cave, Pembrokeshire. I have given a full list of these sites here, as some have already featured in published discussions of Neolithic cave burial (e.g. Barnatt and Edmonds 2002, 114-116). Indeed, it is highly likely that burial took place at most of these sites during the Neolithic. However, in view of the problematic nature of the dates, they were not included in this study. During the final revisions of the text of this book new dates became available as a result of ongoing aDNA studies (Brace et al., in preparation) which confirmed an Early Neolithic date for Carsington Pasture Cave and identified further sites with directly dated Neolithic human remains at Aveline's Hole and Ogof-vr-Ychan.

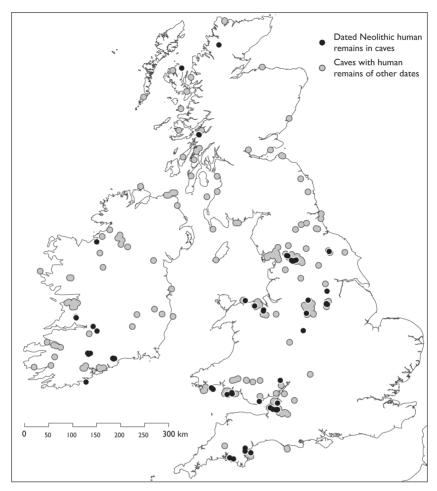
The time range of 4000-2400 BC for this book has been chosen to ensure that the study covers the processes around the beginning of the Neolithic. Andrew Chamberlain was the first to point out (1996, Figure 1) that there was a substantial increase in the deposition of human bone in caves around 4000 BC. This data has subsequently been refined by Schulting (2007, Figure 2), and both authors agree that there is evidence for a significant new practice of cave burial in the centuries around 4000 BC. This is interesting, as it means that new cave burial practices were being introduced at approximately the same time as farming, substantial buildings, monuments, polished stone tools and pottery, all traits which we identify as part of the beginning of the Neolithic. However, thanks to the large-scale use of Bayesian statistics on radiocarbon data sets, we now have the beginnings of a much more precise chronology for the adoption of the Neolithic in different regions (Griffiths 2014a, b; Whitehouse et al. 2013; Whittle et al. 2011). This means that the exact relationship between the beginnings of cave burial and the adoption of the Neolithic needs to be addressed. Some of the early fourth-millennium cave burials in Britain could potentially have been Late Mesolithic rather than Early Neolithic, especially in the north and west. This is a point which has been debated previously. Hellewell and Milner (2011) consider that a Mesolithic date could be established for at least some cave burials, and they propose that cave burial was an example of continuity between the Late Mesolithic and the Early Neolithic. Schulting and colleagues (2013, 22) come to exactly the opposite conclusion. They point to the significant increase in burials dating to the Early Neolithic as evidence of an independent development of cave burial at this time. This is a highly complex area which requires a clear distinction to be made between 'the Neolithic' as a chronological marker and 'the Neolithic' as a description of a way of life. This debate forms the core of Chapter 5, which examines the likely origins and date of the first fourth-millennium BC cave burials in Britain.

It is also necessary to be cautious when using the radiocarbon dates from caves to discuss the likely duration of burial activity, either at individual caves or in the Neolithic period generally. The same problems of open scree deposits and active cave processes mean that we can very rarely prove that two dated bones from the same layer come from a single phase of activity, or that dated bones from superimposed layers represent a sequence of burial events. Despite these limitations, we do have good data that allows us to demonstrate that there was a range of different Neolithic burial practices in caves. The stratigraphic problems do not stop us from analysing and comparing these different practices and attempting to answer the linked questions about burial practice and the agency of caves. Additionally, it *is* possible to use Bayesian methods to discuss the likely chronology of these different practices between sites and across regions. These detailed chronologies are discussed most fully in Chapter 8.

Figure 1.1 indicates the distribution of the radiocarbon-dated Neolithic human remains from caves in Britain and Ireland used in this study. This distribution is at least partly influenced by the availability of suitable caves for burial. The published data (Chamberlain 2014) on caves which contain human remains of any date can be used as a proxy to show which caves would have been available for burial in the Neolithic. On this basis, in the southern part of the country, we can see that wherever there were groups of suitable caves, then there was Neolithic cave burial. To the north of Yorkshire, however, there are large areas which have suitable caves without any Neolithic burials. This is not solely a result of where fieldwork is being carried out. For example, the group of caves along the south coast of Cumbria has been the subject of a recent research project (Smith 2012a) which included radiocarbon dating on human bone, but no Neolithic burials have yet been identified in this area.

Burial and time

We have the potential to understand the chronology of human remains in caves from this period. It could be argued, however, that this is only part of the answer. Chronology, as measured by radiocarbon dating, is not necessarily the same thing as the human experience of



1.1 Known caves in Ireland and Britain with radiocarbon-dated human remains from the Neolithic period (based on data from appendix 1 of this volume; Dowd 2015, table 5.1 and Fibiger 2016). The grey circles show the positions of caves in both countries with human remains of any date (British data from Chamberlain 2014, Irish data from Dowd 2015, Appendix 1). Base mapping of Ireland © Ordnance Survey Ireland and Ordnance Survey of Northern Ireland provided under creative commons 4.0 international licence. Base mapping of Great Britain © Crown Copyright and Database Right (2017). Ordnance Survey (Digimap Licence).

the passage of time. To understand the way in which caves, bodies and people interacted around cave burial, we need to have a similarly embodied and experiential view of the way in which they experienced the passage of time. There is an extensive archaeological and anthropological literature on the human experience of time which is relevant

here. Of particular importance is Tim Ingold's (1993, 159) discussion of temporality. In this work, he coined the neologism 'taskscape' to help discuss time in an embodied and experiential way. If a landscape is thought of as an array of geographical features, then a taskscape is an array of activities; in both cases, the arrays are connected by being experienced by a participant. At the heart of the taskscape is an understanding of time derived from phenomenology, particularly from Merleau-Ponty (1962, 416–421), which depends on human experience rather than any external constant. This temporality derives directly from actions: when people do things, they make time pass. This argument will be developed in more detail in Chapter 4, but temporality is key to understanding both the processes of burial and the actions of people and caves. Past traces of earlier activities would have provided the structure for these burials to take place. Decay processes and geomorphological change in caves would have given material indications of the passage of time. The actions of caves, dead bodies, artefacts and people would have been understood in terms of the passage of time. A key distinction between the different kinds of burial rites, both within caves and elsewhere, would have been their different temporalities.

In Chapters 6 and 7, I will argue that we can see a major change in cave burial practice during the Neolithic period. Early Neolithic cave burial in particular was very diverse and is best interpreted by comparison with a whole range of wider contemporary traditions about human remains. For example, midden burials from caves form part of a wider tradition of midden burial, particularly in western Scotland, during the fourth and fifth millennia BC (Milner and Craig 2009). The practice of successive inhumation in the Early Neolithic may have been similar, whether it was taking place in a cave or in a chambered cairn (Leach 2008, 46-48; Wysocki and Whittle 2000, 595-598). At this date, we seem to have evidence for a range of different rites in caves, each more similar to a different non-cave rite than to other types of Early Neolithic cave burial. However, later in the Neolithic period, it seems as if the range of practices associated with caves had become much more restricted. I will argue that by around 3200 BC, there was a genuinely distinctive cave burial tradition which was coherent and noticeably different from non-cave burial practices. Later period burials like this were generally deeper into the cave, had less opportunity for living people to be involved in the processes of decomposition and disarticulation and drew more strongly on the particular affective and geomorphological properties of caves. The interaction between the agency of two natural processes - bodily decomposition and cave geomorphology – and the social agency of the mourners carrying out the rites seem to have led to the development of a style of burial specific to caves. Some aspects of this rite continued into Beaker and Early Bronze Age period cave burials. However, as might be expected in a period with a distinctive and well-understood set of funerary rites for non-cave burials, Early Bronze Age cave burial seems to have its own different set of rites and practices. The details of these, unfortunately, take us beyond the scope of this book.

In the following chapters, I will attempt to set out these arguments in more detail, to describe the variety of these different burial styles and to offer an account of the broader principles behind the development of a recognisable Neolithic cave burial rite. The common factor in all of these rites was their long duration. Almost all Neolithic burial seems to have been an extended process, presumably aimed at providing a managed transition through the social complexities of mourning and the physiological processes of decay. Extended burial rites like this have been widely studied in a range of disciplines. In Chapter 3, I shall provide a review of these interpretations and the history of their application to Neolithic burial.

The body in the cave, therefore, can be understood as a central part of the British Neolithic. However, British cave burial is only a subset of a wider European phenomenon of cave use in prehistory. Trying to understand the reasons for the adoption of cave burial in Britain around 4000 BC clearly depends on an understanding of both the longer time depth and wider archaeological context available from the continent-wide evidence for similar practices. Wherever there are suitable caves throughout Europe, there are human remains which can be shown to have been deposited during the Neolithic period. The overall spread of the European Neolithic from its Near Eastern origins is reflected in the date and distribution of these cave sites. The earliest examples are in the eastern Mediterranean, with the British caves forming part of the relatively late group in western and northern Europe. Chapter 2 is concerned with this European context in more detail. I have tried to unpick the evidence for different cave practices around human remains in all of the regions of Europe. This will provide a robust background and context to the description and interpretation of the changing practices in British caves in the rest of the book.