The Dwelling Perspective:

Heidegger, archaeology, and the Palaeolithic origins of human mortality.

Philip Tonner

Kellogg College

University of Oxford

A thesis submitted for the degree of

Doctor of Philosophy

Trinity 2015

Abstract

This interdisciplinary thesis is about dwelling, both as a method in archaeology and as a mode of existence. My thesis has two principal aims. Firstly, to explore the 'dwelling perspective' as this has been outlined in recent archaeological theory. This will involve discussion of phenomenological philosophy and the figure of Martin Heidegger. The term 'dwelling' is a technical one originating in Heidegger's philosophy of being. Phenomenology has been making inroads into archaeological theory as a consequence of the interpretive turn of the 1980s. The theoretical commitment of this thesis is that phenomenological inquiry is a useful project in archaeological research. Reflexive archaeological research in the present might articulate and confirm certain phenomenological dimensions of present experience so as to inform and enhance our understanding of the past. Secondly, I discuss the notion of dwelling in the existential sense as a mode of existence in terms that might allow us to deploy this concept in Palaeolithic archaeology, with specific reference to mortuary practice and "art". I propose two case studies in order to explore this. Firstly, mortuary practice and existential awareness of death will be explored with reference to the site of the Sima de los Huesos. Secondly, Heidegger's notion of artistic production as a world-opening event will be explored in relation to Upper Palaeolithic art in caves. The focus on mortuary practice and art is not arbitrary: both are central planks of Heidegger's account of dwelling and both are linked by 'heterotopic' space. Heidegger presented a novel account of human existence as 'Dasein'. Dasein is being-in-the-world and being-in-the-world is unified by what Heidegger called 'care' (*Sorge*). Heidegger's account of Dasein remains anthropocentric: I argue that we should move away from Heidegger's own

anthropocentric view of being-in-the-world, dwelling or care toward a phenomenological archaeology that goes ‘beyond the human’. I argue that care or dwelling is evidenced by the archaeological record of human becoming and that our ancestors ‘cared for’ or ‘dwelled with’ their dead. Care is evidenced by appropriating the world and by looking after compatriots within the world, and I argue that such an existential state had been reached before the advent of the Upper Palaeolithic. I argue that Upper Palaeolithic “art” opened up a hunter-gatherer world that enabled others, including animal others, and objects, to become meaningful to groups of Daseins, and so to become part of particular “dwelling places”. Heidegger remains the key theorist of dwelling but his anthropocentrism should be abandoned. Suitably revised, Heidegger’s account of dwelling will provoke us to look at Palaeolithic archaeology from a fresh perspective.

Contents

Abstract i

List of Tables v

List of Figures vii

Acknowledgements ix

Chapter 1 Introduction: art and death 12

Chapter 2 Origins 33

Dwelling 35

Interpretive archaeology 43

Minds 48

Mortuary activity in evolutionary perspective 59

Chapter 3 Heidegger and the dwelling perspective 85

'New archaeology' 89

Some recent archaeologies 92

Heidegger and three phenomenological archaeologists: Tilley, Gosden and Thomas 94

Phenomenology, archaeology and Gamble's Palaeolithic Societies of Europe 123

Chapter 4	**A phenomenological approach to archaeological Case Studies**	137
	Anatomically modern humans, evolution and the dwelling perspective: anticipating my case studies part one	180
	Dwelling: art and mortality: anticipating my case studies part Two	195
Chapter 5	**Case study 1: Prehistoric dwelling: *Homo heidelbergensis* and the Sima de los Huesos**	202
	Some context	202
	The Sima de los Huesos	219
	Giving reasons, having experiences: dwelling at the Sima	232
	Heidegger's primitives	236
	Heidegger and the Sima de los Huesos	240
	Modernity, dwelling and the death of the other	246
	The Sima de los Huesos as heterotopia	251
	Concluding phenomenological analysis	259
Chapter 6	**Case Study 2: Heidegger, Dwelling and Cave Art**	263
	Interpreting the art: a survey	275
	Caves, heterotopias and dwelling	296
	The Fourfold	315
Chapter 7	**Conclusion**	319
Bibliography		329

List of Tables

Table 2.1. The five apparent phases of human evolution. 50

Table 2.2 Table of human cultural evolution. 62

Table 2.3 Remains bearing cut marks from Lower to Middle Palaeolithic sites. 64

Table 2.4 Pettitt's phases of mortuary activity. 65

Table 2.5. Pettitt's heuristic concepts for mortuary activity. 69

Table 2.6. Klein's 10-point checklist of fully modern human behavioural. traits represented in the global archaeological record beginning 50-40,000 years ago. 74

Table 2.7. The Orders of Intentionality. 78

Table 2.8. Subsistence activities, ranging behaviour, (hypothetical) use of space and technologies amongst hominins. 83

Table 4.1. The Orders of Intentionality and Heideggerian levels of disclosure. 165

Table 4.2. How to spot and anatomically modern human (AMH). 182

Table 4.3. Traits noted as indicators of Behavioural Modernity. 183

Table 4.4. Cognitive and cultural capabilities of fully modern humans and their archaeological traces in Africa. 187

Table 5.1. Markers of the Upper Palaeolithic transition noted by Mellars. 214

Table 5.2. The four chronological camps in the debate over the appearance of (anatomically or fully) modern humans (us!) possessed of symbolic capacities. 217

Table 5.3. The Sima de los Huesos (Pit of the Bones): key points. 221

Table 6.1 Select Chronology of Cave Art sites. 266

List of Figures

Figure 2.1: Common artefact types. 56

Figure 3.1: Maria van Oosterwijck Still Life (1688). 99

Figure 4.1: Heideggerian relations of reference in a contemporary Dasein's world. 149

Figure 4.2: Heidegger's notion of the 'For-the-sake-of-which'. 157

Figure 4.3. The levels of Heideggerian disclosure. 163

Figure 4.4. Heidegger and Gamble. 169

Figure 4.5. First stage of a phenomenological amplification of the function of an item of material culture. 173

Figure 4.6. Phenomenological categories in archaeology (including image of La Mouthe stone lamp). 175

Figure 4.7. The combination of descriptions. 176

Figure 4.8. The phenomenological method as deployed in archaeology. 179

Figure 4.9. For-the-sake-of relation applied to a stone lamp recovered at La Mouthe. 180

Figure 4.10. A phenomenological approach to the relationships between action and production in the Palaeolithic. 192

Figure 5.1. Map indicating the proposed *H. heidelbergensis* sites at Sierra de Atapuerca and Krapina. 205

Figure 5.2. The stratigraphic context of the Sima de los Huesos. 208

Figure 5.3. Artist's impression of the Sierra de Atapuerca. 209

Figure 5.4. Diagram showing the temporal distribution of hominins indicating both the Gran Dolina and Sima de los Huesos. 210

Figure 5.5. Cranium 5 attributed to *H. heidelbergensis* recovered from the Sima de los Huesos together with a map of sites at the Sierra de Atapuerca. 212

Figure 5.6. Profile of the Sima de los Huesos. 225

Figure 5.7. "Excalibur". The only item of lithic industry discovered to date in the Sima de los Huesos. 227

Figure 5.8. Artist's impression of the ritual deposition of a *H. heidelbergensis* individual in the Sima de los Huesos. 228

Figure 5.9. A possible construction of heterotopic "burial" space. 254

Figure 5.10. A possible phenomenological interpretation of the Sima de los Huesos. 259

Figure 6.1. Vincent van Gogh (1853 - 1890), Shoes, 1886-09 Paris, oil on canvas, 38.1 x 45.3 cm. 304

Figure 6.2: Frieze of Horses, Stone Age Cave Paintings, Chauvet, France. 307

Figure 6.3. Outline map of the Cave of Chauvet. 308

Figure 6.4. An abstract representation of the 'work' of the work of art: the 'work' of artworks is to open a historical world. 313

Figure 6.5. The work of the Panel of Horses in Chauvet. 314

Figure 6.6. The Fourfold of earth and sky, gods and mortals. 315

Figure 6.7. The Four-fold applied. 317

Acknowledgements

I owe a debt of gratitude to many people and institutions for their help during the writing of my thesis. I would like to thank my supervisors Gary Lock and Chris Gosden for their sustained support and encouragement throughout my studies. It has been a privilege to study under Chris Gosden, not least because his work has formed some of the subject matter of my thesis. I owe a particular debt of gratitude to Gary Lock for his early encouragement and continued support over the years. The argument of my thesis has improved considerably thanks to their guidance. Naturally, any errors or omissions are entirely my own fault.

I would like to thank colleagues at Glasgow Museums for early encouragement and advice about my project, particularly, Ellen McAdam (now Director of Birmingham Museums Trust), Martin Bellamy and William Kilbride (now Executive Director of the Digital Preservation Coalition). I would like to thank Mark Roberts (now at Glasgow Museums), Kate Bain, Magnar Dalland and Sophie Nichol of Headland Archaeology for allowing me to dig with them in 2008. I would like to thank Gonçalo Velho, Sara Cura and the team at the Field School of the Quaternary and Prehistory group of the Polytechnic Institute of Tomar, Portugal for allowing me to attend their Field School in 2010. I would like to thank Jim Devine of the Kelvingrove Junior Archaeology Club for allowing me to volunteer with him and the junior archaeologists for the last eight years.

I would like to thank colleagues at Hutchesons' Grammar School in Glasgow for their encouragement, in particular our Rector Ken Greig, Jim McDougall, Linda McIntosh (now retired), Gillian Fergusson and Duncan Gillies (now at St Peter’s,

York). I would like to thank Graeme Dench of Hutchesons' Grammar School for his help formatting my images. I owe a debt of gratitude to Hutchesons' Grammar School and Hutchesons' Educational Trust for their generous financial assistance. Thanks also to all my pupils at Hutchesons'. I owe everyone at Kellogg College, Oxford, a debt of gratitude for their assistance and support over the years, particularly I would like to thank Alison MacDonald, Paul Barnwell and Angus Hawkins for their encouragement. I would like to thank Kellogg College itself for the award of a Research Studentship to assist with my studies. I would like to thank Lambros Malafouris, Rick Schulting and Nick Barton for their helpful comments on earlier drafts of aspects of my thesis. Any remaining errors or omissions are my fault. I would like to thank Philip Barber, Liz Strange, Judy East and Elizabeth Allen of Oxford University for their support during my studies. I would like to thank Alexander Broadie for his continued support and encouragement throughout the years. I am grateful to Robin Dunbar, Rob Foley and Gail Higginbottom for early encouragement with regard to pursuing a project in archaeology.

I am grateful to the following individuals for allowing me to reproduce their images and tables, and for their kind remarks and support, David Lewis-Williams, Matt Grove, Richard Klein, Javier Trueba and, Alejandro Bonmatí Lasso (and I am grateful to Alejandro for his email correspondence regarding the reclassification of the Elefante mandible). The Rock Art Research Institute, University of Witwatersrand, the Kunsthistorisches Museum Wien, Madrid Scientific Films and UCM-ISCIII Center Evolution and Human Behavior also deserve thanks. I am grateful to David Campbell for sending me a copy of his paper 'Heidegger and Mind, Objects, and Virtue' (published in *The Heythrop Journal*) in 2009.

I am indebted to my family for their kindness and support during my studies. My wife Lynsey, mother Jane, father William and uncle Philip. Lynsey has been a constant source of encouragement and support and I am indebted to her for that. Our children, Lily and Reuben, arrived during the writing of my thesis and I am in awe of how she has coped with all the challenges that being a mother of two entails. I am in her debt! Sadly, my mother Jane did not live to see the fulfilment of this project. I miss her deeply and I know that she would have been proud to have seen the final version of my thesis. My father William has been a stalwart: ever helpful and supportive. I would not have been able to write this thesis without his help during this and other projects. Lastly, a word about my uncle Philip: it is to Philip that I am most in debt with regards to this project. He was an early source of inspiration for me regarding both archaeology and philosophy and his spirit of intellectual curiosity and rigour informs every page of what follows. I am indebted to him for his support: it is to him that this work is dedicated.

Philip Tonner,
Kellogg College,
Oxford,
2015.

Chapter One

Introduction: Art and death

This interdisciplinary thesis is about dwelling, both as a method or theory, and as a mode of existence. As such, what follows has two principal aims. First, I shall explore the 'dwelling perspective' as this has been outlined in recent archaeological and anthropological theory. Instead of denoting a single monolithic "perspective", reference to 'dwelling' actually refers to a collection of related perspectives that have all, in one way or another, engaged with phenomenological philosophy and, in particular, the work of Martin Heidegger[1]. The term 'dwelling' is a technical one, originating in Heidegger's phenomenological philosophy of being.

Heidegger presented a novel account of human existence, what he called 'Dasein' (being-there-here-now). Dasein's basic state is being-in-the-world (*In-der-welt-sein*) and being-in-the-world is unified by what Heidegger called 'care' (*Sorge*). Care designates Dasein's pre-theoretical 'openness' to its world. Dasein's being-in-the-world is unified by the structure of care. What Heidegger called the 'ontological meaning' of care is Dasein's temporality. Dasein's 'present' (which carries its past with it while pressing into its future) is understood by Heidegger as a 'being-together-with': Dasein is a fundamentally social being that exists in a meaningful world wherein meaningful beings, including others, animals and objects, are encountered and made meaningful by a process of appropriation (Wheeler 2014).

[1] For an important collection of early discussions of engagement with Heidegger in archaeology see *Archaeological Dialogues*, Volume 3, Issue 1, 1996. This includes discussions by, amongst others, Gosden, Thomas, Oudemans and Weiner.

The overriding contribution that I hope to make is partly theoretical and partly methodological: on the theoretical level it amounts to the claim that an engagement with Heidegger's thought is profitable to scholars engaged in understanding prehistoric practices surrounding death and creativity. On the methodological level it amounts to the claim that the phenomenological method (not just Heidegger's version of it) can be applied *mutatis mutandis* in archaeological studies. To serve these ends, I have integrated my discussion of Heidegger and phenomenological philosophy throughout the chapters that follow rather than attempt to discuss them in one place only.

I present a fundamental criticism of Heidegger's thought. I argue that we should move away from Heidegger's own anthropocentric view of being-in-the-world, dwelling or care (the three terms are synonymous in this context) and instead develop a view of these notions that allows for their extension to our ancestors. As such, I argue for a phenomenological archaeology that goes 'beyond the human'. I suggest that care or dwelling is evidenced by the archaeological record of human becoming: this is particularly evident when considering the record of early mortuary practice. I suggest that our ancestors 'cared for' or 'dwelled with' their dead, and while doing so, appropriated parts of the world, (for example, the cave of the Sima de los Huesos). Care/*Sorge* is evidenced by looking after the world and by looking after compatriots within it. I argue that such an existential state had been reached before the Upper Palaeolithic. Complex mortuary practice and the extending of meaning into places is the hallmark of dwelling.

Such extending of meaning into places is evidenced in Upper Palaeolithic creative practices. I argue that Upper Palaeolithic "art" opened up hunter-gatherer worlds that enabled others, including animal others, and objects to become meaningful to groups of Daseins, and so to become part of particular "dwelling places".

So, while Heidegger remains the key theorist of dwelling, and an engagement with his phenomenology of Dasein as care structures my interpretation of the archaeological record, I fundamentally depart from his anthropocentrism. The thought of dwelling and care is the living side of Heidegger's thought that I suggest will provoke us to look at the archaeological record differently. At the same time, it is the archaeological record that announces that Heidegger's anthropocentrism is unsustainable. Our ancestors were engaging with the world in a meaningful way and so doing them justice, while engaging with Heidegger, will necessarily involve revising aspects of his thought and of moving away from other aspects of it. I hope that what I present here will begin this task of engaging with the 'living and the dead' in Heidegger for the sake of both archaeology and anthropology.

The editors of the recent *Routledge Companion to Phenomenology* (2012), Sebastian Luft and Søren Overgaard, identify three notions that unite phenomenological philosophers. Phenomenologists are all concerned to work out of the first-person perspective, in order to describe what is given to intentionality (the 'aboutness' of mental phenomena, consciousness' directedness toward the world). Phenomenology is a 'working philosophy', an *Arbeitsphilosophie*, committed to rigorous research that produces intersubjectively verifiable results, an ethos

bequeathed to the ‘movement’ by its founder Edmund Husserl. Just as there are ‘dwelling perspectives’ there are also ‘phenomenologies’ (see Gallagher 2012: 10).

Phenomenologists attempt to provide a description of that which presents itself to them, whatever that may be, as it is experienced from the perspective of an ‘I’ that is open to the world (Luft and Overgaard 2012: 9). Luft and Overgaard stress the point that these descriptions should, by virtue of intersubjective scrutiny, be considered veridical for other agents too. Phenomenology is not subjectivist or solipsistic. Nor is it, *a priori*, confined to (modern) ‘human’ experience. Rather, as Luft and Overgaard put it, taking a visual example: ‘visual objects never show themselves from all sides at once; they “adumbrate” themselves. This has nothing to do with my personal individual psycho-somatic constitution, but pertains to every creature that has visible perception, be it with one, two or ten ocular organs. In this sense, despite *first*-person access, phenomenology is by no means an individual, solipsistic or private affair’ (Luft and Overgaard 2012: 10).

Importantly, as Gallagher argues, phenomenology, on its own, will not ‘give a full and exhaustive account of experience. It is not, for example, able to provide causal explanations of subpersonal (e.g. neuronal) processes that may underpin some aspects of experience’. Nevertheless, ‘phenomenology can play a productive role as part of a scientific and interdisciplinary practice’ (Gallagher 2012: 4). I uphold Gallagher’s claim and advocate a role for phenomenology in contemporary archaeological practice, whether in the field or in the library. The essence of what I aim to establish is that a phenomenological approach indebted to (but not

necessarily limited to) Heidegger's contribution has something to bring to the table in archaeological studies of human becoming.

Phenomenological philosophy has been making inroads into archaeological theory as a consequence of the interpretive turn. Minimally, my theoretical commitment is that phenomenological inquiry is a useful project in archaeological research. Archaeological research in the present might hope to articulate and confirm certain phenomenological dimensions of present experience in such a way that the result of this research informs and enhances our understanding of the past. Phenomenological descriptions are applicable not just to the phenomenologist working in the present but to *all* agents past and present. In what follows I use the word 'phenomenology' in at least two related senses. Firstly, in the Heideggerian sense where it amounts to the very 'possibility of thinking' (Figal 2010: 33). Secondly, as the self-conscious effort or method for elaborating the structures of being-there that can subsequently be reflected upon in an effort to elucidate past experience. In both cases, approaching archaeology from a phenomenological perspective will provide a novel way of looking at some of the discipline's "problems".

My second principal aim is to discuss the notion of dwelling in the existential sense as a mode of existence in terms that might allow us to deploy this concept in archaeology. I focus on human becoming as this is evidenced by the Palaeolithic record since doing so prompts interesting questions regarding human evolution (broadly conceived) while posing issues to Heideggerian thought. I make specific

reference to mortuary practice and the creative practices grouped together under the heading “art”. As we will see, doing so is not arbitrary.

Archaeological research into the Palaeolithic period tends to weave together two projects: first, the provision of an inventory of the Palaeolithic record that will enable reconstruction of ‘culture history’ through the ‘definition and dating of regional industrial sequences’; and second, ‘to explain the variability in the archaeological record so as to shed light on Palaeolithic lifeways (including particularly the technological, economic, social, ritual, and ideological aspects of Palaeolithic societies at various times in the past) and their relationship to the formation of archaeological sites’ (Brooks 2000: 516). With Brooks’ definition in mind, we can think of the dwelling perspective (and so, this thesis) as having an impact on the second dimension of Palaeolithic research.

The technical notion of “dwelling” as outlined in Heidegger’s philosophy is not a stand-in for the “human condition”. Rather, one must already ‘dwell’ in Heidegger’s sense in order to be able to form a concept of the human condition. Dwelling is a constitutive state of a manner of existing that is at once engaged, embedded, and bodily (Taylor 1993: 203). The notion of dwelling fleshes out and contextualises a conception of agency (and ‘social cognition’ *qua* being-with-others) and stands in contrast to particular conceptual understandings of humanity (like the human condition) that are historically negotiated, theory laden and ultimately dependent upon a prior manner of engagement with the world. Given this, when it comes to interdisciplinary Palaeolithic research or ‘human evolutionary studies’, the kind of research aspired to here, an investigation into past dwelling should be seen as

making a contribution to our possible understandings in the present of past technological, economic, social, ritual, and ideological aspects of Palaeolithic life, in terms of their phenomenological dimensions.

As outlined by Heidegger, dwelling is 'Dasein's' manner of being. Dasein (being-there-here-now) is the notion that Heidegger will deploy to characterise our manner of being in the world as care (*Sorge*) in an effort not to carry over theory-laden notions like 'human being' or 'consciousness' into his phenomenological descriptions. Being a Dasein is inseparable from having a sense of finite mortality: all agents who can be described as a Dasein are able to die in Heidegger's special sense of that term (Heidegger 1971: 178). Tim Ingold who, as we will see in Chapter Two, brought the term 'dwelling' to prominence in the literature drew upon Heidegger's thought in doing so. Whether he is considered an anthropologist or philosopher, Ingold's style of thinking, in his estimation, is a thinking that occurs 'in' and 'with' the world: it is a responsive thinking that attempts to account for what the world is telling 'us' (Ingold 2011: xi-xviii). In this respect Ingold retains a phenomenological if not Heideggerian dimension in his thinking. After all, Heidegger's view was that thought should remain open and responsive to that which comes to presence in experience.

Ingold's goal was to unite 'the approaches of ecology and phenomenology within a single paradigm' (Ingold 2011: 11). It is this aim that highlights his intellectual connection with a number of contemporary thinkers called enactivists[2]. In the

[2] Typically, enactivists see 'the properties of life and mind as forming part of a continuum' (Di Paolo et al 2010: 36). They advocate a 'scientific program that explores several phases along this dimension' (Di Paolo et al 2010: 36). Enactivists take cognition to be embodied and situated. The "core enactive approach" to organisms emphasises their autonomy, sense-making, embodiment,

context of this study the "dwelling perspective" unites the notions of 'organism-and-environment' and 'being-in-the-world' while retaining a sense of the priority of finitude in limiting self-conscious life. Finitude is the enabling condition of a life becoming self-conscious or meaningful as 'my life'. Death (the ability/possibility-to-be-no-more) is also the condition for evaluating one's self and one's life (Tietz 2009: 175). Because of the kind of existential awareness that dwelling involves, that is grounded in the temporality of care (*Sorge*), Heidegger will restrict the notion of dwelling to what has been described from an archaeological perspective as 'anatomically modern humans' or 'fully modern humans' (notions that will be discussed in due course). Heidegger's assumption is that Dasein, whatever else it is, as a mode of existence, is characteristic of modern humans alone. To paraphrase him, *only anatomically fully modern humans dwell*. Such beings create meaningful worlds through their activities and are 'mortal' in Heidegger's sense (this will be discussed further in Chapter Five).

By stark contrast to mortal human beings, animals merely perish (Heidegger 1971: 178). They do so precisely because they cannot existentially relate to the possibility of their own deaths: they cannot conceive of their lives coming to an end and they are not motivated to any significant action as a result of the intimation of death or the presence of the dead. They have not entered a 'mortuary phase' (in the sense outlined by Pettitt (2011a)). For Heidegger, this lack of death as an enabling and

---

emergence and experience (see Di Paolo et al 2010: 37): an 'organism *enacts* its world; its effective, embodied action in the world constitutes its perception and thereby grounds its cognition' (Stewart et al 2010: vii). Enactivism upholds that mind-science and phenomenology are complementary and mutually informing. Enactivism draws on biology, neuroscience, psychology and phenomenology in order to investigate from the ground up subjectivity and selfhood by accounting for autonomous living cognitive beings (Thompson 2007: 14; see also Protevi 2009; see Sutton in Knappett and Malafouris 2008).

individuating condition is why animals do not have language, poetry, history and an archaeological record:

> Man does not dwell in that he merely establishes his stay on the earth beneath the sky, by raising growing things and simultaneously raising buildings. Man is capable of such building only if he already builds in the sense of the poetic taking of measure…The poetic is the basic capacity for human dwelling (Heidegger 1971: 227-228).

In other words, since they are not poetic, since they do not 'poetically take measure', animals do not dwell. Heidegger's division between mortal humans and animals is metaphysical: it admits of no degrees. This essentialism will be challenged throughout this thesis. In fact, a significant part of what follows should be read as a critique of Heidegger from an archaeological perspective. It is a challenge to Heidegger *from* the perspective of dwelling.

My view is that Heidegger's essentialism (his anthropocentric division of man and animal) does not bear up when considering the archaeological record of human becoming: thinking in this restrictive way simply does not do the record – and so our ancestors – justice. Nevertheless, we should not abandon Heidegger's thought wholesale. There remains a significant portion of his work that is useful when considering the archaeological record. The archaeological record of mortuary practice prompts a revision of Heideggerian essentialism since it evidences the advent in the remote past of complex mortuary practices that anticipate the rich ways in which modern humans deal with the dead. I argue that accounts of that mortuary practice would benefit from being read from a perspective informed by Heidegger's account of practical coping (*Sorge* and, as we shall see, *Fürsorge*), which attains its ultimate meaning in mortality, since that perspective will add an

existential-phenomenological dimension to our understanding of the archaeological record and will act as a heuristic for understanding our ancestors mortuary practice.

Importantly, the 'poetic' in Heidegger's sense is not an exalted form of everyday language. Rather, poetry is something primordial: it is originary meaning-making and it is only on the basis of such meaning-making that anything resembling a spoken language could emerge on Heidegger's account. Agent-beings are sensitive to meaning prior to articulating that meaning in language. Heidegger regards all "art", which for Heidegger is really a social practice, to be essentially poetic (Cooper 1996: 78). The capacity for originary meaning-making is a direct result of the human being's appropriation to something non-human; "man" is appropriated to the originary approach of the world as meaningful, as something to be responded to (Heidegger 1971: 207-208). This originary approach of meaning to an embedded, embodied mortal social agent is what Heidegger called the 'appropriating event' (*Ereignis*) of the disclosure of meaning (meaning = Heidegger's notion of "being") to an agent who is simultaneously 'opened-up' by this event to a meaningful world. It is within such worlds that agents 'live' (Cooper 1996; Sheehan 1981; Tonner 2010). What makes all of this possible on Heidegger's account is an agent's awareness of their finite mortality, their existential awareness of death. Heidegger says: 'death harbors within itself the presencing of Being' (Heidegger 1971: 178-179) and so, as Krell has put it, 'all intimations of Being are intimations of mortality' (Krell 1986: x). Death, or rather, finite mortality, is the enabling condition of specifically human life[3].

[3] Death flouts basic taboos while reminding human beings of the fragility of their lives. An ambiguous and anomalous event, death might be coped with by a group according to Douglas's list of five 'negative' strategies (Douglas 1976; Bowie 2006: 45-46). The strategies may overlap and are not exhaustive: first, an anomaly may be redefined. Second, an anomaly may be eliminated by

Given Heidegger's theoretical commitments to the anatomical modernity of the kind of agents who dwell the existential question that will be raised here is the extent to which the notion of dwelling can in fact be applied within the context of studies of human ancestors. In short, did *Homo erectus* or the Neanderthals dwell in Heidegger's sense of the term? Further, what in the archaeological record of their lives would enable us to make the claim that they did? And so, might we deploy the term dwelling descriptively rather than just methodologically from an archaeological perspective?

Retaining Heidegger's emphasis on an agent's awareness of mortality (and the attendant notion of *Fürsorge*) as a heuristic in this endeavour, I will argue that material traces of aspects of mortuary practice in the remote past indicate a manner of engagement that might be described as a form of dwelling. That is, from the standpoint of dwelling, as a reflexive theoretical framework in the present, the point (or points) at which an engagement with the world that indicates a form of 'dealing with death' that leaves a specific kind of archaeologically visible material trace provides a mandate for deploying the notion of dwelling descriptively to indicate an existential state, in terms that preserve its connection with mortality, care (*Sorge*) and solicitude (*Fürsorge*), in Palaeolithic studies. This issue will be explored within the context of my case study of the Sima de los Huesos (Chapter Five).

---

physically controlling it. Third, the anomalous may be avoided. Fourth, the anomalous event/individual might be labelled dangerous. Fifth, the anomalous may be elevated through ritual. Ritualization is one strategy for coming to terms with an ambiguous symbol(s).

The claim that this portion of this thesis sets out to establish is that agents who dwell engage with the dead members of their groups in an archaeologically visible manner and that this manner is connected to their activities in the landscape. This is not to claim that agents who dwell 'bury' their dead. Mortuary practice is more complicated than the simple notion of 'burial' would indicate. Instead, my claim seeks to augment current approaches to early mortuary practice amongst our ancestors, in particular the recent work of Paul Pettitt (especially 2011a), that would open up discussion of their life ways in terms of dwelling, both in terms of how this concept has been fleshed out in contemporary theory and in such a way that preserves the terms' connection to mortality or death awareness. Retaining this connection to mortality allows us to deploy this category in a restricted way in order to phenomenologically describe a particular form of engagement in the world: without this restriction, the term would lose this descriptive force.

A corollary of my claim is that Heidegger's restriction of dwelling to anatomically fully modern humans – which remained a theoretical assumption throughout his work despite engagements with 'animality' from a phenomenological perspective in both the 1920s and 1950s – cannot be sustained. At the very least we must reconfigure a notion of dwelling to admit degrees. In this regard, I will bring Heidegger's thought into contact with recent work on orders of intentionality which is not rooted in an analogically deprivational bio-philosophy of poverty: Heidegger starts with Dasein and then subtracts traits in order to reach the level of the animal. Heidegger's thought should be critiqued and revised by way of an engagement with the archaeological record. An initial reconfiguration of dwelling that allows for its theoretical deployment to beings other than anatomically fully modern humans is

consonant with current research into extant existential awareness of death amongst contemporary non-human animals (Anderson et al 2010). Such research poses a question about these kind of being's manner of being in the world.

Interpretation of the archaeological record of mortuary practice gives us a clue as to the manner of engagement in the world characteristic of the agents who produced these material traces. Borrowing Krell's phrase, my claim is that aspects of this record evidence *intimations of mortality* (finite existence) amongst our ancestors: intimations of mortality in experience in the remote prehistoric past is evidenced by material traces of mortuary practice. To paraphrase Heidegger, our ancestors had to first become mortal before they could become rational animals (Heidegger 1971: 179).

All "art", according to Heidegger, is a form of originary meaning-making enabled by finite mortality. If we count early *pierres figures* as evidencing meaning-making then Heidegger's claim would be that the agents who produced them were enabled to do so by virtue of the sensitivity to meaning produced in them by their incipient awareness of finitude. By contrast to Descartes, for whom 'I am' followed upon 'I think', Heidegger's claim is that 'I am' follows upon the intimation that 'I will die'. In each case of artistic production, it is finite mortality that has ultimately enabled the artist-agents' sensitivity to the world to be appropriated creatively. Creative events that took place in the Upper Palaeolithic of Western Europe will be the subject matter of my second case study (Chapter Six). What archaeologists refer to as mortuary practice is treated briefly by Heidegger in terms of 'funeral rites and the cult of graves' in *Being and Time* (1927). Art is explored by him in a number of

places, most famously in ‘The Origin of the Work of Art’ (1935-36). My focus on creative artistic practice and mortuary practice is not arbitrary: these themes are central concerns of Heidegger’s philosophy of dwelling.

Palaeolithic archaeology is changing. We now have an account of orders of intentionality that suggests a way to understand the cognitive capacities of not only our ancestors but that of contemporary chimpanzees, elephants and, of course, ‘us’. Partly drawing on this theory Paul Pettitt (2011a) has proposed a series of ‘mortuary phases’ in the prehistory of human mortuary activity that range from the archaeologically invisible core phase to the archaeologically visible archaic, modernising and modern phases in order to account for the Palaeolithic record and the ‘origins of burial’ (see Table 2.4). Linking all of these phases is the phenomenon of *Cronos compulsions*, which is the physical extension of what Pettitt calls ‘morbidity’ (interest in the injured, diseased or dead). Archaeologically visible phases of mortuary practice display recognisable mortuary phenomena including structured abandonment (deliberate placing of a corpse at a particular point in the landscape), funerary caching (structured deposition of a corpse in a chosen place without modifying the place) and formal burial/inhumation (creation of an artificial place in order to contain a corpse) (Pettitt 2011: 9).

My study of ‘prehistoric dwelling’ and mortuary practice will focus on the controversial site of the Sima de los Huesos (Pit of Bones) that occurs within the time frame of Pettitt’s archaic mortuary phase (early hominins to *Homo*). Here I will follow Pettitt’s lead and explore funerary caching in so far as this may represent an incipient dichotomisation of the landscape together with the origin of ‘places of the

dead' (Pettitt 2011: 54-55). One question I face is: does such caching and dichotomisation identified by Pettitt entail dwelling? If so, what can we say about its archaeological signature? Further, from the point of view of method, what does a phenomenologically informed archaeological analysis have to say about such a site? Given my aim of expanding discussion of mortuary activity in order to make sense of dwelling amongst hominins in the remote past I will explore and augment Pettitt's framework in terms of 'mortality', where mortality indicates existential awareness of death. Mortality is not a category deployed by Pettitt in his interpretation of the Palaeolithic record. The concept of mortality becomes current from the perspective of dwelling. My claim is that consideration of the record in terms of mortality expands our understanding of our ancestor's possible death awareness and so we are enabled to extend the deployment of the concept of dwelling as a descriptive category at least this far back in the human past.

If the Sima de los Huesos represents an archaeological signature for existential death awareness then it does so in relation to the spatiality of agency, something with which archaeology has begun to deal. Spatial archaeology, the various attempts to come to terms with spatial patterns in the archaeological record by archaeologists in the present in order to say something about human activity and experience in the past, is underwritten by human spatiality as such (Lock 2009: 169-170). Human spatiality is understood by Heidegger's dwelling perspective in terms of the spatiality of Dasein as being-in-the-world. Spatial archaeology is marked by a dichotomy between quantitative approaches and qualitative approaches. On the former understanding, space is approached in terms that both measure it and model it while on the latter, it is approached in terms of culturally constructed notions of

'place' (Lock 2009: 170). Approaching the Sima de los Huesos in terms of dwelling situates this aspect of the present study in terms of a qualitative approach to space, explored from a phenomenological perspective. Cave space plays a significant role in both funerary caching and, in later sites, artistic production. I argue, following Michel Foucault, whose thought represents both a critique of and critical continuation of certain phenomenological theses (Oksala 2012: 528), that cave space is heterotopic and that this aspect is bound up with the appropriation of such spaces by agents in the remote past (and, we might add, in the present too).

In his account of heterotopic space Foucault notes his debt to both Gaston Bachelard and the phenomenologists who have established qualitative space as a field of inquiry[4]. There are six features of heterotopias. First: while heterotopias are diverse in form they are a constant of 'every human group'. Second: heterotopias have precise operations but these can be changed by their attendant societies as a result of the 'synchrony of the culture'. Third: within a heterotopia it is possible to juxtapose incompatible emplacements. Fourth: heterotopias open heterochronias

[4] Foucault's relationship to phenomenology and archaeology is complex. He often positioned himself as a critic of phenomenology: he says 'If there is one approach…I do reject…it is…broadly speaking, the phenomenological approach' (Foucault 2002: xv). Yet, he will also say that 'For me Heidegger has always been the essential philosopher' (Foucault 1988: 250). Foucault's aim was not to uncover (archaeologically or genealogically) empirical facts but rather to outline the conditions that enabled these facts to become objects of knowledge. This is a transcendental question about the conditions – the historical *a prioris* – of possible scientific discourses but also of 'thinking, speaking, acting and even being' (Oksala 2012: 534). In this way Foucault's project attempts an analysis of the transcendental and the historical simultaneously, hence the notion of the historical *a priori*, and it represents (via Kant, who developed a 'philosophical archaeology' and a historical *a priori*) a critical development of a central dimension of Husserlian phenomenology (Oksala 2012: 535; for Kant, see Lawlor 2003: 31). Foucault thought that it was retrospectively possible to uncover the *a priori* structures that determine the orders of scientific knowledge and ordinary experience (the conditions of possibility of past experience) that characterise an age. So, his aim can be summed up as an attempt to 'write a history of the transcendental' (Oksala 2012: 535). Other/past epistemic orders are not epistemologically and totally cut off from our/contemporary epistemic order(s). The historical *a priori* changes and is revealed only through empirical history: it is always local and particular (Oksala 2012: 538). Heidegger's notion of mortality, for Foucault, would not just be 'a' historical *a priori*, but 'the' historical *a priori*: death awareness is a clue to all manners of meaning-making throughout (pre)history. Following Foucault and Heidegger, this archaeological project is intended to disclose this condition via its material remains.

(temporal discontinuities; places of all times, like museums and places of transitory time, sites of annual festivals and so on). Fifth: heterotopias presuppose systems of 'opening and closing', isolating them while making them enterable (perhaps by constraint, as in prisons, perhaps requiring ritual, purification, permissions, the performance of gestures and so on). Sixth: heterotopias function in relation to the remaining space of the society or group (Foucault 1998: 179-184). Foucault says:

> One could imagine a, I won't say a "science," because that word is too compromised now, but a sort of systematic description that would have the object, in a given society, of studying, analysing, describing, "reading,"…these different spaces, these other places, a kind of contestation, both mythical and real, of the space in which we live. This description could be called "heterotopology." As a first principle, let us submit that there is probably not a single culture in the world that does not establish heterotopias: that is a constant of every human group (Foucault 1998: 179).

The core heterotopological thesis developed here is that certain archaeological sites can be understood to have been heterotopic spaces, or, more correctly, 'places' (Foucault fails to adequately differentiate space and place, tending instead to run them together with other notions like 'location' and 'site': see Casey 1997: 300) and that these sites are places where what Heidegger called *Ereignis* happened in the remote past. *Ereignis* is the situated, embodied appropriating event whereby finite temporality – the temporality constitutive of being-there (Da-sein) as "being-in" (*In-Sein*) – is 'appropriated to' and simultaneously 'appropriates' a meaningful world of things. *Ereignis* enables originary meaning-making. The two archaeological markers of *Ereignis* that I discuss are mortuary practice and art and the archaeological sites that are explored here were formed in caves.

My second study will develop this account of heterotopic cave space and will focus on Palaeolithic cave "art"[5]. Drawing on Heidegger, Foucault and Deleuze and Guattari I argue for a series of connections between heterotopic space, appropriation, the world-opening and focal function of art, and art as the 'capture of forces'[6]. The notion of 'art' is problematic to begin with since, as White points out, the contemporary Western notion of art as a 'solitary act of genius' has probably no application to prehistoric societies or to most non-Western contexts (White 2003: 10). Heidegger shared this broad worry about the status of art in contemporary Western thought and his account of it stressed the nature of art as a form of *technē*:

> There was a time when it was not technology alone that bore the name *technē*. Once that revealing that brings forth truth into the splendour of radiant appearing also was called *technē*. Once there was a time when the bringing-forth of the true into the beautiful was called *technē*. And the *poiēsis* of the fine arts also was called *technē* (Heidegger 1977: 34).

Art, for Heidegger, discloses the "true" in the beautiful. Truth for Heidegger is a matter of unconcealment (*aletheia*). It is not propositional truth. Rather, it is an event that happens to a Dasein or a group and it is always accompanied by concealment. Truth is a clearing event (*Lichtung*); it is the opening up of a space of intelligibility within which the knowledge of beings (things) becomes possible in the first place. Human beings are 'called to' or are 'appropriated by' such events

[5] I restrict my analysis to "art" in caves. Analysis of open air sites and portable art will require separate studies.

[6] Like Foucault, Deleuze's (and Guattari's) relationship to phenomenology is complex. He is often taken to be a critic of phenomenology: in fact, his thought shares at least three similarities with phenomenology (Lawlor 2012: 103-104). I) Both phenomenology and Deleuze seek to 'reverse Platonism'. II) The reversal of Platonism equals philosophical immanence: transcendence is abandoned; everything must now be located immanently within experience. For Deleuze and phenomenology immanence is a transcendental (not transcendent) ground. III) The grounding relation for Deleuze and phenomenology (as transcendental philosophies) is paradoxical; the ground *of* experience must be found *within* experience. Ground and grounded are not separate but the ground must be different to the grounded: the ground must be immanent but not presuppose the grounded (Lawlor 2012: 103; Tonner 2010).

and so participate in them. Meaningful configurations of the world (truth) emerge as the happening of "history" and agents are appropriated to these configurations (Davis 2010: 9; Tonner 2010: 151-152).

This dual aspect of truth as an event of revealing/concealing is, alongside the views that being (meaning) requires human beings in order to take place and that being is essentially temporal/historical are central characteristics of Heidegger's thought (Davis 2010: 9). Heidegger seeks to reinvigorate a sense of art as skilled craft (*technē)* that gathers together the background practices and narratives that constitute a meaningful configuration of the world for a group of Daseins or dwellers. (I will explore this in Chapter Six). His general point is that art should not universally be thought to be a distinct 'sector of cultural activity', with the aim of issuing works that are to be 'enjoyed aesthetically' by audiences (Heidegger 1977: 34). Ultimately, for Heidegger, art is a form of bringing-forth; it is the setting into work of 'truth'. The creation of a work of art (what counts as a work of 'art' has a broad range on Heidegger's view) is a culturally paradigmatic event that opens up a world for a group of dwellers.

Moreover, art, for Heidegger, is actually a way of questioning and one should see art as a riddle or enigma (*Rätsel*) (Dronsfield 2010: 130). Partly for this reason art can be an origin of meaningful worlds: art prompts further interpretation. Connecting this interpretation of art to the creative image-making that took place in caves during the last Ice Age and to our understanding of the potential heterotopic function of caves might further elucidate the image's ability 'to disrupt or question the ways the world is experienced under normal conditions' (Malafouris 2007: 298).

For his part, Randall White's notion of art designates only 'meaningful objects [that have been] shaped by human hands' (White 2003: 10. Square brackets: my addition). Heidegger, like some commentators on prehistoric art, will stress the co-responding movement of creative receptivity and articulation that is at work in acts of making but he will do so from a perspective thoroughly informed by phenomenological philosophy. Connecting these discussions will enable a novel discussion of Palaeolithic "art" from a dwelling perspective.

In summary, Chapter Two will introduce Heidegger's concept of dwelling in more detail. It will introduce discussion of the phases of human evolution in connection to dwelling and phenomenology and it will introduce Pettitt's framework for understanding mortuary practice. Chapter Three will examine the dwelling perspective as this has been explored in contemporary theory. Here we will discuss 'Heidegger among the archaeologists' and we will discuss deployments of phenomenological method by archaeological thinkers. Amongst other things, Chapter Four makes the case for a phenomenological approach to archaeological case studies. The phenomenological method is applied archaeologically and Heidegger's philosophy is brought into dialogue with recent theoretical advances made by students of the Palaeolithic. Chapter Four also provides much of the theoretical and methodological context for the two case studies that follow in Chapters Five and Six. Chapter Five focuses on mortuary practice and the Sima de los Huesos while Chapter Six focuses on creative practice and Chauvet.

Discussion of Heidegger's philosophy, human evolution and archaeological theory occurs throughout what follows. Archaeology and phenomenology, disciplinary

accounts of mortuary practice and art, will be affected by each other. Philosophical concepts shall be interrogated in terms of the material traces constitutive of the archaeological record of human becoming. The discussion attempts to get to grips with selected archaeological engagements with Heidegger while examining what Heidegger might bring to the table in connection to theoretically informed archaeology. Contemporary theory has reached the stage where it is appropriate to stop for a moment to take a close look at one of the foundational figures in its past while asking what they might add to current debates. In so doing I make a fresh case for a phenomenological approach in archaeology. Both archaeological and phenomenological research in the present will be deployed in order to attempt to understand the past.

Heideggerian phenomenology can contribute to method in archaeology since it provides access to the manner in which we dwell in worlds of pragmatic concern in the present. Phenomenological analysis can disclose structures of action and agency that can be used to extrapolate how such structures might have shaped the actions of members of past communities in terms of how they dwelled in their worlds. Integrating phenomenology and archaeology will result in the production of the best available accounts of past ‘ways of thought and action’, revealed and described as past ways of being-in-the-world, hermeneutically reconstructed on the basis of the archaeological record and phenomenological accounts of experience in the present.

Chapter Two

Origins

On the face of it, it may seem odd to speak of the "origins" of human mortality, especially if by this we mean the point in time when human beings began to die. After-all, haven't human beings always died? Moreover, isn't the defining condition of human, indeed all life, the fact that it is mortal? To be alive is, in a sense, to be able to die. Why then pose a question about the origins of human mortality - and why invoke archaeology and phenomenological philosophy in its pursuit - if it is a non-controversial and timeless fact about living beings that they die? In fact, framing these questions as I have here glosses over a series of deep and controversial issues about the concepts of 'life', 'humanity' and 'animality', 'mortality' and 'death'. Each of these concepts is historically negotiated and each operates in the background of our basic understanding of what life, including human life, on earth is: *"Of course human beings have always died! What could you possibly mean by suggesting otherwise?"*

Archaeologists have long realised that a preoccupation with death, marked out in the archaeological record by burial, amongst other mortuary practices, indicates a burgeoning concern with both identity and the afterlife amongst our ancestors (Scarre 2005: 26). This concern is not restricted just to human beings: for example, the interred remains of dogs (who, probably having been domesticated as hunting companions during the last Ice Age, may have arrived in the New World along with the first Americans before 12,000 BCE) appear in the archaeological record as early

as the Early and Middle Archaic periods (8000-7000BCE) at Danger Cave in Utah, United States (Browman et al 2005: 326; Fagan 2010: 206)). One example, recovered from Dust Cave in Alabama (Middle Archaic period c. 6000-5000BCE) reveals a pathology that indicates that the animal may have pulled a travois in life like historically described Plains Indian dogs (Browman et al 2005: 326). While not (to my knowledge) including the burial of the corpse the same restrictions apply to what activities might be undertaken in camp amongst Inuit communities when a polar bear is killed as to when a human member of the community dies (Mithen 1996: 49). The polar bear is taken as a human ancestor, a kinsman and as a feared adversary and in the remote past humans and bears could 'change from one kind to another' (Mithen 1996:50). The line between human and animal is a blurred one amongst hunter-gatherers and the idea that animal or human might become transformed into the other is widespread.

Arguments seeking to establish the appearance of cognitively modern *Homo sapiens* in the archaeological and palaeoanthropological literature have tended to rely on evidence and interpretation of early burials as markers of this since if these sites do in fact represent burials the minds that produced them were sufficiently complex to conceive of a "beyond" to human life (Taylor 2011: 97). The material remains of death awareness have been recognised as part of the set of indicators marking out changes in the 'existential awareness' of human beings over the course of human evolution: the archaeological record of the Palaeolithic, amongst other things, bears this out. The appearance of deliberate and purposeful mortuary activity is significant for accounting for the very construction of 'self, society and cosmology' (Parker

Pearson 1999: 146) in prehistory as well as for accounts of the origins of ritual, symbolism (art) and of death awareness itself.

Palaeolithic archaeology is the archaeology of human becoming and the problematic of this thesis is the Palaeolithic origins and developments of human mortality as this can be elicited from a discussion of mortuary practice and art. Mortuary practice is the evidence of a social and spatially appropriating agency and I shall attempt to draw some phenomenological conclusions from the archaeological record that might illuminate the structure of the experiences and behaviours that produced that record and that went on to create those works conceptually collected together under the banner of Upper Palaeolithic art. Activity and its material expression is the basis for drawing phenomenological conclusions and it is these phenomenological conclusions, exploring the structures of experience, that amount to a contribution to the dwelling perspective in Palaeolithic archaeology.

Dwelling

In his *The Dominion of the Dead* (2003) Pogue Harrison accepts the premise that what defines human nature is the awareness of death; but, he asks, where does this awareness come from? For Pogue Harrison this awareness arises from what must be the more primordial sense that we, as individuals or as agents, are not self-authored. That is, the awareness of death that defines us as a species arises from our awareness that we are followers of those who have gone before us and who have died: universally, human cultures are founded upon the authority of the ancestor. For Pogue Harrison what separates the human agent from the non-human animal is

that while the later obey only the 'law of vitality' the former is thoroughly *necrocratic* (Pogue Harrison 2003: ix).

The living do the bidding of the dead, rebel against them, inherit their pathologies of mind, burdens, causes and superstitions. It is, after all, only the dead who can confer legitimacy on the living. As Robert Hertz (Hertz 1960) argued in 1907 death transforms individuals but the dead retain social agency as ancestors. Through Van Gennep's concept of *rites de passage* (Van Gennep 1960), funerals, our human attempts to begin to deal with the dead, can be interpreted as transitions that mark the passage of the dead into new worlds, while providing a structure for mourning and for the renegotiation of society after the passing away of one of its constituent agents. It is through this agency that the dead assist in the continuation of the 'over-arching collective society' that they were members of in life (Pettitt 2011a: 8).

Pogue Harrison's central thesis is that human beings bury their dead in order to humanize the ground upon which they build their lifeworlds and upon which they found their histories: as such, we could say that burial is both spatial and historical. Pogue Harrison is interested in the places (*topoi*) where the dead excerpt their power and grant their blessings and by so doing co-habit with the living in a secular afterlife. Graves, homes, laws, images, rituals, dreams and monuments speak with posthumous voices and if the characteristic manner of human existence on the earth is 'to dwell', as Martin Heidegger argues and as Pogue Harrison agrees, such secular afterlives too require a site in order to take place. 'Like human dwelling, the afterlife needs places to take place *in*. If humans dwell, the dead, as it were, indwell – and very often in the same space' (Pogue Harrison 2003: x). One such place that

we shall consider in this regard is the cave, both in terms of burial and in terms of art. The cave is a heterotopic place or point in the landscape to which we shall return again and again.

For Pogue Harrison, 'humanity' in the sense that he is interested in is not a species. It is a way of being. Humans are mortal, they relate to the dead and to be human means 'to bury' (Pogue Harrison 2003: xi). Drawing on Vico who argues in his *New Science* that the Latin *humanitas* derives essentially from *humando* (burying) Pogue Harrison argues that burial is the 'generative institution' of human nature because as human beings we are 'born of the dead' through the regional grounds that they occupied, through the lifeworlds that they enacted, through the languages that they spoke and through the various other legacies, such as their artistic practices and traditions, that, through the living, connect the dead to future generations: the living are the thread connecting the dead to the unborn ones to come. Here we are in agreement and the question that shall be explored in the case study of the Sima de los Huesos is to what extent can we bring these kinds of considerations to bear when considering our ancestors? Did the people of the Sima's locale emerge as a kind of 'regional ground' for them? Or, are we now in the present rendered mute when it comes to such questions? The 'humic' foundations of our lifeworlds, that which conserves the as yet unfinished account of what has come to pass, have been buried (or perhaps created underground, in the case of Cave Art) in order that they might be reclaimed by a future people and it is through burial that the unfolding of a legacy can become foundational for human beings. Death and burial enables the happening of human worlds.

‘Dwelling is the manner in which mortals are on earth’ (Heidegger 1977: 350): but Heidegger uses the term ‘dwelling’ in at least two senses. First, as the human essence: essential dwelling, the fundamental, perpetual and universally defining characteristic of human beings. Second, as existential dwelling: that state wherein Dasein (the human agent taken as being-there-here-now) has gained an authentic understanding of its essence (essential dwelling) and so lives in accordance with this understanding (Watts 2011: 112).

The significance of the term dwelling derives from the Old High German and Old English word *bauen*. While this word is usually understood as the verb ‘to build’ the Old High German word for building (*buan*) actually meant ‘to dwell’ (Heidegger 1977: 348). Despite being lost to us a trace of this sense of *bauen* can be detected in the German word for neighbour *Nachbar*. A *Nachbar* is a *Nachgebur* or *Nachgebauer*, a near-dweller. Heidegger argues that from *bauen* stem *Ich bin* (I am) and *du bist* (you are) and these mean ‘I dwell’ and ‘you dwell’ (Heidegger 1977: 349). A human being ‘is’ in so far as they dwell.

The word *bauen* has another meaning: it also means to cherish and to protect, to care for and to preserve, especially with regard to agricultural cultivation. *Bauen* in this sense does not ‘make’ anything: cultivation contrasts with construction but both take place within dwelling. Dwelling is that prior state that must be reached in order for both agricultural cultivation and architectural construction to occur. Dwelling is a ‘being on the earth’ that is, from the very outset, ‘habitual’. Human agents ‘inhabit’ (*Gewohnte*, habitual, customary, routine) their dwelling on the earth. For this reason dwelling as a constitutive state of Dasein (being-there-here-now) fades

into the background of the more prominent human accomplishments of cultivation and construction. These activities become the bearers of dwelling while the original sense of *bauen* 'falls into oblivion' (Heidegger 1977: 349-350).

Yet human beings were 'dwellers' before they were agriculturalists or architects. Dwelling is the way that human beings are on the earth. Constitutive of this dwelling is mortality. Human beings are mortals because they die: "to die" in Heidegger's sense means to be capable of 'death *as* death' (Heidegger 1978: 352). What is more, only 'man' dies (Heidegger 1978: 352). True, "death" is a phenomenon of life. Living things 'perish': their biological lives end. Whereas, technically speaking, on Heidegger's account, 'dying' is reserved for Dasein: "death" in Heidegger's sense is a distinctively human characteristic. Dying is a possibility of Dasein and Dasein's mortality is understood as being-towards-death: 'Dasein exists as born; and, as born, it is already dying, in the sense of Being-towards-death' (Heidegger 1962: 426). The term 'dying' stands for the '*way of Being* in which Dasein *is towards* its death' (Heidegger 1962: 291). As being-towards-death Dasein may die at any time. Realizing this, as a result of the pervasive and enlightening event of anxiety about beings as a whole and about its being-in-the-world, Dasein (the agent who is in the world amidst others) is enabled to care about its life, and because of this, the lives of others.

In so far as Dasein is not 'being-towards' its death it might suffer 'demise' rather than 'death' proper. This is because death might come at any time: death 'is the possibility of the absolute impossibility of Dasein' (Heidegger 1962: 294). As 'death' and not demise this phenomenon is 'distinctively impending' (Heidegger

1962: 294): death might not *actually* be occurring tomorrow, but, it may *possibly* occur tomorrow. Physical demise is less important to Heidegger than is the attitude (the Dasein's particular 'toward') that an individual Dasein has to its death during its life. It is this attitude that is crucial for Heidegger's understanding of death (Inwood 1999: 45).

Dasein is being-in-the-world and an essential existential dimension of this is being-with: Dasein is fundamentally social; it always experiences its existence in relation to other Daseins. Dasein's world is a "with-world" (Watts 2011: 265). The function of death is to individuate Dasein: it is non-relational and while it is certain that Dasein will die it is uncertain when any Dasein will die. Death is the end of Dasein's possibilities and no other can take any particular Dasein's place in the face of death. Death comes to individuals: it is the condition of their singularity. Death is also more than this. The existential state of death opens up the communal space in one's being that enables other agents in one's locale to become compatriots:

> The very death, which each individual man must die for himself, which reduces each individual to his own uttermost individuality, this very death and readiness for the sacrifice it demands creates first of all the preliminary communal space from which comradeship springs (Heidegger, Holderlin's Hymnen 'Germanien' und 'Der Rhein' ed. S. Ziegler, 1989, quoted in Inwood 1999: 45).

This is clear in Heidegger's phenomenology of the death of the other. If Heidegger's account has anything to say to Palaeolithic archaeologists it will be to those who are interested in that moment when the ties that bind members of bands together became founded in something resembling modern fellow-feeling. Crucially, this moment has, for Heidegger, a distinct environmental/landscape

signature: communal space. Existential singularity, fellow-feeling and the landscape are bound together because agents, as dwellers, die in relation to others within their world. When "caring for others" or "taking care of others" (if not cherishing them) arise in the record of human mortuary activity we have the traces of dwelling in Heidegger's sense of the term. This is the material remains of a certain kind of human "facing up to" mortality, even if only from the desire of the curious or from the desire for cleanliness. Evidence of 'facing up to mortality' and so of dwelling in Heidegger's sense is what he glossed in *Being and Time* as 'funeral rites and the cult of graves' (Heidegger 1962: 282). Such activities indicate *Mitsein*: being with others, a structural aspect of being-there. It represents the opening up of a life world that is shared between individuals. Therefore, when the material traces of such "rites" are present in the archaeological record we might say that we have a sort of proto-Dasein, the kind of Dasein that would eventually become modern Dasein (there are Daseins of each epoch and many within an epoch: the Dasein of modern science, the Dasein of myth and the Dasein of archaeology, for example. To be Dasein is to be in a world in a particular way).

Proto-Dasein or Palaeo-Dasein is more than (on Heidegger's estimation) the world impoverished life of the animal and yet less than that of world-forming modern Dasein: it is in between these and is representative of *becoming* human. If we were to attach an archaeological signature to the above then we might follow Gamble's (1999) suggestion that it is with the significantly different settlement patterns (greater use of rock-shelters and caves, repeated use of open sites as temporary camps) characteristic of Neanderthal adaptation in Europe (Fagan 2010) that mark the point in time when dwelling really started to come into its own. This fact,

together with our analysis of Palaeo-Dasein, prompts a closer look at the site known as the Sima de los Huesos. This site is also significant since it has been argued that the human remains discovered there represent a population ancestral to the Neanderthals (Arsuaga et al 1997).

The point at which traces of dwelling can be detected in the archaeological record will provide a new take on archaeological approaches to questions about the origins of "cognitive modernity" partly because it will shift the emphasis of analysis away from discussion of ostensibly cognitive traits towards existential awareness and situated practices (mortuary and artistic) founded in the intentionality of being-in-the-world. For many, the possession of religious beliefs, alongside symbolism and language, are traits belonging only to cognitively modern *Homo sapiens* (Pettitt 2011b: 329). If this is true then religious belief can only have occurred after the biological origins of *Homo sapiens sapiens*, some time around 200,000 years ago. However, within palaeoanthropology it is a matter of debate whether cognitive modernity (use of symbols, broad and effective spectrum of resource acquisition, increased planning of activities within the landscape) occurred gradually (McBrearty and Brooks 2000) from the late Middle Pleistocene and Upper Pleistocene, coinciding with the evolution of anatomically modern humans from the best candidate for their ancestral species, *Homo heidelbergensis*, or whether it came about much later and suddenly (Mellars (1996), Klein (1995, 2002). If the latter is the case then cognitive modernity is a relatively recent phenomenon in human evolution (Pettitt 2011b: 329). Either way, a recasting of the narrative of human evolution to take in dwelling is to be encouraged: it just so happens that the former

account would seem more plausible and in line with considerations emphasising dwelling (and those emphasising intentionality) than would the latter.

Interpretive archaeology

Returning to Pogue Harrison, human beings, we could say, are *necronomous* while animals are *bionomous*: humans obey the laws of the dead while animals obey only the laws of nature, of the 'vital'. However, from the perspective of the archaeologist of the Palaeolithic and of the critical Heidegger scholar it is premature to accept this dualism of animality and humanity, especially if these are taken as mutually exclusive categories reflecting biology on the one hand and culture-history on the other. From here the (broadly Cartesian) view that human beings are unique in their status as dual creatures, at once a species of nature (body) but so emancipated from it that it, along with the world as a whole, might become an object of contemplation before the mind is just around the corner (Gamble 2007: 65). Indeed, for Gamble and Coward enquiries into human evolution 'remain committed to a Cartesian model of cognition and consciousness' wherein cognition is 'abstracted from its real-world context' (Coward and Gamble 2009: 52). One insight of interpretive archaeologists influenced by Heidegger and Merleau-Ponty has been to raise questions about human beings *as* animals and the emphasis on 'dwelling' as a perspective that seeks to capture a lived human reality forms part of the more general interpretive turn that has been occurring in archaeology since (about) the 1980s. As I understand the term (and this marks out my departure from a strict Heideggerian position) dwelling is a feature of life that has become self-conscious; because of this it can be applied descriptively to our ancestors. Dwelling is just

another way of talking about embedded-embodied coping (Protevi 2009: 87) but in such a way that emphasises the agents' sense of the precariousness of their embedded-embodied existence, namely, their sense of mortality. If there is anything that acts as a watershed in the history of life it is this: the burgeoning awareness of the fact that "I" will die and it is not obvious that this watershed is to be firmly attached to the appearance of *Homo sapiens sapiens* in the archaeological and fossil record.

Interpretive archaeologies are tasked with understanding the meaning of material culture and of social practices in the past (Shanks and Hodder 1995: 31). Frames of meaning, it is suggested by Shanks and Hodder, may be cultural, while being founded upon complex modes of communication and self-reflection. There has also been a shift in recent palaeoanthropology toward talking about the 'origins of meaning' in the archaeological and fossil record rather than talking about the 'origins of culture'.

Here, meaning is defined as 'the ability of the brain to be self-reflective about behaviours and to propagate actions on the basis of those reflections' (Foley 1995: 76). Meaning equates to reflective self-consciousness. On this picture 'culture' is taken to be the mental template that enables uniquely human traits (such as technology, language, tradition and symbolic systems) to occur. Cultural behaviour is tracked up to its source in the mind and ultimately, the brain. Since the concept of culture is a compound it is inappropriate for evolutionary studies. The proper focus should instead be its constituent parts, technology or language for example. The individual components of culture might be visible in the past while their attendant

"cultures" remain obscure. There is also no reason why past hominins connected the components of culture in the same way that we do today: 'Characteristics of so-called cultural behaviour may appear and exist independently' (Foley, 1995, 76) in the record. If this is the case then it would seem reasonable to suggest that death awareness and mortuary activity might be included in this list of traits that might have arisen at particular points in human evolution and that might have existed without necessary connection to other trappings of modern cognition.

One approach to the problem of the origins of meaning is to see this issue as really being about the evolution of the brain toward the possession of sufficient 'information processing power' to enable the development of the mind (Foley 1995: 76). Evidence for the evolution of the brain across time provides the evidence required for asking about the origins of meaning or of reflective self-consciousness. The fossil evidence suggests that there was a general increase in brain size across human evolution. At the start of that process the australopithecines (circa 3 million to circa 1 million years ago) had brains more or less the same size as extant apes: their Encephalization Quotient is not significantly larger (Foley 1995: 77). While encephalization is a characteristic of the genus *Homo* and while it occurs rapidly in the later phases of human evolution Foley argues that enlargement 'of the brain is not a general hominid characteristic' (Foley, 1995, p77). Further, if chimpanzees and gorillas do not have meaning in the sense that he is interested in then neither did the australopithecines. Also, it is probable that early members of the genus *Homo* didn't have it either. The crucial question that Foley proposes is whether or not apes other than us 'have minds?' If they do, then the conclusion might very well be that the early hominins had 'minds like African apes' (Foley 1995: 77). Investigation of

mortuary activity, death awareness and dwelling might offer a novel perspective on this collection of issues, especially when we consider the view outlined above that the possession of death awareness connects to allocentric awareness and to the notion of having 'a mind' at all. Heidegger's claim was not that dwellers have "minds". It was rather that dwellers are capable of being an 'I' in the performative sense and that this ability is rooted in being-in-the-world. Consideration of dwelling changes the perspective of enquiry from overtly cognitive concerns with the mind and brain toward existential ones about dwelling in the world with others (and this shift in emphasis enables consideration of the ways in which contemporary primates et al deal with death (Chapter Four)).

The impact that the post-processual or interpretive turn in archaeology has had on studies of the Palaeolithic and on human evolutionary studies generally has been that it is now possible to pose deep theoretical questions about the status of *Homo sapiens sapiens* as a species of animal and so about its evolutionary history and development from a theoretically reflexive standpoint (Shanks and Hodder 1995: 31). Interpretive approaches in archaeology are interested in the meaning of things and practices and given that such meaning is rooted in self-reflection, or reflective-self-consciousness, questions about self-reflection and reflective-self-consciousness in human evolutionary studies fundamentally challenge the strict separation of animality and humanity, nature and culture, body and mind. Were our ancestors *necronomous*? And what might constitute evidence for *necronomy*? How did dwelling occur (if it did) amongst agents who were not anatomically modern?

Shanks and Hodder (1995) have posed a number of questions that can now be asked within the context of human evolutionary studies from an interpretive point of view. These are: ‘To what extent were humans more ‘animal’ in the remote past? Are there radical differences between the conceptual abilities of humans and animals? To what extent are contemporary studies of non-human animals relevant the further back in time one inquires? Are there radical differences between the conceptual abilities of humans and animals? What is the nature of these differences? To what extent are interpretation, understanding and intentionality present in animal behaviour? If they are, what are the implications for early hominid development, the development of language, tool-use and symbolic behaviour (for example, artistic and mortuary practices)? What generally is the evolutionary significance of the development of symbolising abilities and linguistic communication? Is the interpretation of the earliest phases of prehistory going to be different from that of later phases? If so, how? (Shanks and Hodder 1995: 31).

While all of these questions are relevant to this study it is to the questions relating to symbolic behaviour and symbolising activities as expressed in mortuary practice and artistic/creative practices that are in focus due to their centrality to dwelling (for Heidegger) and its origins in the distant past. The history of death and of our dealings with it is, after all, as Davies reminds us, a history of self-reflection (Davies 2005: 1). Reviewing the evidence for mortuary practice in the Palaeolithic should shed light on key aspects of hominization from the point of view of death awareness and the dwelling that it testifies to while engaging with the artistic and creative practices of the Upper Palaeolithic should shed light on how we might interpret archaeological phenomena from a dwelling perspective.

Pogue Harrison, for his part, extends to Neanderthals - who continue to suffer from early interpretations and visual reconstructions by, amongst others, Boule and Knight as quasi-Blemmyae, naked, brutish, ugly, stooped primitive folk who carry clubs, live in wild environments and who should not be included in accounts of human ancestry because of an essentially bestial nature (Gamble 1994) - the designation 'human' in his sense despite being a different biological species to "us" (although this continues to be a moot point) precisely because they buried their dead (Pogue Harrison 2003: 34). Death awareness and its commemoration is something that has been attributed to our species alone (Parker Pearson 1999: 145). However, the archaeological evidence would suggest that this proposition is false: human ancestors showed death awareness in their mortuary activities; these ancestors were not anatomically modern human beings. Death awareness cannot be restricted to *Homo sapiens sapiens sensu stricto* and must instead be seen as something that evolves over the course of human evolution. Here, these same claims are made for dwelling: human ancestors showed signs of dwelling, dwelling cannot be restricted to anatomically modern humans alone, dwelling evolves.

Minds

Writing in the late 1970s the structuralist thinker Edmund Leach took it to be a basic premise in anthropology that all human beings 'think' in the same way. For Leach, this premise was just as true of the dead as it was of the living. In fact, it was his view that the 'mammoth hunters of 50,000 BC, the men of Lascaux, the men of the Neolithic Revolution, the architects of Athens, Rome, medieval London and

contemporary Birmingham are/were all ‘people like us’’ (Leach, 1994, p53). If this is true, then ‘people like us’ have been around for at least 52,000 years.

All living people in the world today belong to a single species – *sapiens* – which is the only living species of the genus *Homo*. Hominins include modern humans, *Homo sapiens sapiens*, and all of our fossil ancestors: hominins are hominids, as are the great apes (Coward and Gamble 2009: 64). Archaeology can, with an ever increasing precision, tell us where and when *Homo sapiens sapiens* emerged: the ‘where’ is Africa and the ‘when’ is some time between 100,000 and 200,000 years ago. Some anthropologists and archaeologists would place all of these living human beings, who are ‘modern’, biologically speaking, into the subspecies *Homo sapiens sapiens*, where modern humans are opposed to more ‘archaic’ forms of *Homo* such as the other suggested subspecies of *H. sapiens*, the Neanderthals (*Homo sapiens neanderthalensis*) and even earlier forms such as *Homo heidelbergensis* (sometimes referred to as ‘archaic *Homo sapiens*’: African forms of *H. heidelbergensis* are sometimes placed in the species *helmei* (Helme’s man) partly due to their apparent cranial modernity (Coolidge and Wynn 2009: 260)) and *Homo erectus* (See Table 2.1).

Table 2.1. *The five apparent phases of human evolution.* (After Klein 2009 pp725-728. All timings are estimates).

1. Australopithecine phase.	4.5-2.6 million years ago (Ma). Habitual bipedal locomotion. Apelike brain size.
2. Early *Homo* phase.	2.5-1.9 Ma. Earliest archaeological sites (fragments of animal bones; flaked stones) approx. 2.5 Ma. Larger brains than the Australopithecines. Increased reliance on technology and meat.
3. *Homo ergaster*/*erectus* phase.	1.7- Ma. Acheulean Hand Axe Tradition. Anatomical approximation of modern humans: near exclusive reliance on bipedal locomotion; modern body size and proportions; reduction in sexual dimorphism. Occupation of arid and seasonal environments. Colonisation of Eurasia between 1.7 and 1.4 Ma.
4. *Homo heidelbergensis* phase.	700 ka (thousand years ago). Appearance of late Acheulean phase in Africa approx. 700-600 ka. Equal to or in excess of modern body mass. Brain size approaching that of anatomically modern humans. Colonization of Europe; possible permanent foothold there. Ancestral to Neanderthals in

	Europe. Ancestral to *Homo sapiens sapiens* in Africa.
5. *Homo sapiens sapiens* phase.	Appearance and spread of anatomically modern *Homo sapiens sapiens* beyond Africa approx. 50 ka.

Commonly, the designation 'archaic *Homo sapiens*' is applied widely to any grade of *Homo sapiens* that display evolutionary advances on *Homo ergaster*/*erectus* but that still display 'archaic' features that differentiate them from anatomically 'modern' *Homo sapiens*. While it is easier to distinguish between archaic and modern *Homo sapiens* fossils (the former displaying characteristic brow ridges [*supraorbital tori*] that are absent in the latter) it can be far harder to clearly differentiate late *Homo erectus* and early archaic *Homo sapiens* (Bräuer 1996: 313-314). Of 'species' and 'genus' it is the generic name – *Homo, Australopithecus* and so on – that is the more inclusive and a variety of species may fall within a single genus (for example, *Australopithecus africanus, A. afarensis, H. ergaster* (an early African *H. erectus* as opposed to later European or African variants (Coolidge and Wynn 2009: 260), *H. erectus, H. heidelbergensis*). It may also be appropriate to add a sub-specific name to differentiate sub-species within a species. So, the Neanderthals may be taken to be a sub-species of *Homo sapiens* - *H. sapiens neanderthalensis* – along-side the other sub-species, *H. sapiens sapiens*, who are anatomically modern human beings rather than as a species in their own right, *H. neanderthalensis*.

The archaeological record itself began around 2.5 million years ago with the appearance of the first intentionally modified stone tools, occurring in the earliest archaeological sites. These sites are composed of assemblages of modified stone artefacts and fragments of animal bone that together, as Klein puts it, constitute the earliest (non-anatomical) evidence for human behaviour (Klein 2009: 725-727). The name given to these assemblages is the Oldowan Industrial Complex after Olduvai Gorge where they were first comprehensively described. Oldowan tools display a complexity such that the ability to produce them is (probably) beyond that acquirable by living chimpanzees (Klein 2009: 733).

Modern human brains are roughly three times as large as the brains of apes with the same body size. In such brains there is evidence that areas associated with the production of speech and with perception are much expanded when compared to the corresponding areas in primate brains (Pilbeam 1992: 4). Human brains and those of other primates share much in common. In fact, primate brains share features that serve to differentiate them from the brains of all other mammal species despite variations within the order (Deacon 1992: 109).

As noted, the fossil evidence suggests an increase in brain size across human evolution. The order Primates is composed of two suborders, the Prosimii (lemurs and tarsiers) and the Anthropoidea (monkeys and apes) where anthropoid means ‘having the form of human beings’ (see Tobias 1994: 35). Apes have been documented as using tools in the wild. However, there has not been a documented case of an Ape (chimpanzee, bonobo, gorilla or orang-utan) flaking stones in the wild in order to produce a sharp implement for chopping or cutting. Such tools,

representative of the Oldowan Industry, thus display a level of technological adaptation that is not represented in modern Apes in their natural behavioural contexts (Toth and Schick 2005: 69).

In an experimental setting bonobos ('pygmy chimps', *Pan paniscus*) have learned to make stone tools that are effective in procuring food. However, such tools, while reminiscent of Oldowan tools, remain different: in fact, it is the case that early Oldowan tools, such as those found at Gona in Ethiopia, are more like those produced by modern humans in an experimental context than those produced by bonobos. (See Toth and Schick 2005: 69). Another candidate for 'the first stone tools', (e.g. in Mithen 1996) the Omo Industrial Complex, named after the Omo area in Ethiopia, is contemporaneous with Oldowan sites in Shungura (Toth and Schick 2005: 65).

Both human brains and the technology produced by these brains have been co-evolving since at least this period (and probably before) in the Early Stone Age (ESA; in Africa) or Lower Palaeolithic (ESA outside Africa) (Stout et al: 2009). And so it is not unreasonable to suggest that understanding human cognitive evolution will involve coming to terms with, amongst other things, tool use by our hominin ancestors[7].

[7] Advances in cognitive neuroscience and brain imaging have enabled researchers to explore the foundations for tool-using capacity in both modern human and modern primate brains. Stout et al (2009) have suggested, on the basis of a recent (FDG-PET) study, a thesis for the co-evolution of language and tool manufacture: they note that the neural 'circuits supporting ESA toolmaking partially overlap with language circuits' and that this suggests 'that these behaviours (i.e. tool manufacture and linguistic behaviour) share a foundation in more general human capacities for complex, goal-directed action and are likely to have evolved in a mutually reinforcing way' (Stout et al 2009: 15-16. Brackets: my addition). The implication of this research is that linguistic behaviour and tool manufacture are grounded in the more basic, but nevertheless complex, capacities for intentional/goal-directed activity within an environment. Phenomenology has sought to elucidate such environments. Third-person experimental results relating to tool manufacture etc., must be

Archaeologists, neuroscientists and phenomenological philosophers all aim to shed light on the holistic and co-constitutive role played by bodies, brains, objects and worlds over the course of hominin cognitive evolution. Approaching tool manufacture from a phenomenological perspective (see Chapter Four for a discussion of phenomenological method) would stress that such manufacture is guided by both practical/pragmatic and social concerns and that the action involved in the production of tools admits normative constraints (both in the sense of patterns of normalcy in production and in terms of the actions of others). The use of equipment, such as a hammerstone or piece of antler, in the production of tools is structured intersubjectively.

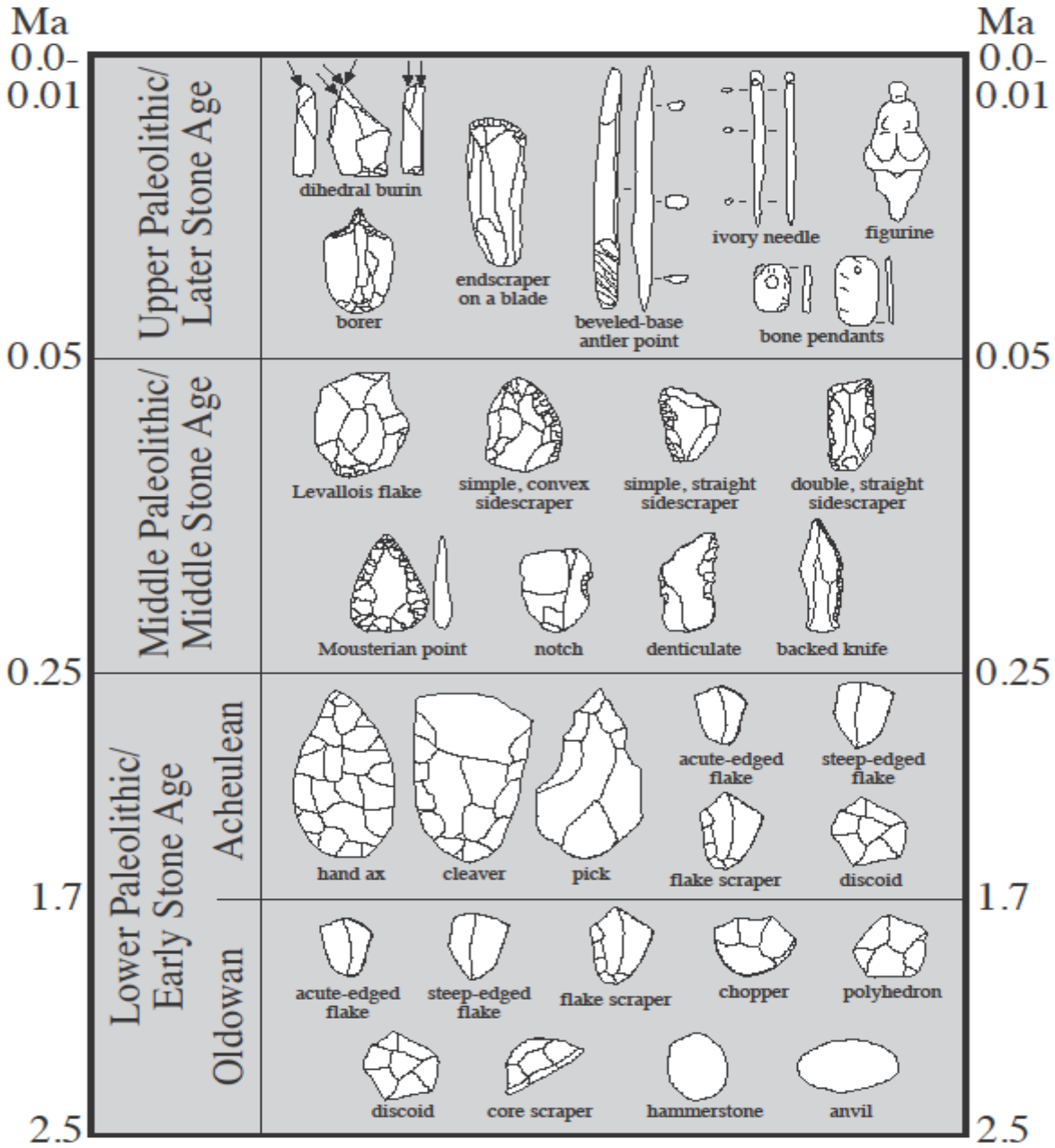
Phenomenological philosophers Gallagher and Zahavi (Gallagher and Zahavi 2008: 154) note that one of the crucial differences between a piece of manufactured

---

'correlated to…[a]…subjects first-person experience' (Gallagher and Zahavi 2008: 16) if it is to be informative for those studying consciousness. Stout et al are not studying consciousness: they are studying the differences between Oldowan tool manufacture and Acheulean tool manufacture in order to test predictions that, when compared to Oldowan tool manufacture, later Acheulean tool manufacture (around 1.7 million years ago until around 0.25 million years ago (Klein 2009: 725-728)) might 'produce increased activity in (i) parietofrontal prehension circuits involved in manual perceptual-motor coordination… (ii) prefrontal action planning systems… and (iii) left posterior parietal and temporal cortices associated with semantic representations for the use of familiar tools' (Stout et al 2009: 4). To test this they conducted their study of ESA tool making by looking at contemporary subjects expert in such manufacture. Stout et al are clear that such functional imaging in modern subjects cannot directly disclose the cognitive capacities or neural organization of extinct hominins but they do argue that such results can 'clarify the relative demands of specific, evolutionary significant behaviours' (Stout et al 2009: 10). Stout et al argue: their results provide evidence for increased cognitive and sensorimoter demands, relating to the nature of the 'expert performance', and to the relative complexity of the tools being produced. Such results are suggestive of relationships between ESA technological change, the evolution of hominin brain size, functional lateralization and linguistic capacity (Stout et al 2009: 10). A phenomenological approach to such an inquiry can add the articulation of the structures of 'in-order-to' and 'for the sake of' that orientate an agent *qua* actor in a world, that is disclosed to them in terms of their felt needs (Figures 4.7 and 4.9), providing insight from the first person perspective that correlates with what can be described scientifically from the third person perspective. Phenomenology promises access to the manner in which engaged agents, past or present, and prior to determining the 'nature' of the actor (as ancient or modern, human or non-human) articulates the world in terms of felt needs. Phenomenological analysis can articulate 'from the inside' structures (social, economic, familial etc.,) of action and agency that can be described from a third person perspective.

equipment and a naturally occurring object is that there are ‘right and wrong ways’ to use manufactured equipment. The use of equipment is guided by norms. However, in prehistoric contexts this division has to be augmented since prehistoric agents used naturally occurring objects – such as hammerstones – as equipment without modifying them first. Simply, they found such a stone that was serviceable to them in terms of their physiology. In such prehistoric contexts normative considerations also apply to the natural objects utilised as equipment.

Figure 2.1. *Common artefact types. Drawings are not to scale. Reproduced courtesy of Richard Klein.* © Richard Klein.



Names can change: Richard Dawkins reminds us that *Paranthropus boisei* has been called, at one time or another, *Zinjanthropus boisei* and *Australopithecus boisei* (it is still often referred to informally as a 'robust Australopithecine' as opposed to the 'gracile (slender) Australopithecines' *A. africanus* and *A. afarensis*). The fossil

KNM ER 1470 has been called variously *Australopithecus habilis*, *Homo habilis*, *Australopithecus rudolfensis* and *Homo rudolfensis* (Dawkins 2009: 190-194). KNM-ER 1470 is currently thought to represent *Homo habilis* or, if *H. habilis* actually represents two species, it may be an example of *H. rudolfensis* (Klein 2009: 219). KNM-ER 1470 was alive around 2 million years ago. Interestingly, the lateralization of the brain in favour of the left hemisphere that is characteristic of modern humans has been detected to a lesser degree in KNM-ER 1470 (Lewin 2005: 220). Such lateralization increased with *Homo ergaster*/*erectus* and continued on to its modern proportions with *Homo sapiens sapiens*.

Dawkins also reminds us that, from an evolutionary point of view, 'the conferring of discrete names [to species] should actually become impossible if…the fossil record were more complete…If we had a continuous and unbroken fossil record, the granting of distinct names to species and genera would become impossible, or at least very problematical' (Dawkins: 2009: 194. Square bracket: my addition). In a sense then, there was 'no such creature as the first specimen of *Homo habilis*' (Dawkins 2009: 197). What we are faced with is a continuum of biological forms, of life itself. Given this, descriptions of one group may apply to greater or lesser extents to other groups: the difference in description will be in degree and not in kind.

As noted, current research places the origin of anatomically modern humans to have occurred in Africa sometime between around 200,000 and 100,000 years ago. All living human beings display only little genetic diversity when compared to nearly all other extant mammals and the implication of this is that all people alive today

share a common ancestor who lived relatively recently in terms of the archaeological and fossil record of human evolution. Estimates based on genetic mutation rates underlying present human diversity enable researchers to conclude that this ancestral population containing the common ancestor of every human being alive today existed sometime around 200,000 years ago. Together with contemporary research into fossil remains modern genetics places this population in Africa while the archaeological record strongly suggests that their initial dispersal out of Africa occurred sometime around 50,000 to 60,000 years ago (Klein 2009: 615; Renfrew et al: 2009: ix).

From a holistic perspective, the attempt to comprehensively engage with and understand the human mind must at some point 'confront consciousness and subjectivity' (Thompson 2007: 16)[8]. Consideration of consciousness is essential when we reflect that our only access to the physical world, including our access to any brains under scientific analysis, and to the archaeological record itself, whether in field work or in experimental settings, is made possible by consciousness (Gallagher 2007; Gallagher and Zahavi 2008). Consciousness provides, as

[8] A shift between first and third person perspectives when considering prehistoric tool manufacture is prompted by at least two factors: i) as Stout et al note, the tools used in stone tool manufacture are highly personal. Test subjects in their experiment were allowed to use their own hammerstones; ii) it has been argued that it is possible to discern traces of the styles of particular flint knappers in the archaeological record from around 400,000 years ago (Stringer 2006: 83). Stringer's example is of handaxes from Foxhall Road produced during the Hoxnian Interglacial. Stringer argues: 'unique clusters of distinctive handaxes' show that each producer had their own individual style, perhaps due to relative skill and experience (Stringer 2006: 83). Several questions follow from this: can we assume that these ancient knappers also had highly personal equipment? Might items found to date represent personalised tools? Might traces of style in the record materially represent personalised practice (the way a particular agent sits, for example, that allows them to grasp their hammerstone in a particular way?) In what sense can we talk about prehistoric agents as 'individuals'? Did such an agent have a conception of themselves as an 'I'? If so, what might have occasioned this sense of self? The first person perspective and its traces in the record is announcing itself as a field of study.

Gallagher puts it, the *sine qua non* 'access we have to studying the physical world' (Gallagher 2007).

Following Pettitt, and given the fact of the continuum noted above, I do not suggest in what follows that biological differences need produce behavioural differences in the realm of mortuary activity (Pettitt 2011a: 4). I am similarly relaxed about biological taxa. The present study is about dwelling, death and art, their interconnection and interpretation and the archaeology of human becoming in the Palaeolithic. Unlike Pettitt however, I am interested in when 'modern behaviour' arose, but not in a straight-forward sense. Death awareness arises in the course of human evolution and it is marked in the archaeological record of mortuary practice. However, the specific quest I have set myself is rather the origins of 'human mortality' – of dwelling. As such, the recent account of mortuary practice offered by Pettitt (2011) will be re-read in terms of 'mortality'. Understanding what is at stake here will bring us to the heart of the problematic of dwelling as this is outlined in the philosophy of Martin Heidegger.

Given this, for the remainder of this chapter I shall attempt to set the scene with regard to mortuary activity in the Palaeolithic.

Mortuary activity in evolutionary perspective

The scholarly consensus is that it would be imprudent to assert that mortuary activity was ritual in nature (stemming from religious imperatives) before the Upper Palaeolithic (see Table 2.2 for a chronological overview of the Palaeolithic). Despite

this, we can note that mortuary activity is intimately linked with the use of space in the containment of the dead during this extensive period (Pettitt 2011b: 337). The aggregation of hominins at particular locales is probably very ancient (Gamble 1999, Gamble 2007, Pettitt 2011b). Sharing of resources (meat, stone and so on) will probably have played an important role in how these locales were negotiated socially (Roebroeks 2001). Such a process is one of fragmentation: resources are divided up into smaller units. These smaller units are dispersed in line with social rules (Pettitt 2011b: 335). Interestingly, there is a presence of cut marks on hominin remains from at least five sites from the Lower to Middle Palaeolithic (see Table 2.3). This demonstrates that hominins were, at times, removing soft tissues from dead individuals. It remains unclear as to whether such examples represent events of nutritional cannibalism or whether they represent a more ritualised event (Pettitt 2011b).

In his recent *The Palaeolithic Origins of Human Burial* (2011a) Paul Pettitt offers an outline of the evolutionary development of mortuary activity amongst hominins (see Table 2.4 for Pettitt's phases of mortuary activity. See Table 2.5 for an elaboration of Pettitt's heuristic concepts representing mortuary activity) (Pettitt 2011b: 338). Part of Pettitt's rational for writing this account is that, to date, there has not been a survey in English of mortuary activity in the Palaeolithic. Pettitt is interested in behaviour that is meaningful and expressive and while the responses of extant Chimpanzees to death are expressive, the question that has to be asked from the perspective of the Palaeolithic archaeologist has to be, at what point in human behavioural evolution did responses to death become 'culturally meaningful'? (Pettitt 2011a: 2). Culturally meaningful behaviour surrounding burial is taken by

many to be a hallmark of the behaviour of fully modern humans (See Table 2.6 point 7).

To date, discussion of the origins of death awareness has tended to focus on the archaeological record of the period of the last 100,000 years (Parker Pearson 1999: 148; Pettitt 2011a: 4). Pettitt suggests that this is probably due to the fact that "burial" (and by extension, death awareness that can be meaningfully expressed and that can leave a material residue) has become one of the items on the 'trait list' of modern human behaviour (See Table 2.6). Pettitt argues that this view is no longer tenable. Pointing to the evidence available from observations of modern chimpanzee populations, that furnish a variety of examples of death awareness, together with the reactions of individuals and groups to death (see Chapter Four), Pettitt argues that it is now possible to begin developing an account of the long-term development of

Table 2.2 *Table of human cultural evolution* (after Leakey 1994). (Timings are estimates. Periods and timings may overlap).

Epoch	Cultural stage	Cultural period	Millions of years ago
Upper Pleistocene	Upper Palaeolithic	Magdalenian	
		Solutrean	
		Gravettian	
		Aurignacian	
		Châtelperronian	
	Middle Palaeolithic	Mousterian	0.04
		Levalloisian	0.15
Middle Pleistocene		Clactonian	
	Lower Palaeolithic		0.05
		Acheulian	1
Lower Pleistocene			
Pliocene		Oldowan	2
Miocene		Origin of hominids	5

mortuary activity amongst hominins. Such an account would present the expectations that researchers have for how the early hominins might have behaved in the face of death (Pettitt 2011a: 4).

Noting the novelty of his project Pettitt does caution the reader to be somewhat wary since extant chimpanzees are not "behaviourally fossilised Miocene" hominoids. They are socially evolved creatures in their own right who display a diversity of responses to death. While mindful of this Pettitt does argue that it is nevertheless possible to extract clues to what researchers can take to be core responses to death that may have emerged amongst our early ancestors. This core set of responses to death provides the point of origin that remains archaeologically invisible from which to begin to account for the increasingly complex and archaeologically visible behaviours that arose in the Palaeolithic record (See Tables 2.4 and 2.5).

As noted, Pettitt is not dogmatic about taxa and he does not assume that biological difference entails behavioural difference. Different taxa might be implicated in the same behavioural processes, for example early burials amongst *Homo sapiens* and Neanderthals. What Pettitt does offer is a variety of concepts that he uses as a heuristic in order to approach the Palaeolithic record in service of rendering the data intelligible in terms of an account of the long-term development of human mortuary activity. His terms span the 'extremes' of this activity in the human past. The Palaeolithic record is not continuous with respect to mortuary activity and while this activity is essentially cumulative it is regionally variable and discontinuous (Pettitt 2011a: 8).

Table 2.3 *Remains bearing cut marks from Lower to Middle Palaeolithic sites*. (After Pettitt 2011b. See also, Cartmill, M and Smith, F.H (2009)).

Sterkfontein, South Africa; Stw 53 maxillia. Around 2 million years old. Species: early *Homo* or late Australopithecus.
Gran Dolina, Atapuerca, Spain. Several Lower Palaeolithic hominins (*H. antecessor*) dating to around 900,000 BP (before present).
Bodo, Middle Awash Valley, Ethiopia. Lower Palaeolithic (Acheulian). *Homo heidelbergensis* (although the specimen has never been completely described). Associated with mid-Pleistocene fauna dated around 600,000 years old. (See Cartmill and Smith 2009: 318).
Castel di Guido near Rome, Italy. Lower Palaeolithic/Acheulian. Archaic hominin cranial fragments dated to around 300-340,000 BP.
Moula Guercy cave, France. Combe-Grenal shelter, France. Krapina, Croatia. Middle Palaeolithic (*H. neanderthalensis*). Also, Belgium: the Engis 2 child calvarium.

Table 2.4 *Pettitt's phases of mortuary activity* (after Pettitt 2011: 264-265)

Core mortuary phase	Miocene hominoids, Pliocene hominins onwards.	Cronos compulsions: infanticide and cannibalism. Social mediated morbidity of corpses. Manifestations of mourning (including: signs of depression; calls; carrying of corpses as an act of detachment). -funerary gatherings: social theatre around corpses, including the controlled access to a corpse; display of corpse; 'involved' behaviour not witnessed in other contexts (for example, in the presence of living agents). Corpses may be put to social use (adjuncts to display).
Archaic mortuary phase	Australopithecines; early *Homo* to the origins of *Homo sapiens*.	Continuity (with the prior phase): Cronos compulsions, morbidity,

		mourning. Possible development of social theatre around corpses in line with increases in group size and neurological capacity. Funerary caching: incorporation of places in the landscape into mortuary activity.
Modernising mortuary phase	Middle Palaeolithic/Middle Stone Age *Homo neanderthalensis*, *Homo sapiens*. (Possibly Early Upper Palaeolithic in Europe).	Continuity: Cronos compulsions, morbidity, mourning, funerary caching, developing social theatre around corpses. Identifiable association of places in the landscape with the dead. -development of formal burial from funerary caching (association of the two). -development of places of multiple burial. -limited use of material

		culture as adjunct to burials (rare examples of the following: grave goods, stone markers/cover, use of ochre).
Modern mortuary phase	European Mid Upper Palaeolithic (possibly from Early Upper Palaeolithic).	Continuation and advancement: Cronos compulsions, morbidity, mourning, funerary caching, elaboration of social theatre around the dead, clear association of places in the landscape with the dead, places of multiple burial, clear use of material culture as adjuncts to burial. -elaboration of use of human relics and so commemoration. -elaboration of burial types: single, double, multiple. -association of novel phenomena with burial: fire, symbolism/art.

		-elaborate rules for burial: burial as containment. -status recognition of the dead in mortuary ritual. -first signs of continent-scale general practice: recognisable regional variation on more widespread themes.
Advanced mortuary development	Late Upper Palaeolithic/Epipalaeolithic onward.	Continuation of elements of the modern mortuary phase coupled with their spread to new geographic areas (e.g., the New World). Increased cultural variability of these. Origin of formal cemeteries. The recognition of exclusive areas of the dead together with the collective representation of death.

Table 2.5. *Pettitt's heuristic concepts for mortuary activity*. (Adapted from Pettitt 2011 pp8-10).

Curation	Carrying around the dead (whether in parts or in their entirety). Whole corpses or body parts may be given social agency and might be put to use in terms of this. If so, such parts may be treated as relics.
Morbidity	Enquiring concern with the injured, diseased or dead body; irrespective of whether this arises from a desire to understand the cause/nature of injury, disease or death.
Cronos compulsions	The physical extension of morbidity. The dismemberment, injury or consumption for whatever reason of body parts of conspecifics. Named after the God Cronos (Saturn) who cannibalised his offspring. Cronos compulsions links nutritional and ritual cannibalism, the processing of the body (scalping, dismemberment) and any other physical changes brought about on the bodies of the dead. Funerary processing and secondary burials may

	arise from these compulsions.
Abandonment	Leaving (abandoning) an individual to die. The default mechanism of infanticide. Includes the notion of *in situ* abandonment of a corpse.
Structured abandonment	Deliberate placement of a corpse at a particular point in the landscape. This may come about from no other reason other than concern for protection from scavengers.
Funerary caching	Structured deposition of a corpse or parts of a corpse in a chosen place. The place where the corpse is deposited is not modified. Examples include unmodified caves or natural fissures. Pits originally created for uses other than inhumation may also represent funerary caching. Unlike in cases of structured abandonment the places where the dead is placed is given meaning beyond mundane concerns (as with predation). "Places of the dead" may arise from funerary caching.
Cairn covering	Creation of a pile of stones (a cairn) to cover a corpse. Different to funerary

	caching since natural materials are now brought to a specific place and to a specific corpse in order to cover it. The created space is part natural and part artificial. Similar to simple burial.
Formal burial/inhumation	Creation of an artificial place in order to contain a corpse. Including three stages: a) intentional excavation of an artificial pit/trench that will serve as a grave; b) interment of a corpse within this grave; c) covering the corpse with the sediment that was extracted during excavation. If no humanly produced grave goods are present the result is part natural (only naturally occurring phenomena are utilised in the process) and part artificial (since natural materials have been repositioned). Formal burial can be distinguished from ritual deposits that include human remains since interment of the corpse is the end of the entire process.
Place of multiple burial	From the Middle Palaeolithic: several sites represent the burial of multiple individuals in multiple graves. *Homo*

	neanderthalensis and early *Homo sapiens* engaged in multiple burials. Numbers of interred individuals is low, usually around 6-12. Even though new grave cuttings tend not to disturb prior burials these sites probably represent episodic (Pettitt uses the word 'brief') phenomena. By this interpretation several individuals were interred sequentially in the absence of an overriding organisational principle or long-term persistence that would merit the site being denoted as a cemetery. Such multiple burials tend to occur within settlement contexts: they are not separated from "the world of the living". The dead are buried betwixt the remnants of mundane occupation.
Cemetery	*Sensu stricto*, places given over (mainly or entirely) to the dead displaying little or no evidence of any settlement. Some overlap with places of multiple burials. However, cemeteries may be distinguished since there tend to be greater numbers of individuals interred

	there (>20). Some degree of spatial organisation is evidenced in such locales. Some locales appear to have persisted for long periods of time.
Detachment	The process of the weakening of extant social bonds between the living and the dead. This may occur through the attrition of time. It may be unembellished by any cultural acts (for example, amongst primates). It may be governed by rules and it may be embellished by ritual practice, material culture. If so, it is a detachment ritual (after Gamble 1999).
Commemoration	The preservation of the memory of an individual. This may be done through the expression of energy (song, story, dance and so on. It may also involve deposition in a special place) or the involvement of material culture (grave goods, grave markers, and so on).

Table 2.6. *Klein's 10-point checklist of fully modern human behavioural traits represented in the global archaeological record beginning 50-40,000 years ago.* (After Klein, R.G, 'Anatomy, behaviour and modern human origins', in *Journal of World Prehistory 9*: 167-198; cited in Gamble 2007).

1. Marked growth in diversity and standardisation of artefact types.
2. Marked increase in rate of artefactual change over time and in artefact diversity over space.
3. First appearance of shaped bone, ivory, shell and associated materials into artefact types (e.g. points, awls, pins, needles and so on).
4. First appearance of true art.
5. First true evidence for spatially organised camp floors.
6. First evidence for transportation of large quantities of desirable raw materials (stone) over distances up to hundreds of kilometres.
7. First solid evidence for ceremony or ritual. This is expressed in art and in relatively elaborate burials.
8. First evidence for the ability of humans to live in continental Eurasia where temperatures were at their coolest.
9. First evidence for population densities amongst humans that approach historic hunter-gatherer groups living in similar environments.
10. First evidence for significant advances in the abilities of humans to acquire energy from nature, e.g., from fishing.

For Pettitt it is the Lower Palaeolithic species *Homo heidelbergensis* that can be seen to engage in occasional funerary caching (see Table 2.5), the intentional deposition of the dead into natural features (such as caves) in the landscape. This was developed in some Neanderthal societies to include the intentional modification of sites by the excavating of simple graves in order to bury the dead. Later, Neanderthals used specific places in order to bury a number of dead individuals (La Ferrassie rockshelter in the Dordogne, Shanidar Cave in Iraq, Amud Cave, Israel). On Pettitt's account Neanderthal mortuary activity (represented by simple inhumation, secondary processing and burial, pits used to bury infants, multiple burial) was more varied than the behaviour of the earliest populations of *Homo sapiens*. For this reason, Pettitt suggests that Neanderthals developed the idea of burial (and its accompanying beliefs, whatever they were) on their own and did not acquire it from *Homo sapiens* populations (Pettitt 2011b 338).

The site of the Sima de los Huesos at Atapuerca Spain, containing the remains of possibly 32 individuals assigned to the species *Homo heidelbergensis* (see Chapter Five), represents the earliest example of a particular place being utilised for mortuary disposal (Pettitt 2011b: 338). The hominin remains indicate that it was largely adults in their prime that were deposited here and the scholarly consensus that is emerging is that these individuals were deliberately deposited at this locale (Pettitt 2011b: 338). A cautious reading of the Eurasian Middle Palaeolithic would suggest that there are at least 30-40 simple burials of *Homo neanderthalensis* dating to this period with the number expanding to 60 on more generous readings of the data. None of these burials include grave goods. They span the period from around 80,000 to 34,000 BP and so overlap in date with the earliest examples of burials

amongst *Homo sapiens* populations (Skhūl and Qafzeh caves in Israel dating to around 120,000 to 90,000 BP). Old and young Neanderthal individuals were buried. However, the fact that there are relatively few examples of burial from this period, despite an otherwise rich record from the Middle Palaeolithic, cautions Pettitt to conclude that 'some Neanderthals buried some of their dead, some of the time' (Pettitt 2011b: 339). This more modest conclusion comes in place of the blanket claim that the "Neanderthals buried their dead" (which, we may recall, was made by Pogue Harrison).

Nevertheless, the possible use of grave markers and the presence of multiple burials at this time may indicate some underlying belief (or system of beliefs) to account for these burials. Neanderthal burial may be more than just prosaic corpse disposal (Pettitt 2011b: 339). If so then it does seem that (in continuation of the theme from the Sima de los Huesos) space was deliberately set apart for non-prosaic activity amongst Neanderthals.

Bolstered by Robin Dunbar's inclusion of the Neanderthals in his fourth level of intentionality (see Table 2.7) Pettitt suggests that it is not unreasonable to suggest that by the Late Middle Palaeolithic some nascent rituals, including, presumably, mortuary rituals, together with some form of underlying belief system had arisen. Dunbar's view is that the evolution of the brain in hominins can be understood in terms of increased levels of 'intentionality' ranging from the first ('I *believe* that …'), through the second and third to the normal human limit of five (as at Gamble et al 2014: 146). Increased levels of intentionality equate with increased brain size, group size and time spent grooming amongst individuals. Each of the intentional

levels set out by Dunbar are reflexive and amongst modern human beings, at about four or five years of age, *theory of mind* develops, represented by the second order of intentionality ('I *believe* that you *believe*…'). Behaving in terms of social norms requires three levels of intention ('I *want* you to *believe* that you must behave how we *want*') while religious belief requires four ('I have to *believe* that *you suppose* that there are supernatural beings *who understand* that *you and I desire* that things happen in a certain way') (Pettitt 2011b: 332).

Table 2.7. *The Orders of Intentionality (after Gamble, Gowlett and Dunbar 2014: 146).*

Order	Had by	Examples
Sixth order Intentionality	A restricted number of modern humans	Complex symbolism
Fifth order Intentionality	Modern human beings with modern languages	Myths; story telling of increasing complexity
Fourth order Intentionality	*H. heidelbergensis*; the Neanderthals	Religious beliefs that are shared and that involve multiple agents and ancestral beings
Third order Intentionality	All hominins with a large brain (>900 cc)	"You believe 'x' about his belief 'y' and this is not my belief"
Second order Intentionality (Theory of Mind)	Modern human children at age 5; all hominins with a small brain (400-900 cc); possibly the great apes.	"I believe 'x' about your belief 'y'"
First order Intentionality	Lesser apes and monkeys. Elephants and dolphins.	Having a belief about something; self-awareness (based on self-recognition in a mirror)

On Dunbar's account australopithecines would approach to two levels of intentionality (and so would have had a theory of mind), archaic *Homo sapiens* (including *H. erectus*, possibly *H. heidelbergensis*) would have had three, possibly four levels, allowing for the emergence of social norms and possibly of elementary religiosity. The fourth level of intentionality includes Neanderthals and *H. heidelbergensis* (Gamble et al 2014: 146). Given this level of intentionality Pettitt suggests that it is not surprising that it is with these latter two species that we see 'burial' represented in the archaeological record (Pettitt 2011b: 332). Dunbar's schema would also be somewhat explanatory for the funerary caching represented at the Sima de los Huesos, if it were allowed that this early sequestering of space for the placement of the dead accompanied an early form of (elementary) religiosity. If this is the case, then dwelling, in connection to mortality would also be something that emerges at the fourth level of Dunbar's scheme of intentionality and so would characterise *H. heidelbergensis,* the Neanderthals and anatomically modern humans: it would be a feature of the existential awareness of all large-brained hominins. This resonates well with the other way that dwelling is described by Heidegger as just being-in-the-world, which, we remember, is a fundamentally social being.

By this account religiosity is enabled by the emergence of complex brains. While it may arise from individual brains, religiosity must become a social phenomenon. It may then allow for the negotiation of status amongst individuals. Gamble (1999) has interpreted social life in the Palaeolithic to include rituals of attachment (greeting) and rituals of detachment (mortuary). Such rituals represent 'intense interactions for any highly social mammal' and include the 'non-linguistic greeting ceremonies among chimpanzees and elephants' (Gamble 1999: 80). Such attaching

and detaching rituals are two examples of what Gamble calls ‘social performance’. Rhythms of the human body (walking, digesting, sleeping and so on) produce temporality in human action. This temporality unites social and technological behaviour (Gamble 1999: 80; Leroi-Gourhan 1993). Indeed, it was Leroi-Gourhan’s point that such rhythms are the origins of space and time for individuals: space and time enter lived experience (and so can become described phenomenologically) only as materialised within a framework of rhythms (Leroi-Gourhan 1993. See Gamble 1999: 80). Such rhythms become instinctual and habitual (Gosden 1994) and it is by such mechanisms that Pettitt suggests that individual agency might be given social and possibly religious meanings (Pettitt 2011b: 333). Places of aggregation for hominins (whether these places were sites where hominins would come together to share resources or just to ‘socialise’) may well have become focal points in the landscape for habitual activities. Within such a context ritual may have emerged (Pettitt 2011b: 333).

The earliest archaeological manifestations of any belief system whatsoever are natural objects that resemble the human body or parts of the human body and that have received a small amount of intentional modification by an agent(s) in order to enhance the perceived similarity to the human form (Pettitt 2011b: 333). Three such *pierres figures* are known: two from the Lower Palaeolithic (the Berekhat Ram (Golan Heights, Israel) figurine, dated to somewhere between 230,000-780,000 BP, and the Tan-Tan (River Draa, Morocco) quartzite cobble dated to the Middle Acheulian, around 400,000 BP) and a further one from the Middle Palaeolithic (block of flint with a natural perforation from which several flakes had been removed and into which a bone splinter had been lodged, from La Roche Cotard,

Indre-et-Loire, dated to around 32,000 BP). The two examples from the Lower Palaeolithic are reminiscent of the human body while the Middle Palaeolithic figure may resemble a face (Pettitt 2011b: 333-335). Pettitt's point about these *pierres figures* is that while they do not on their own provide a robust case for early symbolism and ritual (not to mention 'art') they should not be 'written off'. The six large mammal bones discovered at the Lower Palaeolithic site of Bilzingsleben that display engraved lines, possibly geometrically arranged, might also be interpreted in this context. With Dennell (2008) Pettitt suggests that it might be more profitable to ask why such *pierres figures* are so rare and under what conditions might they be produced? In fact, Dennell argues that symbolism (and perhaps also ritual, by extension) 'drifted in and out of use over evolutionary time' alongside more promising technologies such as end-scrapers and burins found at Berekhat Ram (Pettitt 2011b: 335). If we grant to the agents producing these artefacts that they were 'dwellers' then it does not follow that all aspects characteristic of modern dwelling would have been present at all times. Rather, certain aspects may have been present while others were not and the question becomes, under what conditions are different aspects of dwelling, such as the production of art and other symbolic phenomena produced? One claim that I make in this regard is that heterotopic space has a role to play in the evolutionary development of dwelling: receptivity to the heterotopic dimension of spaces is one of the conditions enabling the appropriation of space for artistic and mortuary practices.

Following Gamble, Pettitt suggests that the aggregation of hominins at particular locales probably has a very long antiquity and that the sharing of resources, such as meat and stone, probably had a fundamental role in how these spaces were socially

negotiated (Pettitt 2011b: 335). (Chamberlin has conveniently summarised the hypothetical use of space by hominins from the pre-Palaeolithic up until the Middle Palaeolithic: see Table 2.8).

At least by the time of the Mid-Upper Palaeolithic select human bodies were fragmented and circulated as relics, possibly for ritual use. This process originated at particular spatial locales that were in the first instance entirely natural and unmodified but were places that nevertheless allowed for the focusing and magnifying of individual agency. Such places may have been familiar or strange; they may have had abundant resources; they may have been places of danger or of safety. Ritual spaces such as these create microcosmic places for engaging with the macrocosm and at some point in the evolutionary past human groups began to artificially create these places by modifying them (Grim 2006: 96; Pettitt 2011b: 335). Such spaces are what we are referring to under the banner of the heterotopic and their function, with reference to Heidegger's phenomenological ontology, is to enable appropriation (*Ereignis*) to occur. Another way of characterising this appropriation is as a form of "engaging with the macrocosm" in terms of how it is going to matter to an individual or a group and, if Heidegger is right, it is bound up with mortality and issues in art.

Pettitt's view is that it is a legitimate archaeological goal to look into how and in what contexts such creation of ritual space evolved (Pettitt 2011b: 335). By the time of the Upper Palaeolithic, evidence is abundant when it comes to the deliberate appropriation of space for ritual activities, in both camp sites and caves, for example. However, in the Lower and Middle Palaeolithic such evidence is much

harder to discern. Despite this and invoking two sites separated by three million years (Hadar, and Bilzingsleben) Pettitt argues that it is quite possible to see how places might inherit meanings to which religious ideas and sentiments might become attached on occasion. It is to this problematic that I shall turn in my case study of the Sima de los Huesos. For now, however, it is time to turn to Heidegger amongst the archaeologists.

Table 2.8. *Subsistence activities, ranging behaviour, (hypothetical) use of space and technologies amongst hominins.* (After Chamberlin 2008: 107).

Period	**Hominin Taxa**	**Subsistence and technology**	**Ranging/use of space**
Pre-Palaeolithic. 8-2.5 million years ago.	*Ardipithecus,* *Australopithecus,* *Paranthropus,* *Orrorin,* *Sahelanthropus*	Unmodified stone tools used. Localised foraging and secondary access to animal carcasses. Food sharing amongst individuals at point of acquisition.	Continued dependence on arboreal refuges. Localised ranging behaviour and restricted use of open landscapes. Short-distance migrations evident.
Lower Palaeolithic. 2.5-0.2 mya	*Australopithecus robustus,* *Homo habilis,*	Hand-held stone tools in use. Possible opportunistic use	Raw materials transported over short distances to favoured or central

	H. rudolfensis, *H. ergaster,* *H. erectus*	of fire. Foraging over longer distances. Primary access to animal carcasses with food distribution at point of consumption.	places. Greater exploitation of open landscapes and longer-distance (including transcontinental) migration and colonization.
Middle Palaeolithic. 0.2-0.05 mya	*H. heidelbergensis,* *H. neanderthalensis*	Hafted stone tools in use. Controlled use of fire and unrestricted foraging. Unrestricted primary access to animal carcasses together with food storage and delayed consumption.	Inhospitable and hazardous landscape accessed. Long-term occupation of sites that include spatially demarcated working and living areas. Ritualized burials. Long-distance transportation.

Chapter Three

Heidegger and the dwelling perspective

Following the interpretive turn in the 1980s archaeologists have increasingly found inspiration in the phenomenological philosophy of Martin Heidegger. The historian of archaeology Bruce Trigger has identified a strain in postprocessual archaeology that draws significantly on the phenomenological tradition. This strain in contemporary theory has been dubbed intuitive, constructivist and humanist archaeology and it places emphasis on the nature of human experience in archaeological enquiry (Trigger 1996: 472). Introduced in the mid 1990s [and including key exponents such as Christopher Tilley (*A Phenomenology of Landscape* (1994a)) Christopher Gosden (*Social Being and Time* (1994)), and Julian Thomas (*Time, Culture and Identity* (1996)), [John Barrett (2009), Cornelius Holtorf and Håkan Karlsson (2000) deserve mention too] this variety of interpretive archaeology can be characterised by its sustained engagement with phenomenological philosophers, including Edmund Husserl (1859-1938), Martin Heidegger (1889-1976) and Maurice Merleau-Ponty (1908-1961).

Phenomenological thinkers became attractive to archaeologists because their work promised access to that fundamental manner in which practically engaged (human) agents ‘dwell’ on this earth and it is in this context that what archaeologists now call the ‘dwelling perspective’ arose. The dwelling perspective developed out of a sustained engagement with thinkers from the phenomenological movement, along with thinkers, such as Pierre Bourdieu, who shared a concern with the nature of

human experience (Gosden 1999), but its ultimate origins lie in the existential phenomenology of Martin Heidegger: dwelling, as we have seen, is a technical term in Heideggerian phenomenology.

'Dwelling' was first brought into the archaeological and anthropological literature by social anthropologist Tim Ingold in two papers in 1993. Interestingly, in one of these papers Ingold specifically links dwelling to theoretical reflexivity. He says: 'the *practice of archaeology is itself a form of dwelling*' (Ingold in Thomas: 510). In the other paper he invokes dwelling in terms of the agent who 'dwells in the world'. He says:

> a being who…is wholly immersed, from the start, in the relational context of dwelling in a world. For such a being, this world is already laden with significance: meaning inheres in the relations between the dweller and the constituents of the dwelt-in-world (Ingold 1993: 453).

In both of these statements the echo of Ingold's engagement with Heidegger is unmistakable, right down to the hyphenation of 'dwelt, in and world' in Ingold's text. Instead of referring to an 'ego', 'self' or 'I' when characterising the human being Heidegger will instead use the term Dasein (being-there-here-now) to invoke the characteristic manner in which human beings exist or 'dwell' in the world as embodied, interpreting and acting agents; and, as he puts it in *Being and Time*, Dasein 'is *in each case mine*' (Heidegger 1962: 67). This 'mineness' (*Jemeinigkeit*) dictates that you must always use a personal pronoun when addressing a Dasein (Heidegger 1962: 68). Daseins (I, you, we) comport themselves toward their own

being: that is, for any Dasein its own being is an 'issue for it' and the essence (*Wesen*) of Dasein lies in its 'to be' (*Zu-sein*) or its existence (*Existenz*)[9].

As Dasein our primary mode of engagement within the world is non-cognitive. Dasein is primarily an actively engaged agent who is situated in a context and who cannot be usefully abstracted from that context for analysis. Understanding what it means to be a practically engaged agent or 'human being' is impossible without reference to the world in which an agent dwells. Dasein's being is being-in-the-world (*In-der-welt-sein*) and the basic character of this mode of existence (*Existenz*) is non-cognitive dwelling. Such non-cognitive dwelling captures the fact that, as Dasein, we are not spectators on a world that is somehow separate to us. It is in just these terms that Ingold's statement that archaeology is a form of dwelling is intelligible: being an archaeologist is a manner in which a practically engaged agent can be in touch with their world. Their project of being an archaeologist gives shape to their worldly concerns.

A theoretical, detached cognitive perspective on the world can, of course, be reached but this perspective depends upon prior interpretation that takes place in non-cognitive dwelling (Polt 1999: 46-47). Heidegger puts it this way in *Being and Time*:

[9] Heidegger's use of the term 'existence' (*Existenz*) does not equate to the traditional meaning of 'existence' (*Existentia*) in Western philosophy. Traditionally, existence meant 'thatness' (that-being; that something 'is') in contrast to 'whatness' (what-being; what something 'is') or essence (*Essentia*) (Davis 2010: 15). *Existentia* in this traditional sense connotes for Heidegger being present-at-hand. This manner of being is only inappropriately applied to Dasein: for present-at-hand beings their being is not an issue for them. Heidegger's project (*die Seinsfrage*) investigated how the meanings of any particular entities (any 'X' or 'Y'), together with their possible relations, gets established in the first place (Davis 2010: 5).

> Knowing is a mode of Dasein founded upon Being-in-the-world. Thus Being-in-the-world, as a basic state, must be Interpreted *beforehand* (Heidegger 1962: 90/62. Italics in the original).

Extending the dwelling perspective into Palaeolithic archaeology will provide an illuminating discussion of the evolution of dwelling agents. Here, I propose a non-anthropocentric reading of Heidegger that allows us to deploy the term dwelling in connection to our ancestors. For his part, Heidegger restricts the term 'Dasein' to what palaeoanthropologists call 'anatomically modern humans' (and he recoils from a view of our relatives, the Great Apes, as beings whose existential awareness approximates to Dasein's, as we will see). The Sima de los Huesos will provide archaeological grounds for challenging Heidegger's narrow application of the term 'Dasein'.

The dwelling perspective, as it has been developed by archaeologists, stresses the 'full sensuous experience of living in the world' (Gosden 1999: 127) that occurs in human existence and this perspective originates in Heidegger's philosophy of being-in-the-world. What I would like to do in this chapter is to place my discussion in context by shedding some light on how Heidegger's thought came to be a point of reference in contemporary archaeological theory. This will give me the opportunity to further elucidate the dwelling perspective while suggesting just why Heidegger's thought and the phenomenological perspective is relevant to archaeology. This will also prepare the way for the more detailed discussion in subsequent chapters. From here I will discuss Gamble's recent contributions to Palaeolithic archaeology in terms of the more general 'phenomenological turn' in contemporary archaeology. In *The Palaeolithic Societies of Europe* (1999) Gamble adopted a position that is coordinate to this phenomenological-interpretive turn in archaeological theory: as a

result of this he has brought interpretation of the Palaeolithic (2,500,000 to 10,000 years ago) into the purview of the interpretive agenda in contemporary theory (recall here Shanks and Hodder's list of questions that can now be posed in human evolutionary studies from an interpretive point of view that was outlined in the previous chapter). More recently Gamble has, without himself invoking Heidegger, shown one direction where engaging with Heidegger's thought will prove instructive in accounting for human cognitive evolution; that is, in the critique of Cartesianism (Coward and Gamble 2009).

Given this set of aims I will now place the 'interpretive turn' in contemporary archaeology in context by introducing what it was that theorists turned away from, namely, processual archaeology.

'New archaeology'

To put the interpretive turn in archaeology in context we must go back to the 1960s because it was then that a new orthodoxy in archaeological theory emerged that intended to guide and unite approaches to the material past. This orthodoxy claimed for itself the title the 'new archaeology' (Shanks, and Hodder 2007: 144-165) and the rise of theory as a distinct aspect of the archaeological enterprise coincides with the advance of the new archaeology in the 1960s and 1970s. In contradistinction to previous culture-historical approaches to the archaeological record, associated with figures such as V. Gordon Childe (1893-1957) the 'new archaeology' modelled itself on anthropological science and aimed to explain, rather than describe, the

past[10]. This manner of approach to the subject matter of archaeology is also known as 'processual' archaeology since it favoured cross-cultural generalizations, (inferred from particular cases) that explain phenomena by reference to both natural and social processes.

The anthropological dimension of processual archaeology is evident from its concern with the reconstruction of past social realities. From this point of view society was taken to be composed of sets of patterned behaviours that included the production of material culture. The archaeological record itself is taken to reflect society and society is nothing more than the total set of patterned behaviours. Society is essentially an expression of human adaptation to social and natural environments and explaining social processes entails directing attention to aspects of the society in question that are most central to environmental adaptation (Shanks and Hodder 2007: 145). For the new archaeologist then, material culture and environment are essentially linked. The aim of archaeology under processualism was the 'generation of law-like statements covering human social and cultural development' (Thomas 2000: 2).

'New archaeologists' were explicitly concerned with both theory and method. Ultimately, the aim of this approach is to gain more and more positive knowledge about the past and such knowledge is, it is held, neutral and timeless (Shanks and Hodder 2007: 144). This is not to say that processual archaeologists were un-reflexive. David Clarke's 1973 paper in *Antiquity* 'Archaeology: the loss of innocence' for example, notes that a loss of innocence will occur in archaeology,

[10] Bruce Trigger identifies Childe's *The Dawn of European Civilization* (1925) as the first text in English to attempt to apply the archaeological concept of culture systematically (Trigger 1996: 242).

with regard to theory generally, inevitably, as in any discipline, as a consequence of an 'expanding consciousness' that forms a continuous process unfolding from the initial naming of a discipline (Clarke 1973: 1)). He says:

> theory exists, in however unsatisfactory a form, in everything that an archaeologist does regardless of region, material, period and culture…It is this pervasive, central and international aspect of archaeological theory, multiplied by its current weakness, which makes the whole issue of major importance in the further development of the discipline (Clarke 1973: 17-18, in Greene and Moore 2010: 249).

Subsequently 'postprocessual archaeologists' have taken this theoretical reflexivity or 'critical self-consciousness', further and it is Hodder's view that their various criticisms of the processualists have been more to do with theory rather than method (Hodder 2001: 1). (This is true of the dwelling perspective too). The result of the new archaeologists stress on science and anthropological theory has been the opening up of contemporary archaeology to a wide range of different theoretical perspectives, including phenomenology but also post-structuralism and evolutionary psychology. Steven Mithen, who takes inspiration from Darwin and the evolutionary psychologists, sums up the new enthusiasm for casting a wide theoretical net when he says that '[a]rchaeologists should always be seeking to extend the domain of their discipline' (Mithen 2001: 98). For his part, Ian Hodder argues that what he sees as the new 'maturity and confidence' amongst contemporary archaeologists derives from their expertise on the 'long-term view' and materiality of human life; and amounts to their belief that they have something to contribute to debates about the very nature of human existence. Here, of course,

we are starting to get into the philosophical territory that includes Heidegger's concerns.

Some recent archaeologies

The phenomenological movement and the growing field of interpretive archaeology are broad and heterogeneous. Not only did the interpretive or hermeneutic turn in anthropology and archaeology involve an engagement with phenomenology it also involved an engagement with the philosophy of Ludwig Wittgenstein (Gellner 1995: 49). While phenomenology awakened an interest amongst anthropologists and archaeologists in the 'subjective', a reading of Wittgenstein emphasised the social use of language and so encouraged a focus on the socio-cultural and historically negotiated nature of meaning. Commenting on the diverse approaches that are now employed in archaeology John Bintliff suggests that the modern eclectic archaeologist take heed of Wittgenstein's image of a craftsman who takes to their work a large tool bag full of tools that are each ideally suited to the particular applications that they will face within their profession: that is, Wittgenstein argued that different methodologies and approaches can be seen to be complementary and not oppositional. This was most strikingly the case with regard to the humanities and the sciences (Bintliff 2004: xviii-xix). Different methodologies are not commensurable, they cannot be judged by each other's standards, but they are required in order to come to terms with a world (and a past) that seem to admit of infinite variation.

One way of making the connection between the (historical) phenomenological movement and Wittgenstein despite the former's non-naturalism is in terms of their accounts of interpretation and meaning. Heidegger and Wittgenstein are linked in so far as both construe meaning as 'use', and so relate it to agents' understanding and interest. Interpretation is linked to meaning and initially, with regard to artefacts (and so to the archaeological record) meaning admits two levels: a functional meaning level and a symbolic meaning level. On the functional-meaning level, object 'a' is for task 'b' (a knife *means* a thing for cutting). On the symbolic-meaning level object 'a' connotes meaning 'b' (the knife 'is' a symbol of relations of exchange and gender identity) (Thomas 2000: 9). Julian Thomas suggests that it is the latter sense of meaning that is typically employed in archaeology: his example is of a throne connoting royalty and state power. Interestingly, in his reading of Wittgenstein, Newton Garver has noted a tension between these two levels of meaning in connection to what we might call the 'epistemological poverty of archaeology'. He says:

> When we look at artifacts from our ancestors of one hundred thousand years ago, we don't know what to infer about their lives. Certain artifacts may signify religious practice [symbolic meaning level]; but they may have been used in cooking [functional meaning level] (Garver 1994: 260-261. Square brackets: my addition).

Garver makes this comment in connection with elucidating the relationship between Wittgenstein's notion of 'forms of life' *vis-à-vis* the theory of evolution. The notion of a 'form of life' is bound up with Wittgenstein's take on natural history. Evolution, or rather our confidence in it as a theory, relates to 'general principles and anatomical details' (Garver 1994: 261) and not to the details of behaviour that

would disclose the use/meaning of an artefact as in "that is clearly a cooking pot not a funeral urn".

Thomas suggests that these two distinct senses of meaning (the functional and the symbolic) would break-down if we approach a 'thing' in terms of its significance to a historically situated agent. Seeing a throne *as* a thing to sit on has no priority over seeing it *as* a symbol for state power since what any object 'is' is a matter of how it reveals itself to an agent (Thomas 2000: 9). Both senses of meaning are not separable since either could be revealed as primary in so far as they are connected to the comportment of an agent at any point in time. Viewing things in this way upholds the phenomenological thesis that what something 'is' is how it reveals itself to an agent's understanding and interest and that is, in terms of their projects and tasks. Meaning (what something is) 'is' use (the thing's revelation to an agent in terms of that agent's appropriation of it to their tasks) and it is this sense of 'use' that is central to accounting for the archaeological record from the point of view of dwelling.

Heidegger and three phenomenological archaeologists: Tilley, Gosden and Thomas

Writing in what he considered to be a 'blurred genre' in his *Phenomenology of Landscape* (1994a) Christopher Tilley draws on phenomenological texts in philosophy alongside works in cultural anthropology, human geography and

interpretive archaeology, in service of understanding prehistoric landscapes (Tilley 1994a: 1). Without reducing one thinker's position to the others' (in fact Tilley sees them as quite distinct) Tilley lets Heidegger and Merleau-Ponty set the theoretical scene when outlining what is characteristic about the phenomenological perspective (Tilley 1994a: 11-14).

Phenomenology involves the description and interpretation of 'things' from a first-person perspective. With regard to the category of space it is by virtue of 'the *dwelling* of humanity' (Tilley 1994a: 13) within the world that spaces open up for description by phenomenologists (or anyone else), before they can be approached in quasi-mathematical or theoretical terms. It is because spaces are first inhabited by agents, described in terms of Heidegger's characterisation of Dasein (being-there-here-now) as being-in-the-world, as the being who 'dwells', that they can be meaningfully appropriated and interpreted by agents in terms of their projects and tasks prior to theoretical abstraction. It is because of the primordial nature of dwelling in human being that the body must also be considered since it is that point from which the world is experienced by situated agents, a point stressed by Merleau-Ponty. What is distinctive about Merleau-Ponty for Tilley is that his phenomenological work is 'grounded in the physicality and material existence of the human body in the world' (Tilley 2004: 2).

In his 'Phenomenological Approaches to Landscape Archaeology' (Tilley 2008b) Tilley outlines some key methodological aspects of his approach[11]. Tilley's starting point is the proposition that, from a phenomenological perspective, knowledge of

[11] Tilley's *The Materiality of Stone* (2004) and *Body and Image* (2008a) form the first two parts of a projected trilogy of volumes dedicated to landscape phenomenology. These works develop themes in his earlier *A Phenomenology of Landscape* (1994) and *Metaphor and Material Culture* (1999).

landscapes, past or present, is attained through perceptual experience of them from the point of view of a subject (Tilley 2008b: 271). Phenomenologists attempt to describe these experiences so as to outline with as rich detail as possible a description of the landscape in question so that other subjects may come to understand these landscapes in their rich and detailed complexity. Tilley suggests that these other subjects may partake of the original set of experiences outlined by the phenomenologist of landscape by virtue of their metaphorical textual mediation and while there can be no 'rulebook' when it comes to undertaking such research Tilley does offer seven basic stages that he employs in his practice:

i) Familiarize oneself with the landscape. Develop a feeling for it; open oneself up to it.

ii) Visit places of prehistoric significance. Record their sensory constraints and affordances. Record (in writing and by visual means) these experiences.

iii) Revisit the same places at different times of the year, at different times of the day and in different weathers.

iv) Approach these places from different directions. Record differences in their character as a result.

v) Follow 'paths of movement' (as suggested by features of the landscapes themselves such as the lines of ridges, the courses of valleys, the presence of prehistoric monuments) through the landscape. Record any changes in the perceived relations between perceived aspects of the landscape.

vi) Visit, explore and record ‘natural’ places (places with little or no archaeological evidence of human activity) within the landscape.

vii) Draw together all of these observations and experiences. This will form a synthetic text that imaginatively interprets these observations and casts them experientially in terms of ‘possible prehistoric life-worlds’. These ‘possible prehistoric life-worlds’ are possible ways in which ‘people in the past made sense of, lived in, and understood their landscapes’ (see Tilley 2008b: 274).

While acknowledging that phenomenological approaches to landscape are in their infancy Tilley does offer a number of conclusions. Landscapes have a profound significance/meaning for individuals and for groups. Such meanings may be variable and contested, being related to the interests and practices of these individuals and groups. Landscapes ‘do’ things to individuals (and, we might add, to groups) and I will suggest, by way of a discussion of heterotopic space just why cave space can have an effect on individuals and groups. Landscapes have experiential effects on agents and these experiential effects have a structure that can be articulated phenomenologically. (Tilley’s method here will be taken up again in Chapter Four). A landscape, as something constructed, will have had more or less specific sets of meanings attached to it that researchers in the present can try to semiotically decode.

A clue to how such semiotic decoding might begin comes from the phenomenological philosopher Wayne Martin in his discussion of the *vanitas* tradition in Dutch still life painting. Here Martin makes some pertinent remarks in

connection to how one might begin to semiotically decode a representation. A still life painting is a ‘thing’ that is constructed by an agent and given this, it seems entirely possible to take Martin’s remarks and apply them to other artefacts, such as items of material culture or to landscapes.

Semiotics studies the structure of meaning in signs and symbols and Martin applies this method to the semiotic structure of *vanitas* still life paintings. Such paintings are replete with symbols. Martin invites us to consider van Oosterwijk’s ‘Vanitas Still Life’ (1668) (Figure 3.1): here we see symbols of a merchants’ wealth (globe, ledger, quill, coins and a money sack), we see symbols of the pleasures made possible by such wealth (flowers, music, an Asian porcelain) and we see symbols of death (an hourglass, a butterfly [with a short life span], and a skull).

Figure 3.1: *Maria van Oosterwijck Still Life (1688). Reproduced by permission of the Kunsthistorisches Museum Wien. © Kunsthistorisches Museum Wien.*

‘Seeing’ this work partly depends upon understanding and responding to this symbolic code. The viewers’ literacy with regard to this symbolic order depends upon their familiarity with a ‘common stock of cultural symbols’ derived from the lived world of ordinary everyday life (Martin 2006: 8) together with their understanding of what the philosopher Paul Grice called ‘natural signs’. For Grice natural meaning occurs when some thing is a non-conventional sign for some other thing: for example, spots on your face meaning you have measles. These spots are a non-conventional sign for the presence of measles: human activity didn’t bring these signs about. Non-natural meaning, by contrast, is attached to conventional

signs: for example, a red traffic light means 'stop'. The red light could have meant 'go' had human beings constructed it so[12].

In van Oosterwijk's painting the skull means death naturally (since it is a non-conventional sign for it on this account) while the symbolic significance of the ledger and flowers are non-natural or conventional and the reader must possess knowledge of how they are deployed symbolically. Martin points out that there is an underlying formal structure to this symbolic code which he calls dialectical polysemy, where polysemy means a multitude of meanings/accumulated multiple symbolic codes. Polysemic accumulation becomes dialectical when one set of meanings (for example, those to do with pleasure or power) becomes balanced by an opposing set (vanity and mortality). For Martin, it is this dialectical structure that makes van Oosterwijk's painting so hermeneutically rich. This is heightened by the cultural setting, which is caught in a tension between accomplishment and anxiety, in which the painting was produced.

For these reasons, and in this sense, the semiotic structure of van Oosterwijk's painting 'articulates a structure of meaning in the world of Dutch burghers' (Martin 2006: 8). When we consider Ice Age art (Chapter Six) we will see how Heidegger understands the articulation of such a structure of meaning – the hermeneutic richness – in the lives of the hunter gatherers who produced it (Figure 6.5). Further, semiotic systems of representation can be open or closed: in a closed system one set of meanings is dominant and dictates a particular interpretation. If you do not grasp this meaning you are in error. Martin's example is of a street sign, or of the practice

[12] For more on Grice see: https://files.nyu.edu/mjr318/public/language08/Language%208%20-%20Grice.pdf]. Last accessed: 29.3.15.

of waving flags on the Fourth of July. Open systems leave unresolved what meanings are to be taken from them. Many still life paintings in the *vanitas* tradition are semiotically closed: this is sometimes effected by employing a motto. Torrentius' inclusion of a score that includes the lyric "That which is without measure is immeasurable evil" in his Allegory of Temperance (1614) for example. Here the message of the painting that 'worldly pleasures must be taken in moderation' (Martin 2006: 9) is materialised in the painting itself. In other cases, such as with skulls or with reminders of worldly pleasures, semiotic systems might be resistant to closure. Importantly, Ice Age cave art is resistant to closure in this sense: we have no lyrics superimposed on these images hinting strongly at what they mean. This does not mean that they are resistant to interpretation but it does mean that they are polysemic and semiotically open.

How does landscape archaeology fit into this? Well, given this discussion we might say that landscapes are polysemic while perhaps not being dialectically polysemic (although this cannot be ruled out) and that they are semiotically open: landscapes rarely have mottos attached (but again, this cannot be ruled out). What is certain though is that the archaeologist of landscape who might operate without much of the detailed supporting contextual evidence that is present in the case of Dutch Seventeenth Century still life painting has a difficult task ahead. (By outlining aspects of the phenomenological method as it can be applied in archaeology, Chapter Four begins the task of meeting these difficulties).

Tilley continues: landscapes also have somatic effects that can be described. Such effects may include having to traverse the landscape in one direction rather than in

another, together with the general movement between constituents of the landscape. Further phenomenological elaboration of somatic effects such as sight, touch and sound will also be possible. Holistically, the semiotic meaning, emotional, somatic and kinaesthetic effects that these landscapes had in prehistory in relation to the body-agents who inhabited them will have been intimately related to each other, as they are for the contemporary researcher: the goal of a phenomenological account of landscape in archaeology is to explore and furnish descriptions of this emersion in the world of agents in the past in terms that are based on and further enable intersubjective understanding in the present.

Such understanding, if it is to be ampliative, will allow for an understanding of the structures that underlie any particular experience, say of the structure of intentionality underlying the experience of the peculiar grainy texture of sediments and paints as they are run through the fingers of an agent engaged in the task of preparing a hand stencil on the wall of a cave in the Upper Palaeolithic. The researcher cannot ‘know’ in any simple sense what was going on in the mind of such an agent, either in the past or in contemporary experimental settings. In fact asking what was going on in ‘the mind’ of this agent is an over-simplification if not just a misunderstanding of what is at stake in accounts of dwelling. What the phenomenologically informed researcher can bring to the table is an understanding of the structure of comportment characteristic of instrumentality with reference to the project of cave painting (Chapter Six). Such structures, if they are a feature of living beings, allow for a fusion of perspectives.

Of the other thinkers who note Heidegger's importance to archaeology two of them, Christopher Gosden and Julian Thomas, develop archaeological questions regarding the nature of time in their respective works. We will deal with Gosden first. Gosden's *Social Being and Time* (1994) is explicitly 'about time' (Gosden 1994: 1) and his engagement with Heidegger in this text, alongside the other two 'Hs' of phenomenology Edmund Husserl and G.W.F Hegel, and the theorist of practice Pierre Bourdieu, is mediated by his interest in this question.

Along with Heidegger, Bourdieu is important for Gosden, and in his *Anthropology and Archaeology: A changing relationship* (1999) he points out that a 'stress on dwelling is an antidote to what Bourdieu calls the outsider's perspective in anthropology' (Gosden 1999: 127). Gosden's view derives from recent variations of cultural anthropology that place emphasis on material worlds and meanings as these are 'worked out through material culture and landscape' (Gosden 1999: 120). Gosden begins with the opposite statement to Gell, for whom social relations were central to anthropological theory ('in so far as anthropology has a specific subject-matter at all, that subject-matter is "social relations" – relationships between participants in social systems of various kinds' (Gell 1998: 4)). Restricting 'relationships' to just the human, in abstraction from the 'things' that surround them in their world, doesn't capture the rich complexity of life as it is lived by agents in their pre-reflective immersion in their world for Gosden. Human relations always incorporate things: they are always material and social. Material culture is at the heart of human social life (see Gosden 1999: 120).

Gosden has developed what he calls a framework of reference in order to bring out the fact that the production of any artefact 'in one place has implicit within it a series of spatial and temporal dimensions…[since]…the artefact will often be used at times and places distant from its point of production and by people other than the maker' (Gosden and Knowles 2001: 19. Square bracket: my addition). Such frameworks of reference can be read in phenomenological terms when we consider that it is by emphasising relations of reference that phenomenological thinkers like Heidegger (see the discussion in Chapter Four) set out the dynamic structures that orientate individuals within contexts.

Things themselves can become 'social agents' for Gosden when we consider the creation of social relationships through the medium of materiality. The durability of materiality when considered alongside questions of landscape prompt raising questions of history: human beings become socialised within material settings. In no small measure then, consideration of the material world is of critical importance when accounting for social reproduction and, to employ a Heideggerian term, 'appropriation', in the succession of human generations. The various approaches in cultural anthropology have different timescales built into them, from the biography of individuals or of individual objects to longer term histories of exploration or colonialism. For archaeology, such cultural biographies of individuals and objects would be a minimum unit of temporal analysis while the maximum available would extend into the millions of years (Gosden 1999: 120).

Cultural anthropology and archaeology overlap in subject matter and timescale and they exploit similar theoretical structures. In *Anthropology and Archaeology* (1999)

Gosden highlights two viewpoints that, while distinct, one being an outsider's analytical viewpoint and the other stressing the importance of the view from the inside, are complimentary and which he considers to be promising: both stand in need of further analysis. These are the dwelling perspective and the 'relational view' associated with the deconstructionist anthropology of Melanesia of Strathern and Wagner (Gosden 1999: 121).

Keeping in mind Bourdieu's caution that we must not mistake the model of reality for the reality of the model the relational view allows the analyst to isolate particular contexts of action and change while keeping in mind broader perspectives concerned with period and place and the central role played by the interconnectedness of phenomena. That is, on the relational view people and things have no essential natures or properties. Rather, the nature of things and people(s) emerge out of the relationships that things and people(s) are bound up with. Thus, the nature of any particular thing (artefact or human) will depend upon and derive from the various sets of material and social relations that together constitute the situation in question. Gosden's example is gender: on this analysis gender is not something that is an inherent or invariable property of an individual agent. By contrast, an individual's gender is something that is produced by the relations that make up their context and it is itself relational, depending as it does on these relations. Gender will unfold differently in different relational contexts. Life as a whole can be seen on this perspective to be 'a series of transformations' unfolding as the relations that compose people and things change (Gosden 1999: 121).

On this ontology of life as becoming, regularly occurring transformations of relations count as continuity while the unexpected transformations that issue in new sets of relations count as change. The challenge to the analyst is to link the 'domains of transformation' into a whole where the set of relations *between* relations would demarcate the variety of transformations that individuals and things might undergo in the different contexts of life. The total set of transformations itself 'might be called the culture' (Gosden 1999: 122) but we must keep in mind that it – the culture – will remain unbounded. Gosden uses the metaphor of a culture as a centre of gravity wherein certain sets of relations between individuals and objects pertain that are less likely to be pulled in by other such centres.

It is because this analytic relational perspective allows the analyst to focus in on specific contexts that it may be complementary to the dwelling perspective. This later perspective keeps firmly in mind the first person perspective of life as it is lived through by an agent but it sees the orientation and identity of any individual within a context to be directly related to the plurality of relations constitutive of the context. Where someone like Heidegger is distinctive is that he emphasises the possibility of becoming individuated within such contexts, from the first person perspective, by virtue of the existential awareness occasioned by mortality. Perhaps inevitably, the dwelling perspective is place-specific and has a tendency towards the synchronic (Gosden 1999: 121). Gosden notes that the dwelling perspective derives from the phenomenological philosophy of Martin Heidegger (Gosden 1994, Gosden 1999) and that it is the epithet that Tim Ingold deploys to name his position (Gosden 1999: 128). Both theories of practice and the dwelling perspective share in a phenomenological heritage and the full sensuous immersion in the world as a whole

has led researchers influenced by the dwelling perspective to overcome divisions of mind and body, subject and object (Gosden 1999: 127).

Gosden's discussion of the dwelling perspective in *Anthropology and Archaeology* (1999) continues his opening of the door onto the Palaeolithic that he started in his earlier *Social Being and Time* (1994). There he discussed notions like Palaeolithic 'species being' and the temporality of the '*very* long term'. Hitherto, in human evolutionary studies, the investigation of the origins and development of human intelligence has been central. The older view, which Darwin himself expressed, that the use of tools has given hominids a vital competitive advantage over various competitors and prey suggests that the intelligence that provides for the possibility of tool manufacture and use has been selected for over, ultimately, millions of years (Gosden 1999: 127). In essence, tool use is the central plank in accounting for human intelligence. Recently this view has been challenged by those who emphasise the centrality of the social environment of extant primates.

On this view, sometimes called the Machiavellian intelligence hypothesis, but now generally referred to as the Social Brain Hypothesis (Gamble et al 2014: 17), it is argued that it is the social environment that primates live in that is the most complex and demanding aspect of their lives and not tool use. (A dwelling perspective would emphasise that these two features of life, tool use and manufacture and the social environment, are not separable; see Chapter Four). Employing the principle of uniformity, what is true of present day primates will have been true of our fossil ancestors, close knit social groups are necessary for the long period required for the education of infants and within these groups both social competition and co-

operation is intense (Gosden 1999: 127). In such a tight knit social group being able to understand the motives of other agents and coming to an awareness of how to influence and alter their actions through manipulation or deception (theory of mind, the second level of intentionality) is crucial for the individual. Being able to deceive another implies that the deceiving agent be able to subtly appreciate others' thoughts and actions, including their potential actions. This ability to foresee possible futures that might come about based on the actions of others, depending on what the other knows, together with the ability to intervene in the advent of these futures by manipulation or deception so as to bring about an advantageous outcome, shows complex mental processes and would be crucial in the advent of human intelligence and, we might add, mortuary practice and artistic practice. Ultimately, intelligence developed as a result of these intense interactions amongst primates (Gosden 1999: 128. This view has its origin in Humphrey (1976) and has subsequently been discussed by Byrne and Whiten (1988) and Gibson and Ingold (1993) and others).

Instead of subscribing to either of these forks in what might in fact be a false dilemma Ingold has argued for something of a synthesis of these two views based on a redefinition of the notion of intelligence. The technological and Machiavellian views presuppose a view of intelligence and intelligent action as proceeding from 'the action of the mind' (Gosden 1999: 128). Mental events precede and inform physical actions. If so, then this view would have a broadly Cartesian flavour and would have its origin in an abstraction at odds with a dwelling perspective. Primate cognition, mental representation and consideration of external realities and contingent possibilities are the key to intelligence on these views. The mind is the

director and the body the actor and it is precisely from this theoretical commitment that Ingold departs. Rather, he suggests, skilled practice in fact represents a unity of thought and action. The origin of an act is rooted just as much in the skilled body as it is in a rational mind and skilled action is non-verbal: it is something we know how to do physically rather than representationally. Gosden broadly accepts Ingold's view, having argued for a cognate position in 1994 (Gosden 1999: 128) but he adds the Heideggerian point that an agent's conscious attention only comes into play when otherwise smooth actions don't go to plan and the agent has to investigate alternative actions: this point echoes Heidegger's account of the transition from the sphere of the ready-to-hand to the present-at-hand. It is this position that Ingold entitles 'the dwelling perspective' (Gosden 1999: 128).

To dwell, on Ingold's account, is to be immersed in the 'flow of life composed of both social relations and practical actions' (Gosden 1999: 128). Such a perspective adds a spatial dimension to Ingold's earlier notion of the taskscape, which is an assortment of related activities distributed across the physical landscape. Again, Gosden has developed a complementary view to this that stresses activities forming systems or frameworks of reference: an activity that is carried out at one place refers either implicitly or explicitly to a myriad of other activities to be carried out at other places and again Gosden's view resonates with Heidegger's. The activity of fashioning a handaxe, for example, is embedded within a system of references and purposes that will affect its manufacture. The ideas of taskscape and of systems of reference are helpful in accounting for both space and time since activities that are spatially distinct must also be temporally distinct: each taskscape has its own temporality, rhythms of action and of rest (Gosden 1999: 128).

Although dwelling humanizes time by contextualising it within a taskscape the broader perspective of dwelling retains a synchronic dimension: its roots are in the 'here and now', or, methodologically speaking, the 'then and there', as this was deployed by Heidegger in his analysis of Dasein (being-there-here-now). On its own terms the dwelling perspective does not address longer sequences of change. Gosden reminds us that we must remain attentive to questions about how intelligible human worlds were created in the first place and how humans are then shaped by their creations: the dwelling perspective will have a role to play in this since, as we will see, it accounts for those originary moments where 'worlds' are opened up for agents and subsequently engage in self-interpretation therein (see especially Chapter Six) nevertheless, for Gosden, dwelling is not the whole story (Gosden 1999: 129).

Gosden emphasises what he terms the 'plasticity of…brains and objects: brains help make new objects, which in turn help create new brains' (Gosden 2009: 109). Plasticity is just that ability of the brain to change as a result of experience (Ward 2006: 177). From an archaeological or object-centred perspective Gosden considers just how novel materials appearing in the archaeological record at different times (stone, bronze, iron) place new demands on both the brains and bodies of the agents who make, use and admire such objects. Like a number of other contemporary figures (e.g., Latour, Ingold, Gell)[13] Gosden emphasises the 'entangled nature of people and things' (Gosden 2009: 107): this move is made in realisation of the co-developing relationship between human life and the lived world in terms of the

[13] Ingold notes that his thesis regarding the generation of the forms of objects 'from the mutual involvement of people and materials in an environment' (Ingold in Graves-Brown 2000: 68), has been expressed by Heidegger in his exploration of the relationship between building and dwelling. Tilley (2008) has recently linked Gell's approach with that of Merleau-Ponty.

holistic and co-constitutive role played by bodies, brains, objects and worlds over the course of hominin evolution. This realisation can now be taken as a starting point when beginning to consider the complex relationship between brains, bodies and worlds (Gosden 2009: 108).

The example Gosden considers is that of the ancient metallurgist: an agent who conducted their highly skilled work without the aid of a thermometer or of modern means to measure pressures and weights, or indeed of detailed written plans; but who nevertheless managed to control firing temperatures in their forge and to calculate the appropriate amounts of component metals to add to the mix at the correct times; and who knew just how much air to pump from their bellows in order to complete their task of producing an iron blade that would later be fixed to a handle made of animal horn infused with red glass and that would be sheathed in a scabbard made of both bronze and iron (Gosden 2009: 109-115). Suggesting that it was the agent's embodied knowledge and bodily intelligence that was the key to their highly skilled productive activity, and developing the notion of a social ontology (materials and agents equally input in the unfolding of human life), which can be expressed phenomenologically in terms of the co-respondence between self-presentative phenomena and appropriative agency, in order to bridge the gap between materiality and agency Gosden argues that material objects can change and extend the body schemas of the agents who utilize them, including their interaction with other agents[14].

[14] Following Gallagher and Zahavi I understand the notion of the body schema to encompass two aspects: i) the virtually automatic system of processes constantly regulating both posture and movement in the service of intentional action and ii) pre-reflective non-objectifying body-awareness (Gallagher and Zahavi 2008: 146).

Gosden argues that our peripersonal space, the space that surrounds our bodies and that is within reach of our limbs (Vaishnavi, Calhoun and Chatterjee 2001: 181), can be extended through objects (in terms of our 'reach', 'effective action' and through the 'image' that our brains 'have of our bodies') and further that our peripersonal space extends into what Gosden calls our interpersonal space (the space between agents; intersubjective space) wherein social life is performed. For Gosden, the creation of an object impacts on all of these senses of space, as it does to the relationship between agents that is mediated materially by the object[15]. Ultimately, it is Gosden's view that the 'world of metals' aided the creation of different sets of social ontologies – different networks of connections between agents and materials – than those that were created in the earlier 'world of stone', (Neolithic), before the advent of metal working technologies, and that because more materials were then being utilized, argues Gosden, then 'more aspects of bodies and brains' would be engaged (Gosden 2009: 116). In sum, Gosden argues that it is possible to say that, in different periods, both peripersonal space (together with its attendant phenomenology) and social interaction are 'constructed differently' and that this construction is fundamentally related to the manufacture of an object (Gosden 2009: 116).

Such networks of connection are produced and enabled as a result of the phenomenological disclosure integral to the creation of, for example, an item of material culture. These 'worlds' form the background to practice. 'Things' are

[15] Multiple agents would have been involved in the production of this sword because, as Gosden suggests, understanding how to work or procure the different materials involved in producing it were probably beyond the ken of a single individual. So, 'a number of skilled bodies [probably] collaborated in its production' (Gosden 2009: 115. Square brackets: my addition).

available in an agent's experience because of the activity of intentional consciousness. After Heidegger, speaking in terms of consciousness can be reframed in terms of dwelling. For Heidegger, Dasein is involved in a 'hermeneutic' or constituting movement between 'act' and 'object'. Such constitution creates worlds.

Turning to Julian Thomas: his discussion of time occurs alongside a discussion of identity and materiality, together with case studies that seek to place these discussions within the context of prehistoric archaeology (Thomas 1996: IX). His central argument in *Time, Culture and Identity* is that while these phenomena remain implicit concepts in writing much archaeology their 'character' remains only rarely questioned within archaeology itself. So, while archaeologists have dating methods and chronologies they might not ask the philosophical question 'what is time?' Archaeologists have produced accounts of peoples, communities and groups in the past but they have not, Gosden argues, asked how such entities have emerged in the first place and how they might have come to self-recognition. Again, asking such questions brings archaeologists into the territory of philosophy generally and of Heidegger's thought in particular.

Exactly these questions have been posed by phenomenological thinkers. As noted, Heidegger was interested in how it happens that the meanings of any particular entities, (any particular 'X' or 'Y'), together with their possible relations becomes established in the first place (Davis 2010: 5). What I have called Heidegger's 'logic of sense' (Tonner 2010: 169) is that moment when the prevailing way in which things (the relational totality of 'Xs' and 'Ys') becomes meaningfully, although not

fully, present to individuals and groups. A paradigm of such an event is the creation of a work of art (which is a cultural paradigm for Heidegger, see Chapter Six). Such work can then become appropriated by individuals/groups into their lives[16].

For Thomas, archaeologists study 'material culture' without being overly troubled by the recent division of culture from material nature that is often implied by the term (Thomas 1996: IX). In fact, it is Thomas' view that the issues of time, culture and identity are deeply connected and, in a Heideggerian move, it is due to their fundamental importance (in the sense of standing under/being foundational to while being self-evident) to archaeology that they can be taken for granted. This is in no small part due to archaeologies' being embedded in the standard categories of thinking characteristic of Western modernity. Thomas argues that, as a discipline, archaeology emerged in tandem with modernity as an investigation into the 'origins and depths of human historical achievement' (Thomas 1996: IX) by means of the material record that such achievement left behind: it is for this reason that Thomas suggests that it is difficult to puzzle out archaeologies' fundamental assumptions without questioning the very foundations of modernist thought.

Thomas is clear, the argument he is making about archaeologies' genealogy runs in parallel to Heidegger's argument about ''Being'' (Thomas 1996: X). Heidegger's argument about the notion of being extends to a critique of the entire tradition of

[16] An example will be discussed in Chapter Six, the *panel of horses* in Chauvet; Figure 6.2. This work presents itself/is revealed to an audience ('preservers', for Heidegger, since they 'preserve' in their interpretations and actions the work's meaning) in such a way that it gathers together all the possible narratives attaching to horses, agents, and animality, to the world and to their interconnections. These narratives are 'presented' to the audience and are interpreted in terms of the meaning of their lives, as these lives are there for them as projects to be accomplished (Chapters Four and Six).

Western metaphysics (see Tonner 2010) and it is Thomas' view that it is Heidegger's challenge to the run of the mill categories employed in contemporary Western thought, along with his discussions of time, materiality and art, and so on that make his ideas important to contemporary archaeology. After all, past peoples may not have constructed their worlds out of the 'concepts and habits of mind' that we might now employ unthinkingly in order to understand them and so a thinker who places these concepts in question would seem to be required reading for the theoretically reflexive archaeologist. In no small measure Heidegger's importance lies in his critique of the detached theoretical perspective that has been unthinkingly adopted in Western philosophy and in much theory, including archaeological theory, hitherto.

Time, Culture and Identity constitutes Thomas' effort to consider what a Heideggerian archaeology might look like. There is, however, an important point here that we must note. That is, while Thomas is correct to point out that past peoples may not have characterised their world in terms of the categories of modern Western thought, if Heidegger is correct, then whatever they were, the categories they did employ to characterise their world will have had the same source and ontological foundation in human existence *qua* Dasein. It is in these terms that Heidegger will develop a *genetic phenomenology* and that he will inquire about the 'birth certificate' of our concepts in his 1927 lecture course *The Basic Problems of Phenomenology* (Heidegger 1988: 100).

Husserl, the founder of phenomenology, distinguishes between 'static' and 'genetic' phenomenology and Heidegger's genetic phenomenology aimed to account for the

genesis of our concepts out of their intentional and experiential base (Tonner 2010: 40). Whereas static phenomenology is descriptive genetic phenomenology is explanatory: genetic phenomenology asks 'how' a particular phenomenon (a particular concept) arose. Underlying this question is the view that there are identifiable laws or structures that can be discerned in consciousness and its genesis, its' being intentional (directional) for example. It is the task of genetic phenomenology to uncover these laws (Lewis and Staehler 2010: 29-31).

Consider the phenomenon of time that interests Gosden and Thomas. Heidegger argued that what he called the 'ordinary concept of time' was parasitic on 'primordial time'. Time conceived in terms of clocks and timelines where time extends infinitely into the past and into the future and is composed of points or moments (clocks track our progress along this line as we progress into the future in the same way that everything else in the universe does (Polt 1999: 106)) is founded/grounded on the 'primordial time' of Dasein's temporality (a structural dimension of being-there-here-now revealed phenomenologically). He says:

> The ordinary conception of time owes its origin to a way in which primordial time has been levelled off. By demonstrating that this is the source of the ordinary conception of time, we shall justify our earlier Interpretation of [Dasein's] temporality as *primordial time* (Heidegger 1962: 457. Square bracket: my addition).

Primordial time, the existential temporality of having a past, being in a present situation and projecting our projects into a future, is a fundamental characteristic of Dasein. It is this temporal structure that enables 'ordinary' human notions of time as linear-chronological (or whatever else) to arise. It was Heidegger's view that 'Temporality [primordial time] is the reason for the clock' (Heidegger 1962: 466.

Square brackets: my addition). For his part, Gosden understands time to be a fundamental aspect of human involvement with the world and he follows Heidegger (and Merleau-Ponty, although he doesn't mention him in this context) in seeing time as an 'aspect of bodily involvement with the world' (Gosden 1994: 7). For Gosden, time is 'the crucial element in all human activities' (Gosden 1994: 7) and it may be for this reason that he found influence in a thinker such as Heidegger who argues that Dasein – human existence (*Existenz*) – '*is time itself*' (Heidegger 1992: 13E-14E; italics in the original). The point that should be noted here is that primordial time is the ontological foundation for all our manners of constructing and describing time (ontically) in our narratives of it. This claim is what is at stake when we say that any categories employed by historical humans have a common source or ontological foundation in human existence *qua* Dasein: the structural dimensions of being-there-here-now ground our concepts and our worlds. The recognition that this ontological foundation is finite, is mortal, is the enabling condition of a human world becoming meaningful as 'my' world. It is, we recall, as Krell put it: 'all intimations of Being are intimations of mortality' (Krell 1986: x).

Returning to Thomas: he has recently (2008) provided a useful and succinct account of both phenomenological approaches to landscape archaeology and to the dwelling perspective, partly in response to Andrew Flemming's (2006) criticism, that makes a sustained use of Heidegger's works. Flemming's worry about post-processual uses of phenomenology is that they are subjectivist, personal, non-repeatable and hyper-interpretive (Fleming 2006: 300; Thomas 2008: 300). Like Thomas, dispelling these myths is one of my concerns. For Thomas, if a phenomenological approach to landscape amounted to no more than a consideration of how a self-contained

objective world composed of different classes of evidence (built structures, faunal remains, artefact distributions and so on) that are more or less integrated can be experienced by a human subject then it would have little to advocate it to landscape archaeologists (Thomas 2008: 300-301). In some respects archaeologists of landscape influenced by phenomenology have been their own worst enemies in this regard since amongst the initial profusion of studies in the wake of Tilley there were those that employed phenomenology just as a technique that could be applied to a particular environ alongside other techniques and analyses, such as field walking and survey.

If the question posed by the researcher is 'how might this landscape, analytically described, have been experienced by past peoples' and the answer is gleaned from the researcher going out into the landscape to 'have experiences' then the result may just be, in Thomas' analysis, an unbridled subjectivist and narcissistic description (Thomas 2008: 301). In fact, this kind of approach would be a naïve phenomenological-cognitive archaeology that attempts the replication of the thoughts that went on inside the heads of dead individuals, assuming that they can be recovered and reconstructed in the present as a result of an encounter with things and places (Thomas 2008: 301).

It is from these kinds of questions and approaches that Thomas (and I; see my discussion in Chapter Four where a methodology for applying the phenomenological method in archaeology is introduced) departs. Instead, he argues that an experiential analysis must be situated within a different conception of landscape to the one traditionally employed by archaeologists if it is to be workable.

That is not to say that the phenomenological approach to landscape must ignore more traditional methods but it is the case that, for Thomas, post-processual landscape archaeology and traditional landscape archaeology are not complementary alternative manners of investigating the same phenomenon (after all, one is reached by an abstraction, the other by an immersion) and further, the phenomenologically inspired post-processual approach 'necessarily connects with what Tim Ingold (1995: 75) characterizes as "the dwelling perspective"' (Thomas 2008: 301).

It was in his 1995 piece 'Building, dwelling, living: How animals and people make themselves at home in the world' that Ingold turned to Heidegger's essay 'Building dwelling thinking' in order to elucidate the dwelling perspective[17]. It is in this essay that Heidegger states what Ingold considers to be the 'founding statement' of that perspective. He says:

> We do not dwell because we have built, but we build and have built because we dwell, that is because we are dwellers… To build is in itself already to dwell… *Only if we are capable of dwelling, only then can we build* (Heidegger 1971: 148, 146, 160, original emphasis. Cited in Ingold 1995: 76).

For Ingold, Heidegger's statement amounts to the view that the 'forms' constructed by individuals and groups, whether in their imaginations or in their environs, arise from within their actively engaged and involved agency/activity within their particular relational contexts that are their contexts of environmental praxis.

[17] Heidegger's essay 'Building Dwelling Thinking' appears in translation in *Poetry, Language, Thought* (1971). This collection (trans. A. Hofstadter) was agreed by Heidegger himself. 'Building Dwelling Thinking' originally appeared in 1952 and subsequently in 1954 in *Vortäge und Aufsätze* (Pfullingen: Neske). It had been delivered as a lecture on 5th August 1951 and was printed in the conference proceedings (Neue Darmstädter Verlagsansalt).

Dwelling is the pre-condition of *everything* that agents do. To build is not to import a pre-existing template/form of a finished project onto an inert material substrate. Ingold is not denying that human beings might be unique amongst the animals in that they have the ability to conceive of forms in advance of their material instantiation. His point is that this very conceiving is something that occurs within a real-world environment, within dwelling, by real engaged agents within a world of pragmatic concern (Ingold 1995: 76). Dwelling has evolved. The forms implemented by such agents are not the product of a disembodied Cartesian intellect in a wholly theoretical perspective who imports them into the world. On the contrary, as Merleau-Ponty (1962: 24) put it, the world is the homeland of our thoughts. It is only because dwelling is already occurring that the agents who dwell can think the thoughts that they do (Ingold 1995: 76).

The dwelling perspective sees form as something generated from the immersed agency and immanent processes within the world that are denied creativity by a perspective that regards form to be the instantiated solution to an intellectual problem. What is more, for Ingold, adopting the dwelling perspective has import beyond the "human": analysis can now begin from consideration of the animal-in-its-environment rather than from a self-contained atomic entity. Following Susan Oyama, Ingold argues that organisms receive both their 'genome and a segment of the world' (Oyama 1985: 43) from their ancestors and that together these factors constitute a developmental system. It is in the unfolding of this system throughout the life-cycle of the organism that form emerges and is sustained. The constructions of non-human animals must be accounted for from this point of view rather than from one that would see the 'reading' of the genetic code as somehow extra to the

organisms' development within its environment (Ingold 1995: 76). The result of this change in orientation in evolutionary thinking is that organisms are seen to be active participants in the evolutionary process by their creation of the environmental contexts of development for their progeny.

The example Ingold gives is of the beaver. A beaver incorporates a set of relations with its environment into its bodily orientations and activity patterns that has been shaped cumulatively by the activities of preceding generations of beavers. This individual beaver will, of course, participate in this evolutionary sequence by continuing to shape this set of relations. And, what is true of beavers is also true of human beings. Human infants, like the infants of other species, grow up in the environments that have been shaped by the activities of previous generations and, as Ingold puts it, as they do this they 'come literally to carry the forms of their dwelling in their bodies – in specific skills, sensibilities and dispositions' (Ingold 1995: 77). Taking an intellectualist approach to the forms produced by individuals and groups by introducing a notion of an 'evolved mental architecture' (Tooby and Cosmides 1992) from which an animal's constructions would derive, that is transmitted genetically, (or by some other means, culturally, for example), prior to agents' environmental development is entirely wrong-headed for Ingold. This is because, as he argues, it is from immanent practical engagement by humans and non-human animals within their surroundings that such forms are generated (Ingold 1995: 77).

From this dwelling perspective the dichotomies between evolution and history, biology and culture are undercut. When history is understood to be the process

whereby individuals, through their intentional and creative activities, configure the conditions that affect the development of their successors it becomes nothing less than an instance of a process that is occurring everywhere in the organic world. And, when cultural variation is taken to mean the differences of embodied knowledge stemming from the diversity of local contexts of development then such variation is just part of the continuous variation of all living things arising out of their entanglement within their field of relations (Ingold 1995: 77). On this view, theories of biological evolution accounting for the transition from 'nest to hut' and theories of cultural history accounting for the transition from 'hut to skyscraper' are not required: history is the continuation of evolutionary processes and the idea that there is a point of origin for the beginnings of architecture and history and, ultimately, of "true humanity", marked by the intersection of evolution and history, is an illusion (Ingold 1995: 77). A full-bodied dwelling perspective represents a serious challenge to anthropocentric and intellectualist approaches in human evolutionary studies. It does so, I will argue, in such a way as to enable revised accounts of death awareness and artistic expression (Chapters Five and Six respectively) that will impact both on archaeology and Heidegger scholarship.

It is also to Heidegger's 'Building Dwelling Thinking' that Thomas turns when outlining the dwelling perspective. As Thomas reconstructs it in his 2008 essay, dwelling, for Heidegger, is that condition which humans beings experience when they are at home in the world; it is a relationship, characterised by equanimity with the world wherein the individual cares for and preserves their surroundings without imposing their will onto them; the individual lets beings 'be'; dwelling is at once a

‘caring for’ and ‘being cared for’ by one’s environs; it is a relationship of reciprocity between agent and world (Thomas 2008: 302).

We will return to Heidegger in due course. Now, we must turn our attention to what we might consider a reinvigoration of Palaeolithic archaeology characterised by an engagement with post-processualism and phenomenological thinkers in archaeology and beyond. That is, we must now consider Gamble and his framework for tackling humanity’s remote past.

Phenomenology, archaeology and Gamble’s Palaeolithic Societies of Europe

As we have seen, the dwelling perspective developed out of a sustained engagement with thinkers from the phenomenological movement, such as Husserl, Heidegger and Merleau-Ponty along with thinkers, such as Bourdieu, who shared a concern with the nature of human experience (Gosden 1999). The dwelling perspective is one perspective in what has been called post-processual and ‘interpretive’ archaeology. Most recently, and partly thanks to the archaeologists we have discussed above, post-processual archaeology has started to influence studies of the Palaeolithic, an area that had hitherto been characterised by studies influenced by the ‘hard sciences’. Perhaps the central figure in Palaeolithic archaeology who engages with post-processual studies is Clive Gamble who, in his *The Palaeolithic Societies of Europe* (1999) adopts a broadly phenomenological definition of culture, where emphasis is placed on the active engagement of individuals within their environments (Gamble 1999: 420). Effectively, Gamble brings interpretation of the period in human prehistory between around 2,500,000 to 10,000 years ago into the

purview of the post-processual or interpretive agenda in contemporary archaeological theory.

A central aim in this present study is to follow the lead provided by Gamble and the archaeologists influenced by phenomenology and to pursue questions in terms of dwelling that might hitherto have been dealt with under the banner of 'human cognitive evolution'. Far from being a subjective approach to human cognition and experience the phenomenological approach promises an account *of* subjective experience and cognition that may form the basis for understanding past ways of thought and action, a goal that has become a central plank of cognitive archaeology. Extending the 'dwelling perspective' into the Palaeolithic will necessarily open a space for evolutionary and non-anthropocentric considerations to be heard in connection with Heidegger's account of dwelling. This will at once develop the dwelling perspective to take account of human ancestors and present a challenge to Heidegger's account of dwelling which remains anthropocentric. Discussion of the two related senses of dwelling (as an approach and as a mode of engagement) will show how and why Heidegger's thought is relevant to Palaeolithic archaeology and to human origins research. Informed by phenomenology the dwelling perspective places emphasis centrally upon the agent who 'dwells in the world' and so suggests that archaeological description begin from the richness of the human experience of life as it is – or was – lived in a world.

In his *The Palaeolithic Societies of Europe* (1999) Gamble sets out to show that V.G. Childe's (1951) view that reconstruction of social life in the Palaeolithic is 'doomed' is incorrect. Childe's view was that due to the deficiency in the

archaeological record of the (Lower) Palaeolithic when it came to indications of social organisation or of its lack, from the 'scraps [that are] available [to us] no generalizations are permissible' (Childe 1951: 85. Square brackets: my addition). Gamble challenges this view, which during the 1990s was still widely accepted. While it is true that data representative of the Palaeolithic is not as helpful to social archaeologists (anthropologists of the past) as the later pyramids and granaries have been to the reconstruction of social relations in later periods, it is the case that Palaeolithic data is well-dated and of high-quality (Gamble 1999: 417). Both intra- and inter-regional variation is available to analysis and in *The Palaeolithic Societies of Europe* Gamble has shown that, within the timeframe of 500,000-21,000 years ago, it has been the way in which archaeologists have approached the Palaeolithic that has 'doomed' the social archaeological programme and not the data.

After 21,000 years ago it starts to become possible for analysis to begin to approach the paradigm of studies of later periods. This is partly due to the increased data from across Europe, coupled with a decrease in timescale, aiding the possibility of approaching questions of recolonization (Housley et al: 1997) in comparison to the later advance of farmers (van Andel and Runnels 1995). Also, after 21,000 years ago, there is an abundance of cave and mobiliary art and there are burials that begin to pave the way for the cemeteries of the later Mesolithic (Whittle 1996) (see Gamble 1999: 417-418): generally, it becomes easier to study the transition from ecological adaptation to the reconstruction of social relations (Gamble 1999: 418). A dwelling perspective approach to the issues that present themselves within these analyses will emphasise that these phenomena (art, cemeteries, farming) arose

within past vibrant ‘life-worlds’ wherein agents engaged with themselves and others.

Gamble argues that because it is necessary to recast our approach to the reconstruction and understanding of society in the Palaeolithic it becomes necessary to rethink our underlying assumptions and our approach to social archaeology itself as this has been done in a number of post-processual critiques (Hodder 1990a, Thomas 1991, Tilley 1996) (Gamble 1999: 418). Gamble’s point about a social archaeology of the Palaeolithic runs deeper than just a criticism of ‘archaeo-pessimism’. Interpretation of the Palaeolithic becomes an aspect of the broad post-processual agenda that disbars any return to the “good old days” of social-typology and/or evolutionist approaches (Gamble 1999: 418). The result of bringing the Palaeolithic into the post-processual purview will enable the debate to move beyond discussions of ‘calories and tool maintenance’ as well as to move beyond social reconstruction as ‘merely an assertion of what must have gone on during rituals around open graves, against cave walls and in our ancestors’ heads’ (Gamble 1999: 418). That is, the post-processual purview prompts a move toward capturing social life as a whole and not just as it unfolded in the time between meals. To move beyond the two models which Gamble sees as governing analysis of the Palaeolithic – the ‘stomach led’ and the ‘brain dead’ interpretations: the first focussing on early hominids as hunters and which dwells on the importance of calories; the latter attributing change to gradual awakening of hominid’s brains from their prehistoric slumbers – both of which dogmatically and fallaciously seek a ‘prime mover’ as cause of change in the archaeological record, Gamble argues it is necessary to adopt a social perspective that will ultimately champion the individual as a unit of analysis

while focussing on the importance of interaction in the performance of social life (Gamble 1999: xx)[18].

On this basis Gamble outlines a framework for new research that includes a précis of the issues that he takes to now be available for investigation to the archaeologist of the Palaeolithic. Crucially, Gamble returns to the individual rather than the group. Stressing both involvement with the world and with others through the concept of agency he seeks to examine the acts that arise when the body is taken to be the prime 'form of social communication and power' of individuals in a group (Gamble 1999: 419). This removes the search for material remains of social institutions (rank, religion, economies, bureaucracy) as the prime goal of research.

On Gamble's account, interpretation of the Palaeolithic focuses on the individual, on the creation of networks and on the role of performance in social life (Gamble 1999: 67). Because of this, social archaeology cannot begin with the rich Upper Palaeolithic record but must instead extend its reach throughout the entire hominin record; that is, from at least 5 million years ago right down to the present. It is in this context that social archaeologists are required to explain the 'release from proximity', which is our primate social heritage: this is the moment when social relations became stretched across space and time (Gamble 1999: 67-68). Lower Palaeolithic excavations such as Boxgrove in Sussex (500,000 years ago: handaxes, butchered bones, human fossil) represent precious moments in time: snapshots of ancient events that when investigated do bring us closer to the actions of individuals from the most distant past. Exploring Palaeolithic society by way of individual and

[18] One question that might arise here is whether Heidegger's notion of *Ereignis* (and finitude) is a 'prime mover'. If this is a criticism of Heidegger then it might act as a prompt to further develop the dwelling perspective beyond his limitations.

group action will involve constructing methodologies capable of tacking between individual and society, micro and macro scales, narrow to wide contexts and so forth.

Gamble's definition of culture places emphasis squarely on individuals' and groups' active engagement with their environments, making it broadly phenomenological, rather than on any enhanced linkage in a modular mind as proposed by, for example, Mithen (1996). Underlying this methodological drive on Gamble's part is the view that in order to understand the changes and selection that brains underwent it is necessary to place them within their context of action. This is garnered by the more general creation of social life where the brain is 'part of the whole organism and its surrounding environment' (Gamble 1999: 420). In these terms, the promise of Heidegger and the phenomenologists, enactivists, Deleuze, Ingold, Gosden and others, is that their contribution will enable archaeologists to, amongst other things, overcome Cartesianism, which is the view most associated with the radical division of mind and body and mind and world into separate ontological domains that can be investigated without essential reference to each other. Heidegger, for example, was at pains in *Being and Time* (1927) to redress what he took to be the Cartesian failure to do justice to the lifeworld (see Tonner 2010). As we have seen, it is Gamble's view that overcoming the spectre of Descartes is especially pressing in human evolutionary studies given its commitment 'to a Cartesian model of cognition and consciousness' wherein cognition is 'abstracted from its real-world context' (Coward and Gamble 2009: 52).

The problem facing human evolutionary studies is to understand 'how 'the mind' is grounded in real-world contexts' (Coward and Gamble 2009: 63). Archaeologists are now arguing that meaning is 'always already' lived 'in the material world by embodied beings' (Hodder 2001: 7) prior to any theoretical abstraction. Thus, within the context of the widened theoretical net of post-processual archaeology, theorists have now made this existential-phenomenological move and so have recognised pre-theoretical dwelling as the ground of human experience. Pre-theoretical dwelling is the fundamental manner in which agents, including anatomically modern human agents, but not belonging to them exclusively, exist in their worlds. As such, what Heidegger and the existential phenomenologists (Sartre, Merleau-Ponty et al) called being-in-the-world (*In-der-welt-sein, être-au-monde*) can now be considered a basic starting point in archaeological enquiry.

To date, there have been two uses of a social focus in Palaeolithic studies. The first has been associated with the study of human origins in Africa where the social underwrites a multi-disciplinary research programme: 'human social origins' provides both the goal of deduction and the research paradigm toward which the efforts of these multi-disciplinary teams (anatomists, geologists, archaeologists etc.) are directed. For such programmes identifying and defining the proto-cultural basis for later cultural development is a (perhaps 'the') key aim. The second use of the social in Palaeolithic studies tends to focus on the later stages of the period: it is the emergence of band society and/or the emergence of complex society as a hallmark of 'modern humans' that has been sought after. On this paradigm, the social is the explanation rather than the research paradigm: both social and cultural revolutions have driven the larger 'human revolution', or the general process of hominization

along its trajectory towards ‘we moderns’. Such revolutions are necessary to foreground the Upper Palaeolithic record where local styles and time-space cultures are identifiable.

The period between the dispersal of *Homo erectus* from sub-Saharan Africa down to the Upper Palaeolithic revolution has, to-date, received little attention and what attention it has received has not been of high impact. Generally, it is discussed in terms of ecology and subsistence. Prerequisite for an ampliative study of the hominids of the Middle Palaeolithic is a more developed sense of the ‘social’ and ‘society’ as these terms are applied by Palaeolithic archaeologists (Gamble 1999: 30-31). Gamble employs a network approach to define the social in the Palaeolithic where the notion of ‘structure’ has a dual nature: (social) action both enables and constrains (individuals). Structure and interaction is a ‘two-way process’ (Gamble 1999: 64). Human beings’ involvement with the world through social life (along with the constraints and compromises implicated in this) favours a performative view of the creation of society, where society is taken to be produced through human social activity, rather than a structural model that implies that society somehow precedes human agents. Thus, it is social actors (“human” or otherwise) that make society what it is and adopting a ‘bottom-up’ approach that examines the rules and resources that organise interaction between agents and the world is the way Gamble suggests taking such an analysis into the Palaeolithic period. Here, the recurring size of an individual’s networks is dependent upon both temporal and cognitive constraints. While varying between individuals the existence of such networks produce predictable outcomes in terms of the ties that bind individuals and

the sizes of their resource-based (emotional, symbolic, material) networks (Gamble 1999: 63-64).

Key to understanding Gamble's concern with the social in the Palaeolithic is the following proposition: 'social life in the Palaeolithic involved hominids in the continuous and different construction of their surrounding environment' (Gamble 1999: 96). In order to investigate this Gamble sets out a conceptual scheme employing spatial scales of locales and regions. (This conceptual scheme will be integrated with Heidegger's phenomenological approach in Chapter Four: see Figure 4.4). Such locales and regions are linked by rhythms: the paths and tracks trod by prehistoric hominids, the operational sequences immanent in their tool manufacture and the 'taskscape' (a 'mutual environment which surrounds individuals as they go about the business of living' (Gamble 1999: 421)) wherein individuals attended to one another.

Locales are defined in terms of 'encounter, gathering and social occasion/place' (Gamble 1999: 96). These terms are used in place of the more familiar terms of 'campsites, home bases, and satellite camps' and in place of Binford's distinctions between 'residential camp, location, caches and field stations' (Gamble 1999: 96). Since these older terms have become attached to a dichotomous approach to the study of foragers (territorial versus non-territorial; complex versus elementary; closed versus open, etc.) they have become theory-laden and are best restricted to specific analytical approaches that they are appropriate to. Gamble's point in applying a new vocabulary (something that Heidegger himself did in *Being and Time* that to this day gives readers cause to find him impenetrable) is to declare that

a new agenda is being explored: the study of Palaeolithic society rather than Palaeolithic settlement.

Important for Gamble's project is Leroi-Gourhan's stress on the social nature of technical acts. The *chaîne opératoire* (for example, flint knapping occurring at one locale, or the collecting and transportation of raw material from one locale to another) is an operational sequence that, at the same time, is an example of social production: social productions develop their specific rhythms and form as the body is engaged in material action (*le geste*). On the basis of this perspective a social approach to the Palaeolithic takes in all aspects of 'mobility, production, consumption and discard' (Gamble 1999: 96) and it is the repetition and persistence of such material action in time and space that produces archaeological cultures. Archaeological cultures are the result of the repetition of learnt 'technical gestures' by individuals[19].

Despite the fact that the search for material remains of social institutions (rank, religion, economies, bureaucracy) as the prime goal of research has been largely removed in the post-processual agenda it is possible to investigate the changing roles of artefacts and 'culture' in the varied social performances of body-agents, especially when, suggests Gamble, animals and objects come to take on the traits of 'people'. The question of the moment of the 'release from proximity' is bound up with the question of social complication (Gamble 1999: 67-68). Release from proximity is achieved when 'artefacts become people' (Gamble 1999: 85). This may happen through personification and the resultant incorporation of the artefact into

[19] Bernard Stiegler deserves mention here. Stiegler approaches Heidegger's philosophy of technology through Simondon and Leroi-Gourhan (Stiegler 1994; Howells and Moore 2013).

the ‘nexus of social relations’ (Ingold 1994: 335). Release, in terms of the actions of individuals, is achieved ‘through the social landscape’ (Gamble 1999: 92). It is the extension of social behaviour that results in the ‘release from proximity’ (Giddens 1984: 35, Rodseth et al 1991: 240; see Gamble 419) and this release is the stamp of human social evolution.

One criticism of Gamble’s general approach may be that “individuals are simply lost in the haze of Palaeolithic time!” For Gamble this statement is counter-intuitive when we consider the nature of the Palaeolithic data. This is so since there is *prima facie* more contact with micro-scale individual action in the Palaeolithic than there is in later assemblages, such as those that represent a ‘crowd scene’ from the *agora* in Athens. As Roe (1981) argued, Lower Palaeolithic excavations represent snapshots of ancient events that bring us closer to the actions of individuals from the most distant past. In each case it is the body that both creates and is limited by physical constraints: the body-agent produces patterns by applying movement and gestures to materiality and its technical acts are social acts[20]. In fact, the individual’s involvement with the world is decisive and if the theorist unites ‘mind and body, as in the philosophies of Heidegger and Husserl, then we do not need to infer the world but rather we start with it, in it, of it’ (Gamble 1999: 81).

[20] For Gallagher, a ‘linguistic act’ includes both gesture acts and speech acts: language itself is generated out of the body’s movement. He suggests, while we could imagine gesture to be the origin of language (spoken language would emerge gradually from embodied movement) this will still leave the question of ‘how gesture itself came about?’ (Gallagher 2005: 107). If language arose out of instrumental movement (reaching, grasping), or locomotive movement (walking, sitting), both of which can be solipsistic, one would have to show how a variety of non-solipsistic or inter-subjective movement, including, expressive movement, was generated from them (Gallagher 2005: 107; Protevi 2009).

Culture is an expression of active engagement structuring the social processing of 'information' received through activities, that themselves involve rhythms and gestures that take in other agents and materials. Such processing is not necessarily linguistic and it is not solely recorded in the style of the artefacts produced. Rather, culture is produced by 'attention, perception and movement' without which social life would not exist (Gamble 1999: 420). Gamble's view is that his approach highlights two areas that have yet to be studied in depth in the Palaeolithic: learning and memory. Both terms involve the 'cultural transmission of information' about how one should act and about how one should control one's body during the performance of social life.

The approach to these questions that Gamble would support would depart from the hitherto dominant tradition of accounting [analytically] for change in the Palaeolithic in terms that emphasise training the mind. In fact, it is preferable that such dualist questions do not arise as is the case with the dwelling perspective for, as Merleau-Ponty would argue, 'all aspects of a life are captured in 'the body'' (Cullen 1994: 112). It is the body that 'is our point of view on the world, the place where the spirit takes on a certain physical and historical situation' (Merleau-Ponty 1964a: 5). Individuals anticipate problems and deploy culture to solve them in the face of challenges from the environment and all of this takes place through their bodies.

Binford's discussion of the differences in organisation between Neanderthals and Crô-Magnons, emphasising greater planning depth (variation in the amount of time and technological investment that elapses between anticipatory behaviour and the

actions that are its outcome) amongst the later, is a case in point. Crô-Magnons had more complex and varied tools designed specifically for 'use in directly coping with the environment' (Binford 1989: 21. cited in Gamble 1999: 420). Gamble departs from Binford because, as he sees it, the notion of planning depth and anticipation are concepts that are constructed upon the basis of an agent's detachment from its world. Further, life becomes 'compartmentalised' in order to study specific behaviours that emerge as a result of this reduction. The result is that the individual fades away in favour of an 'imposed institutional-like framework' (Gamble 1999: 421). On the terms developed by Gamble in *The Palaeolithic Societies of Europe* agents are engaged with their world and they evolve within the social networks that they create. Utilizing Ingold's notion of the 'taskscape', where this concept places emphasis on 'continual action and attention to others' within an environment of pragmatic concern, the dichotomy of agents, on the one hand, who engage with a more or less hostile environment 'out there', on the other hand, is challenged. In place of this, a holistic analysis will be undertaken. The concept of the taskscape, on Gamble's estimation, allows for a focus on action in the midst of a world and it allows for an understanding of (as Wilson put it) 'that creature of immense but inchoate promise and potential' that "*Homo erectus*" was, to emerge (Wilson 1980: 41, cited in Gamble 1999: 418).

Gamble's hope is that employing a social perspective will 'raise the curtain on a much more interesting past' (Gamble 1999: 426) and his *The Palaeolithic Societies of Europe* provides the framework for the archaeologist to investigate the multifaceted products of social interaction over the *longue durée* of at least 500,000

years. Moreover, Gamble's work fully opens the door to a dwelling perspective on the Palaeolithic.

Chapter Four

A phenomenological approach to archaeological Case Studies

Dwelling, as we have discovered, is a technical term, in at least two senses. Firstly, it refers to an archaeological perspective that seeks to give full credence to life as it is lived by social agents, agents who are wholly immersed in a world of their pragmatic concern (Gosden 1999: 121). Secondly, it is a technical term in the phenomenological philosophy of Martin Heidegger, where it refers to nothing less than 'the human essence' (Young 2001: 125). Dwelling is a human being's or Dasein's manner of being: it is another term for Dasein's constitutive state, being-in-the-world, unified by the care structure. Dwelling constitutes human existence and precedes and provides for the possibility of our cognitive powers. I argue that dwelling, and so care, should be approached in a non-anthropocentric way that will allow us to deploy this concept in Palaeolithic archaeology. I argue that we should approach the archaeological record of our ancestors in terms of the creation of meaningful worlds. What I will do in this chapter is to bring out the methodological dimensions of phenomenology in order to show how it might be deployed in an archaeological context. In order to make the most of my methodological discussion I will lead into it by way of a discussion of Heidegger's anthropocentrism.

For Heidegger, being-in-the-world (care) means dwelling (Heidegger 1962: 80, Polt 1999: 46). Dwelling involves 'being in' the world in a particular way:

> 'In' is derived from "*innan*" – "to reside", "*habitare*", "to dwell"…The expression '*bin*' is connected with '*bei*', and so '*ich bin*' ['I am'] means in

> its turn "I reside" or "dwell alongside" the world, as that which is familiar to me in such and such a way. "*Being in" is thus the formal existential expression for the Being of Dasein, which has Being-in-the-world as its essential state* (Heidegger 1962: 80. Italics in the original).

A 'world', on Heidegger's account, is a referential totality and Heidegger's account of what he calls 'worldhood' or 'worldliness' begins from the notion of the *Umwelt* (Heidegger 1962: 93, Polt 1999: 49). The German word '*Umwelt*' is usually translated as 'environment': it is the world wherein 'things' are produced and used; it is an everyday environment wherein agents dwell. The environment or *Umwelt* is the most ordinary world wherein agents encounter 'equipment', ready-to-hand entities ("handy beings") that are productively deployed and manipulated by agents. The key suggestion that I make in connection to Heidegger's analysis is that we can usefully apply aspects of his analysis *mutatis mutandis* to the worlds of our ancestors. This will involve a move away from his metaphysically biased perspective toward one that is phenomenologically and scientifically informed.

Heidegger objected to the anthropocentric dimension of Western thought. Despite this Heidegger's own work did not transcend this anthropocentrism. In *Being and Time* Heidegger placed Dasein at the centre of the ontological universe. It has been suggested that Heidegger's fundamental ontology is a form of 'transcendental anthropocentrism' (Frede 1993: 65) and that Heidegger is heir to a tradition of European philosophy that originated with Kant (Tonner 2010 and 2011). To recap, all things – including objects, animals and events – are ordered and given meaning by human beings *qua* Dasein in terms of their possibilities for interaction or appropriation into a task or project. Objects, animals and events are understood in

terms of Dasein's involvement or possible involvement with them and they exist only as part of a web of possible encounters wherein all 'things' refer to, relate to, or point at, other 'things' within the web.

Engagement with the world involves appropriating aspects of it into a task or project. Not all appropriation will involve the actual physical modification of an object beyond its appropriation: it might very well 'do' just as it is. Early hominins found a stone that was serviceable to them in terms of their physiology and then deployed it as equipment in their task of, say, de-fleshing a bone. Such deployment as equipment in pragmatic use imputes a rule (there were/are right and wrong ways to use such naturally occurring objects) for this use. Normative considerations apply to natural objects utilised as equipment.

Satisfactorily accounting for the meaningfulness of things involves accounting for them in terms of their pragmatic use. What a thing 'is' depends upon what an agent takes it to be in terms of their subordinating the serviceable 'matter' to a need (Campbell 2009: 272). The notion of intentionally (the founding structure of experience) is central here: by virtue of intentionality it becomes possible to 'take' a stone *as* a hammer, in terms of an agent's understanding of the practice of hammering. Meaning is 'projective': it is cast ahead of agents in terms of the project at hand. Projection structures the thing that will be appropriated by the agent. Agents first engage with things pre-theoretically in terms of their being 'handy' for accomplishing a task that they are engaged in, in terms of their needs. For example, the rocky overhang in the valley is handy for shelter: in fact, it 'is' a shelter. The 'thing' is constituted in interpretation (Campbell 2009: 274): this intentional aspect

of any ‘thing’ is what enables it to point toward its contextual and appropriative use by agents.

Action is expressive and meaning generating; in ‘skilful coping’ world and agent coincide (see Protevi 2009: 87). The body is the site of interpretive skills enabling everyday ‘smooth coping’ (as Dreyfus might put it). In connection to this let us consider Heidegger’s account of the cabinet maker’s apprentice. This account occurs in his 1951-2 lecture course *Was heist Denken* (*What Is Called Thinking*). Heidegger gives an account of an apprentice whose bodily-agency is responsive to the materials appropriated to their task of producing a cabinet. As Heidegger describes the scene, the apprentice approaches and responds to what comes to presence in the materials that they are working with. And, of course, in order to be an apprentice engaged in learning under a master their productive activity must be expressive of their stage in the process of mastery of their craft, prior to any explicit gesture of success, failure, consternation and so on. If not, apprenticeship could not take place since the master would be unaware of the stage in the process of learning that their apprentice had reached. Masters generally know where you’ve gotten to in a process without you having to tell them, by gesture or by speech. Apprenticeship could not take place if it were not for the intersubjectivity of expressive movement.

Heidegger says: ‘If he is to become a true cabinet maker, he makes himself answer and respond above all to the different kinds of wood and to the shapes slumbering within the wood’ (Heidegger 1993: 379)[21]. It is in connection to this discussion that we reach Heidegger’s anthropocentric limit. Heidegger’s apprentice can engage in

[21] As we will see, this resonates with accounts of ‘artistic’ practice amongst the Inuit. We will discuss comparisons with Heidegger to the Inuit and to the Upper Palaeolithic ‘artist’ in Chapter Six.

this relatedness to the wood in and through their task because of their possession of 'hands', where hands are conceived as that which 'reaches and extends, receives and welcomes' (Heidegger 1993: 381) that which comes to presence in the wood. Hands have this dual role of 'extending to' and 'receiving what' comes to presence in the material that is being appropriated by the body to the task of production, in this case, the production of a cabinet. The particular shape/form that the cabinet will take is not simply 'in the mind' of the maker. Rather, it is generated in the disclosure accompanying 'extending and receiving'. Heidegger's limit, if I can put it like this, is that he conceives of all of this in non-evolutionary terms. Remarkably, for Heidegger, apes 'do not have hands' (Heidegger 1993: 380). Instead, they have 'organs that grasp' (Heidegger 1968: 16). For Heidegger, hands and the beings that have them are separate from any such agents possessing grasping organs by an 'abyss of essence' (Heidegger 1968: 16).

Heidegger critically appropriates the traditional metaphysical idea of the *scala naturae.* This metaphysical commitment bars his way to fully appreciating animality in terms of life as a continuum of biological forms (Chapter Two) that would include our ancestors and from which modern human beings immanently emerge. Based on the fundamental ontology of Dasein in *Being and Time* Heidegger transforms the traditional Aristotelian-scholastic substance-ontology of human beings, animals and objects: in his 1929-30 lecture course *The Fundamental Concepts of Metaphysics* Heidegger suggests that while Dasein is 'world forming' (*weltbildend*), by analogy to Dasein, objects are 'worldless' (*weltos*) and animals are 'poor in the world' (*weltarm*) (Tonner 2010 and 2011). Now, Heidegger says, 'Every animal and every species of animal as such is just as perfect and complete as

any other' (Heidegger 1995: 194). For this reason, metaphysically, animals do not vary and should not be considered to be differentially sensitive to being: on this view, there is nothing *essentially* different between, for example, the sensitivity of chimpanzees to meaning and the sensitivity of domestic rodents to meaning. This problematic brings out the limit of Heidegger's thought when it comes to thinking about our pre-modern ancestors: in its current form, Heidegger can't account for them (which, to be fair to him, was never his aim: this is more a problem for those who would seek to draw from his work in Palaeolithic archaeology) since, the notion of them being 'more animal' (after Shanks and Hodder's question), by contrast to 'primitive' modern humans which, as we'll see, Heidegger does have room for, is unintelligible on his view. Either our ancestors were human or they were animal: there is no 'between' of becoming here. What will make them human or animal is whether they can die in his specific sense and it is as a result of this ability that they can create "art".

Heidegger's view is that Dasein is capable of transcending pragmatic environments and of creating meaningful worlds. Animals, by contrast, are impoverished precisely because of their inability to do this. Animals cannot transcend their environments of immediate and pragmatic concern. This is Heidegger's anthropocentrism and it is precisely this metaphysical closure that I depart from when drawing on aspects of Heidegger's thought with regard to human evolution and archaeology in service of a dwelling perspective. That is, the view outlined here is that ancestral populations of hominins did create meaningful worlds and so the aspects of Heidegger's thought dealing with agency and meaning is deployable when considering them. Further, meaning creation, it is suggested, involved

transcending the pragmatic, something that Heidegger restricts to modern humans by virtue of death awareness. Our ancestor's worlds and animal worlds are not *essentially* different in kind to human worlds: they are different in degree.

Now, the argument that I'm putting forward is that we can read the archaeological record of our ancestors in terms of the creation of meaningful worlds in a phenomenological sense – where the concept of world implies a sensitivity to being/meaning – and that these worlds became cumulatively more complex over the course of hominization. If the Palaeolithic record is viewed in this way Heidegger's metaphysical anthropocentrism will not stack up in light of the evidence provided by archaeology: research should approach each past world on its own terms, deploying the phenomenological method, and not in terms of implicit metaphysically-based analogy. Irrespective of archaeology, Heidegger should not have isolated in an essentially static metaphysical fashion the categories of animality and humanity from each other. Instead, these categories should be rethought in terms of the evolutionary process of becoming that is hominization. The questions that Shanks and Hodder (Chapter Two) identify that can now be asked within human evolutionary studies from an interpretive point of view can be read as a watershed moment in our approach to Heidegger and dwelling. The move that is being made here is not a move away from all analogical thinking but it is a move away from static metaphysical-analogical thought[22].

[22] Recall Shank's and Hodder's question: 'To what extent were humans more 'animal' in the remote past? (Shanks and Hodder 1995: 31). The results of the exploration of such questions in archaeology should be brought to bear on theorists such as Heidegger in order to bring out unsustainable theoretical prejudices. Heidegger appropriated the scholastic concept of *analogia entis* (analogy of being) in his account of animals and objects. He establishes an analogical hierarchy between Dasein, animals and objects, where Dasein has a focal function: the being of animals and of objects is

Returning to Heidegger, it is true that he does not reduce all human activities to the pragmatic deployment of serviceable equipment but he does use this as his point of departure in coming to terms with 'worldhood' in general. Other activities within the world might involve using ready-to-hand beings but these other activities cannot be reduced to using tools (Polt 1999: 49-50).

If we approach things theoretically, not in terms of their pragmatic serviceability, then we approach them as present-at-hand objects. Here, we might begin to describe something in almost quasi-scientific terms. In this regard the inquirer is attempting to gain an understanding of the object without reference to pragmatic use. In this connection Richard Polt invites us to consider the description of an unknown 'something' given by Dr P, a patient of neurologist Oliver Sacks. Sacks begins:

> 'What is this? I asked…'May I examine it?' he asked…'A continuous surface,' he announced at last, 'infolded on itself. It appears to have' – he hesitated – 'five outpouchings, if this is the word'. 'Yes,' I said cautiously. 'You have given me a description. Now tell me what it is.' 'A container of some sort?' 'Yes,' I said, 'and what would it contain?'…'There are many possibilities. It could be a change-purse, for example, for coins of five sizes'…Later, by accident, he got it on, and exclaimed 'My God, it's a glove!' (Sacks 1985: 13).

---

understood by an analogy to Dasein's way of being (Taminiaux 1994; Tonner 2010, 2011). For the relevance of analogy to palaeoanthropology see Foley 1992. Foley suggests that the principle of uniformitarianism is perhaps the most important element when determining the appropriateness of an analogue model (Foley 1992: 338). Phenomenological analysis relies on a form of analogy since it suggests that knowledge of the structures of experience that hold for all agents can be gained from the description of one's own experience. Here the role of intersubjective corroboration of such structures is crucial.

Although this description evidences pathology on the part of Dr P it is nevertheless reminiscent of many attempts to describe objects (including those composing the archaeological record) in quasi-scientific terms, as present-to-hand ('a container of sorts'), and so not as appropriated to a context of use ('a glove'). Without this reference to pragmatic use description remains at the level of the present-to-hand. Objects can be described in ontic terms but such descriptions do not reach what these objects in fact are; such descriptions do not approach the ontological. By contrast, on Heidegger's account, what something 'is' (its being; "glove-being") is revealed by use. This is an invitation to experimental archaeology: through the attempt to see how to use something, to see how the thing might have been deployed in the attempt to solve some of life's problems in the past, something more than a quasi-scientific understanding of the record becomes possible. Crucially, this 'something more' to the experience of the object is revealed phenomenologically and is, as I have been arguing, an elucidation of dwelling. The essential point is this: the quasi-scientific approach to objects ('continuous surface with five outpouchings') cannot explain why they are/were meaningful to agents (gloves = warmth or cleanliness or safety or fashionable desirability and so on). It is precisely this 'mattering to' agents that the phenomenological or dwelling perspective attempts to elucidate (gloves = warmth, depending on the context of the site) and it does so with reference to the world (cold) and to others (hunters and craftspeople and so on) within the world.

Analogy plays a part in this: as Foley puts it, the 'ultimate test of an analogue model… [is that]…its material consequences can be observed' (Foley 1992: 340). Foley's example is of moving inferentially from 'A', contemporary ethnographic

observation of Kalahari hunter-gatherer behaviour to 'D', archaeological interpretation of prehistoric hunter-gatherer behaviour by way of stages 'B', the material debris of hunter-gatherer life (ethnoarchaeology), and 'C', excavation and the archaeological record. The analogue models help to bring out the 'processes, patterns and principles' from contemporary studies (in this case, the analogue model of the Kalahari hunter-gatherers) that act as a 'source of expectations about the past' (in this case, our prehistoric hunter-gatherer) (Foley 1992: 338).

While not being dogmatic or naïve the suggestion is that analogue models show 'points of comparison between life in the present and life in the past' (Foley 1992: 340). Analogical considerations hold true in phenomenologically informed archaeology too: if, for example, gloves = warmth in the present and the subjective experience of this provision of warmth in the present is available to description in terms of its structures then by virtue of uniformity and intersubjective corroboration we can use this experience in the present as a starting point for comparison between life (behaviour and experience) now and life (behaviour and experience) then. Phenomenological description of experience now occurs at the starting point of the inferential process (Foley's 'A' stage) alongside any other analysis and, as is the case with ethnographic analogies, the material archaeological record must bear the analysis out.

Polt reminds us that, for Heidegger, the proper kind of 'sight', where what is seen is the 'use' of the object for an agent, can be thought of as *Umsicht*. This is precisely the kind of sight that occurs within an *Umwelt* (Polt 1999: 50-51). *Umsicht* is circumspective concern: it is 'know-how', practical coping, and it is this sense of

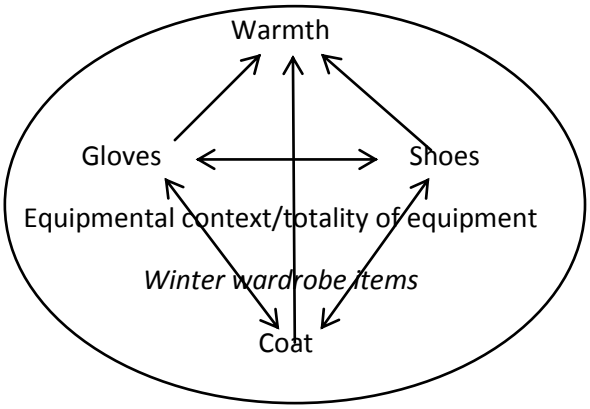
practical coping within an environment that Heidegger sought to outline with his notion of Dasein's being as care. In fact, I use the term 'care' in this thesis to bring together Heidegger's cognate notions of *Besorgen* (concern) and *Fürsorge* (solicitude). While *Sorge* refers primarily to Dasein's practical care for itself, *Besorgen* refers to the Dasein's activities in the world. *Fürsorge* refers to Dasein's being-with-others. These three notions are inseparable from one another (yet *Sorge* is the dominant term (Inwood 1999: 35)). These three dimensions of care enable Heidegger to bring together being-in-the-world and to account for our solicitude for others (our care for them) and our concern with culture and world history. It is because our being is care that we can 'care for' our compatriots and create artworks that are world opening events.

Sticking with the example of gloves and sticking with a contemporary human agent *qua* Dasein, Polt asks us to consider a pair that might have been worn on a winter's evening: an agent's circumspective concern reveals what these objects 'are' (their being, the ontological level of description), they are gloves to be worn 'in-order-to' (purpose, function, use) protect one's hands from the cold. It is the agent's *Umsicht* that discloses this purpose of the object to them. The gloves refer to a *totality of equipment*: they are part of a 'winter wardrobe' that might also be deployed and relied upon when utilising other items of equipment/beings (such as a sled or a car). An agent's understanding of this equipmental context is more basic to them than their understanding of the particular item, in this case the gloves. After all, should the gloves be lost, something else (perhaps a pocket on a parka) would do. The archaeo-phenomenological point here is that, by analogy, what is revealed by phenomenological description of contemporary gloves forms the basis of inference

(or ‘imaginative variation’, the Husserlian process of moving from an individual instance of a phenomenon to the appearance of what is invariant in all possible instances and across all possible variation (see Moran and Cohen 2012: 159-161)) for the interpretation of, for example, a pair of Upper Palaeolithic mittens, that would have formed part of an ‘Ice Age wardrobe’, that we take to have been produced by some of the bone and antler tools discovered from the Aurignacian onward (Pettitt 2005: 158).

The gloves purpose, their ‘in-order-to’, refers to the particular ‘work’ of providing warmth: this is their ‘toward-which’. The gloves (even if made of a modern synthetic material, which ultimately derives from the natural world) refer to or point toward nature in so far as they were fashioned from natural materials and in so far as they are designed to protect the wearer from nature (the cold). The gloves also refer to a wearer: perhaps, due to their size, they refer to someone with small hands (a child, a woman etc.,) (Heidegger 1962: 97-101). This description captures Heidegger’s notion of *Verweisung*, translated as ‘reference’ and this notion is central to understanding Heidegger’s notion of ‘worldhood’. It is also central to understanding my deployment of his thought in archaeology. Relations of reference are brought about by agent’s activities. Such relations are the referential glue that stick worlds together. The dwelling perspective, as I develop it here, is fundamentally concerned to provide an archaeology of these relations of reference. Such archaeology begins in the present and works its way down through the “sediment of experience”. Being possessed of a reference is what enables things to point at (to be ‘about’) other things (see Figure 4.1).

Figure 4.1: *Heideggerian relations of reference in a contemporary Dasein's world (After Polt 1999: 51). The ellipse represents the totality of equipment; the arrows represent reference relations.*



There are moments when these relations of reference can be brought to an agent's attention. Such moments include those occasions when our smooth coping within an environment with our useful items is interrupted: when, for example, we notice a stone in our shoe or when we notice a hole in our coat that lets in the cold, or when we can't find our gloves. These moments bring the phenomenon of worldhood to our attention because we are forced to focus upon such reference relations, not least because we might have to substitute one object for another. These relations of reference provide orientation in such situations: agents are guided by these relations and it is because of them that agents can find substitute items that will serve the required purpose. In these cases objects begin to take on the manner of being of present objects that are no longer wholly subsumed in use. In fact, as with the stone in the shoe example, such objects in these circumstances can in fact resist our use of them.

Worlds/referential totalities/referential contexts are dwelling places wherein objects are not only available as 'useful objects' but as *meaningful* ones (Heidegger 1962: 105, 107, 121). Agency within worlds (or world-agency networks), on Heidegger's account, can be essentially impoverished, as is the case with animals, or it can be 'world forming', as is the case with modern Dasein, who is separated by a "gulf of essence" from all animality, by virtue of mortality. This evaluative perspective is based upon Heidegger's privileging of Dasein together with his deployment of metaphysical analogy: departing from this metaphysical perspective will allow researchers to approach various worlds (or world-agency networks, or social ontologies), be they animal or ancestral, more on their own terms without evaluative prejudice creeping into the analysis. To this extent, engaging with Heidegger and phenomenology in archaeology is an essentially reflexive affair.

Analogy to contemporary world-agency is not abandoned. If it were then there would be no basis for comparison. Rather, such worlds will be approached in a more truly phenomenological manner by a theoretically informed and reflexive analyst who doesn't start with an implicit metaphysical commitment and whose results are not prejudicially evaluative. Philosopher of archaeology Alison Wylie puts the situation with regard to analogy as follows:

> analogical inference is not categorically faulty or misleading…analogical inference can be strengthened by a careful appraisal of dissimilarities as well as similarities and, most important, by a discerning use of source- and subject-side evidence to establish arguments for the relevance of specific similarities in observable properties to further, inferred (closely delimited) similarities between unobservable aspects of the cultural past and their counterparts in living contexts. These strategies will never establish interpretive conclusions with certainty, but they do offer a viable alternative to "artefact physics" on the one hand, and unconstrained speculation on the other. They are strategies for eliminating error and assessing likelihood,

> improving credibility and delimiting uncertainty, in a field in which the most interesting questions…lead beyond the safety of clear-cut, empirically secure answers (Wylie 2002: 153).

The basis of analogy is contemporary experience which must be analysed in the most comprehensive and multi-disciplinary ways possible. The role of intersubjective corroboration is fundamental here. Phenomenological analysis need not be a solitary affair: different phenomenological descriptions (which will deploy *eidetic variation*, the imaginative variation of features of an object under analysis so as to reach those that are essential to it) by different analysts should be compared. Intersubjective corroboration of descriptions is 'concerned with replication and the degree to which the discovered structures are universal or at least sharable' (Gallagher and Zahavi: 2012: 31). Phenomenology is one way into this problematic and will allow for ongoing and careful appraisal of similarities and dissimilarities, as Wylie notes, while at the same time allowing for a greater theoretical reflexivity and sensitivity to our implicit metaphysical commitments (such as Heidegger's to *analogia entis*) to emerge.

To take a modern example: it would be *a priori* odd if the result of primatological fieldwork concluded that chimpanzee world-agency networks were "essentially impoverished" when compared to human world-agency networks. Consider the following example: Pettitt (2011a) suggests the following interpretation when discussing compassion and the roots of morbidity and mortuary activity.

> At Gombe, infants who lost their mothers…displayed numerous symptoms of behavioural disorders in the physiological and behavioural realms, all of which began with signs of clinical depression. Some of the infants gradually recovered and reverted to normal behaviour, others didn't. The premature

> loss of play activity and general lethargy are notable…I interpret these responses as expressions of mourning activity of a kind found among modern human groups…Although for chimpanzees one need have recourse to no more complex an explanation than an outpouring of emotion following death, it is such behaviour, I argue, that would later evolve into formal (i.e. rule-regulated) mourning in human societies (Pettitt 2011a: 25).

A far more productive approach than one that saw in this description no more than poverty when compared to (modern) human responses to death would seek to elucidate how such chimpanzee world-agency networks were different to other networks, including human but also other primate networks, in order to begin to understand the nature of their cognitive abilities including their sensitivity to meaning as this is lived *qua* dwelling. Such a study would be interested in differential sensitivity to being or meaning and would approach its subject species not as a representative of a different (impoverished) metaphysical kind but rather as another example of world-agency within an evolutionary horizon that might well be different to the agency and meaning sensitivity of other groups but that nevertheless repays analysis on its own terms. As Wynne has put the point with regard to comparative animal psychology (rather than, of course, dwelling):

> Evolution teaches us to expect similarities in the psychology of closely related species and differences in the psychology of distantly related species, but it does not tell us what the appropriate measures of psychological similarity and dissimilarity might be…each species is well adapted to its chosen environment and comparisons can be offensive. While the task of comparing the psychological abilities of different species may be difficult both philosophically and practically, it is important enough to be worth making the attempt (Wynne 2001: 181).

The first ‘offense’ to avoid is the kind of anthropocentric and metaphysical one committed by Heidegger.

Boesch and Boesch-Achermann (cited in Pettitt 2011a: pp26-27) describe the activities of a group of chimpanzees on the occasion of the death of an infant named Bambou. One act they note to have particular significance was the soft 'hou' calls made by Serène, the preferred playmate of Bambou, and some other chimps. These events happened the day following Bambou's death:

> At 9.20 [Bambou died the previous day at 10.45 from a suspected broken neck] the body was so swollen that the skin tore in several places and flies started to swarm. At 14.30, after a long rest, the group started to move and Bijou [Bambou's mother], hesitatingly, looked alternately at the group and at Bambou's body. Then Mystère, Goma, Belle, Agathe, and Ondine came back to Bambou. Mystère and Serène…climbed a small tree above the body, looking down on it. Ondine, Mystère, Gona and especially Serène made a few soft 'hou' calls. Then, they all left silently. At 14.56, leaving Bambou behind, Bijou started to catch up with the group…[some of whom were waiting for her]…After 8 minutes…[she]…alone, came back to Bambou and carried him for over 20 metres. She hesitated in this way for another 80 minutes, until she left him definitively behind (Boesch and Boesch-Achermann 2000: 250, cited in Pettitt 2011a: pp26-27. Square brackets: my additions).

Pettitt agrees with Boesch and Boesch-Achermann that the soft 'hou' calls made by the returning females make behavioural sense if these chimpanzees 'were all aware' that they would not see Bambou again (perhaps allowing for this behaviour's description as an example of a detaching ritual (although, for Anderson et al, chimpanzees lack death-related rituals (Anderson et al 2010: 351)). But, it remains puzzling if we cannot attribute this awareness to them. In addition to this the description attributes hesitation to Bijou on the basis of her behaviour. Pettitt suggests that it is 'apparent empathy' that may be the cause of these chimpanzee's actions and that if so morbidity may unfold through compassion that arises out of

feelings of empathy; this may result in survival strategies (since investigation of corpses may lead to information about causes of death) (see Pettitt 2011a: 27)[23].

The phenomenological point here is that such ascriptions, of empathy, compassion and awareness, on the basis of perceived behaviours are founded upon our experiences of these phenomena in our lifeworlds for ourselves in the first-person: experiential analogues are then ascribed to other agent-beings on the basis of their behaviour. In fact, such phenomena is grouped together by Heidegger as *Fürsorge* and it is this dimension of care (*Sorge*) that he brings out in his early Twentieth Century phenomenological analysis of contemporary Dasein as being-with-others. In other contexts there will be material traces of like activities and it is the job of archaeo-phenomenological analysis to flesh out descriptive comparisons between life (behaviour and experience) now and life (behaviour and experience) in the past that begins to make sense of these material traces.

References are not restricted to utility: they could be religious, aesthetic or political (see Polt 1999: 52). Signs[24] are also cases of reference that function to orientate a Dasein within an environment: they situate an agent within their referential context (Heidegger 1962: 110; Polt 1999: 53). Heidegger's example in *Being and Time* is of an indicator light (a turn signal) on a car (Heidegger 1962: 108-110). Should a car in front of you indicate to turn right while waiting at traffic lights in the United

[23] For their part, Anderson et al ascribe to chimpanzees self-awareness, empathy and cultural variation in many behaviours (Anderson et al 2010: 351).

[24] Recall Grice's notion of natural meaning. This occurs when some 'thing' is a non-conventional sign for some other thing; spots on your face meaning (pointing at) you having measles, for example. On this analysis Bambou's motionless body would be a natural sign of death.

Kingdom in the year 2014 then there will be a number of things that you, as the driver in the car behind them, might do. Responding to this sign in terms of practical smooth coping would not involve analysing the frequency of the light, nor would it involve establishing whether or not it came from a conventional bulb or from some kind of light emitting diode. It would instead involve looking to one's left somewhat automatically to see if it were possible to pass the car that is blocking your progress by sitting in a lane not served by a right turn filter light. This experience might involve annoyance, frustration, anticipation and calculation all of which operate on the basis of the agent's familiarity with these relations of reference and their know-how. Reacting to this situation 'correctly' involves an agent's familiarity with this entire system of references as a background upon which their action (and experience) takes place: had that system of references been different, so too would a correct reaction.

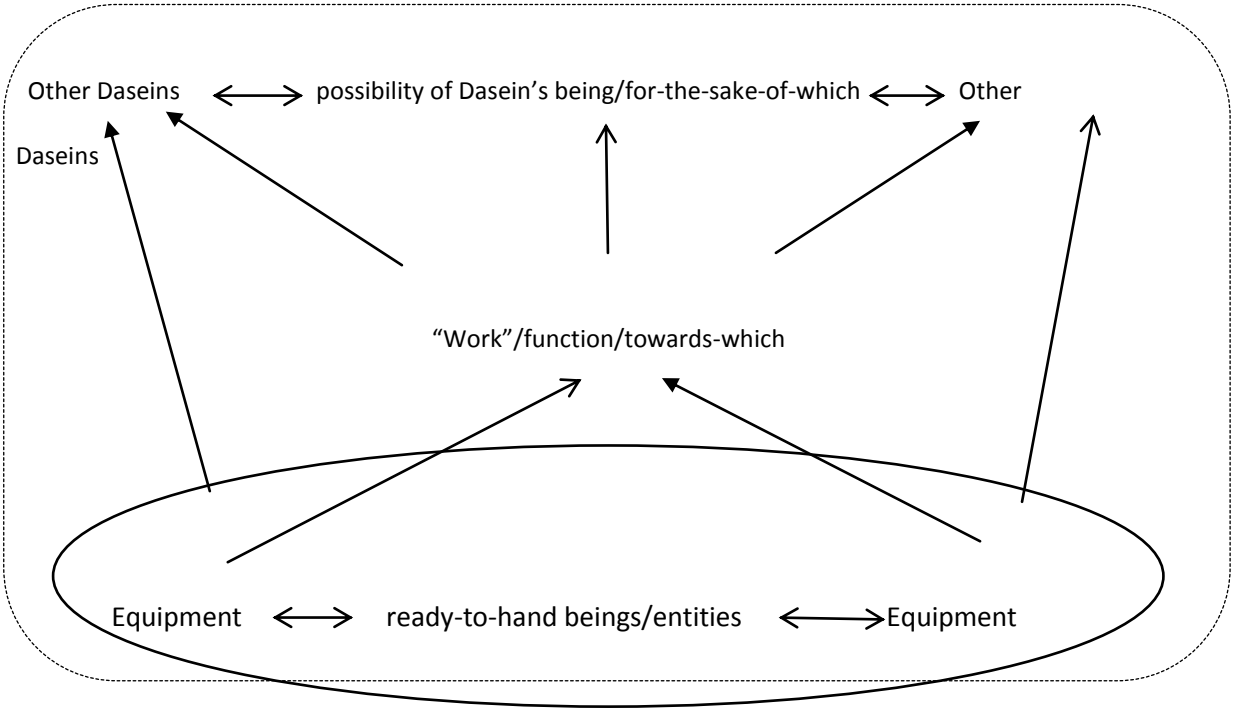
When Heidegger discusses his famous 'hammering' example he does so in a section of *Being and Time* that deals with significance and involvement; there he introduces the concept of the 'for-the-sake-of-which' (see Figure 4.2 below). It is worth quoting Heidegger at length here:

> When an entity within-the-world has already been…freed for its Being, that Being is its "involvement"…The fact that it has such and involvement is *ontologically* definitive for the Being of such an entity, and is not an ontical assertion about it. That in which it is involved is the "towards-which" of serviceability, and the "for-which" of usability. With the "towards-which" of serviceability there can again be an involvement: *with* this thing…which is ready-to-hand, and which we…call a "hammer", there is an involvement in hammering; with hammering there is an involvement in [possibly] making something fast; with making something fast, there is an involvement in protection against bad weather; and this protection 'is' for the sake of [*um-willen*] providing shelter for Dasein – that is to say, for the sake of a possibility of Dasein's Being…In a workshop, for example, the totality of

> involvements…constitutive of the ready-to-hand…is 'earlier' than any single item of equipment; so too for the farmstead with all its utensils and outlying lands. But the totality of involvements…goes back…to a…primary 'towards-which'…[that is]…a "for-the-sake-of-which"….pertain[ing] to the Being of Dasein, for which, in its Being, that very Being is essentially an *issue* (Heidegger 1962: 116-117. Square brackets excluding around *um-willen*: my additions).

In this quote, Heidegger has connected ready-to-hand items of equipment to their work (towards-which) and he has connected both of these relations to a possibility of Dasein's being, in the case above, to getting shelter from inclement weather. These features of the analysis emerge with reference to a world wherein the practice of hammering takes place: they remain abstract until details are added that flesh the analysis out. This can occur in relation to what other information is available to the analyst. Heidegger believed there to be multiple Daseins (as being-in-the-world) but all of these were applied to fully modern humans. Descriptions of Dasein(s) can form the analogical basis for engaging with non-human (we have seen that Heidegger would accept this but that he would stress animal impoverishment) and ancestral agents (which Heidegger can't account for). While this will represent something of a departure from Heidegger himself it will represent an advance in the dwelling perspective.

Figure 4.2: *Heidegger's notion of the 'For-the-sake-of-which' (based on phenomenological description of contemporary Dasein)* (after Polt 1999: 54 and 61). *The unbroken ellipse represents the totality of equipment; the arrows represent reference relations; the rectangle represents the world, which is the totality of references. A world is a network of references; it comprises a system of meanings and purposes that organise the identities and activities of agents within it; it is within worlds that entities are intelligible to agents.*



For Heidegger, what any being 'is' at an ontological level is its use: at an ontical level it might be described in terms of other properties that it bears (being red and/or grey, heavy or light and so on). The possibility for being of Dasein (being sheltered) and the activity of hammering is tied to a place: it is tied to a workshop and to a weather-scape: it is tied to a locale wherein Dasein must find shelter. The totality of

involvements that make up the ready-to-hand is prior to any one item of equipment; this is also true of wider contexts of work, such as farmsteads, and for their 'outlying lands', which, of course, connects the analysis to locales and regions. What each of these 'beings' is, is constituted in interpretation. The totality of involvements – the world – ultimately goes back to Dasein's being and to a primary 'for-the-sake-of-which' relative to Dasein. The chain of functions (hammering and so on) *qua* involvements that are essential to the being of the ready-to-hand relate to and depend upon some possible "way" (self-interpretation) for Dasein 'to be' in its world (Heidegger 1962: 116-117; Polt 1999: 53-54).

The kind of self-awareness involved in self-interpretation that more or less unifies a chain of functions *qua* involvements is a feature of modern human Dasein on Heidegger's analysis. Recent studies have suggested that, in addition to human beings, some animals (including chimpanzees and elephants based on their ability to recognise themselves in mirrors) are self-aware (Gamble et al 2014: 145). In this context the word 'intentionality' refers to a hierarchical order of awareness of the, for want of a better way of putting it, 'contents of (our) minds' (Dunbar 2004: 45). Six orders of intentionality have been proposed (see Table 2.7) and self-awareness is placed at the first order. In Chapter Two I suggested that 'dwelling' in the technical sense of relating to mortality would emerge at the level of fourth order intentionality and so would be a feature of all large-brained hominins[25]. Third order intentionality is also a good candidate for the emergence of the kind of self-

[25] This discussion about chimpanzees might lend weight to an argument for the emergence of elementary mortality or death-awareness at the second level of intentionality, which would include 5-year old modern human infants and extinct small brained hominins, as well as the great apes.

interpretation involved in the above since it involves behaving in terms of social norms (*'I am this kind of person amongst the kinds of people that there are'*).

What a move away from Heidegger's metaphysical position allows is an evolutionary perspective on the development of the kind of cognition and worldly engagement necessary for self-interpretation to happen. In other words, it would allow for an evolutionary-dwelling perspective and it would open the door to analyses of earlier hominin worlds ("non-human worlds" if the term 'human' is restricted to fully modern humans; "ancestral human worlds" if the term 'human' is used more widely) in terms of dwelling. One point here is crucial: by talking about phenomenological accounts of self-interpretation and experience we are not attempting to answer the kind of question which Gamble et al have described as 'meaningless' and 'inappropriate' namely, did 'the maker of the Schöningen spears feel satisfaction, pride or fear?' (Gamble et al 2011: 129).

Feelings of satisfaction, pride or fear are possible only on the basis of a kind of engagement with the world: they are possible experiences within a range of experiences that could be had by beings capable of a kind of cognitive engagement with the world and that take shape upon a background or horizon of self-interpretation. An artisan can only feel satisfaction or dissatisfaction about their products on the basis of an understanding of the practices of craft and design and success and failure that accrue to them within the context that they are working in. In other words, they have to already understand themselves *as* an artisan before they can become a satisfied or dissatisfied artisan. From an evolutionary perspective, a

threshold has to have been reached in order for satisfaction or pride in one's work to occur. Phenomenology is interested in the structure of the kind of cognitive engagement that would underscore individual feelings of satisfaction and dissatisfaction: it will, of course engage with these experiences, but it will do so in order to draw out their underlying structures. Phenomenological analysis seeks to shed some light upon these structures based upon an account of subjective experience (not a subjective account of experience) from the first person perspective. But, as noted, starting from the first person perspective does not imply that the entire enterprise be solipsistic. Subsequently, this experience can be intersubjectively verified and investigated analogically in order to determine what might be universal or sharable.

The content of any self-interpretation might be insignificant but from an evolutionary perspective the capacity to create a self-interpretation is significant and this capacity will be exercised within a particular context or lifeworld. One way of looking at this is to think of the phenomenological question as a transcendental question (a question about the conditions of possibility of something to occur) taking place within an archaeological and evolutionary context. Heidegger is interested in uncovering the transcendental conditions that enable an encounter with beings. Whatever appears to Dasein and howsoever any Dasein takes itself to be is conditioned by the fundamental *a priori* of that Dasein having a world (Tonner 2010: 46). 'Being' 'is a transcendental structure or condition of possibility for the presence of beings. Being…allows things to show up for us *as* what they are' (Tonner 2010: 75). From an evolutionary perspective informed by Heideggerian phenomenology the point is that in order to have the kind of meaningful experiences

(such as of success or failure, pride or satisfaction) noted by Gamble et al an agent must have attained the level of dwelling. Agents who dwell can generate self-interpretations upon the background of shared self-interpretations within lifeworlds. Phenomenological engagement with instances of experiences of fear or satisfaction in the present are interesting to phenomenologists in so far as they can tell us something about the "situatedness" of that experience within a horizon of possible experiences. The case that I am making here is that we can begin to engage with past contexts or horizons of possible experiences from a perspective influenced by both Heidegger and phenomenology in the present.

Phenomenological analysis deployed using my methodology ought to bring the analyst to the point of description of relations of reference in the present that surround an object. This description can be intersubjectively verified and can serve as the basis for archaeological investigation of such relations as they might surround an object within a past world. The point of archaeological intersubjective verification of descriptions is to ascertain the extent to which the (transcendental) structures described in the present and extrapolated to the past (structures like care, finitude, mortality) are universal to a practice ("burial", for example) or at least sharable (feelings of sympathy for deceased compatriots). Starting from a non-anthropocentric understanding of care is important since it will avoid characterising an experience beforehand as 'modern', or 'evolved'. Similarly, integrating Heidegger's notion of disclosure with recent discussions of orders of intentionality might provide additional impetus to a more inclusive account of care than Heidegger's own.

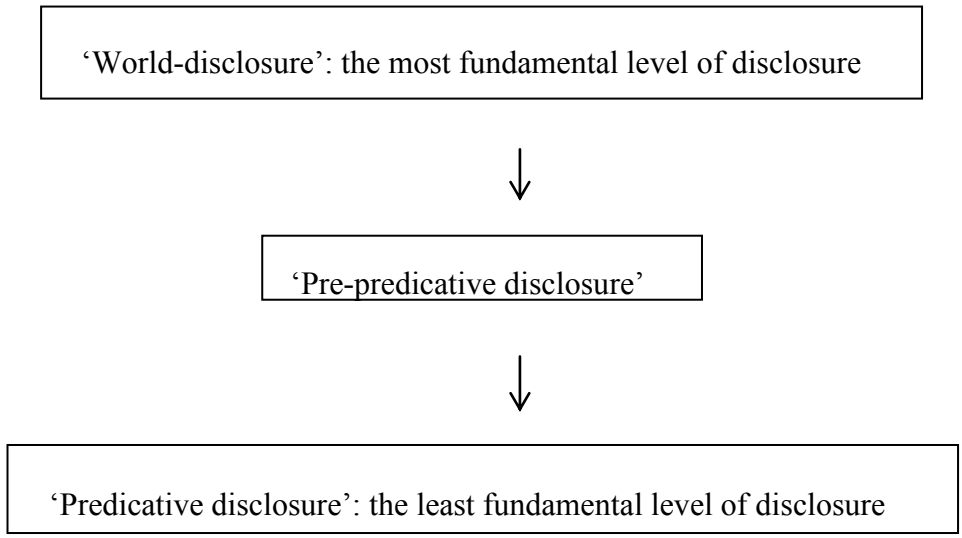
Richard Polt's example of modern human Dasein self-interpretation is of a manager typing a memo on their computer keyboard (ready-to-hand item of equipment) (Polt 1999: 53-54). Such self-interpretation would certainly require the attainment of Dunbar's fourth level of intentionality, if not the fifth level of intentionality. The keyboard is *for* typing (this is the item's 'work', its 'toward-which' or function). The activity of typing is conducted in a particular place [office? home? airport café?] surrounded by other items of equipment [lamp? printer? coffee cups?]. The activity of typing is *for* producing a memo (which refers to other Daseins). The memo is *for* increasing efficiency in the manager's company (which refers to contemporary working practices). The efficiency is *for* profits (which refers to the wider economy and to the cultural context). The profits are *for the sake of* the manager's and the other employee's *being*-successful (which is a primary possibility of Dasein's being) within this context (since the markers of success – in this case profits – will vary depending upon the context).

"Being successful" is a self-interpretation (a possibility of Dasein's being) that enables an agent or group of agents to define who they are in the world (which is a determination of their being (Heidegger 1962: 117; Polt 1999: 53-54). The entities encountered within a world refer to other agents (see Figure 4.2). One's equipmental context is also a social context: the glove examined by Dr P was bought from a particular assistant in a particular shop owned by a particular company, directed by a particular Director at a particular time in history. Heidegger names this aspect of being-in-the-world "being-with" (Heidegger 1962: 153; Polt

1999: 60). He puts it this way: 'The world of Dasein is a *with-world* [*Mitwelt*]. Being-in is *Being-with* Others' (Heidegger 1962: 155).

On Heidegger's account, disclosure (emergence, unconcealment, truth, the meaning of being, the occurrence of being within finite human understanding) happens at three levels (Figure 4.3).

Figure 4.3. *The levels of Heideggerian disclosure*.



World-disclosure is the original opening up of a field of significance (the "*Da*", the world) for Da-sein (being-there; restricted to modern human existence by Heidegger). This level of disclosure allows the beings that are met in experience to be meaningfully present to agents. Such disclosure would, in a sense, *enable* Dunbar's first order intentionality: world-disclosure forms the basis for any "aboutness" of beliefs (including beliefs about oneself). Being 'meaningfully present to agents' is equivalent to a pre-predicative encounter with objects: knowing

something pre-predicatively (pre-linguistically or pre-conceptually) enables it to be used by an agent within environments/worlds of practical engagement and concern. In terms of Dunbar's orders of intentionality, pre-predicative disclosure would occur up to and including level six (see Table 4.1)[26].

World-disclosure and pre-predicative disclosure (*qua* availability of beings) enables predicative disclosure. So, on Heidegger's account, the foundational levels of disclosure that characterise an originary opening-up of a field of concern and practical (non-linguistic) engagement therein are pre-requisite for and enable the kind of disclosure that is present in linguistic-conceptual judgments (required by the fifth and sixth orders of intentionality). Heidegger thinks that what he calls the 'essence of truth' *qua* world-disclosure is what makes conceptual truth possible (Sheehan 2003: 106-111).

[26] It is important to note that Heidegger's and Dunbar's analyses start from different theoretical assumptions. While I have related their thought here I am aware that a more fundamental analysis is required in order to be able to show the compatibility (or otherwise) of their views. Such an analysis would focus upon the concept of 'intentionality' as a starting point and would show the extent to which its meaning varies in phenomenology and evolutionary psychology.

Table 4.1. *The Orders of Intentionality and Heideggerian levels of disclosure.*

Order of intentionality / level of disclosure	**Agents**
Sixth order / world, pre-predicative and predicative disclosure	A restricted number of modern humans
Fifth order / world, pre-predicative and predicative disclosure	Modern human beings with modern languages
Fourth order / world and pre-predicative disclosure, (possibly) predicative disclosure	*H. heidelbergensis*; the Neanderthals
Third order / world and pre-predicative disclosure	All hominins with a large brain (>900 cc)
Second order / world and pre-predicative disclosure	Modern human children at age 5; all hominins with a small brain (400-900 cc); possibly the great apes.
First order / world disclosure	Lesser apes and monkeys, mammals.

Applying these phenomenological insights archaeologically puts flesh on the bone of the dwelling perspective and, when considering the Palaeolithic, we can think of it as taking its point of departure from Gamble's broadly phenomenological definition of culture in *The Palaeolithic Societies of Europe* (1999) (discussed in

Chapter 3): this account emphases agents active engagement within environments (Gamble 1999: 420). The diagrams offered in the present chapter seek to outline the parameters of such active engagement in terms offered by Heidegger in service of the reconstruction of social life in the Palaeolithic, specifically with regard to artistic practice and mortuary practice, the subject matter of the following two case studies (Chapters 5 and 6 respectively). The proposed result is a phenomenologically informed discussion that attempts to outline the relations of reference that partly (since full disclosure is impossible) constituted a past world wherein agents dwelled: these diagrams attempt to aid reconstruction of past 'lifeworlds' and in order to do so it is necessary to draw upon the work of Heidegger and Gamble (and others).

A combination of the terminologies offered by Heidegger and Gamble should help to make this possible. Gamble's social perspective looks to the individual and to the creation of networks (Gamble 1999: 67). Exploring the Palaeolithic by way of individual and group action must involve the construction of methodologies that are capable of oscillating between individual and 'society'. Heidegger's dwelling perspective is based upon outlining the relations of reference that constitute (past) worlds and in each case it is the individual Dasein's 'possibilities for being' in any world that analysis begins from, while the relations of reference uncovered provide the vectors for tacking between the individual and the group or society.

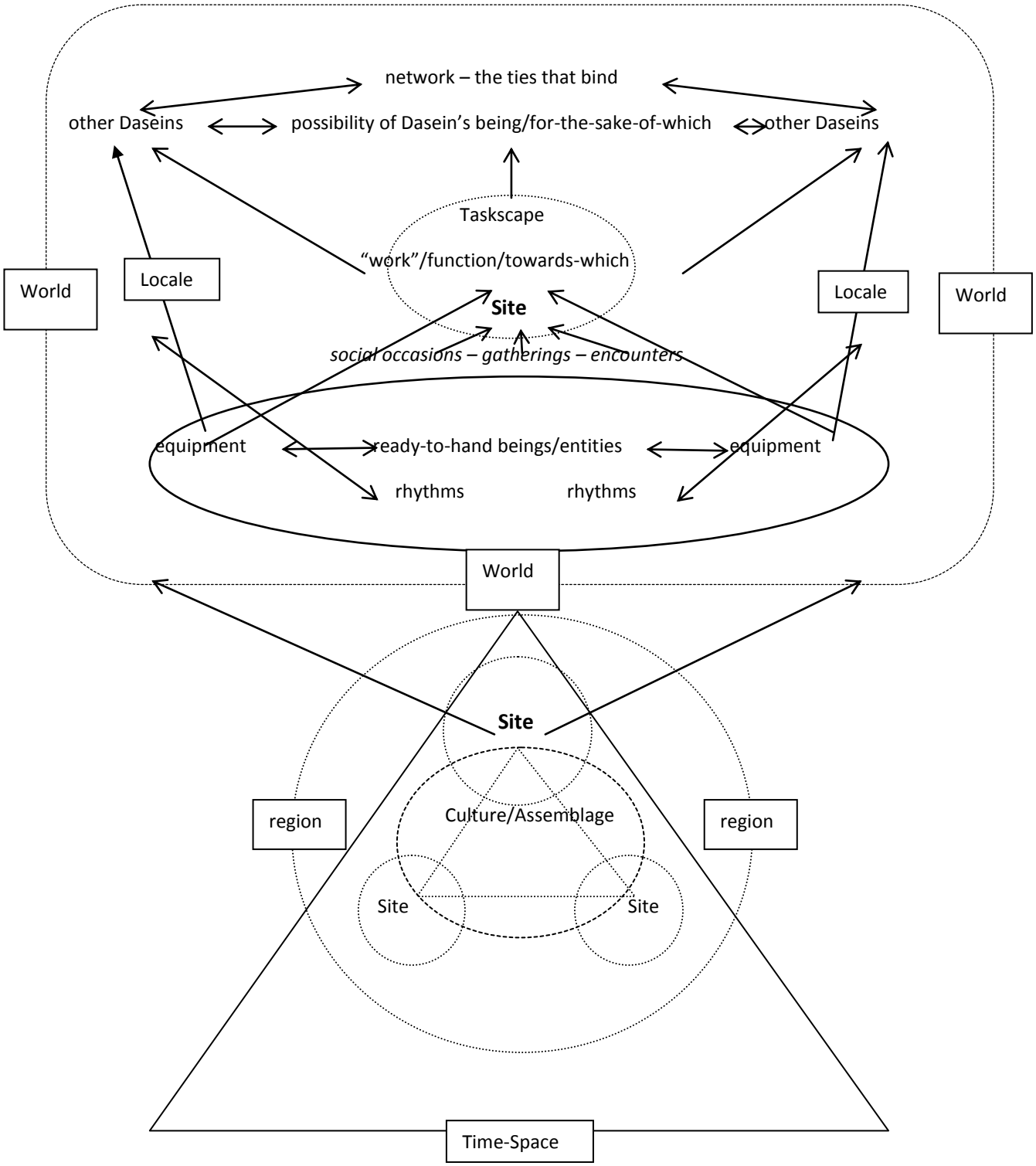
Being-in-the-world (*In-der-welt-sein*) becomes the basic starting point for enquiry. Gamble's network approach is taken in terms of being-with-others. Ingold's notion of the 'taskscape' is deployed in terms that approach Heidegger's notion of the 'for-

the-sake-of' and the ready-to-hand. Social actors are Daseins and they make a society what it is through action. Their networks include the "ties that bind individuals" and their resource-based (emotional, symbolic, material) networks (Gamble 1999: 63-64). Sites within the dwelling perspective can be seen in terms of the spatial scales of locales and regions that are in turn linked by rhythms. For example, the distance between two points is not numeric: it is temporal and rhythmic; "it will take two days to get there and we will need to hunt along the way". Here, as outlined phenomenologically, an archaeological culture denoted in the present expresses a past active engagement that structured a past social world (see Figure 4.4).

The lower diagram in Figure 4.4 represents the relationships of reference between sites in a region (indicated by the larger circle). The large triangle enclosing this lower diagram indicates 'time-space': this denotes a particular historical configuration of meaning set up by historical Dasein by virtue of what Heidegger calls *Ereignis*. Each of the three sites (which is, of course, an arbitrary number) is linked by items of a shared material culture. This shared material culture is indicated by the notions of Culture or Assemblage (a collection of artefacts taken as an analytical unit). The broken circle in the lower diagram indicates the possible distribution of this assemblage while the smaller triangle indicates that each of the three sites identified here participates in it. We then scale up from the lower diagram and focus on one site in the higher diagram. The site indicated in bold in the lower diagram is further analysed in terms of dwelling. Here the site is situated within a locale that is constituted by relations of reference. This locale would have been traversed by agents: locales, constituted by relations of reference, would be

measured by the temporal sense of ‘nearness’ and ‘farness’ (‘three days walk away’ and so on) from the current location of a Dasein. The locale occurs within a world in Heidegger’s sense. The equipmental context of ready-to-hand beings, the functions of beings (their ‘works’), the rhythms of production and consumption, their ‘for-the-sake-of-which’, constitute a taskscape that itself is related by relations of reference to other Daseins in a particular Dasein’s network. The unit of analysis at the first level of this multi-scalar set is the individual Dasein. It is this individual Dasein’s world that is opened up in the present by virtue of phenomenologically informed archaeology. As a contemporary reflective endeavour phenomenology brings to the table a methodological ‘way in’ to the relations of reference that gave orientation to a life within a context: the ‘totality of involvements’ relate to Dasein’s being and the chain of functions *qua* involvements relate to and depend upon a possible self-interpretation of a Dasein.

Figure 4.4. *Heidegger and Gamble. Figure 4.4 combines Heidegger's and Gamble's analyses.*



Significantly, the analysis outlined in diagram form in Figure 4.4 remains, in a sense, abstract. The phenomenological point of this is that the diagram can be used to flesh out different contexts. Recall here Luft and Overgaard's analysis of the commitments of philosophers who work in a phenomenological tradition. All work out of the first-person perspective: they do so in order to describe what is given to intentionality (the 'aboutness' of mental phenomena). Working out of a first-person perspective does not disbar adopting a third-person perspective for the sake of different analyses. What the phenomenologist insists on though is that this third-person perspective not be seen as a 'view from nowhere'. There is no '*pure* third-person perspective' (Gallagher and Zahavi 2012: 46). The third-person perspective emerges out of intersubjectivity, which is the encounter between 'at least two first-person' perspectives (Gallagher and Zahavi 2012: 46).

The 'aboutness' identified in Figure 4.4 is approached in terms of relations of reference (indicated by arrows). The ready-to-hand item of equipment 'is about' its function (the keyboard is, in this sense, 'about' typing). Phenomenology is committed to research that produces intersubjectively verifiable results: different phenomenologically informed archaeologists should be able to generate conclusions about items recovered from sites, and about the sites themselves, that are commensurate.

Constructing an example should help to show how phenomenological considerations might amplify our understanding of an object from the archaeological record. It is important to note that analysis without any

phenomenological considerations provides descriptions that remain at the level of the present-to-hand. That is, they provide more or less thorough descriptions of objects in quasi-scientific terms. Recall, Heidegger distinguishes between the modes of being of Dasein, the ready-to-hand and the present-to-hand. Ready-to-hand beings are items taken as available to human understanding and interest. This is why the category of equipment is a paradigm case of the ready-to-hand. Ready-to-hand items are structurally intelligible because of their reference to use by agents. Present-to-hand objects are objects taken as things that have not been appropriated to a worldly context. Present-at-hand items can be described more or less completely in terms of properties such as colour, weight, mass, size and so on, but all of these properties are possessed by the object independently of any reference to an agent's use for them. Phenomenological analysis aims at articulating the intelligibility of items in terms of their relationship to understanding and interest.

Let me take the example of the stone lamp discovered in 1899 by Rivière at La Mouthe (Dordogne, France) (See Figure 4.5). I will proceed generically (without worrying too much about whether a stage in the process belongs to a particular phenomenologist's analysis) and in stages following Cox's (2010) useful analysis. What follows should be taken to be an attempt to outline the phenomenological 'way in' to archaeological problems. First: (1) when beginning with any object (from a piece of stone to a landscape) perform a phenomenological reduction (*epoché*). This involves suspending (or putting in parenthesis) any previous ideas about the nature of the object in question. Reduction just means suspending our prior beliefs, personal or academic, about an object in order to let the object adumbrate itself phenomenologically. Such a reduction will always be imperfect

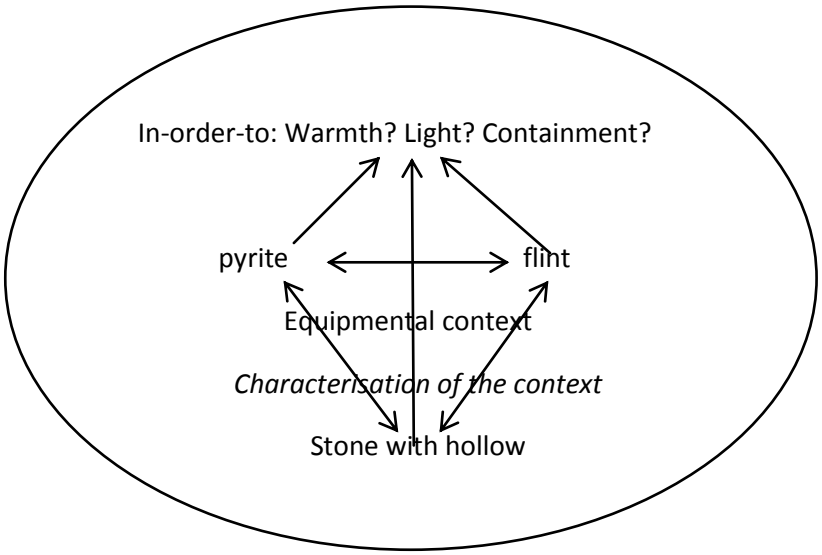
and should best be thought of in terms of the adoption of a reflexive attitude noting that any inquiry begins with an inquirer who will have certain pre-judgments and pre-dispositions. Reduction is intended to minimise the interference of such pre-judgments in order for as fresh a look as possible at the object to emerge (Cox 2010: 51-52).

Second: (2) foster empathetic interpolation. Experiment with the object. We have seen that Tilley (2008b) has begun to outline aspects of the phenomenological approach to landscape. He does so in terms of seven basic stages that he employs. The first six of these stages occur at the level of experimentation with the object. The seventh stage of drawing together such experimentally revealed observations and experiences is a composite stage and will occur throughout the phenomenological process described here.

In stage two the phenomenological researcher should aim to cultivate a feeling for the kind of practices that might feature the object under consideration. What does the object 'afford' the agent? The researcher must attempt to "enter into" the experiences of an agent attempting to use or negotiate the object. Just how would someone traverse this landscape? What on earth was this stone that I'm holding for? How does holding this stone this way affect its possible uses? What marks does this stone bear? How do they relate to the position of my fingers and palm of my hand when I hold it? Does this grip afford me a particular deployment of the stone? If so, might this deployment relate to other items discovered at the site? Do these items relate to other items that have been discovered at other sites taken to be

contemporaneous with this one? If so, would such objects be transported between sites? What relations of reference does such travel imply? And so on (see Figure 4.5).

Figure 4.5. *First stage of a phenomenological amplification of the function of an item of material culture. (After Polt 1999: 51). The ellipse represents the totality of "equipment" discovered at a site; the arrows represent reference relations*.



As with reduction, stage two is also imperfect. Experiential community with a past user or group of users is cultivated but never equates to an actual experience had by a past agent. Stage two is an exercise in approximating the 'what it might be like to…' of possible experiences (Cox 2010: 52-55). Naturally, this stage is subject to interpretive error and so the role of intersubjective corroboration of phenomenological results should be emphasised.

The next stage (3) (although this is a composite stage and would occur throughout the phenomenological process) is to describe the phenomena as accurately as

possible. This involves providing interpretive ‘answers’ to the questions noted above. Here the phenomenological researcher is actively engaged with the object *qua* phenomenon in such a way as to disclose what is occurring in the process of experimentation and interpretation. This involves allowing more prominently adumbrated phenomena to be described while organising it into a meaningful account of the object. Here is where phenomena are interpreted in terms of an ‘in-order-to’ (see Figure 4.5 where the in-order-to of a stone with a hollow is being investigated phenomenologically in terms of an equipmental context). After a process of phenomenologically informed (experimental) archaeology the stone item discovered at La Mouthe in 1899 is interpreted as a lamp. This description best fits the adumbration of the object/describable phenomena within the context of describable phenomena discovered in this context. Phenomena should be interpreted as they appear to the phenomenologist in a reflexive manner taking into consideration the fact that the phenomenological researcher is a historically situated agent engaged in a process of research (see Cox 2010: 58).

Next, (4) the object *qua* phenomena must be ‘named’. This is when it is placed within a structure of intelligibility or system of categories that account for similar objects. Here, objects can be placed within a series of types but without reifying the types. These types are intended to be useful just in so far as they aid researchers to separate objects in terms of how they appear within experience. Here are some possible categories into which an archaeological observable phenomenon, in our case, the stone lamp from La Mouthe, might be put: utilitarian, ritual, aesthetic, narrative, decorative (Figure 4.6).

Figure 4.6. *Phenomenological categories in archaeology. The image of the stone lamp discovered in the cave of La Mouthe (Dordogne) is reproduced by permission of David Lewis-Williams and the Rock Art Research Institute, University of Witwatersrand:* © Rock Art Research Institute, University of Witwatersrand.

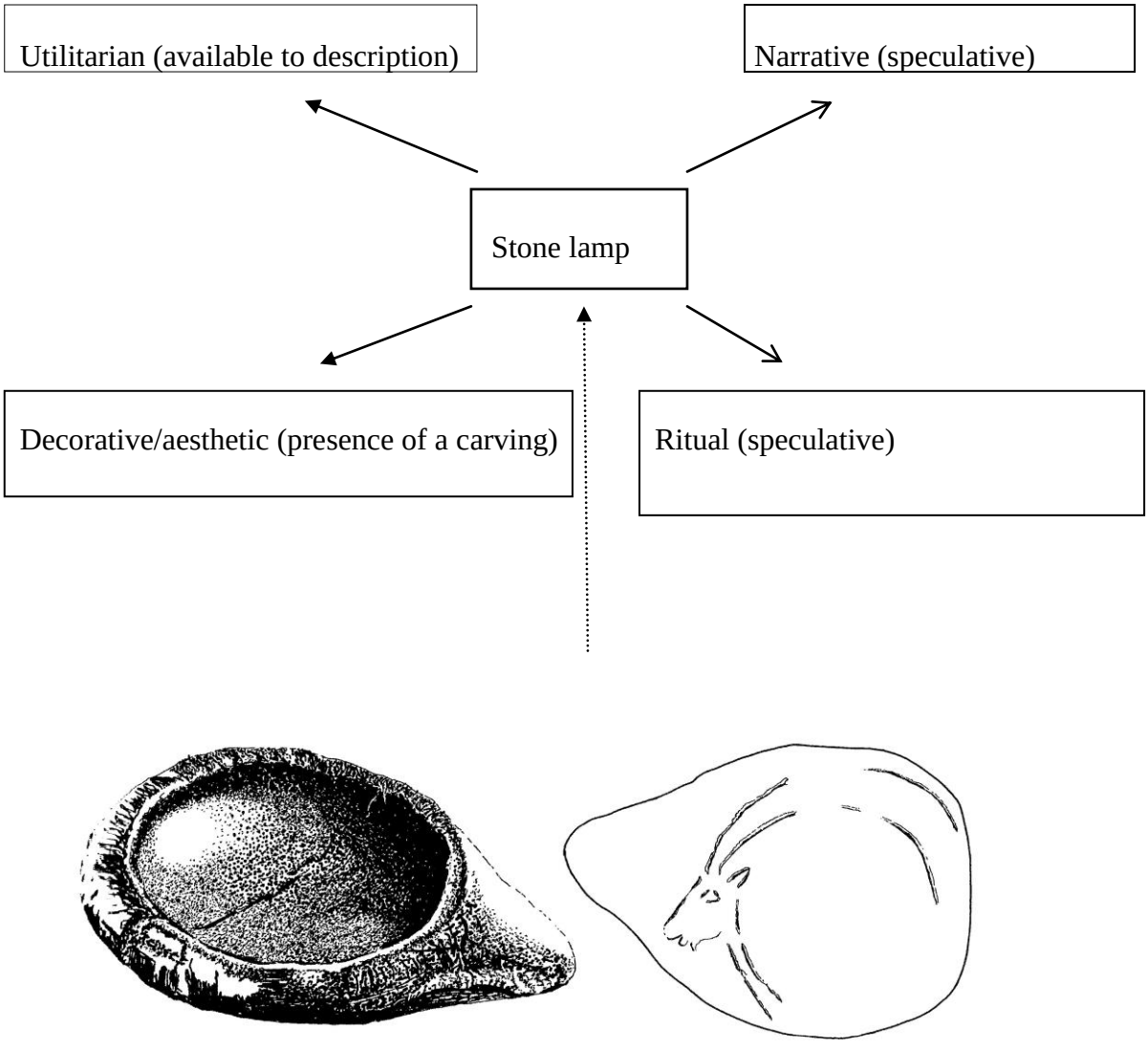
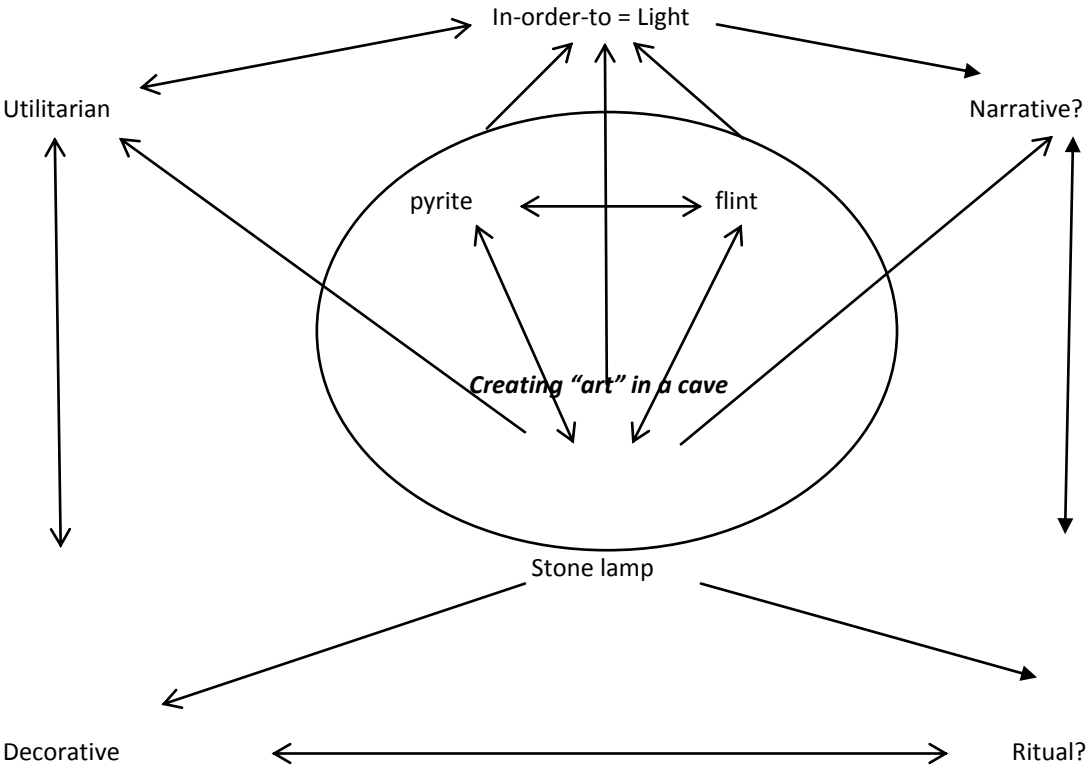


Figure 4.7. *The combination of descriptions. Descriptions are never final. They can always be added to as more research is carried out.*



After a set of categories has been established the next stage (5) is to enter into a description of 'relations and processes' between them (Figure 4.7). At this point the interrelations between an object, an equipmental context, a taskscape and a set of phenomenological categories are explored in terms of all the available data. For example, a particular object/phenomenon, the stone lamp, might be utilitarian in terms of its in-order-to of providing light which is subordinated to the possibility of the being of a Dasein (a for-the-sake-of-which) to be an "artist"[27] or craftsperson,

[27] The terms 'art' and 'artist' are problematic. I discuss this issue further in Chapter Six. We should note here that many scholars would argue that Palaeolithic art studies have recently undergone a 'loss of innocence' (Moro-Abadía and González-Morales 2008, borrowing Clarke's terminology). This loss of innocence is related to discoveries of new sites (such as Chauvet and Blombos), to the development of new methodologies (AMS radiocarbon dating; thermoluminescence dating) and to new theories of human cognitive evolution (Moro-Abadía and González-Morales 2008: 529). As

which is related to the unknown narratives (of ancestry, of origin, of landscape and so on) of a particular group of hunter-gatherers, which is in turn reflected in their representations, which is, in turn, inscribed on the object. There may have been a ritual dimension to painting within this context which could have been extended to the decoration of functional objects such as lamps. In fact, it may not be possible to distinguish decoration and functionality in the sense that decoration would be something added to an already functional object: the two notions might be simultaneous. Decoration could be essential to the functionality of the thing: the decoration might be its function. The crucial point from the point of view of method is that all of these categories and descriptions are generated from the first-person perspective of the phenomenological archaeologist and they are based on the relations of reference and affordance that the object adumbrates to that researcher. It is such adumbrated relations that are available to intersubjective corroboration and the attempt to conduct this corroboration results in an on-going ampliative hermeneutic phenomenology of the archaeological record[28].

From here it will be possible to engage in the next stage (6) of analysis whereby informed comparisons (by analogy) can be made to other archaeological cultures and to ethnography. Here, the aim is to build up enough information that enables the

---

noted (Chapter Three), Clarke's 'loss of innocence' provokes the emergence of a 'critical self-consciousness'. For Moro-Abadía and González-Morales the loss of disciplinary innocence in Palaeolithic art studies is connected to 'the emergence of a critical self-consciousness of the limits of our knowledge' with regard to the complexity of this field (Moro-Abadía and González-Morales 2008: 531). Critically self-conscious pre-historians of art are now at the stage of looking at '"how little we know and how inappropriate…our models and explanations"' are (Moro-Abadía and González-Morales 2008: 531). This situation has, naturally, led to new approaches to prehistoric art. In Chapter Six I begin to develop a contribution to this growing field from a dwelling perspective.

[28] For an early contribution to the hermeneutic phenomenology of archaeological phenomena see Sheets-Johnstone 1990.

contemporary scholar to speak meaningfully about, for example, the utility and function of a particular object within a particular archaeological culture. This level of description aims to elucidate aspects of the worldly use of an object by an agent within a culture and begins from the level of the second stage of analysis. This stone was *for* light. Light was significant in terms of the task of painting (amongst other tasks). The lamp would most likely have been held in this position when carried alight. Holding the lamp in this way implies slow movement during motion and during painting. This implies a use-wear pattern in the object and a possible duration for the act of painting itself. The duration of painting implies an organisation of resources and of other Daseins within a group which in turn suggests a possible time of year for the act of painting to be carried out and so on.

Next, (7), present the results of the phenomenological enterprise. Here, the aim is to elucidate the meaning of the description previously outlined. This meaning should be thought in terms of the elucidation of generally invariant structures such as ‘in-order-to’ and ‘for-the-sake-of’ that form the organising principles within any assemblage: the meaning of ‘in-order-to’ is functionality and the meaning of ‘for-the-sake-of’ is self-interpretation. So, this stage of phenomenologically informed archaeology is to say something more general about functionality and self-interpretation (which are only two of the organisational structures or categories available) from the point of view of the long-term.

Finally, (8) the analysis must continue, the intuitions which guided the process and which were provoked by the adumbration of the object should be tested, by the

original researcher and by a community of researchers (intersubjective corroboration or contradiction). So, we are now in a position to offer an outline diagram of the phenomenological method as deployed in archaeology (Figure 4.8). And, for reference, a diagram showing a possible 'for-the-sake-of' relationship is included for the stone lamp (Figure 4.9).

Figure 4.8. *The phenomenological method as deployed in archaeology. (This diagram is an adaptation of Cox's diagram of the phenomenological method as applied to the phenomenology of religion (Cox 2010: 71)).*

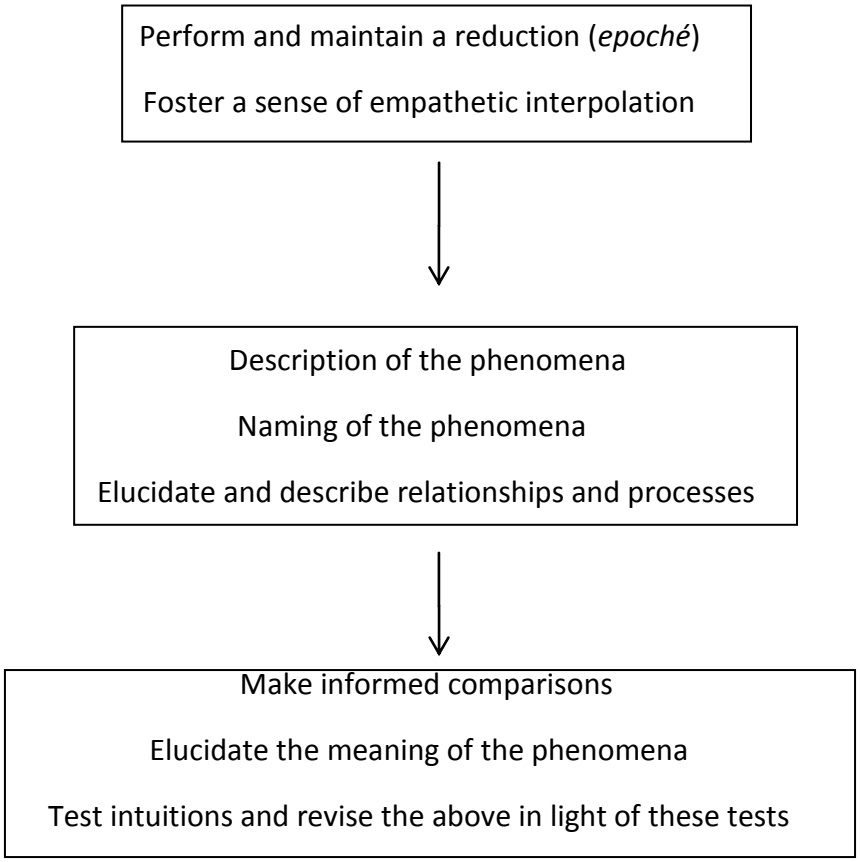
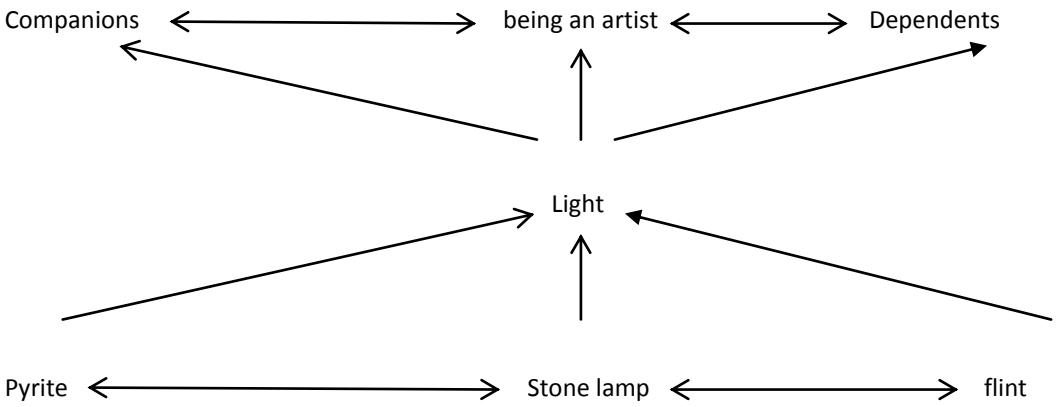


Figure 4.9. *For-the-sake-of relation applied to a stone lamp recovered at La Mouthe.*



Anatomically modern humans, evolution and the dwelling perspective: anticipating my case studies part one

Human agents dwell pre-theoretically in their environments. I argue here that we should not arbitrarily restrict considerations of dwelling to so-called anatomically modern humans. The notion of care should be taken to extend 'beyond the anatomically modern human'. The move away from restricting dwelling to anatomically modern humans, as Heidegger seems to have done, is the move away from a stultifying anthropocentrism. In the case studies that follow, I attempt to explore 'Palaeolithic dwelling'. Some of the agents dealt with are called 'anatomically modern humans' in the literature but some will not be. In particular, the creatures of the Sima de los Huesos are certainly not anatomically modern but I argue that the material traces that they left behind indicate a form of dwelling and a form of *Fürsorge*, that dimension of care (*Sorge*) specifically related to being-with-others. The most important thing is that the material record of these agents' lives is

given the opportunity to speak for itself. This phenomenological commitment forms the backdrop to my case studies of prehistoric mortuary practice and artistic practice in the following two chapters.

The notion of an 'anatomically modern human' is something of a hybrid concept that incorporates both archaeological and anatomical data (Gamble 2007: 36. See Table 4.2). According to Gamble, the concept of an anatomically modern human was introduced into the literature forty years ago in order to capture evolutionary evidence in service of ousting racist dogma from debates in human evolutionary studies.

One flaw in the construction of this concept for Gamble, however, was the retrieval of Cartesian themes that emphasise the human being's unique position as a creature who is at once a species of nature and yet is so free from its entanglement in the world that it can take a step back out of its worldly affairs in order to present the world to itself as an object, standing before its consciousness (Gamble 2007: 64-65). Essentially, this revived a characterisation of human existence that took agents to be spectators on the world rather than agents in it, as the dwelling perspective is at pains to point out. It is just this kind of theoretical perspective that Heidegger sought to overcome with his account of dwelling. Human agents dwell pre-theoretically in environments of pragmatic concern prior to theoretical abstraction. Indeed, Heidegger's critique of Husserl pointed to the fact that, according to Heidegger, Husserl took for granted that the beings he was dealing with were essentially the rational animals of the theoretical spectator perspective and not the immersed agents who cope (*Sorge*) pragmatically with the world in terms of their

active engagement in it (Tonner 2010: 89). That is, Husserl and the tradition of philosophy before him, overlooked dwelling.

Table 4.2. *How to spot an anatomically modern human (AMH)*. (After Gamble 2007: 37).

1. Human being (including all extant individuals) possessed of a gracile skeleton (including relatively thin bone in the skull and mandible). This contrasts with other species of the genus *Homo*.
2. While no more voluminous than Neanderthal craniums, AMH craniums are large, short, high and domed.
3. Reduced or absent browridges and external cranial buttressing.
4. Reduced jaw and tooth size
5. Face tucked under the forehead; face does not slope forward (probably as a result of 4 above).
6. Presence of a chin from a young age on the mandible.

The critique of Heidegger's own position that I'm presenting here, partly as a result of the evidence of complex behaviour ('complex' as opposed to 'modern': see Table 4.3 for a list of traits indicating supposed behavioural modernity) in the remote past afforded to us from archaeology and partly due to theoretical considerations, is that Heidegger was mistaken to restrict dwelling only to modern human Dasein. He did so since, from his point of view, it is 'only man who dies'. Earlier human populations present us with evidence that would not allow us to say that they 'die' in the way that modern agents do in Heidegger's sense. However, given the archaeological evidence afforded by the Sima de los Huesos I believe that earlier

populations were engaging with death in a meaningful way and so can be considered ‘dwellers’. I will take this up in the case study in the next chapter.

Table 4.3. *Traits noted as indicators of Behavioural Modernity (after Henshilwood and Marean 2003: 628. See Henshilwood and Marean for a comprehensive list of sources deploying these traits).*

Traits
Burial of the dead: indicator of ritual; Art, decoration and ornamentation; Ochre used symbolically; Working of bone and antler; Blade technologies; Standardization of artefact types; Artefact diversity; Construction of complex hearths; Organised use of domestic spaces; Expanded networks of exchange; Effective exploitation of large mammals; Seasonally focussed strategies for mobility; Harsh environments utilised; Fowling; fishing

For Gamble, both of the qualifiers of ‘human’ or ‘*Homo sapiens*’ (the ‘anatomic’ and the ‘modern’) are worthy of comment. One early candidate for anatomical modernity was discovered in 1967 by Richard Leakey’s team, who were searching in the Omo Valley, in the Kibish geological formation, in Africa. Leakey’s team discovered the remains of three fossilised adults that would later be included in a list of ‘anatomically modern *Homo sapiens*’ by David Brose and Milford Wolpoff (1971). Bearing the names Omo I, Omo II and Omo III respectively, one individual was represented by a near complete skull, but with the absence of a face (Omo II), one individual was represented by a partial skeleton (Omo I) and the other by just a

skull fragment (Omo III). The site admitted no stone artefacts and the age of the three individuals was originally set at 130,000 years old (Gamble 2007: 35-37). (Subsequently, the date of Omo I has been placed at around 195,000 years ago (Stringer and Andrews 2011: 16)).

Of particular interest was Omo II: while all three specimens were heavily mineralised none appeared to display any pathology (unlike the pre-modern examples from the earlier Sima); Omo II was possessed of a high forehead, a large brain case and gracile features, indicating that this individual was a 'very early representative of *Homo sapiens*' (Leakey et al 1969: 1132, cited in Gamble 2007: 35). Omo II represented the earliest modern human yet discovered and so aided the case for establishing Africa as the cradle of humanity (*Homo sapiens*).

In 1997 a joint American-Ethiopian team, working in the region of Afar that had yielded Lucy some time earlier, discovered three crania. These finds from Herto Bouri represented one immature individual and two adults. Stone tools accompanied their remains. It has been possible using absolute dating techniques to place these finds to between 160,000 to 154,000 years ago. Due to their morphology and age these individuals are candidates (after Tim White) to be the ancestors of anatomically modern humans and have been classified as a subspecies of *Homo sapiens*, named *Homo sapiens idaltu*, Idàltu being the Afar word for 'elder' (Gamble 2007: 35-36).

So, anatomical modernity might apply to the Omo finds and near anatomical modernity to the Herto finds. This designation, "anatomically modern", would serve

to distinguish these individuals from examples of *Homo sapiens* who were not anatomically modern, much in the same way that (after Ingold) we might (not without a hint of irony) distinguish anatomically modern Elephants or Chimpanzees from their fossil ancestors (Ingold 2000: 388). Anatomically modern human beings are, anatomically speaking, 'people like us'. Whether these were 'people like us' in Leach's sense of thinking like us – or behaving like us – is another matter; were these humans both anatomically and culturally or "cognitively" modern? Sharing anatomical features with fossils doesn't bring us close to their lifeworlds in the way that, as with the remains discovered at the Sima, sharing possible behavioural and experiential constants with them might. Interpretation of the Sima might very well serve as a first point of contact for an archaeology of *Fürsorge* in the Palaeolithic.

Writing in 2010 Nowell has pointed out that as recently as 1990 there was wide acceptance for the view that 'modern' human behaviour and anatomy evolved in parallel in Europe and that their (behaviour and anatomy) 'appearance' there around 40,000 years ago marked the start of the Upper Palaeolithic (Nowell 2010: 438). Anatomically modern humans emerged and this was marked by the 'creative explosion' in the form of, amongst other things, language and art. Over the last 25 years research out-with Europe has prompted a different view on the origins of both anatomical and behavioural modernity. Genetic and fossil evidence suggesting an African origin for anatomical modernity possibly even as early as 160,000 to 195,000 years ago have pointed to a 'lag' or gap between the appearance of anatomical modernity and behavioural modernity since evidence of, for example, symbolizing behaviour (personal adornment) dates to 77,000 BP in South Africa

(but possibly to between 90,000 and 100,000 BP in Israel and Algeria)[29]. The result of this body of work has been the 'decoupling of modern anatomy and modern behaviour' (Nowell 2010: 438)[30].

While I do not intend to ascribe 'modern' behaviour to the agents of the Sima my analysis of this site should lend weight to a further decoupling of an unproblematic conjunction of behaviour and anatomy. Actually, using a tensed adjective like 'modern' when discussing behaviour and anatomy might be conceptually confused. (This confusion might be the source of Ingoldian irony).

Nevertheless, following upon this decoupling, researchers have reframed studies of the emergence of modern humans as a debate focussing on the origins of behavioural modernity where its association with modern anatomy is a point for discussion and not simply a given (Nowell 2010: 438 and references therein). Issues arising from this debate include:

> (*a*) what specifically constitutes modern behaviour and what the archaeological signatures of modern behaviour are; (*b*) whether the appearance of modern behaviour is sudden (revolutionary and continuously built upon)…or gradual (appearing and disappearing at different times and places – more mosaic in character and only gradually becoming more

[29] Marean et al's work at Pinnacle Point in South Africa may have collapsed the gap a little. This site affords evidence of the exploitation of aquatic resources, the (symbolic?) use of ochre and the use of bladelet technology (noted traits of behavioural modernity: see Table 4.3) dating to 164,000 BP (Nowell 2010: 438).

[30] Nowell points to the increasingly complicated relationship between stone tool industries and their supposed makers as a prompt to the decoupling of modern anatomy and modern behaviour. For Nowell, it is no longer possible to simply identify Mousterian industries with Neanderthals and anatomically modern humans with Upper Palaeolithic industries exclusively. In the Levant both Neanderthals and anatomically modern humans are found associated with Mousterian artefacts during the Middle Palaeolithic; in Western Europe during the early Upper Palaeolithic anatomically modern humans and some Neanderthal populations made Upper Palaeolithic industries (while other Neanderthal populations made Mousterian tools and followed Middle Palaeolithic 'lifeways') (Nowell 2010: 438).

> generalised)…(*c*) whether modern behaviour is, by definition, unique to modern humans…or is more widely shared with other species, most notably the Neanderthals…and (*d*) whether the appearance of modern behaviour is primarily the result of new cognitive abilities…or cultural, historical, social, and demographic factors' (Nowell 2010: 438-439. Italics in the original).

It is in light of questions like this that discussion has begun to focus upon the notion of 'full modernity'. As such, the question would become, were either the Omo or Herto hominins (or both) 'fully modern' in the cultural and cognitive senses? (See Table 4.4).

Table 4.4. *Cognitive and cultural capabilities of fully modern humans and their archaeological traces in Africa* (after McBrearty and Brooks 2000).

Cognitive skill	**Definition**	**Cultural capabilities**	**As revealed in the archaeological record**
Planning depth	Ability to formulate strategies based on past experience together with the ability to act upon these strategies within a group context.	Technological	Human inventiveness. Capacity for logical thinking.

Symbolic behaviour	Ability to represent people, objects and abstract concepts with arbitrary symbols (visual or vocal) combined with the ability to reify these symbols in cultural practice.	Symbolic	Capacity to imbue aspects of human experience with meaning. The ability to communicate abstract concepts. Capacity to manipulate symbols in everyday practice.
Abstract thinking	Ability to act with reference to abstract concepts that are not limited in space or time.	Ecological	Human ability to colonise novel environments, requiring both innovation and planning depth.
Innovation	Behavioural. Economic. Technological.	Economic and social	Ability to draw models based on individual and group experience. Ability to develop and apply

			systematic plans in order to conceptualise and predict futural events and situations. Construction of formalised relationships between individuals and groups.

The archaeological record begins around 2.5 million years ago. The period from around 6 million years ago until around 12,000 years ago takes in appearance of the earliest hominins, the hominins of the Sima de los Huesos and of the appearance of Upper Palaeolithic "art", right down to the period of the virtual global distribution of modern human populations. 'Anatomically modern humans' (referring to individuals whose fossil remains fall within, or very nearly within, the range of variation seen in extant populations) started to migrate out of Africa at least 120,000 years ago during the event sometimes referred to as 'Out of Africa II' (Lockwood 2007: 101)[31].

Richard Klein is one influential figure who has doubted whether all anatomically modern human beings represented in the fossil record were also all fully modern human beings. More specifically, Klein (1995) has questioned whether these anatomically modern humans were all equipped with a fully modern brain, enabling

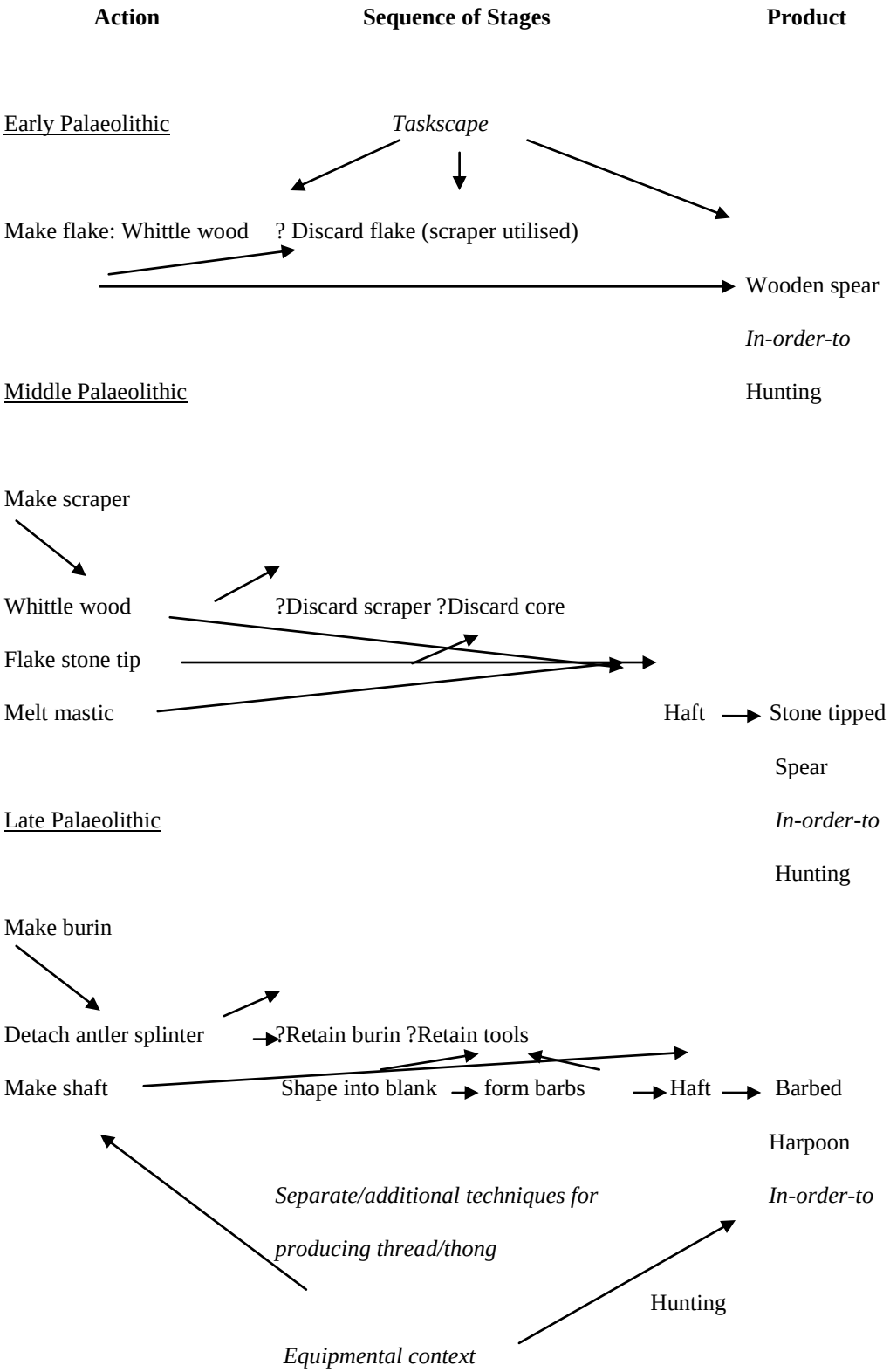
[31] 'Out of Africa I' refers to earlier dispersals of hominins, beginning with *Homo ergaster* (although the timing of this event remains controversial), from Africa (Klein 2005: 97). Early modern *Homo sapiens sapiens* moved initially into the Middle East from North Africa. From the Middle East human populations spread Eastward, reaching Australia (by boat) by at least 50,000 years ago and Westward, reaching Europe by at least 45,000 years ago (Stringer and Andrews 2005: 192-195).

them to use language (Klein suggests that it the so-called 'language gene' *FOXP2* that these people were missing), produce images, believe in an afterlife, recall their ancestors and make plans for the future (I will return to Klein's analysis in the next chapter during my discussion of the Sima de los Huesos). Consider again the individuals discovered at Herto. The technological assemblage found alongside them actually belonged to the Acheulean industry that first appeared in Africa 1.5 million years ago and that is associated with *Homo ergaster* and still with the agents of the Sima (we will discuss "Excalibur" in the next chapter). Analysis has revealed that the Herto bifaces reflect an advance in that tradition, they are probably not older than 300,000 years, and so they represent a final or transitional phase of the Acheulean, gesturing toward a Middle Palaeolithic industry composed of smaller tools and lacking in bifaces (Gamble 2007: 36-37). There were abundant faunal remains, including the remains of large mammals, such as hippopotami, bearing evidence of butchery found at this site (Pettitt 2011a: 58).

As we have seen the dwelling perspective problematizes theoretical perspectives that prioritise human beings' cognitive abilities over their practical engagements, whether these are taken as markers of (full) "modernity" or not. The dwelling perspective favours accounting for the structures of agency, such as being-in-the-world or care, that underpin action and cognition within a context. Such structures are taken to be primary; 'theoretical' activities are secondary and are parasitic upon practical agency within contexts. Given this, a phenomenological analysis will suggest an account of the relationships of reference (the referentiality of the world) that orientate the production and consumption of the kind of technologies found at

the sites mentioned above and at other sites (Figure 4.10. The designations ‘early’, ‘middle’ and ‘late’ represent a broad characterisation of industries worldwide’).

Figure 4.10. *A phenomenological approach to the relationships between action and production in the Palaeolithic. (After Brooks' (2000: 516) adaptation of R. Dennell European Economic Prehistory, Academic Press, 1983).*



Importantly, phenomenologist's descriptions are of that which presents itself to them as experienced from the perspective of an 'I' that is open to the world (Luft and Overgaard 2012: 9-10). As noted, these descriptions should, by virtue of intersubjective scrutiny and verification, be considered veridical for other agents. Phenomenology is neither subjectivist or solipsistic and it is not a priori confined to fully modern 'human' experience. As such, the diagram outlined in Figure 4.10 depicts the shape of a technological sequence when this is considered together with a phenomenological approach. The sequence admits phenomenological description across the phases of the Palaeolithic. In each case, ready-to-hand objects are deployed 'for the sake of' some possibility (satiety) and to accomplish some task (hunting). In Figure 4.1 this 'for the sake of' is 'warmth'. The necessity of finding warmth is that which structures our other activities: finding warmth is what our activities *are for the sake of*. In 4.10 the quest for satiety would be the transcendental condition of the sequences leading to the event of hunting.

Agent-beings in a world of pragmatic concern may require warmth at times and their contextual dealings 'adumbrate' themselves or 'open-up' in terms of the project of finding or procuring warmth: the structural adumbration of finding warmth is, in terms of the key structures and concepts at work ('equipmental context', 'ready to hand', 'in order to', 'for the sake of') the same. Activities by different agents (at different stages of Dunbar's orders of intentionality) can be understood in terms of their 'for the sake of' relation. Heidegger will, after all, differentiate the worlds of animals and humans only in terms of 'poverty' and

'richness', which are relative terms. How an agent dwelling in the proximity of the Sima de los Huesos lived their *Fürsorge* might be approached more in its own terms by engaging with the archaeology of the site rather than by way of terms such as 'poverty' and 'richness'. Such an agent's possession of *Fürsorge* is an inference based on analogy to contemporary experience, described phenomenologically. For "15 minute culture worlds" the fundamentally relational categories such as 'in-order-to' still apply (see Figure 4.10). Luft and Overgaard's example was of visual objects not showing themselves from all sides at once. Instead, visual objects 'adumbrate' themselves over time: this has nothing 'subjective' about it but instead occurs for any and every creature that has visual perception. For this reason, despite operating out of a first-person perspective, phenomenology is not individualistic, solipsistic or necessarily anthropocentric. A great deal of work is required to furnish the level of detail required to flesh out the subject matter of Figure 4.10. That is a given: but, what is at issue here is that phenomenology can contribute to this task.

It is reasonable to suggest that archaeological research in the present might articulate and confirm the phenomenological dimensions (relations of reference) of a past act within a past world. After all, phenomenological descriptions apply to the phenomenologist and to all other agents, past or present. Phenomenological archaeology is a self-conscious effort in the present aimed at elaborating structures of being-there in the past. In an important sense phenomenologically informed archaeology is an exercise in reflexive archaeology. It is an uniformitarian approach to experience that looks to its formal synchronic structures (aboutness, referentiality, possibility-being, and so on) in the present in order to draw

phenomenologically founded inferences about past lifeworlds and past actions within them.

Dwelling: art and mortality: anticipating my case studies part two

It has been noted that the Herto trio's skulls indicate deliberate mortuary practices. Cut marks, consistent with the removal of the mandible and subsequent defleshing of the skull, are evident on the remains while two of the crania were subsequently deliberately polished and scraped (Clark et al 2003: 751). Clark (2003) has referred to these modifications as decoration and it is precisely this feature of the skulls that differentiate them from the earlier Bodo skull (Middle Awash Valley, Ethiopia) that bears signs of defleshing only and not of decoration (see Table 2.3). The Herto trio, accorded sub-species status as *Homo sapiens idaltu*, possible ancestors of anatomically modern humans, bear witness to a transitional skull morphology, an archaic tool kit and deliberate mortuary practice. I argue here that mortuary practice is part of the set of pre-theoretical engagements marked out by Heidegger as issuing from beings who dwell (which I will discuss further in the next chapter). The Omo trio, who seem to admit less archaeologically tangible information, have been accorded the status of anatomically modern *Homo sapiens* (Gamble 2007: 36-37). The archaeological evidence of mortuary practice amongst these agents should prompt a reconsideration of Heidegger's metaphysically based restriction of dwelling to 'modern Dasein' since, if Heidegger was correct, this evidence of quite complex mortuary activity should not be there. Ancestral beings did not dwell: only modern human beings do. Human ancestors were just that: they were ancestors, not humans.

In fact, it would seem appropriate to speak about "Palaeolithic dwelling", in so far as our ancestors, in this case *Homo sapiens idaltu*, admitted deliberate and possibly advanced mortuary practice. If so, then dwelling, as an existential category, can be applied to agents that were not 'anatomically modern humans' *sensu stricto* and the question becomes, at what point does the mortuary practice of our ancestors start to admit features characteristic of dwelling? This will be the ultimate subject of the case study on the Sima de los Huesos that follows.

In the fullest sense of the term, beings who dwell are beings for whom death has become a significant and individuating feature of their lives. It is for this reason that someone like Heidegger restricts dwelling to what has been called fully modern humans. The argument of the present study hopes to provide archaeological impetus for extending dwelling beyond the confines of "fully modern" individuals. In this regard mortuary practice is a key piece of evidence. Rather than placing emphasis on human cognitive ability emphasis is placed on existential death-awareness and embedded bodily action when engaging with the record of human becoming. The dwelling perspective, as I develop it here, is more in line with accounts in the current debate (after Nowells above) that suggest a gradual (mosaic) view of the advent of modern behaviours while not restricting them solely to modern humans. In fact, following Heidegger, it is mortality that is key in drawing together the structures of the world for an 'I' who is engaged within it: mortality in his sense is an individuating principle; it enables agents to engage with 'their' possibilities or, in terms of *Ereignis*, it is that which enables the appropriation of the world. Mirroring the biology (as noted by Dawkins) what we are faced with is a continuum of

behaviour, gradually cumulative or intensified, only differing in degree and not in kind, evidenced by the archaeology precisely because dwelling issues from within life.

My case studies on mortuary practice and artistic practice that follow do enter into the domain where what is sought is the origins of self-consciousness and symbolic behaviour. Ultimately though, this quest should be rethought in terms of a search for the "origins" of the beings who dwelt on this earth in the Upper Palaeolithic and who by this time were displaying the hallmarks of behavioural modernity, for example, by the tangible association of places in the landscape with the dead, with burial (Pettitt 2011: 264-265) and with art. In my first case study of the Sima de los Huesos I will suggest that evidence for mortuary practice, what Heidegger grouped together as 'funeral rites, interment and the cult of graves', (Heidegger 1962: 282), deep in the human past, is evidence for the advent of a form of engagement in the world that amounts to palaeo-Dasein or a form of dwelling characteristic of archaic *Homo sapiens*. Given this, the recent account of Palaeolithic mortuary practice by Pettitt requires augmentation to take in considerations of dwelling. Archaeology records the advent of the form of engagement that became dwelling in Heidegger's sense. Importantly, this is not to conflate cognition with dwelling as an existential state[32]. Rather, it is to point to the occurrence of world-disclosure (Figure 4.3 above) in the remote past, evidenced by the archaeology in the form of appropriating agency that would in turn enable the development of further levels of disclosure in

[32] For de Lumley, the major steps in technological and cultural evolution accompanying the development of cranial capacity and cerebral complexity amongst hominins marks out the gradual and progressive emergence of symbolic thought across archaeological time. He argues that *Homo heidelbergensis* displayed the 'first incontestable signs of symbolic thought' at Sima de los Huesos, Atapuerca Sierra, Castile Leon province, Spain (de Lumley 2009: 17).

the future. The ‘dwelling perspective’ in archaeology in both of its related senses (as an approach and as a mode of engagement) can be usefully cited in discussions of the Palaeolithic.

In my second case study on ‘art’ I will take that analysis further partly by developing the theme of heterotopic (cave) space that will be presented in the first case study. I will enquire about the kind of dwelling that is at work in the creation of art. Dwelling will be implicated in the ‘opening up of worlds’ for these Palaeolithic communities as originary fields of significance. In both case studies (art and death) it is the appropriation of space, spatiality and landscape that will prove illuminating in terms of dwelling. I will argue through these case studies that, in particular, caves are heterotopic spaces: caves, (and other places) are uncanny and numinous spaces and that this is what enables human beings to appropriate them as, in case one, a place of the dead and in case two, in order to produce art as a world-opening event[33].

A cave (or any place for that matter) ‘is’ what it is for a particular group in terms of how they appropriate it and in turn their appropriation of it is coloured by how the space presents itself (adumbrates itself) to them (*as* a place of the death of animals, for example, that might then become associated with a place *for* the death of humans; a place of the *difference* between being alive and being dead; a place where such differences are, at the very least, engaged with if not contested and/or represented). Cave space *qua* heterotopia may allow for the contestation of the

[33] We should not think of ‘uncanny numenous’ spaces as necessarily frightening. For Foucault, museums were paradigms of heterotopic spaces, as were ships. What is important is what goes on in the space regarding human experience to make it heterotopic. I connect heterotopic space to Heidegger’s account of anxiety, where anxiety is pervaded by a ‘peculiar calm’ (Heidegger 1998: 88). Whereas fear has a particular (threatening) object anxiety is a general and disclosive state.

relationships within a group. It is these relationships and networks of relations that enable an agent's projects to take the shapes that they do (as we have been suggesting in this chapter). For Heidegger, a central constitutive feature of Dasein is being-towards-death, where death is seen in terms of the annihilation of an agent's individual projects (Moran 2000: 24). Heidegger's account of anxiety is bound up with his account of being-towards-death. Anxiety is ultimately about Dasein's being-in-the-world, its basic state. Taylor (2002) has linked Heidegger's account of anxiety in the face of death (although death is certain for individuals its "when" isn't) to a possible emotional logic that would account for controlled killings of a variety of kinds that the archaeological record evidences. By dictating the "when and how" of death groups and communities may relieve anxiety in the face of it by a kind of domestication of the phenomenon itself (Taylor 2002: 212).

For Heidegger, anxiety lets a Dasein encounter the fact that there is a contingency or groundlessness to their existence and so enables their familiarity with their everyday world to be held up as what it is, namely as contingent (Heidegger 1998: 134) . This experience of anxiety is a structural dimension of Dasein: in so far as a being is Dasein it will experience anxiety. Anxiety discloses possibilities for existence that in turn disclose a world for a Dasein (Moran 2000: 241). As Dermot Moran has put it, 'Anxiety shows up precisely the way in which we are free to choose and take hold of ourselves' (Moran 2000: 241). Anxiety enables our individual and, by extension, communal self-interpretations (a for-the-sake-of-which) [where these interpretations enact a rule or rules to live by] to originate.

The experience of anxiety reveals Dasein's essential 'homelessness' in the world. The world is revealed as something uncanny (*unheimlich*): as something that agents are ultimately not at home in (Heidegger 1998: 88). Because such events of anxiety are unsettling, individuals and groups turn away from them. Such a turning away might also include an attempt at domestication (after Taylor). The revelatory dimension of the event of anxiety is covered over again by reteritorialising on 'homely' or mundane possibilities that enable life to go on (Moran 2000: 241). Heidegger's account of anxiety is an existential first-person articulation of the underlying dimensions of the disarticulation and subsequent renegotiation of groups whereby the 'over-arching collective society' (Pettitt 2011a: 8) is maintained. The kind of 'homely' possibilities that Heidegger is interested in are just those making up the collection of possibilities that society is. In the end the experience of anxiety reveals that Dasein, and so dwelling, is bound up with the world in an appropriative co-constituting relationship of practical coping (*Sorge*) that enables the creation of cultural worlds: because we are 'not at home' in the world we are bidden to create cultural worlds.

Archaeologically tangible places, such as caves, can be read as spaces bound up with "anxious experiences" in the past that, I will suggest in my second case study, issue in the production of world-opening cultural paradigms. The cave enables art to occur as a bringing forth of worlds[34]. Similarly, the Sima de los Huesos could become a place to deposit the dead due to its uncanny function in the lives of the populations of hominins that lived in the region of the Sierra de Atapuerca at that

[34] Painted caves could be 'sacred spaces' in Heideggerian terms since art puts up for decision what are to be the highest values of the group, or, in Heidegger's words, 'what is to count as holy and what unholy' (Heidegger 1971: 43).

time. Before we built heterotopias we constituted them through our activities in the natural environment.

Chapter Five

Case study 1: Prehistoric dwelling: *Homo heidelbergensis* and the Sima de los Huesos

Some context

For Pettitt, the two markers of change in the mortuary activity of our ancestors, from early hominins to early members of the genus *Homo*, surround the body and space. Regarding the former, it is expressions of morbidity and its physical extension in Cronos compulsions that is noticeable while to the latter it is the development of funerary caching that is evident. From the time of the earliest hominins corpses were processed, as witness the various instances of cut marks on hominin bones from both the African and European Lower Palaeolithic (Pettitt 2011a: 45). It is possible that these events represent only a minor advance on the morbidity admitted by extant chimpanzee populations (which include dragging, smelling, investigating and continued grooming of corpses, including the removal of insect eggs from bodies) and by extension Miocene and Pliocene hominins. If the interpretation of site AL-333, Hadar Ethiopia, as a place of deliberate deposition of the corpses of thirteen *A. afarensis* individuals by other *australopithecines (afarensis)* is borne out, then the association of specific places with the dead (in this case of bodies deposited amidst long grasses beside a stream) and so of basic funerary caching has a very long prehistory indeed (Pettitt 2011a: 56).

Reconstructions of early hominin lifeways tend toward the functional. Such interpretations have promulgated the view that early hominins were indifferent to aesthetics, were symbolically lacking and were unable to plan ahead, beyond immediate necessities of life (Chamberlain 2008: 102). For Chamberlain, such interpretations of early hominins as cognitively limited contrasts with palaeoecological evidence that points toward successful long-term adaptation to survival in hostile environments together with demographically driven expansion of populations into many parts of Africa, Europe and Asia by around one million years ago (Chamberlain 2008: 102-103).

Nevertheless, for Gamble, social life in the Lower Palaeolithic of Europe, 500,000-300,000 years ago, was routinized (Gamble 1999: 173). Hominins did lead complex social lives but read superficially, the archaeological record of this period stands as testimony to hominins encountering resources and not "others" (Gamble 1999: 164). For 200,000 years there was a 'taskscape of sounds and activity', which demanded attention and instrumental 'reasoning', in place of a social landscape that 'extended co-presence through the use of symbols and the infusion of meaning into places' (Gamble 1999: 164).

Given this interpretive background of routinized and limited hominin behaviours, what are we to make of the intriguing Middle Pleistocene site dubbed the Sima de los Huesos (Pit of the Bones) (see Figures 5.1 and 5.2)? Further, what are we to make of it from the dwelling perspective? Might such a site evidence a (possibly emergent) social landscape? Employing the dwelling perspective I will argue that

this site does represent an incipient infusion of meaning into places and at the same time an incipient form of mortality in the technical Heideggerian sense.

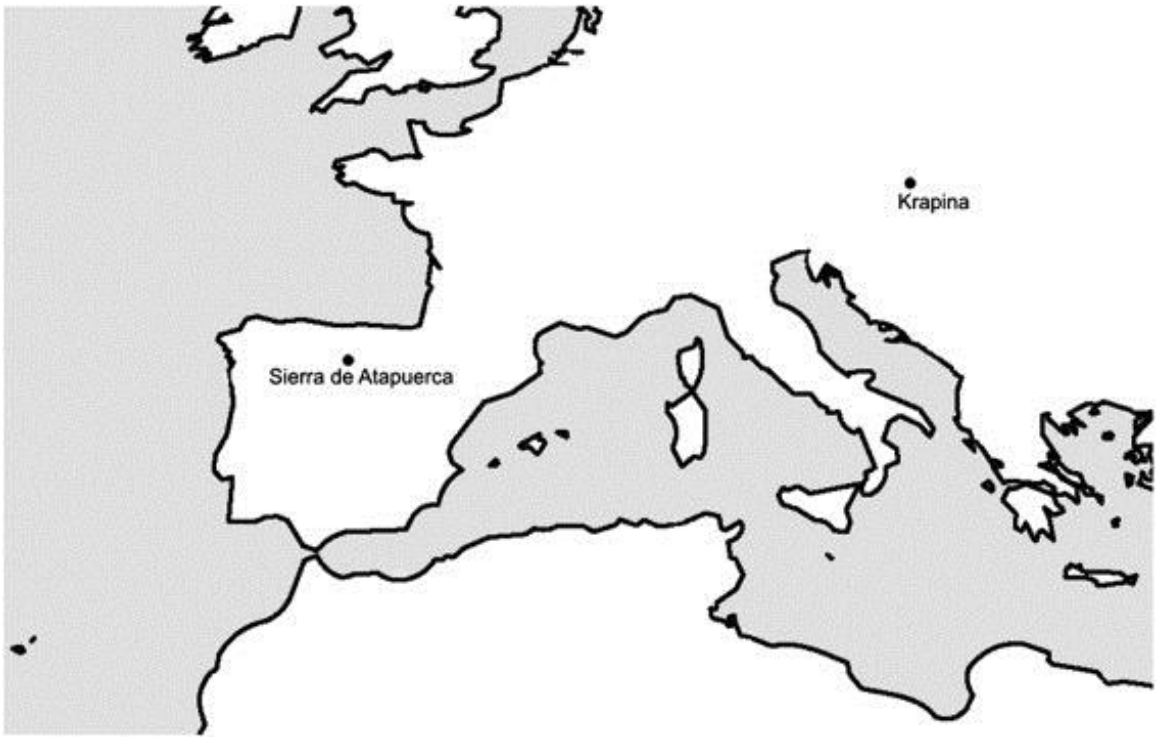
The final dating of the Sima de los Huesos (in the Sierra de Atapuerca[35], a limestone range of hills honeycombed with caves (see Figure 5.3)) and the identity of the hominins therein is unresolved[36]: dates range from as early as around >500,000 years ago to around 300,000 years ago. If the date of the site falls between the period 500,000-300,000 years ago then this would put it somewhere in the date range of the Lower Palaeolithic in Europe. Given this, what we can say is that during the Middle Pleistocene *Homo heidelbergensis*, possibly around 400,000 years ago (Coolidge and Wynn 2009: 191) deposited somewhere in the region of

[35] I cannot do justice to the remarkable Sierra de Atapuerca here. A summary of this important area is provided here: http://www.atapuerca.org/. An understanding of Sima de los Huesos should be balanced by interpretation of what else was happing in the Sierra. *H. heidelbergensis* visited other sites: notably, the horizontal Galería, a natural trap for large fauna. *H. heidelbergensis* butchered animals there but transported the cuts for consumption elsewhere. Only a piece of human skull and jawbone have been discovered there. This contrasts with the large number of human remains discovered at the Sima and perhaps adds weight to the thesis that *H. heidelbergensis* lived in a landscape with more or less distinct 'places' of consumption, of life and of the dead.

[36] I have followed convention by referring to the hominins discovered at the Sima de los Huesos as *Homo heidelbergensis*. This site has given up thousands of bones (starting with cranial remains in 1976) belonging to (28-32) hominins who are taken to be on the lineage leading to later Neanderthals (Arsuaga et al 1997). These remains have been grouped together as *H. heidelbergensis* (and are referred to in this thesis) in a broad sense that includes incipient Neanderthals (after Sala et al 2014: 72). The status of *H. heidelbergensis* is subject to continued debate: to some researchers this group represents the last common ancestor to the subsequent species *H. sapiens* and *H. neanderthalensis*. To others, the group *H. heidelbergensis* represents only a European form that would give rise to the Neanderthals. Naturally, this debate bears on the dating of the site (Arsuaga et al 1997: 219; Stringer 2012: 104). Stringer has argued (2012) that the concept of *H. heidelbergensis* should be restricted to a more precise set of fossil characteristics allowing its use for referring to a species ancestral to both modern humans and Neanderthals. However, this would entail, for Stringer, reclassifying the Sima fossils as early Neanderthals (Stringer 2012: 105). Genetic analysis of a phalanx would suggest that the recently discovered hominins from the Siberian site Denisova seem to have been a 'subgroup' of the Neanderthal clade (Stringer 2012: 105). Sala et al (in response to Stringer) point to a recent study of the mitochondrial DNA of one of the Sima hominins that seems to indicate that they shared a common ancestor with the "Denisovans" rather than with classic Neanderthals (Sala 2014: 72). Sala et al suggest that this result could be interpreted as indicating the exchange of genes between the Neanderthal lineage and the restricted grouping of *H. heidelbergensis*. This discussion is ongoing and I have no way of resolving it here. Therefore, I will continue to refer to the Sima hominins as *H. heidelbergensis*.

28-32 individuals in a shaft within a deep cave in the Sierra de Atapuerca in Spain[37]. These individuals have been interpreted as ancestors to later Neanderthals or as an archaic form of Neanderthals (Pettitt 2011a: 50; Stringer 2012: 104; Sala et al 2014: 72).

Figure 5.1. *Map indicating the proposed Homo heidelbergensis sites at Sierra de Atapuerca*. [Reprinted from *Evolution and Human Behaviour*, Volume 30 (5), M. Lozano et al, 'Right handedness of *Homo heidelbergensis* from Sima de los Huesos (Atapuerca, Spain) 500,000 years ago', Fig1, 369–376, 2009, with permission from Elsevier. Copyright © 2009, Elsevier].



[37] Here I follow Coolidge and Wynn and Sala et al in date and identity. For a discussion see Andrews et al 1997; Arsuaga et al 1997; Carbonell et al 2006; De Castro et al 2004; Sala et al 2014; Stringer 2012.

H. heidelbergensis represents the first species to establish a permanent occupation in Europe (see figure 5.5)[38]. These populations produced late Acheulean technology (see Figure 2.1). The Acheulean tradition was initiated by *H. ergaster* and its distinctive product is the hand axe or biface (Klein 2005: 93). Hand axes were knapped from large cobbles or large flakes and were fabricated to produce a sharp cutting edge around the periphery of the tool. The earliest Acheulean tools are put at 1.65 million years ago and were discovered in West Turkana, northern Kenya, famous for the discovery of Turkana Boy (an ergaster individual who is around 1.6 million years old and who shows that populations at this time had reached modern body size and proportions (Klein 2005: 89)). Early Acheulean assemblages also tend to admit artefacts, such as core forms and flakes, characteristic of the earlier Oldowan Industry. Many bifaces resemble large teardrops, narrowing from a broad base to a rounded point, although 'choppers' with a sharp straight edge and more oval or triangular examples have also been recovered. Taken together these large bifacial tools define a tradition that lasted for in excess of a million years and that spanned three continents (Klein 2005: 93).

[38] In addition to the Sima the neighbouring Gran Dolina or 'large depression' (Figure 5.4) provides evidence for a hominin presence in Europe prior to 500,000 years ago. (Evidence from East Anglia in the United Kingdom identifies a hominin presence there 700,000 years ago (Stringer 2006: ix). Layer TD6 of Gran Dolina has revealed in excess of 90 human fossils and some 200 flaked stone artefacts. The result of electron spin resonance dating suggests that the fossils and artefacts represented in TD6 date to between 857,000 and 780,000 years ago. Remains from a minimum of 6 individuals aged between 3 and 18 years have been recovered. Parallel processing of animal bones (including pigs, deer, horses, bison, some carnivores, rhinoceros and elephant) and human bones recovered in Gran Dolina indicate that the hominins were cannibalised. Klein suggests that if this cannibalism was nutritional (since there is no evidence for ritual cannibalism) then it may point toward nutritional stresses amongst a population on its way to extinction (Klein 2005: 108). On the basis of interpretation of the 4 partial jaw bones recovered to date it is argued that these individuals possessed smaller, perhaps more modern looking faces, than *H. heidelbergensis*, suggesting that these individuals are not a good candidate as an ancestor for this later hominin. They have been assigned to the species *Homo antecessor* (pioneer man) perhaps representing a branch of *H. ergaster* that died out after failing to establish a permanent foothold in Europe (Klein 2005: 108). A single skull recovered at Ceprano (an ancient lake deposit near Rome) that shares features with skullcaps of *H. erectus* is thought to be 900,000 to 800,000 years old (Klein 2005: 108). If accurate, this date indicates an even earlier failed attempt to colonize Europe than that of *H. antecessor*. Both sites indicate that the significance of *H. heidelbergensis* is that they were the first species to gain a permanent foothold in Europe even if they were not the first to try!

While Oldowan core forms do broadly anticipate later Acheulean bifaces a truly intermediate form, so argues Klein, has not been discovered. For Klein this points to the possibility of an abrupt appearance of the biface form in terms of a 'punctuational event' similar to the one that he suggests may have produced *H. ergaster* itself (Klein 2005: 95). While the name "hand axe" implies an intended function for these artefacts many examples that have been recovered were too large to be utilised in the manner suggested by the interpretation of the function of hand axes for butchery and so on. Given this, the exact use for these 'tools' remains a matter of speculation[39].

The notion of a punctuational event is significant. Klein follows Eldridge and Gould (1972) in advocating a model of speciation known as punctuated equilibrium as opposed to phyletic gradualism (Klein 2002, 2005, 2009. See also: Pallen 2009: 120). Whereas microevolution remains genetically relatively minor and occurs within separate breeding populations of single species macroevolution denotes more dramatic genetic change. It is at the macroevolutionary level that speciation (the production of new species) occurs. Speciation on the phyletic gradualism model has been elaborated, following Darwin's view that natural selection causes species to emerge as a result of slow, gradual (continual) change, by Mayr who proposed geographic speciation or adaptive radiation whereby genetic divergence between actually separate populations of individual species, eventually resulting in new

[39] Mithen and Kohn for example, have suggested that (partly due to sites such as Melk Kunturé (Ethiopia), Olorgesailie (Kenya), Isimila (Tanzania) and Kalambo Falls (Zambia) where hundreds of hand axes have been discovered that are grouped together and display no obvious signs of use) hand axes may represent some kind of hominin equivalent to a male peacock's plumage: something impressive for attracting mates (Klein 2005: 95; Kohn and Mithen 1999). The hand axe, having shown to the female that it's maker possessed qualities desirable in a mate, could then simply be discarded, having served its purpose.

species, is caused by natural selection *qua* adaptation to particular local ecological environments. This model assumes anagenesis: gradual change on separate branches of the evolutionary tree (Klein 2009: 7).

Figure 5.2. *Stratigraphic context of the Sima de los Huesos*. [Reprinted from *Evolution and Human Behaviour*, Volume 30 (11-12), Garcia N and Arsuaga J.L, 'The Sima de los Huesos (Burgos, northern Spain): palaeoenvironment and habitats of *Homo heidelbergensis* during the Middle Pleistocene', Fig. 2, 1413–1419, 2011, with permission from Elsevier. Copyright © 2011, Elsevier]

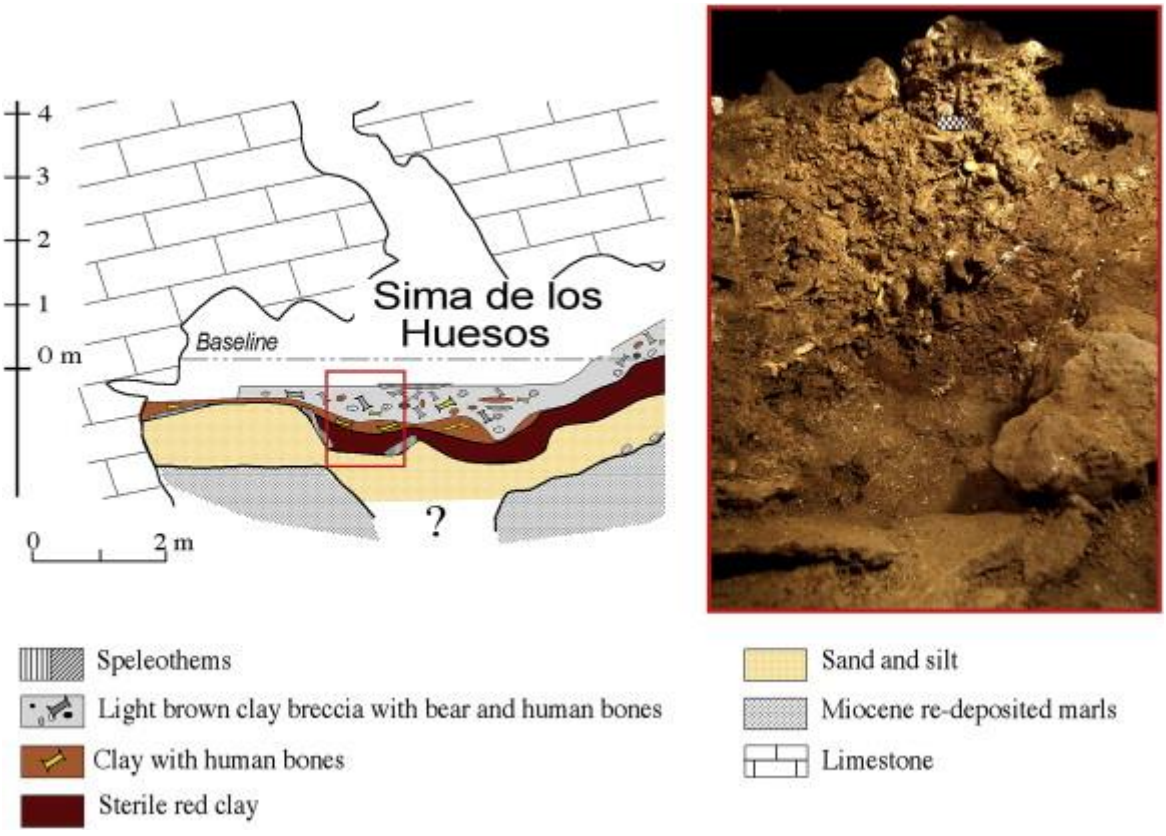
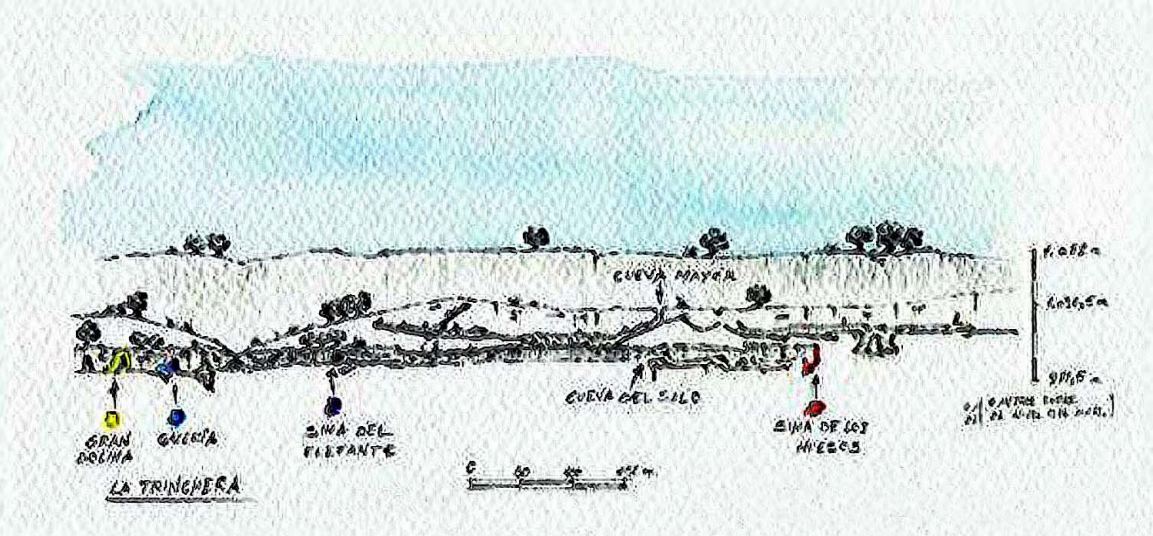


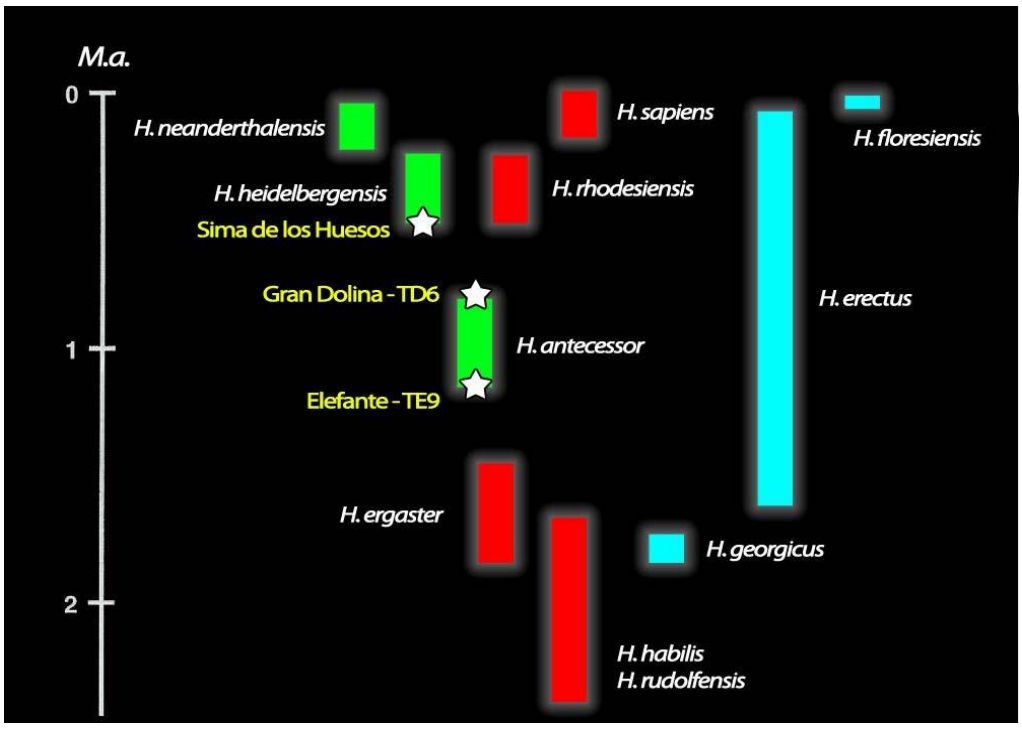
Figure 5.3. *Artist's impression of the Sierra de Atapuerca. The Gran Dolina (left) is highlighted in Yellow, the Sima de los Huesos (right) in Red*. (Courtesy of Javier Trueba, © Madrid Scientific Films.



Klein's criticism of phyletic gradualism is that while it seems plausible it nevertheless fails to explain the material evidence of evolution in the fossil record which seems to show the abrupt appearance of species. These species seem not to change dramatically during their existence and then disappear from the record almost as abruptly as they appeared. In the past this would have been put down to gaps in the fossil record with the hope that future discoveries would provide science with the "missing links" and transitional forms that would bridge these evolutionary gaps. Faced with a more furnished record some palaeontologists, notably Eldridge and Gould, have abandoned gradualism and instead advocated a model of punctuated equilibrium: evolution by natural selection that varies in intensity, being episodically intense, perhaps as a result of climatic and environmental change, and that results in sudden and infrequent evolutionary innovations (Klein 2009: 7-8). On

this view the fossil record evidences these abrupt changes: species appear abruptly in the record after a period of stasis.

Figure 5.4. *Diagram showing the temporal distribution of hominins indicating both the Gran Dolina and Sima de los Huesos*. [The Elefante mandible has since been reclassified as *Homo sapiens* as opposed to *H. antecessor*. Email correspondence with Alejandro Bonmatí Lasso]. (Courtesy of UCM-ISCIII Center Evolution and Human Behavior. © UCM-ISCIII Center Evolution and Human Behavior).



For punctuated equilibrium new species would most likely arise amongst isolated populations where genetic changes/mutations may occur, take hold and become dominant. Anagenesis is replaced with the notion of cladogenesis: evolutionary change occurs as an event that produces a new branch or clade on the evolutionary tree. Importantly, these significant changes are restricted to the branching event and

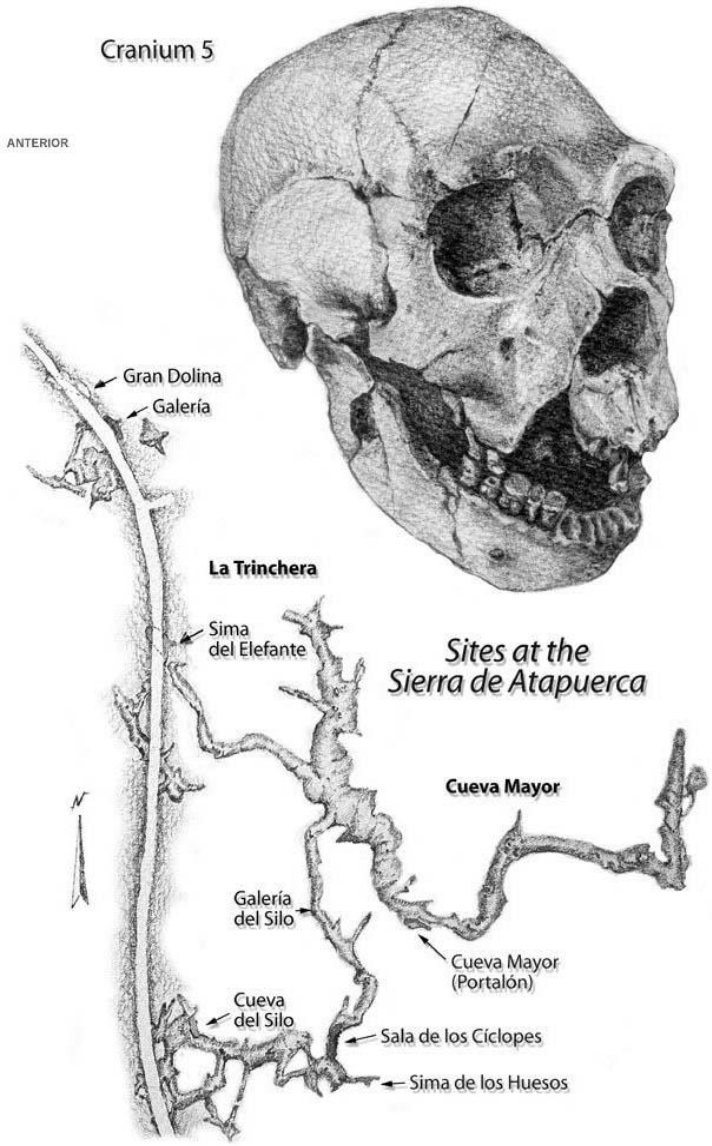
do not continue down the branch anagenetically. Klein's suggestion is that species in the fossil record will be easier to identify if cladogenesis is 'the rule and anagenesis the exception' (Klein 2009: 9)[40]. Amongst its advocates, Klein being a good example, punctuated equilibrium remains a 'thoughtful generalization' based on the observable data and does not amount to a "theory" in the absence of material evidence in the shape of fossils.

Klein (with Edgar) proposes four punctuation events in human evolution that occurred when human populations fitted the model outlined by punctationists and that lead up to the 'dawn of modern human culture', the culture of fully modern humans. These events occurred in Africa and are marked by behavioural and biological change (Klein 2002: 23-24). The first of these events occurred 2.5 million years ago: this is marked by the appearance of flaked stone tools, the earliest evidence of human culture and of the brains capable of producing it. The second occurred around 1.7 million years ago: this is marked by the production of hand axes or bifaces and marks the arrival of human populations with modern body proportions. The third occurred 600,000 years ago: it is marked by a rapid increase in brain size and an improvement in the quality of lithic technology. The fourth event occurred just 50,000 years ago producing the 'fully modern ability to invent and manipulate culture. In its wake, humanity was transformed from a relatively rare and insignificant large mammal to something more like a geologic force' (Klein 2002: 24). At this point "The Human Revolution" occurred, characterised in terms

[40] The Spanish record provides the example of successive rodent faunas that, between 24 and 2.5 million years ago (Ma), document the appearance and disappearance of species in close correspondence to pulsed climatic change evidenced in the deep-sea floor sedimentary record. In Africa, speciation events may have occurred amongst antelopes and primates (including human ancestors) in response to significant climatic and environmental change around 5 million years ago and again around 2.5 million years ago (Klein 2009: 8-9).

of a "creative explosion" (Pfeiffer 1982), and it is in these terms that Klein's opposition to archaeological gradualists like McBrearty and Brooks should ultimately be understood.

Figure 5.5. *Cranium 5 attributed to H. heidelbergensis recovered from the Sima de los Huesos together with a map of sites at the Sierra de Atapuerca. (*Courtesy of Javier Trueba, © Madrid Scientific Films*).*



Klein links his third puncuational event to the emergence of *Homo heidelbergensis* and possibly to the appearance of late Acheulean lithic technology. He says:

> The nature and timing of the shift from the early to the late Acheulean remain to be firmly established, but if the transition turns out to have occurred abruptly about 600,000 years ago, it could have coincided with a rapid expansion in brain size that may have occurred about the same time…If a spurt in brain size and associated changes in skull form sparked the appearance of *Homo heidelbergensis*, its emergence 600,000 years ago would signal a punctuational event like the one that may have introduced *H. ergaster* more than 1 million years earlier. The analogy would be especially apt if…a link between *H. heidelbergensis* and late Acheulean technology…[is confirmed]…to parallel a postulated earlier one between *H. ergaster* and the origin of the Acheulean tradition (Klein 2005: 110. Square bracket: my addition).

By contrast, McBrearty and Brooks advocate archaeological gradualism, sometimes dubbed the "long fuse" hypothesis, in contradistinction to the "short fuse" hypothesis advocated by Klein and others (Zimmer 2005: 132-134). McBrearty and Brooks do so in order to explain advances in technology, self-expression and population growth that occurred around 50,000-40,000 years ago rather than explaining them by appeal to genetic mutation. In 1973 Paul Mellars characterised the transition to the Upper Palaeolithic from the Middle Palaeolithic in terms of material technology, subsistence activities, social organization and demography (see Table 5.1) (Gamble 2010: 45). The 'short fuse' view of this transition might now be dubbed the "short-fuse-Human-Creative-Revolution" in order to capture its theoretical parameters.

Table 5.1. *Markers of the Upper Palaeolithic transition noted by Mellars*. (After Mellars 1973 as reproduced by Gamble 2010: 45).

Material technology
Greater range and complexity of tool forms. Replacement of relative stability in tool forms in the Middle Palaeolithic with rapid change in forms during the Upper Palaeolithic. Development in bone, ivory and antler working and the appearance of personal ornaments.
Subsistence activities
Greater emphasis on single species (particularly reindeer). Broadening of subsistence base to include smaller game. Possible development of large-scale co-operative hunting combined with greater efficiency as a result of the invention of the bow and arrow. It is possible that these advances were paralleled by improved food storage and preservation techniques.
Demography and social organization
Substantial increase in population density and maximum size of co-residential group, as inferred from site numbers and dimensions of settlements. Group aggregation and participation in co-operative hunting of migrating herds (e.g. reindeer). Increased "corporate" awareness.

For McBrearty and Brooks the short-fuse-Human-Creative-Revolution model (which draws together conceptually the near simultaneous appearance around 50,000 to 40,000 years ago in the Old World of modern human behaviours: possibly signalling a cognitive advance and reorganization of the brain together with the manipulation of symbols and the origin of language) is "fatally flawed". The

Human Revolution creates a time lag between the appearance of anatomical and behavioural modernity, creating the impression that the earliest *Homo sapiens sensu stricto* that arose in Africa and who are found there and in the Levant more than 100,000 years ago were primitive behaviourally; this is taken to indicate what Renfrew has recently called a 'sapient paradox' (Renfrew 2007: 79)[41].

For McBrearty and Brooks, this view is born of a Eurocentric bias and a failure to appreciate the African archaeological record. McBrearty and Brooks argue that aspects of the Human Revolution (blade and microlithic technology, bone tools, increased geographic range, specialised hunting, the utilization of aquatic resources, long distance trade, systematic processing and the use of pigment, art and decoration) appear tens of thousands of years earlier in the African Middle Stone Age (McBrearty and Brooks 2000: 453). Rather than appearing suddenly in Europe these 'modern' behaviours are evidenced at sites diverse in space and time. For McBrearty and Brooks this suggests 'a gradual assembling of the package of modern human behaviours in Africa, and its later export to other regions of the Old World' (McBrearty and Brooks 2000: 453).

Western Europe is a remote *cul de sac* from the perspective of world prehistory and the anomalous and "revolutionary" nature of its archaeology is more to do with the discontinuity of the record owing to ice and mountains than to any rapid bio-cultural transformation. *Homo helmei's* (otherwise known as archaic *Homo sapiens* or *Homo heidelbergensis*) appearance in the Fossil record coincides with Middle Stone Age technology and the first glimmer of modern behaviour: this species is seen as a

[41] See also: D'Errico (2003); D'Errico and Stringer (2011); Henshilwood and Marean (2003); Hutchins (2008); Nowell (2010).

plausible African ancestor to *H. sapiens*. For McBrearty and Brooks if *H. helmei* were to become 'sunk into *H. sapiens* [then] the origin of our species is linked with the appearance of Middle Stone Age technology at 250-300 ka' (McBrearty and Brooks 2000: 453). In other words, data has been discovered/cited in Africa (by McBrearty and Brooks 2000; but also by Henshilwood and Marean 2003 and d'Errico et al 2003) that provide grounds for the argument to establish the presence of the traits noted by Mellars (Table 5.1) to be characteristic of the Upper Palaeolithic transition at a much earlier date outside Europe (Gamble 2010: 46). There are now four possible alternative chronologies for the appearance of modern humans, 'humans like us', in the literature, each with its own theoretical commitments (see Table 5.2).

Table 5.2. *The four chronological camps in the debate over the appearance of (anatomically or fully) modern humans (us!) possessed of symbolic capacities*. (After Gamble 2010: 47).

Approximate age	**Theoretical commitment**	**Anatomically (AMH) or Fully (FMH) modern human**	**Geographic focus**	**References**
>15 kyr ago	No human revolution	AMH, FMH	Africa	McBrearty 2007
>60 kyr ago	Human revolution	AMH, FMH	Africa, western Asia	Henshilwood *et al*. 2002
<60 kyr ago	Upper Palaeolithic Revolution	FMH	Global diaspora	Bar-Yosef 2002. Gamble 2010.
<15 kyr	Neolithic Revolution	FMH	Independent centres	Hodder 1990

D'Errico and Stringer (2011) note that in the debate over the origin of "quintessential human behaviours" crucial questions still surround whether we can take modern cognition and innovations associated with it to be unique to *H. sapiens sapiens* and to whether this cognition and innovation emerged abruptly or gradually or as the result of a discontinuous process. They note three scenarios put forward to

account for the origin of cognitive modernity. One: argues that modern cognition is unique to *H. sapiens sapiens*; it is the consequence of genetic mutation amongst anatomically modern humans that took place approx. 50 thousand years ago in Africa. Two: posits that cultural modernity gradually emerged in Africa. This began at least 200 thousand years ago in unison with the origin of *H. sapiens sapiens* there. Three: posits that the innovations indicative of modern cognition are not restricted to *H. sapiens sapiens* and appear and disappear in Africa and Eurasia between 200 and 40 thousand years ago before they became fully consolidated (D'Errico and Stringer 2011: 1060).

McBrearty and Brook's accept the point that the search for revolutions in Western thought has been part of *modern man's larger search for a soul*, part of a search for that unique aspect of their being that distinguishes them from the (rest of the) animal kingdom. If found it will be this aspect that makes them "uniquely human". Think here of Solecki's remark about the Shanidar IV burial: specifically, that the "association of flowers with Neanderthals [sic] adds a whole new dimension to our knowledge of his [the Shanidar IV male, interpreted by Solecki to be a Neanderthal medicine man] humanness, indicating that he had a 'soul'" (Solecki (1975), quoted in Klein 2002: 193. Second square brackets: my addition)[42].

For McBrearty and Brooks, continued emphasis on revolutions in archaeology will only create and perpetuate a gulf separating human beings 'from the rest of the biological world' (McBrearty and Brooks 2000: 533). Affirming Foley's view

[42] Solecki remarks in his abstract to his 1975 paper that the Shanidar IV grave indicates that "although the body was archaic, the spirit was modern" (Solecki 1975).

(1987) that all species are unique McBrearty and Brooks speculate that each species will have its own form of consciousness and that humans will 'no doubt share elements of their consciousness, as they do their behaviour, with their close relatives' (McBrearty and Brooks 2000: 533) a sentiment that we noted in the previous chapter in connection to comparative psychology. This view is cognate with the diverse positions of Gamble, Ingold, various 'enactive' views and with the variation of the dwelling perspective developed here.

While a Human Revolution model would not rule out considerations of dwelling (here recent philosophies of the event, of which Heidegger is a key proponent, would be relevant) a gradualist model (here represented by McBrearty and Brooks) is more inclined to see dwelling to be an important aspect of our and our ancestors' engagement with the world over a much longer period of time. A dwelling perspective need not chauvinistically favour the uniqueness of modern human beings.

The Sima de los Huesos

Heidegger argues that only modern human beings dwell because it is only modern humans that die in his specific sense of the term. Dying, for Heidegger, entails being able to relate to death *as* an existential possibility; the possibility of no longer having any possibilities (of being finite). I will argue in what follows that Heidegger's view is too restrictive since when we consider the material record of the Sima do los Huesos this indicates that *H. heidelbergensis* behaved, was "dealing

with the dead", in a way that when analysed phenomenologically brings their behaviour into the arena of dwelling in a broadly Heideggerian sense.

The Sima de los Huesos is remarkable (see Table 5.3): amongst the puzzles it presents to researchers is to establish just how and why the bones of these 28-32 (Bermúdez de Castro et al 2004; Sala et al 2014) individuals got to be in the pit of the cave in the first place? Is their presence there the result of a catastrophic event; or, as the result of human collectors, animal or 'natural' transporters/re-workers; or, as the result of intentional accumulation? (Sala et al 2014: 80).

Variation in results of age and sex estimation persist: to date the remains recovered from the pit are interpreted to include those of 1 child under the age of 10; 8 to 12 females and/or 8 to 12 adult males; only 3 or 4 individuals aged more than 30 (Andrews and Fernandez Jalvo 1997; Arsuaga et al 1997; Bermúdez de Castro et al 2004; Carbonell and Mosquera 2006). The long bones recovered are not broken, indicating that individuals were thrown or placed in the Sima possibly in a state of rigor mortis. No remains of species of large herbivore have been found at this site indicating that accidental interment of hominin remains is highly unlikely.

Table 5.3. *The Sima de los Huesos (Pit of the Bones): some key points*. (After Klein 2005: 113 and 2009: 428-431).

28-32 individuals are represented in the Sima. Their remains have illuminated patterns of later human evolution: they are assigned to the lineage that produced classic Neanderthals after 130,000 years ago.
The Sima (pit; sometimes referred to as the Sima proper) itself is an 8 x 4 m oblong chamber. Immediately adjacent to this pit is the Rampa (ramp; sometimes referred to as the Sima Rampa), a 9 m long chamber (see Figure 5.2: the Rampa is to the right of the pit itself. Figure 5.2. represents the pit and the 13 m vertical shaft above it. The Rampa is omitted). The Rampa is the source of the speleothem (cave formation) that suggests that the human fossils are at least 530,000 years old (Klein 2009: 428).
The bones were fragmented and tightly packed in the clay layer where they were discovered. The Sima yields the majority of human remains discovered: the Rampa has admitted only a few. Virtually all of the bones discovered in the layer containing human remains are human. This rules out accumulation as a result of predation. (Gnaw marks indicate that small carnivores such as foxes were able to enter the Sima). The overlying clay layer has produced 9000 bones from cave bears and some from other carnivores. The presence of the bear bones (representing mainly two year olds) is as puzzling as the presence of the human remains. It is possible that these bears fell into the Sima in a failed attempt at hibernation elsewhere in the cave system.
Only one artefact has been discovered in the Sima: a late Acheulean hand axe (see Figure 5.7). Its presence backs up the dating of the fossils to between 500,000 to 350,000 years ago. The hand axe alone does not provide evidence that the people of

the Sima inhabited the cave. No additional evidence of habitation is forthcoming.
The excavated human bone sample now exceeds 5500 specimens. This includes: three skulls and large fragments of six others, many smaller skull/facial fragments, 50 complete or partial mandibles and maxillae, numerous isolated teeth, many postcranial bones (bones not from the head).
Males and females seem to be almost equally represented in the sample.
(Some variation in results of age and sex estimation persist. The following is an interpretation only). Wear on the teeth and the estimated time of tooth eruption suggest that 18 of the (maximum) 28-32 individuals were adolescents aged between 11 and 20 years. 5 were young adults aged between 21 and 30 years, a single child, was under 10 years. 4 adults were over 30 years old (Klein 2009: 429-30). 8 individuals could not be sexed: the remainder comprises 12 males and 8 females.
The rarity of children in the record is difficult to account for and may be due to the relative softness of their bones and to selective destruction of the sample.
The rarity of adults beyond 35 years may be due to (as with later Neanderthals) life expectancy. Life expectancy may have been no more than 40 years.
The age range of the individuals recovered is puzzling: if their deaths were the result of everyday mortality events (accidents, endemic disease) we might expect to find more older/weaker individuals than young adults. One implication is that their deaths might not have been as a result of everyday events but as a result of a catastrophe that affected everyone.
Disease: epidemic disease hypothesis. The placing of the bodies in the Sima itself would still require an explanation. Individual cause of death remains unknown. Cranium 5 (see Figure 5.5) did have a large facial abscess that might have caused septicaemia. The browridge of one juvenile had been (severely) fractured.

Attack: perhaps the deaths of the individuals in the Sima were caused by an attack from another group of hominins. Survivors may then have placed the dead in the Sima. If this is the case the recovered remains ought to display signs of violence. They do not. Unlike the bones recovered at the Gran Dolina the remains from the Sima do not display cut markings, ruling out cannibalism.
The bones recovered from the Sima only display damage as a result of their being gnawed by small carnivores.
Given the completeness of the skeletons recovered it is argued that entire corpses reached the Sima (coming down the vertical shaft) intact and decomposed there (see Figure 5.8).
The recovered bones are mostly broken. Their disarticulation is due to natural forces (sediment flow; animal trampling) not hominin activity.
Plausibly, the bodies in the Sima were deposited there by other hominins, perhaps for ritual/ceremonial reasons or for hygienic purposes.
The ritual/ceremony/proto-religious interpretation cannot be ruled out. The presence of one hand axe may add to the ritual interpretation of the site. However, no other supporting material culture has been found that would bolster this interpretation. The ritual interpretation is based on the rarity of children and adults in the sample and the presence of the hand axe.
The hygienic disposal interpretation is plausible: a desire to dispose of the dead remotely from an occupation site may explain the presence of the Sima remains.

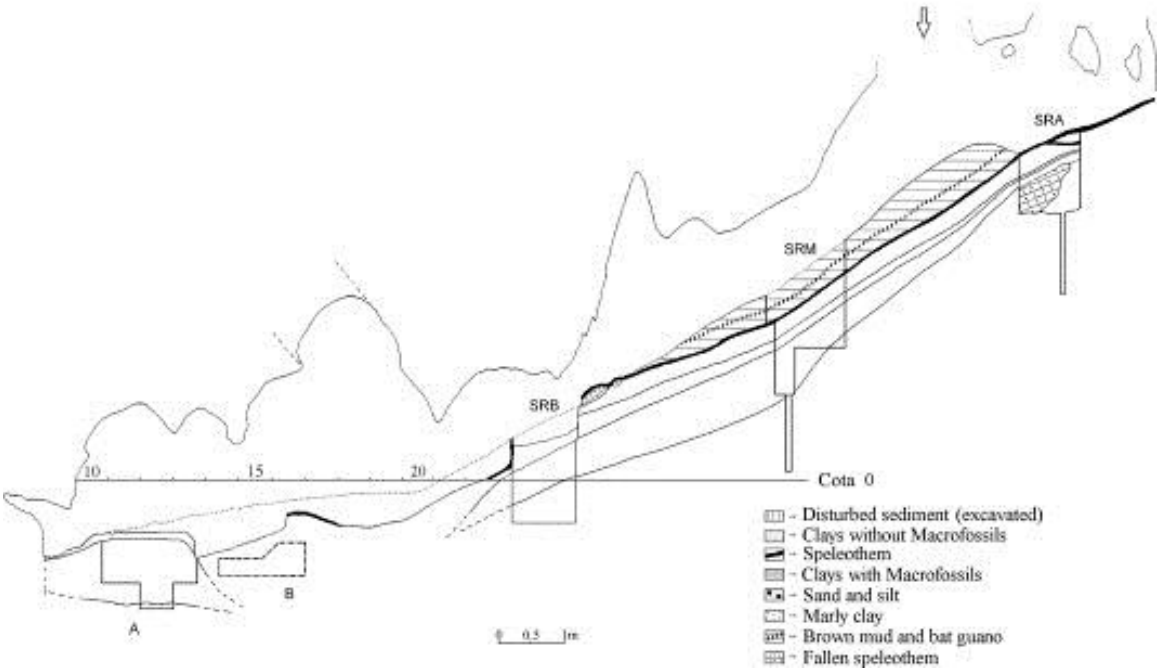
Most of the human bones that are found at this site are found in a pit or gallery – the Sima – at the base of a ramp (Rampa). Gaining access to this pit requires now, as in the remote past, climbing down a 13 metre vertical shaft. Any other entrances that

might have existed in the past are now blocked. Only a few hominin bones are found on the ramp leading to the pit. Partly due to difficulty of access it is argued that no animal or hominin used this pit as a living space or den: no debris of daily human life has been discovered there. This was not a space of habitual activity for humans and it is argued that these individuals were deliberately deposited in this pit because had they fell in accidentally, like the bears who have been recovered, they would need to have survived the fall, unlike most of the bears, in order to have crawled down into the pit, the deepest point of the cave, to die. Had they been washed down into the pit by natural forces we might expect that the bear bones and the few bones of the other carnivores, being subject to the same natural forces, to also have been washed into the pit and to be mixed into the clay layer containing the majority of human bones, which they aren't.

Bones of bears have been found on the ramp leading down to the pit; some were found in the pit itself in a layer above the human layer. While some of the recovered human bones do show signs of gnawing by small carnivores such as foxes the dead hominins were not dragged into this pit by predators. If they were, then we would expect to find other large herbivores: these, however, are conspicuously absent. The bears (*Ursus deningeri*: ancestor of the massive cave bear) found in the pit, some of which might have survived in there long enough to gnaw the bones, must have fallen down the shaft after entering the cave: the Sima de los Huesos takes its name from the presence of bear bones, not human ones. Bones of other carnivores, such as lions and wolves, have also been found there. It is complete cadavers of both hominin and animal that are represented in this pit, not just isolated bones (Andrews and Fernandez Jalvo 1997; Arsuaga et al 1997; Bermúdez de Castro et al 2004;

Carbonell and Mosquera 2006; Klein 2005: 111; Parker Pearson 2009: 153; Sala et al 2014).

Figure 5.6. *Profile of the Sima de los Huesos. This figure shows the morphology of the cavity (the chamber, ramp and portion of the shaft). This figure was published in E. Carbonell and M. Mosquera, 'The emergence of a symbolic behaviour: the sepulchral pit of Sima de los Huesos, Sierra de Atapuerca, Burgos, Spain' in, Human Palaeontology and Prehistory, C. R. Palevol 5* (2006) 155-160. Copyright © 2006 Académie des sciences. Published by Elsevier Masson SAS. All rights reserved. Reproduced courtesy of ELSEVIER MASSON SAS.



The hominin bones discovered in the Sima were not articulated and they had moved very little from their original place of deposition. To date only one handaxe has been found at this site (see Figure 5.7). Knapped from an unusual block of naturally occurring pink-coloured quartzite from a source roughly thirty kilometres from the site of its interment this example is rectangular, symmetrical and well-constructed.

Importantly, it appears from examination of its edges that this hand axe had never been used (de Lumley 2009; Stringer 2006; Carbonell and Mosquera 2006). Hand axes were the most complex and possibly most significant items in the Acheulean 'tool kit' and "Excalibur's" presence in the Sima has been interpreted as pointing to its intentional and symbolically mediated association with the dead: this, it is suggested, indicates that the Sima de los Huesos represents 'the first case of mortuary symbolism in human evolution' (Carbonell and Mosquera 2006: 159).

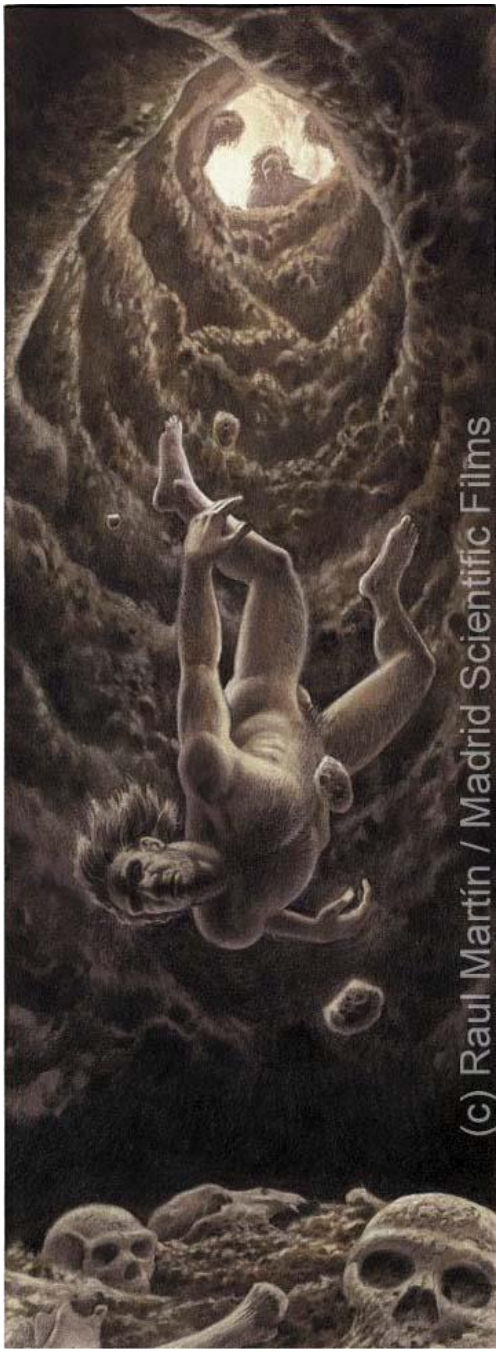
For Pettitt, whatever the exact date of the sample it is true that the site is highly relevant to accounts of the development of mortuary activity[43]. The age profile of the remains seems biased towards adolescents and adults in their prime. Pettitt suggests that at least 12 males and 8 females are represented (Pettitt 2011a: 50). At sites like Caune de l'Arago in France, Gran Dolina (neighbouring the Sima), Bodo in Ethiopia and Zhoukoudian in China, remains of hominins (*H. erectus*; *H. antecessor*) have been found that exhibit cut marks, indicating that these bones had been de-fleshed, which in turn possibly indicates episodes of prehistoric cannibalism, some of which may have been ritualistic (although this is unlikely given the parallel processing of hominin and other animal remains).

[43] Pettitt quotes a range of 400,000-500,000 BP as opposed to Klein's range of 600-530 thousand years ago (Pettitt 2009: 428) but see the discussion above.

Figure 5.7. *"Excalibur". The only item of lithic industry discovered to date in the Sima de los Huesos*. (Courtesy of Javier Trueba, © Madrid Scientific Films).

Cannibalism was not practiced at the Sima de los Huesos. Pettitt suggests that the Sima hominins accumulated there anthropogenetically, potentially on a number of occasions over a long period of time (see Pettitt 2011a: 52-53).

Figure 5.8. *Artist's impression of the ritual deposition of a H. heidelbergensis individual in the Sima de los Huesos*. (Courtesy of Javier Trueba, © Raul Martin, Madrid Scientific Films).



Pettitt provides a contrasting interpretation of the Sima to figures like de Lumley and Carbonell and Mosquera who emphasise the ritual nature of the site and to those who would emphasise the catastrophic interpretation[44]. He suggests that the individuals represented in the pit may have been deposited, perhaps in the pit itself or at its original entrance (which has not been discovered), in such a way that left them exposed, near to the shaft, where they may have been scavenged (on occasion) and where the processes of disarticulation would have begun (Pettitt 2011a: 53). He suggests this because of the variation in the weathering of the surfaces of the recovered bones: elsewhere this has been put down to sediment flow and animal activity in the cave system (Klein 2005: 113). For Pettitt, it is not appropriate to refer to the pit of bones as a 'proto-cemetery' (Pettitt 2011a: 53). This account differs significantly from those that envisage individuals being thrown down the Sima's shaft followed by the ritual deposition (Figure 5.8) of a single hand axe as a funerary gift (de Lumley 2009).

For Pettitt it is not possible to demonstrate that the Sima was a 'site of collective disposal of the dead or its associated rituals' (Pettitt 2011a: 54). By contrast, individuals may just have been deposited at the entrance to the site for the need of hygiene. The unique biface discovered there may just have fallen out of a pouch of

[44] De Lumley argues that *H. heidelbergensis* ritually deposited their dead in the Sima, which represents an invisible 'world of the dead' (de Lumley 2009: 18). For him (and Carbonell and Mosquera (2006)) the Sima de los Huesos is the oldest discovered sepulchral deposit. It represents the first true expression of ritual thought and practice in prehistory. *H. heidelbergensis* displayed the 'first incontestable signs of symbolic thought' (de Lumley 2009: 17). For de Lumley, symbolic thought is one essential dimension of human cognition: it is our ability to transcend the material world and to integrate our cogitations into a universe that is richer than that revealed by the senses. This involves combining concepts into a 'system of complex relations' (de Lumley 2009: 10). Evidence for sophisticated symbolic activity issuing from such thought follows the appearance of *H. sapiens sapiens* in the record. For de Lumley, 'the first elements of symbolic thought gradually developed in human cognition, in parallel with the emergence of consciousness' (de Lumley 2009: 10): 'metaphysical anguish', to use de Lumley's expression, and religious thought, occurs just less than 100,000 years ago with the 'first true burials' (in the Mousterian) (de Lumley 2009: 19-20; but see also Klein 2005: 113 and Pettitt 2005: 152).

either one of the dead or of one of the living who brought the dead there (Pettitt 2011a: 54). A number of the individuals represented in the Sima sample display pathologies that may relate to painful and disfiguring diseases in life (as with the young adult (Cranium 5) with the large facial abscess). Perhaps this fact, suggests Pettitt, may account for the living hominins' desire to dispose of these dead at a specific place – which may have already become known as a place of death, perhaps of other animals (for example, bears) and which might have enabled its appropriation as a place of hominin death – in a manner distinct from routine patterns of abandonment or disposal (Pettitt 2011a: 54-55).

The Sima could represent a number of separate instances (separate events of funerary caching) of structured deposition of the dead (of a corpse or parts of a corpse) in a chosen place that resulted from a 'cultural association' of a specific place with the opportunity to get rid of the dead (Pettitt 2011a: 54). If so, then on this account it is this 'cultural association' on the part of the hominins that stands in need of explanation (perhaps by invoking the possession of fourth order intentionality). If Pettitt's account holds water then the Sima would provide an important hint as to how and when human ancestors began to dispose of the dead in particular places, adding a geographical/spatial dimension to mortuary activity.

The Sima was certainly known to the populations of *Homo heidelbergensis* living around the Sierra de Atapuerca at this time. Yet, the lack of cut marks on bones recovered there suggests that the site was not of primary importance to them as a place of scavenging. If the Sima had become known as a 'place of death' then, on Pettitt's account, places associated with funerary caching have their origins as

places of disposal. Such places were (probably) liminal, unpleasant, perhaps dangerous, perhaps associated with disease and/or decay. Such places would have been places to avoid in ordinary activities and would have functioned as places where the dead could be removed to from the mundane places of human life. For Pettitt, if this is so, then this is the point in human evolution at which a dichotomy has come to organise the landscape in terms of places of life and places of the dead (see Figure 5.9) (Pettitt 2011a: 54-55).

Leaving the catastrophic interpretation of the Sima to one side and focussing instead on the religious/ritual interpretation and the structured deposition interpretation offered by Pettitt it remains the case that on both accounts the individuals doing the depositing of corpses remain cognitively sophisticated. The religious/ritual interpretation would, for example, require the attainment of fourth order intentionality. Pettitt's account would not go so far in terms of cognitive and/symbolic development to ascribe a proto-religiosity to these hominins, inspiring them to create a proto-cemetery, none-the-less the agents doing the depositing were still capable of taking places *as* a place for the deposition of hominins, *as* liminal, *as* unpleasant, *as* dangerous, and so on. Recall, for the phenomenologist, what a thing 'is' depends upon what any agent takes that thing to be in terms of a need (Campbell 2009: 272). Phenomenological accounts of intentionality, what Heidegger radicalised in terms of being-in-the-world, describe that dimension of agency that makes it possible to take anything whatsoever 'as' something: projective meaning is cast ahead of agents in terms of their projects and in so doing structures the thing that will be appropriated by them. Heidegger puts it this way:

> In terms of the significance which is disclosed in understanding the world, concernful Being-alongside the ready-to-hand gives itself to understand whatever involvement that which is encountered can have….In dealing with what is environmentally ready-to-hand by interpreting it circumspectively, we 'see' it *as* a table, a door, a carriage, or a bridge…pre-predicative seeing of the ready-to-hand is, in itself, something which already understands and interprets…In the mere encountering of something, it is understood in terms of a totality of involvements [a world]; and such seeing hides in itself the explicitness of the assignment-relations (of the "in-order-to") which belong to that totality (Heidegger 1962: 189. Square brackets: my addition).

For the phenomenologist, seeing something 'as' anything at all (liminal, unpleasant, dangerous and so on) requires that thing to be contextualised by the agent in terms of a background understanding of a totality of involvements or a world. Any 'thing', including a landscape, is constituted in interpretation (Campbell 2009: 274). If a place becomes known as a place of the dead then it must be able to be seen 'as' a place of the dead. Given this, a space for a phenomenological/dwelling perspective contribution to the debate has opened up. For the agents to be able to take any place 'as' this or that they must be capable of interpretation in the phenomenological sense of that term. In this case, this place has been constituted in interpretation as a place of the dead.

Giving reasons, having experiences: dwelling at the Sima

Coolidge and Wynn point out that in the early days of the study of Neanderthals it was the fact that they seemed to have buried their dead on occasion that made them appear very human to paleoanthropologists (Coolidge and Wynn 2009: 190). Coolidge and Wynn caution us however: the phenomenon of burial is apt to be under- and over-interpreted (Coolidge and Wynn 2009: 191). Even the presence of a few Neanderthal burials has prompted scholars to argue that Neanderthals had a rich

symbolic and religious life replete with concepts of the supernatural and of the afterlife (Coolidge and Wynn 2009: 191). Coolidge and Wynn remain sceptical of these claims. They point out (as does Pettitt) that there are many reasons to bury a corpse and only some of these involve the supernatural.

Regarding the Sima de los Huesos and the activities of *Homo heidelbergensis* Coolidge and Wynn point out that the hominins' reasons for depositing these bodies at this site remain unknown (and, we may add, unknowable) but that, whatever they were, they cannot be accounted for in natural terms or by the necessities of facing up to the everyday challenges of life in Middle Pleistocene Spain. Simply pointing to the 'non-utilitarian' (although an account of the Sima that stresses the role of hygiene is not obviously non-utilitarian) character of the events that unfolded at the Sima will not do for Coolidge and Wynn. For one thing, it sells our ancestors short! For Coolidge and Wynn, the evidence points to the fact that *Homo heidelbergensis* (and later, Neanderthals) had reasons for how they treated the dead: the effort expended in dealing with them in the manner that they did points to the fact that it was certainly not done on a whim, regardless of whether it was done for religious/ritual reasons or as an event of individual funerary caching.

Properly, we do not know what our ancestors' reasons may have been (interpretations vary from the pragmatic (hygiene) to the esoteric (the religious or supernatural)) but what we can say is that 'the very act of having reasons is an important piece of evidence' in itself (Coolidge and Wynn 2009: 191). Having reasons for anything implies prior interpretation: this prior interpretation then provides the horizon (that 'upon which') for reasons. The case I have been making

(see in particular the previous chapter) is that such prior interpretation admits phenomenological elaboration in terms of 'seeing as', 'in-order-to' and 'for-the-sake-of-which'. Taking Coolidge and Wynn's contribution as a point of departure I want to focus on the act of deposition or, more specifically, the structure of the act of deposition as this is revealed phenomenologically. This is the phenomenological/dwelling perspective contribution to the debate.

Phenomenological-hermeneutic interpretation-description involves the movement from the first-person description of how things might appear to a particular observer to a general understanding of how things can become present *per se* (Cazeaux 2000: 68). Recalling the phenomenological method as outlined in Chapter Four (Figure 4.8), when approaching the Sima as an object of phenomenological study it is important to perform and maintain a reduction (*epoché*) while fostering a sense of empathetic interpolation for the agency (the object of phenomenological study) that might have produced these material traces (the object of archaeological study). From here the phenomena must be described and named and elucidated regarding relationships and processes. Informed comparisons must be made (by analogy) that will elucidate the phenomena while allowing intuitions to be tested. For example, might the archaeology allow for an interpretation of the agency in question exhibiting *Fürsorge*? What are the intersubjectively verifiable dimensions of these experiences that might be archaeologically investigated?

Interpretation, as the fleshing out of our tacit understanding of things that structures our 'know how', is always derivative: it can only disclose to the agent what has already been understood by them (Madison 1994: 300). What has already been

understood by the agent is structured communally: being-in-the-world, as Heidegger would have it, is always shared with others, Dasein's world is a *Mitwelt*, a with-world (Tietz 2009: 169. See Chapter Four).

Our aim is to understand the structure of the act of deposition itself. A ritual or religious interpretation of such an act of funerary caching is an ontic interpretation advanced on the basis of the ontological or structural interpretation. We cannot know what *Homo heidelbergensis* experienced (how could we?) when engaged with a corpse of one of their band but phenomenological structures, such as intentionality, world, readiness to hand, presence at hand and so on, enabled these experiences to take the shape that they did for these individuals. This is the phenomenological claim that such structures are prerequisite for having the kind of reasons that Coolidge and Wynn note were almost certainly there and which ascription of, for example, fourth order intentionality would seek to account for. In essence, the phenomenological claim is that the shape of these past hominin's consciousness admits phenomenological description by virtue of the material traces that were left behind by its agency. If ampliative, this description will take phenomenology beyond a description of the experiences of just *Homo sapiens sapiens* and instead provide a glimpse of the structure of engagement of our ancestors. Just as it has become possible to moot the idea of primate archaeology (after Haslam et al 2009) I argue that it is possible to moot the idea of hominin phenomenology. I'll begin in this regard by way of a hint that Heidegger gave us in *Being and Time*.

Heidegger's primitives

When Heidegger wrote in *Being and Time* that 'the ways in which death is taken amongst primitive peoples, and their ways of comporting themselves towards it in magic and cult', while illuminating their understanding as situated agents within a culture, nevertheless still requires 'an existential analytic and a corresponding conception of death' (Heidegger 1962: 291-292) to be reached, in order to account satisfactorily for their understanding, it is certainly the case that the people of the Sima, along with their ancestors and pre-modern progeny, were not the kind of 'primitives' that he had in mind. Heidegger had in mind modern human 'primitives', or 'primitive Dasein', as he calls it, who are scientifically described as members of the species *Homo sapiens sapiens*, and not any of their fossil ancestors. That said, he would have probably extended this category to include "fully modern humans" if not necessarily just "anatomically modern" ones. Heidegger's starting point is that there are multiple 'Daseins' that may characterise the way in which an agent is 'in' the world as the place where meaning becomes manifest. In a note in *Being and Time* for instance, he makes the point that there is a 'Dasein of myth' (Heidegger 1962: 490). And in every case Dasein's world is a 'with-world' (Heidegger 1962: 155). From the point of view of phenomenological archaeology it is when elucidating the parameters of this manner of being that there should be empathetic interpolation: in as far as is possible the phenomenological archaeologist must try to inhabit the Dasein that has been there.

Heidegger has quite a lot to say about 'primitive Dasein' as a manner of 'being-there' (of being-in-the-world) and of its significance for existential analysis, the

analysis of Dasein. Analysis of Dasein directed toward the ‘‘life of primitive peoples’’ can be methodologically positive since ‘‘primitive phenomena’’ (Heidegger 1962: 76) can be less ‘concealed’ and ‘complicated’ by the kind of ‘extensive self-interpretation’ on the part of Dasein in more ‘complex societies’. That is:

> Primitive Dasein often speaks to us more directly in terms of a primordial absorption in ‘phenomena’ (taken in a pre-phenomenological sense). A way of conceiving things which seems, perhaps, rather clumsy and crude from our standpoint, can be positively helpful in bringing out the ontological structures of phenomena in a genuine way (Heidegger 1962: 76).

It is precisely these ontological structures that we are interested in with regards to the people of the Sima. Here phenomenological description of structures should be made; phenomena under analysis should be named; relationships (references, ‘in-order-to’ and so on) and processes should be elucidated; the object of study should be adumbrated. Such structures (elucidated phenomenologically from the first person perspective in the present and applied to other forms of being-there) would enable their experiences to take on the shape that they did.

Now, on one level Heidegger might be read here as a man of his time: *primitive cultures are simply less complicated than advanced Western ones*. While no doubt revealing a theoretical pre-judgment on his part, to leave the discussion at this juncture would be to miss the deeper point that he is making. Again, from the point of view of method, here is where informed comparisons should be made in the analysis and any intuitions as to the meaning of the phenomena should be tested. That is, precisely because there is, in one sense, less to make of a particular ontic case or example of behaviour in such “primitive” societies, an assumption that can,

of course, be challenged, there is much more to make of it in ontological terms because of its simple – we might say, structural – clarity. The existential analytic of primitive Dasein, of primitive 'being-there, here, now', will yield an ontological understanding of the structure of Dasein's being as possibility: that would include the existential-ontological understanding of death that is logically prior to any ontical understanding of it. At this level, death functions as the principle of individuation: death awareness draws together a set of possibilities in such a way as to enable an agent to appropriate and order them as *their* possibilities. In other words, death is the origin of the 'I'.

An ontical understanding of death would include any particular culture's 'other-worldly speculation' as to the meaning of death (Heidegger 1962: 292). Such 'speculation' need not be overtly theoretical and may well include the culture of the people of the Sima (afforded by, for example, fourth order intentionality) that in turn may have taken death as something religious or as something sanitary. The ontological structural articulation of death, constitutive of beings who dwell (Daseins) in Heidegger's restricted sense, grounds any possible cultural interpretation of its meaning. Heidegger's general thesis is that the theoretical world (of the present-to-hand) depends upon the existentially prior practical world (of the ready-to-hand) (Tietz 2009: 174).

Ontological analysis of death will be 'formal and empty' (even diagrammatic) but it will reveal death to be central to the existential nature of Da-sein (being-there-here-now) as possibility and of Dasein's being-toward-its-end as this is lived out in a dwelling place or landscape (Dasein is, after all, being-in-the-world). Death, the

constitutive moment of dwelling, is Dasein's 'basic certainty': it is the 'possibility of the absolute impossibility of Dasein' (Heidegger 1962: 294). And 'only man dies' (Heidegger 1971: 150). Only man dies because it is only man that 'dwells poetically upon this earth'. It is only such dwellers that are capable of death *as* death (Heidegger 1971: 150)[45].

The existential analysis of death is 'superordinate' to the analysis of death in 'biology, psychology, theodicy or theology' and, we should add, to its analysis in archaeology and anthropology, because it reveals aspects of human dwelling in their ontological dimension. Heidegger notes in *Being and Time*, that (to-date) the information that is available for analysis about modern "primitives" has been provided by ethnology (which tends to refer to 'the observable aspects of a society encountered by the anthropologist in the field' (Gosden 1999: 3)). The trouble with this is that, like other ontic enquiries, ethnology proceeds with an implicit but definite preliminary conception and interpretation of what 'human Dasein in general' is: 'Ethnology itself already presupposes as its clue an inadequate analytic of Dasein' (Heidegger 1962: 76). The structural (diagrammatic), ontological clarity that is provided by the phenomenological, existential, analytic of Dasein is prior to any account of a particular cultural manner in which Dasein has found itself. Such an account remains at the ontic level and does not plumb the depths of the ontological.

[45] Dasein is 'mortal', in Heidegger's later terminology. It is mortals who dwell in terms that allow them to come to regard themselves as safe in their world *as* their dwelling place, (as their 'place' or 'home'). Mortals are, in a sense, 'taken care of' or 'provided for' by this dwelling place and 'take care of' and 'care for' the things they encounter there (Young 2002: 64). To dwell is to be in that 'free place' where, *qua* mortal, one is, in a sense, secure and so enabled to face up to mortality in terms of a releasement (*Gelassenheit*) that is not an evasion: 'Mortals dwell in that they initiate their own nature – their being capable of death as death – into the use and practice of this capacity, so that there may be a good death' (Heidegger 1971: 151. See also Young 2002: 64-65).

Despite this, positive (ontic) science (such as archaeology) cannot and should not await the completion of philosophy *qua* ontology. Rather, what must occur is that what has 'already been ontically discovered' (such as an archaeological site) must be subjected to ontological purification in order to render such ontological structures transparent (see Figure 5.9). The many cultures described by anthropologists and archaeologists amount to various 'forms of Dasein' (Heidegger 1962: 77) and each of these should and could be subject to ontological purification. That is, to get a 'genuine knowledge of essences', the kind of knowledge that Heidegger is interested in here, it is necessary to go beyond cultural comparison and classification and toward the existential analytic. Doing this will reveal the categories of factical life (care, existence, instrumentality, temporality, historicity) that are transcendental, formal and ontologically neutral: they are the universal structures of factical life that are logically prior to any ontic cultural constellation (Tonner 2010: 80).

Heidegger and the Sima de los Huesos

So, with this all in mind, let us return to the people of the Sima. What does the material evidence and our phenomenological analysis suggest about the structures that oriented their behaviour? Minimally, I suggest that the Sima provides evidence for the advent of a form of engagement that begins to 'face up to mortality' in the sense that these individuals would have seen death as something problematic, as an issue to be somehow resolved, howsoever that 'facing up' was taken ontically. This interpretation requires no more than fourth level intentionality to have been reached.

My interpretation is methodologically prior to Pettitt's account (although I will revisit his terminology) of the Sima in terms of funerary caching events and to accounts of it in terms of religion/ritual.

Interpretations of the Sima emphasising catastrophe followed by an anthropogenetic origin to the remains in the pit may also be understood from the perspective of dwelling: Heidegger reminds us that the 'present-at-hand (for our purposes here, "objective reality": the 'Real') as Dasein encounters it, can, as it were, assault Dasein's Being; natural events, for instance, can break in upon us and destroy us' (Heidegger 1962: 193). Reality, (what others might call 'subjective' reality) for Heidegger, not 'the Real', depends upon care (*Sorge*, practical coping) (Heidegger 1962: 255). Catastrophic interpretations, interpreted from the dwelling perspective, would emphasise the threatening nature of an agent's encounter with the dead (as catastrophic events in themselves) in terms of a threat to the continued dwelling of the living.

From Heidegger's point of view, looking at 'simpler cases' of primitive Dasein should enable us to elicit ontological knowledge of the structures of being-there in a more direct way than when dealing with more 'advanced cultures'. Importantly, primitive Dasein is not 'Primitive Man', in the sense that this concept was applied by someone like Vygotstky, where it marked out a non-literate hunter gatherer phase of human evolution between 'civilised' modern individuals and apes (Gamble 2010: 46). Heidegger's primitive Dasein is modern *Homo sapiens* and the ontological knowledge afforded by the process of investigating primitive Dasein is ontological knowledge of the structure of dwelling. My ultimate criticism of

Heidegger is that it is wrong to limit 'Dasein' as a "conceptual designation" to just *Homo sapiens sapiens*. Instead, Heidegger's sense of the term should be broadened to include other members of the hominin family in so far as their mortuary activity, discernible archaeologically, dictates an engagement with death *as* death: where death is appropriated prior to ontic elaboration. Death is a structure that individuates a Dasein and that enables ontic interpretation of the phenomenon of death as meaning this or that in any religious or cultural constellation (fourth order intentionality). This penetrates to the heart of Heidegger's position[46].

Where Heidegger is distinctive is in the thematization of death as the central dimension of dwelling: mortals and only morals dwell in his restricted technical sense. Dwelling is, of course, something that occurs in a place. In this sense, as a spatial condition of meaningful existence, dwelling is a prior condition that would need to have been reached in order for any dichotomisation of the landscape, after Pettitt, to occur. In this context let us remind ourselves of Pettitt's mortuary phases in order to explore a possible Heideggerian reading of the Sima. The Pit of Bones falls within the later period of Pettitt's Archaic mortuary phase. It requires no more than fourth level intentionality to have been reached. This mortuary phase takes in the Australopithecines, early *Homo* and persists until the origins of *Homo sapiens*. During this phase there is some continuity with the earlier Core mortuary phase comprising Miocene hominoids and Pliocene hominins but now the advent of funerary caching, the incorporation of places in the landscape into mortuary activity,

[46] The dwelling perspective may allow us to unite notions of 'organism-and-environment' and 'being-in-the-world' while retaining a sense of the priority of finitude in limiting self-conscious life. Tietz puts Heidegger's position like this: death (the ability/possibility-to-be-no-more) is that final boundary 'before which the question concerning a good or successful life is really meaningfully posed' (Tietz 2009: 175).

becomes centrally important. Pettitt argues that it is from funerary caching that burial proper arises (Pettitt 2011a: 268).

If we take Pettitt's point that the activity at the Sima amounted to funerary caching, which is the structured deposition of corpses or parts of corpses in a consciously chosen place in the landscape, without first modifying that place, then (in addition to the spatial nature of dwelling that has opened a world wherein the dead become meaningful) the first thing that we might say from the perspective of dwelling is that for the people of the Sima the 'being-dead' of these individuals *mattered* to them or was *meaningful* to them to such an extent that the dead individual warranted deposition at a particular place in the landscape. In order for this to take place the individual must have been present *as* dead to the other individuals doing the caching. In order to be able to select a place in the landscape as a place suitable to take the dead, agents must understand the 'practice' of dying and the spatiality of their environment.

From Heidegger's perspective of dwelling as embedded being-in-the-world, agents can appropriate a particular aspect of the world, let's say a particular stone functioning as a makeshift knife or cutting edge, in service of a particular project, for example the cutting of a rope tie in order to open a box in order to gain access to a piece of fruit, because the agent already understands the practice of cutting[47]. Cutting is something that agents can do in that world. Cutting is an intelligible practice. Holistically, the object (sharp stone edge) functions as an intentional

[47] I base this example on a video clip of Kanzi, a bonobo, first knapping and then utilizing a stone tool in order to recover a piece of fruit in a box. An important difference is that Kanzi makes the tool: my example presupposes only that the tool was found. This video clip is available on the website of The Stone Age Institute at: http://www.stoneageinstitute.org/tool-behavior.html

(directional) sign within a practical context (Campbell 2009:273): it 'points to' the practice of cutting. Having a concept for Heidegger amounts to having a disposition to use intentional signs in the right kind of way and this ability has a temporal underpinning. Care (*Sorge*), practical coping, is grounded in temporality: temporality is, as Heidegger puts it in *Being and Time*, the ontological meaning of care (see Heidegger 1962: 370).

Any sharp object would 'do' in this context provided that it meets the need: it is sharp enough to slice through what needs cut. The practice of cutting opens up an equipmental context in which the rope shows up *as* rope (as something that requires cutting *in order to* get at the prize), the box *as* box (as something containing something of interest) and so on. In this regard, Heidegger 'interweave[s] intentions and nature' (Campbell 2009: 275). The world on Heidegger's account is a system of signs organised in terms of a hierarchy of projects that is unified by the structure of being-in-the-world that Heidegger calls 'care' (*Sorge*) or practical coping.

The practice of, for example, preparing a Magdalenian harpoon implies the coherence of that individual project (the making of the individual harpoon) together with the coherence of the project of fishing, that itself implies a catch that may be shared, which in turn implies a social context (*Mitsein*). The practice of knapping a hand axe (such as the one discovered at the Sima) implies the coherence of that individual task together with the coherence of the practices of consuming the object in use, howsoever those practices were in fact structured and howsoever the object was actually 'used'. An object, taken phenomenologically – in the remote past just

as now – when appropriated to a task is a ‘junction of signs in a referential totality’ (Campbell 2009: 276).

The pre-conditions for funerary caching include being opened to the world (being a dweller) and so being able to select the site for the caching. In other words, an object – the site of the caching – must be appropriated to a particular task, in this case the structured deposition of a corpse. As structured, the act of deposition involves selecting a place to deposit a corpse. Given that this is something that happened more than once this implies a coherent ‘practice’ that admits rules even if these were never linguistically articulated. Depositing a corpse in the Sima is something that is intelligible to the agents doing the depositing: it ‘makes sense’ to them. It is a practice grounded in their practical engagement with the world. It is grounded in care. This practice implies the coherence of a wider practice of dealing with the dead while negotiating a landscape, howsoever that dealing was understood (ontically) by the agents engaged in the practice. The material evidence of funerary caching, from which true burial would arise, on Pettitt’s account, is evidence of a form of engagement, phenomenologically describable, in terms of the practices that orient social actors in the world. The archaeological record itself as ‘Remains, monuments, and records that are still present-at-hand, are *possible* ‘material’ for the concrete disclosure of the Dasein which has-been-there’ (Heidegger 1962: 446). This is Heidegger’s gesture toward a phenomenological archaeology: a gesture toward the disclosure of past ways of being-there as an embedded and embodied agent. This disclosure of past Dasein is the foundation stone of writing world prehistory and history in a phenomenologically meaningful way from a Heideggerian perspective.

Modernity, dwelling and the death of the other

In the background to accounts of the Sima is the problem mentioned above about exactly when our ancestors became "modern" and when their behaviour became complex. Pettitt reminds us that in all modern human populations cultural behaviour is mediated by symbolism and symbolism itself has become definitional of *Homo sapiens*: modern behaviour (after Henshilwood and Marean 2003) is behaviour that is 'organised symbolically'. Fully symbolic behaviour (after Wadley 2001) is that behaviour which externally stores symbolic information in an archaeologically visible way (Pettitt 2011a: 266).

Recently, the editors of *Homo Symbolicus* note that 'The more research data we receive, the more apparent it becomes that the use and application of symbols, at least to some degree, is a constitutive component of animal cognition' (Henshilwood and d'Errico 2011: vii-viii). Reading Heidegger's point about concepts as the disposition of agents to follow intentional signs non-anthropocentrically is allied to and reinforces this point. Thinking along these lines will help transcend the basic dichotomy of man/animal that continues to plague Western science (Savage-Rumbaugh and Fields 2011: 13). The door is becoming opened to seeing archaeologically visible agency as the result of agents' disposition to follow signs, of having the "conceptual ability" to do so, in terms of their embedded and embodied dwelling in a world of pragmatic concern.

This new paradigm of dwelling replaces the 'mind in the skull' view of cognition criticised by Gamble and Coward. The 'emergence of 'symbolism' over the course of hominin evolution has in the past few years become arguably the most important object of archaeological study in the quest for defining what makes us behaviourally modern humans. The debate over what symbolism is and how it should be defined has only just begun in archaeology (Pettitt 2011c: 142-158). Some groundwork has already been done in phenomenological philosophy about how to proceed in this regard.

The kind of engagement that lies behind an act of funerary caching sees death *as* an issue, to such an extent that the dead individual must be separated from the living, be that for pragmatic reasons or for more esoteric ones. The point is that the dead are seen 'as' mattering in *some* concrete way: they are to be gotten rid of for 'x' reasons. The acts that result from this mattering leave a material trace such as with the funerary caching characteristic of the Sima de los Huesos.

As a past kind of being-there we might call the kind of engagement exhibited here 'prehistoric Dasein': it is a form of being-there that is not yet Heidegger's primitive Dasein but is nevertheless a form of being-there that, from an ontological point of view, displays aspects of the kind of engagement that characterises the family set of engagements, including the ones characteristic of 'modern' agents, that we are investigating here. Prehistoric Dasein's being was unified in a structure of care. And, as such, *Fürsorgen* enabled the 'concernful solicitude' for deceased compatriots evidenced at the Sima. Such engagement, argues Pettitt, is the spring

from which concepts of ‘places of the dead’ and the dichotomisation of the landscape between these places and places of the living arise (Pettitt 2011a: 55).

For modern agents, whether primitive or not, *qua* Dasein as care (*Sorge* and *Fürsorgen*), a deceased person amongst us remains a ‘compatriot’ to those who ‘have remained behind’, as Heidegger puts it in his phenomenology of the death of the other in *Being and Time*. In remaining a compatriot, the dead person is not reduced to a ‘lifeless material thing’. The corpse does not become ready-to-hand: its being remains in excess of instrumental use. ‘In the dying of the Other we can experience that remarkable phenomenon of Being which may be defined as the change-over of an entity from Dasein’s kind of Being (or life) to no-longer-Dasein’ (Heidegger 1962: 281). The corpse is not straightforwardly present-at-hand. Rather, it is encountered as something ‘unalive’: it is something that has lost its life (Heidegger 1962: 282). The ‘deceased’ individual (who has a relationship to living Daseins) can be the ‘object of ‘concern’ in the ways of funeral rites, interment, and the cult of graves’ (Heidegger 1962: 282) because they are ‘still more’ to those who have ‘remained behind’ in life than mere equipment for use, as encountered in concernful being-in-the-world.

Projective meaning shapes the world. Seeing a dead agent ‘as’ a dead compatriot structures the behaviour of the individuals within the group that the dead agent is from. So far, the structures that have been described phenomenologically (compatriotship, mourning, commemoration, the unalive) would not be alien to an account of Pettitt’s mortuary phases from the time of the Core phase and to that of contemporary chimpanzees. Pettitt’s core phase, elicited from observing

contemporary primates and taken to be potentially characteristic of Miocene hominoids and of hominins from the time of the Pliocene onwards, involves Cronos compulsions, the socially mediated morbidity of corpses, manifestations of mourning that include signs of depression; calls; the carrying of corpses as an act of detachment, funerary gatherings and social theatre around corpses that include controlling access to a corpse, displaying a corpse and other behaviours not witnessed in the presence of living agents. The presupposition of all of these is the ability of these agents to remain with a dead individual as more than just a thing: it requires of them to be able to see the dead individual *as* a dead individual while taking this being dead to be of consequence: being dead matters.

In mourning and commemoration those who are left behind remain with the deceased in 'respectful solicitude'. Their mourning and commemoration is a mark of solidarity with and concern for their dead compatriot *as* a dead compatriot: finitude opens up in Dasein that space of sensitivity to the meaningfulness of things and while the deceased individual has left the living agents' world, that same world that they shared with those who now mourn their passing, it is '*in terms of that world* [that] those [individuals] who [have] remain[ed] [behind] can still *be with*' their deceased compatriot *as* a dead compatriot (Heidegger 1962: 282. Square brackets: my addition). Recall, seeing something 'as' something involves casting the meaning of the thing (the thing taken *as* this or that) forward in such a way that it contributes to structuring agent's projects together with the way that things will be appropriated by them.

The point of comparison with the people of the Sima and Heidegger's phenomenological description of the death of the other must turn on the interpretation of the material evidence of their mortuary practice. The perspective of dwelling has revealed that the form of engagement lying behind the structured deposition of an individual corpse is such that it sees the dead individual *as* mattering to the group within an open world. Dead individuals are an issue to be resolved not a problem to be fixed (mended), nor a tool to be used: they matter to the living in a way that tools do not.

Universally, modern Dasein (including Heidegger's primitive Dasein) ritually disposes of the dead in some way. Whether we see the first example of what Heidegger calls 'funeral rites, interment, and the cult of graves' as occurring during the Archaic mortuary phase potentially amongst the people of the Sima is a moot point: minimally, such terms may just be taken to illicit the structures of mourning that I have attempted to outline above. If so, then such terms are not applied to instances of funerary caching or structured deposition of corpses in this period of the Palaeolithic without merit. What I think we can say, from a perspective of dwelling, is that we see in the people of the Sima a sophisticated form of engagement, a form of Dasein or being-in-the-world, that enables their dealing with the dead in such a way that sees the dead *as mattering* in some way. And, this engagement leaves a tangible material trace with a potentially dichotomised landscape. Methodologically, this form of engagement is phenomenologically intelligible in the way that I have described. This form of engagement is, after all, if Pettitt is correct, the origin of the dichotomisation of the landscape, something the

advocate of dwelling would argue is only possible for beings who are *in* the world as embedded and embodied agents. It is such beings who dwell.

The people of the Sima were not yet us; they were *becoming* us. Their world was meaningful to them in a way that approaches the way that our world is meaningful to us. Then, as now, dead individuals were taken as something to be disposed of or interred and this brings the creatures doing these acts into the arena of "modern" Dasein – primitive or not. *Homo Heidelbergensis* may have been that creature who began to engage with their world and their kin in a way that approaches modern dwelling on this earth.

The Sima de los Huesos as heterotopia

If Pettitt is correct that the period of the Sima marks the point in human evolution at which a dichotomy between places of life and places of the dead come to organise the landscape (Pettitt 2011a: 55) then an argument can be made that the Archaic mortuary phase marks the origin of what Foucault called heterotopias.

Foucault's starting point in his discussion of heterotopic space is to point out that space has a history: space is essentially bound up with time. For Foucault, the pioneering work of Gaston Bachelard and the subsequent descriptions provided by the phenomenologists have shown that rather than occupying homogenous empty space human agents in fact live in space that is 'laden with qualities' and that may be 'haunted by fantasy'. Foucault attempts to describe 'space outside' (*du dehors*) with the notion of the heterotopia. This is the space in which we are living, in which

we are drawn outside of ourselves and in which time and history take place: as with internal space, the space of our passions, this space is heterogeneous, an ‘ensemble of relations’ that define irreducible emplacements.

According to Foucault, a heterotopia is a real place that is ‘designed into’ the originary structures of a society: they are designed into the ‘very institution of society’ (Foucault 1998: 178). Such spaces are implicated in the constituting appropriative acts that are at the same time the origin of a group or society. Foucault includes so called ‘primitive societies’ (that would be populated by ‘primitive Daseins’, according to Heidegger) in his account. Such societies have ‘crisis heterotopias’: spaces that are ‘privileged or sacred or forbidden’ and that are reserved for individuals who are ‘in a state of crisis with respect to society and the human milieu’ (Foucault 1998: 179). The individuals Foucault has in mind here are adolescents, menstruating women and those in labour, the old, the dead and so on. Given this, the Sima de los Huesos would be an early example of a crisis heterotopia: it is a place for caching the dead. Heterotopias are a constant feature of human groups across time (since at least Pettitt’s Archaic mortuary phase) and they take many diverse forms. For this reason there might not be a single form common to all societies. Nevertheless there are two broad types; in addition to the ‘crisis heterotopia’ there are also ‘heterotopias of deviation’.

In modernity crisis heterotopias have nearly disappeared yet there remain a few remnants of them. Foucault points to military service for young men with the argument that the first manifestation of male sexuality has to take place ‘elsewhere’ to the family. Also, there is the tradition of the honeymoon trip (*voyage des noces*)

that enables the deflowering of a girl in a heterotopic place without geographical coordinates: the non-specific honeymoon hotel or train cabin would serve this function since the act of deflowering could not occur just anywhere. Heterotopias of deviation are replacing these outdated heterotopias of crisis and they represent places in which individuals are 'put' because their behaviour deviates from the norm in their society: examples are rest homes, psychiatric hospitals, prisons.

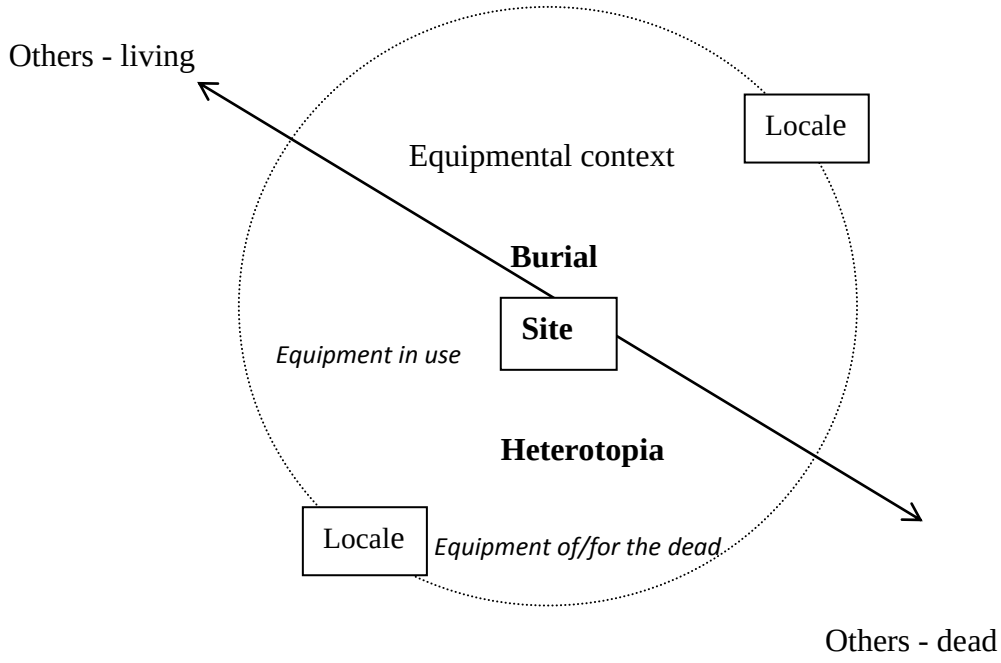
My suggestion is that the cave is a good example of amongst the first batch of heterotopic spaces (firstly in connection to mortuary practice and second, as will be discussed in the following chapter, with regard to artistic/creative practice) in the archaeological record. Sites such as the Sima can be represented in their heterotopic aspect (Figure 5.9). Heterotopias are diverse in form but are a constant of 'every human group' and they enable the juxtaposition of incompatible emplacements, such as 'alive' and 'unalive/dead' (Foucault 1998: 179-184).

Tolan-Smith and Bonsall suggest that it is the ritual use of caves that is uniquely human[48]. Two ritual activities they describe are the use of cave space as a theatre for ritual (evidenced by art and/or the presence of votive deposition) and as a burial vault. That is not to say that all archaeologically recovered human remains in caves provide evidence of ritual: some may provide evidence of accidental death by way of rockfalls (as may some bear remains) and some may provide evidence of

[48] Other higher primates tend not to use caves, perhaps since they do not regularly occur in their preferred habitats (Tolan-Smith and Bonsall 1997: 217). Putting caves to use is not a uniquely human trait. The social carnivores (wolves, hyenas) regularly use caves and bears use them for hibernation. Summarising the variety of different activities that humans have undertaken in caves over several hundred thousand years Tolan-Smith and Bonsall suggest that two categories are particularly helpful: the economic and the ritual. The economic use of caves is not uniquely human: the social carnivores and other animals use caves economically. Such activities include residence (short or long term), the acquisition of raw materials, such as workable stone, water, minerals (antelopes and elephants have been reported to enter caves in order to find water and minerals), storage and waste disposal (wolves and hyenas reside in caves; their remains together with their food remains can be found in many).

predation. The distinction between the economic and the ritual should not be seen as hard and fast: economic behaviour might admit a ritual dimension and ritual behaviour might be partly economic (Tolan-Smith and Bonsall 1997: 217).

Figure 5.9. *A possible construction* of *heterotopic "burial" space. According to Foucault, such qualitative spaces are constants in human groups. Such places create temporal discontinuities and they function in relation to the other 'spaces' of the group.*



It is possible to classify caves into open or daylight caves (including rockshelters) and deep caves. Open caves are used both economically and ritually although rarely for both purposes simultaneously. Globally, the use of open caves moves from the economic to the ritual (including for burial) and tends to coincide with other social

and economic changes, such as from hunting and gathering to farming. Mobility is key to this dimension of the human use of open caves. Such caves are firstly ‘convenient cavities’ and when a sedentary lifestyle is adopted agents tend to abandon a cave dwelling lifestyle in favour of a built environment, the result being that these spaces are ‘given over to ritual’. By contrast to open caves deep caves are rarely utilised and when they are they are put to ritual use. Deep caves do not have a natural light source. They are difficult to access. They are damp, often have poor ventilation and are generally uncomfortable. Their economic use is possibly restricted to times of unrest where they could provide refuge. Before modern speleology accessing truly deep caves was restricted to Central America, Southwest Europe and the Urals. Broadening the category of deep cave to include those without natural light sources their ritual use becomes as widespread as their economic use and of course, in practice, many caves have both open and deep aspects. It is not unusual to find economic use of cave entrances and ritual use in the deeper reaches of the same cave complex (Tolan-Smith and Bonsall 1997: 218).

Approaching caves contextually would not only juxtapose different activities it would also seek to enhance our appreciation for the archaeologically visible phenomena. Tolan-Smith and Bonsall’s example is of Upper Palaeolithic cave art (our subject in the next chapter). Contemporary scholarly appreciation of this phenomenon is enhanced by ‘attempts to reconstruct the circumstances under which these images may have been viewed originally, taking account of light, shade and view point’ (Tolan-Smith and Bonsall 1997: 218) while taking account of the potential role of other stimuli such as sound and smell. Such a quest is at once an exercise in experimental archaeology, phenomenology and hermeneutics. When it

comes to ritual, caves would almost certainly not have been the only aspect of the natural environment bearing special significance. Rocks, streams, trees, chasms and waterfalls would have stood beside caves and ritual appropriation of a cave should be interpreted within this broader context.

Heterotopic spaces are central to cultures because they have the function of suspending, neutralising or reversing the relations between elements of a culture (Foucault 1998: 178; Lord 2006: 1). Two of Foucault's examples are particularly suggestive. The first is the cemetery: it is a place of the difference between life and death, of the difference between duration and eternity, yet it is a place that is related to all of the other emplacements of the society or group in question, not least because every individual and family in the group may have a relative in it (Foucault 1998: 180; Lord 2006: 1). The other place is the ship, a 'floating space, a placeless place, that lives by its own devices, that is self-enclosed' (Foucault 1998: 184-185). Indeed, for Foucault, in 'civilizations without ships the dreams dry up' (Foucault 1998: 185).

Heterotopic spaces are built into the very acts that establish the constitutive relations of a group. These spaces are a sort of necessary 'other', or space of difference, that enables a representation and contestation of cultural norms that renders these norms uncanny, contingent and humanly produced, but as nevertheless law-like because they represent the rules – perhaps the myths – that we live by. Encountering such spaces enable those reflective moments that are fleeting and that function as *that in the face of which* we continue to live our lives. Indeed, as Tolan-Smith and Bonsall put it, there are 'few ways of feeling more human than to find oneself in a deep cave

when the lights go out!' (Tolan-Smith and Bonsall 1997: 218). This is important, for not only do we share 'some aspects of [our ancestors] experience, be it a sense of awe, a sense of safety or a sense of fear' (Tolan-Smith and Bonsall 1997: 218) in such a setting in a deep cave, by disclosing the uncanny in human experience, cave space, now, as in the remote past, reminds us of what Heidegger called our *not being at home in the world*. (We can concede to Heidegger here that, for example, a cave bear is 'more at home in the world' than a human cave user. After all, for the cave bear, the lights would never have 'gone on' in the first place).

For Heidegger, anxiety individuates Dasein, disclosing the agent as *solus ipse* (alone himself). This experience brings Dasein 'face to face with its world as world' (Heidegger 1962: 233). By doing this anxiety discloses to Dasein its character as an agent in the world or as being-in-the-world. Further, in anxiety the agent feels uncanny (*unheimlich*). Ordinarily Dasein is absorbed in its world in terms of its tasks and projects and it tends to understand itself generically as 'one', going about its business just 'as one does'. Such absorption in the world induces a sort of 'tranquilized self-assurance' (Heidegger 1962: 233) on Dasein's part where they feel 'at-home' in the world.

Individuating anxiety, by contrast, withdraws Dasein from this tranquilized absorption in the world: in doing so Dasein's comfortable, fluid practical coping, collapses and Dasein becomes individualised precisely as contingent, finite and fragile being-in-the-world. Heidegger's view is that in this state Dasein "realises" that it is not-at-home-in-the-world. In other words, Dasein comes to a situational awareness of the contingency of their lifeworld: this is the moment of the uncanny

for Heidegger. Experiencing the uncanny is a constant threat to Daseins since from an '*existential-ontological point of view, the "not-at-home must be conceived as the more primordial phenomenon*' (Heidegger 1962: 234). That is, there is no ultimate foundation to any human world: all human worlds are contingent and fragile, and what is more, so are the agents that produce them! Experiencing anxiety problematizes an agent's ordinary world, rendering it uncanny in so far as it is contingent, and because of this anxiety and the uncanny provide and provoke Dasein into reclaiming and reconfiguring (Polt 1999: 78) their world, often through some 'foundational' act, like building a temple or consecrating a burial ground, both of which would count as heterotopic spaces.

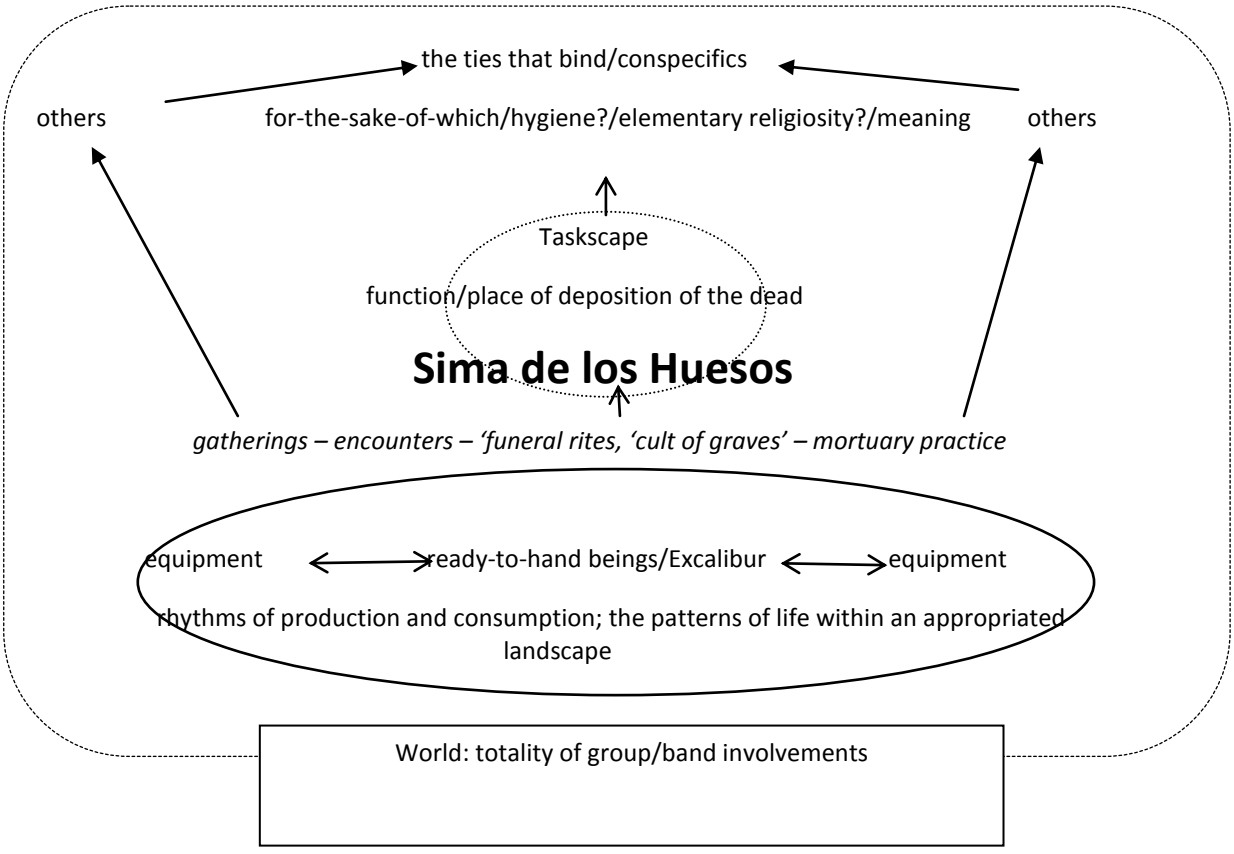
Interestingly, like Tolan-Smith and Bonsall Heidegger employs a metaphor of light in this regard. He says: 'Anxiety can arise in the most innocuous Situations. Nor does it have any need for darkness, in which it is commonly easier for one to feel uncanny. In the dark there is emphatically 'nothing' to see, though the very world itself is *still* 'there', and there *more obtrusively*' (Heidegger 1962: 234). The dark interrupts our smooth coping with the world. While anxiety can occur anywhere at any time, unexpectedly, nevertheless, it is easier to experience the uncanny in the dark. This would help explain ritual use of deep caves and of other dark spaces for Heidegger since it is easier to induce the experience of the uncanny there: coming to terms with the uncanny *is* the reason for the ritual in the deep cave in the first place[49]. What takes place in the cave, whether that be artistic creation or mortuary practice, might be construed as a 'foundational act'.

[49] Recall here Taylor's linking Heidegger's account of anxiety to the desire to alleviate the uncertainness of death and to the logic of controlled killing (Taylor 2002: 212).

Concluding phenomenological analysis

Ultimately, Pettitt suggests that, for the time being, it is best only to conclude no more concerning the Sima than that it represents 'the repeated selection of a certain place for the disposal of the dead' (Pettitt 2011b: 338). The phenomenological point to make here is that such repeated selection of a particular site indicates something significant: this particular site is being repeatedly appropriated into the activities of a group. The Sima repeatedly functions as a point of reference in the centre of a network of being-in-the-world of past Dasein (Figure 5.10).

Figure 5.10. *A possible phenomenological interpretation of the Sima de los Huesos*.



Occasionally, *H. heidelbergensis* deposited the dead in unmodified natural places (funerary caching); some Neanderthal groups developed this 'practice' by modifying the natural places by excavating simple graves; later, some Neanderthal groups utilised specific places to contain multiple corpses (La Ferrassie in France, Shanidar in Iraq and Amud in Israel) (Pettitt 2011b: 338).

The site of the Sima de los Huesos can be understood in terms of phenomenologically describable structures (Figure 5.10). The material remains of the Sima evidence a sophisticated form of engagement that can be elucidated from a phenomenological perspective and this elucidation contributes to the interpretation of the site from an archaeological perspective. The phenomenological interpretation is not the whole story of the site but it is an ampliative account of a form of Dasein or being-in-the-world 'that has been-there' in the remote past.

Heidegger is interested in the 'origin' of our ideas: he thinks that 'experience' will be the key to understanding this origin as well as being key to understanding the worlds that human beings create for themselves. Human beings respond meaningfully to the approach of a meaningful world and archaic mortuary practice is a material marker of responsive agency. Finitude is the 'enabling condition' of human life: ultimately it is our sense of our finitude that, for Heidegger, enables us to take the world as 'ours'. Those working in a 'dwelling perspective' ought not to draw an arbitrary line in the evolutionary sand and should instead remain responsive to what the evidence (material, anthropological, primatological) is telling us.

Heidegger's account of dwelling suggests a phenomenology of how the dead can remain important to us. This allows us to develop an analogy from our experience. The 'mattering' to us of the dead is the origin in experience of our ability to relate to the dead as 'compatriots' on Heidegger's analysis: this only requires 'world' and 'pre-predicative' (pre-linguistic) disclosure. This is the origin in our experience of certain intentional states: the people of the Sima could *judge* that the dead 'mattered' in some way (even if this was just as a sanitary issue: they mattered in so far as they were a threat/hazard). Pettitt's notion of elementary religiosity could equate to Heidegger's 'cult of graves'. This would require only fourth order intentionality to have been reached and so would apply to *H. heidelbergensis* at the Sima. There and then, seeing a dead agent 'as' a dead 'compatriot' structured the behaviour of the individuals within their group and their activity left a material trace.

The case for counting the Sima de los Huesos as an early (if not the first) heterotopic cave is plausible. The site as a whole can be interpreted phenomenologically in terms of appropriation and seeing 'as'. The Sima may have been visited over longer periods of time in order to deposit corpses or it may have been visited only on one (or few) occasion(s) in order to deposit the dead. On any of these interpretations the phenomenological analysis of the appropriation of a place to the understanding and interest of a group stands. For it to be used in anything like a routine it must have been appropriated to a task. The Sima may have held a deliberately deposited grave good and it may have been a site of early ritualistic behaviour surrounding corpses. It was a site of funerary caching and of 'being with' dead agents who had formally shared a world with the living even if this was for no

other reason than for their removal from the sphere of the living. The Sima may have functioned as what Pogue Harrison called a 'humic' foundation: a basis for a lifeworld that as a heterotopic space functioned as a place of the difference between life and death. Phenomenologically speaking, the early dichotomisation of the landscape is something that happened: it occurred within the experience of a group of our ancestors and it became a point of orientation, an emplacement, in the lives of their descendants.

Perhaps the Sima de los Huesos conserves through the structured deposition of corpses a snapshot of what a group or groups of *H. heidelbergensis* individuals understood about what had "happened" as a result of the event of death. Perhaps they might have felt that they could claim the Sima for themselves as a result of this deposition as a place of not just 'the' dead but as a place of 'their' dead, howsoever their dead actually died or howsoever their deaths and their corpses were understood. Perhaps death and burial enabled the happening of their prehistoric world.

Chapter Six

Case Study 2: Heidegger, Dwelling and Cave Art

In 1899 the French prehistorian Émile Rivière discovered a stone lamp in a cave at La Mouthe in the Dordogne Département of France. The cave itself – an important site with respect to both the history of archaeology and to the understanding of Palaeolithic art, containing both engravings and a small number of paintings – had been discovered in 1895 when a local farmer began to clear away debris from a small rock shelter that he was intent on utilising (Clottes 2008: 128; Lewis-Williams 2002: 32-33). During this process he revealed a tunnel behind the accumulated debris that blocked up the shelter. This proved too much of a temptation to four local boys who, after entering the tunnel, discovered an image of a bison. At this time the antiquity of parietal art (images engraved or painted on walls or ceilings) was still highly controversial. The idea that Palaeolithic Stone Age peoples possessed of only 'savage minds' could produce art that rivalled the works of modern greats was deeply troubling to many. Twenty years had passed since Don Marcelino Sanz de Sautuola's daughter Maria's discovery of the parietal art in the cave of Altamira and forty years had passed since the publication of Darwin's *The Origin of Species*. Despite both of these facts it was still possible to deny the antiquity of Upper Palaeolithic art.

By 1902 things had changed[50]. That year saw the publication of a piece by Émile Cartailhac, partly entitled *Mea culpa d'un sceptique*, which, despite coming too late for De Sautuola, who had died in 1888, sought to extend 'justice' to him by making public 'reparation' for his (Cartailhac's) 'error' in denying the antiquity of the art at Altamira (Bahn 1988: 22). This event had been precipitated by the publication in 1901 of Louis Capitan's and Abbé Henri Breuil's drawings of images from another cave in the Dordogne, Les Combarelles (itself discovered in 1901). The evidence for the antiquity of Palaeolithic art had become so compelling that Cartailhac and the other sceptics could no longer maintain their position reasonably: they had to acknowledge its true antiquity and they had to come to terms with this revelation in an intellectually satisfying way. Lewis-Williams compares this cognitive revolution in archaeology to that of the shift from a geocentric to heliocentric view of the solar system in astronomy (Lewis-Williams 2002: 32). *The prehistoric human mind was capable of producing art*[51] (see Table 6.1).

It is very important to say something about the notion of 'art' as I employ it in what follows. Following White, perhaps the best starting point in a discussion of prehistoric art is to note that when the term 'art' occurs it should be read minimally, in the first instance, to designate only 'meaningful objects shaped by human hands' that emerge from a particular 'cultural logic' (White 2003: 10, 29. See also White 1992). This has the dual benefit of minimising our theoretical commitment at the

[50] The discovery of La Mouthe played a significant part in the acceptance of the antiquity of this art not least because it contained images of long extinct fauna covered by layers of sediment that contained Palaeolithic tools and animal bones (White 2002: 45-46).

[51] It is still possible to frame discussion of European Ice Age art (circa 40,000 to 12,000 years ago) in terms of the appearance of the "modern mind": as witness The British Museum's special exhibition *Ice Age Art: arrival of the modern mind* (7th February to 26th of May 2013) and the accompanying book by Jill Cook.

outset while also providing a good way in to Heidegger's account of art[52]. For Heidegger, "art" is a socio-historical practice and it is out of this practice that individual works of art, artists and audiences emerge.

For Heidegger, when a work of art is created, a historical world or cultural context is created or, more precisely, 'opened up' for a community. Heidegger's short piece from 1969 'Art and Space' is instructive in this regard. In this piece Heidegger's focus is the relationship between sculpture and space. Here, Heidegger affirms that art is the setting to work of 'truth' (*aletheia*), where truth means the unconcealment of being (Heidegger 2009: 307)[53]. The 'space of art', if I can put it this way, has the character of 'clearing away', which means 'to clear out (*roden*), to make the wilderness open. [Such] Clearing-away brings forth what is free, [and that is] the open for humans' settling and dwelling' (Heidegger 2009: 307. Square brackets: my additions). In other words, art clears a space for human dwelling to take place within a particular locale.

[52] If art is conceived as aesthetics (*aisthēsis*, *Ästhetik*: a human leisure activity) then art will be transformed into an object that exists solely for subjective apprehension and consumption. Such 'works' have ceased to 'work' in Heidegger's sense (Heidegger 1971a: 41. Dronsfield 2010). Heidegger is interested in works of art as 'events' that bring 'worlds' into being: a work of art is an event that opens up a historical world for a historical people. Works of art belong in the *agora*: they are public truth events (Heidegger 1971a: 40; Young 2001: 19). "Aesthetics", like "metaphysics", is something that Heidegger argues must be overcome. Overcoming aesthetics enables a return to that more Greek sense of art as *technē* (Dronsfield 2010: 129).

[53] Recall, being is the 'meaning and ground' of beings (Heidegger 1962: 59). Being is a transcendental-horizonal structure: it provides for the appearance of beings. By virtue of Dasein's pre-theoretical understanding of being the meaning and ground of beings can be sought by way of phenomenological interpretation (Heidegger 1962: 61).

Table 6.1 *Select Chronology of Cave Art sites* (adapted from Clottes 2008 and Bahn 1988)[54].

c.35,000 – 30,000 Years Before Present (BP)	**c.25,000 BP**	**c.20,000 BP**	**c.15,000 BP**
Aurignacian	**Gravettian**	**Solutrean**	**Magdalenian** Early, c.15,000, Middle c.13,500, Late, c.10,000
Fumane (Veneto) Ardèche) Cosquer [phase 1] (Bouches-du-Rhône)	Pech-Merle (Lot) Cougnac (Lot)	Cosquer [phase 2] Lascaux (Dordogne)	Les Trois-Frères (Ariège) Altamira (Cantabria) El Castillo (Cantabria) Niaux (Ariège)

The socio-historic activity of making works of art involves a clearing-away that amounts to a freeing up of places for human dwelling or habitation. The individual

[54] The chronology of Upper Palaeolithic Cave Art has recently been challenged by Pettitt, Bahn and Züchner. They challenge the antiquity of Chauvet (which has been ascribed the date range of ca. 32-26 thousand years ago) arguing instead that most of the art present in Chauvet is Solutreo-Magdalenian in age (see Pettitt, Bahn and Züchner 2009). This is significant since, if true, it would place the date of this important cave that's content has considerable implications for our understanding of 'the origins of art, Upper Paleolithic behaviour…and…the emergence of 'modern' cognition' (Pettitt, Bahn and Züchner 2009: 239) much later than has been suggested by the Chauvet team. A further, potentially very significant, complication has recently emerged in the shape of claims that Neanderthals may have been responsible for the earliest European cave art (see Appenzeller 2013). Given that the jury is still out on both of these debates, and that I have no way of settling either of them, I will simply note them and move on. In any case, the truth of these claims would not contradict the argument put forward in this chapter. Rather, they would just invite interpretation in terms of it.

work of art, be it a representational work or any other form of art, has the function of enabling a particular locale to be appropriated by a group as their dwelling place. It is through such activities that groups define themselves, their locales and their values. Place, on this account, receives its character from the making-space constitutive of art. And, through this constitution of place, regions become opened up for groups in such a way that the region 'gathers things into their belongingness in the region' (Heidegger 2009: 308). For this reason, art is at the heart of world making (or meaning making) for Heidegger. As Heidegger will say, art belongs to appropriation (*Ereignis*).

It is through art that everything whatsoever that can be encountered in a human world first finds its place and character. Focussing on sculpture, he says:

> Sculpture…the embodiment of places which, opening and preserving a region, hold something free gathered around them, granting a stay to each thing, and a dwelling to humans in the midst of things…Sculpture: an embodying bringing-into-work of places, and with them an opening of regions of possible dwelling for humans, of possible tarrying of things that surround and concern humans. Sculpture: the embodiment of the truth of Being in its work of instituting places' (Heidegger 2009: 308-309).

This quote really outlines the kind of phenomenological analysis that Heidegger is engaging in. The act of creating a sculpture involves an investment on the part of the agent that allows beings to come to presence for them in such a way that they can be appropriated and 'fixed'/'set into' a figure. The sculpture 'works' by instituting places: sculptures enable places to 'show up' or 'be cleared' for a group to dwell in. At the same time, sculptures 'grant' things a meaning (their "stay" as what they are) that can be appropriated by dwellers. The 'truth of being', the transcendental background that enables things to appear meaningfully for an agent

or group, is embodied or materialised in the work. Place, the site for dwelling, is involved in this: the dwelling place forms part of this transcendental ground. Place participates in the meaningfulness of things for an agent or group. The hermeneutic totality of this set of relationships is dwelling.

'Locality' itself, on this account, is nothing less than the combined 'play of places' (Heidegger 2009: 308). Given Heidegger's account of sculpture we might get an insight into Abbé Breuil's excitement, occasioned by receipt of a telegram from Count Henri Bégouën that read, 'The Magdalenians modelled in clay!' (Lewis-Williams 2002: 35). Understood from the perspective of dwelling what this revelation testifies to is an event, associated with the Magdalenian culture, where a specific world was opened up through art. The sculpture (in this case, of bison) instituted a place (the cave within the context of the lives of a group). It also gathered together a set of meanings (of bison, of clay, of caves, of agents, of the seasons and so on) in such a way that each of these could occur/become present *as* what they are (the clay as a medium for sculpture, for example). Phenomenological archaeology, utilising the methodology outlined in Chapter Four, will attempt to describe the character of these worlds by way of a reading of the wider material culture and material remains that are contemporaneous to the work.

An art work, on Heidegger's account, is an event that enshrines the 'meaning of being' (the way that things can become meaningfully present) that constitutes a historical community[55]. Sculpting an animal enables that animal to emerge *as*

[55] Heidegger argues for a more profound 'essence of truth' *qua* world-disclosure that precedes and makes conceptual truth possible (Sheehan 2003: 106-111). The ancient Greek word for truth *aletheia*, (unconcealedness) captures Heidegger's sense of truth. On his account, knowing a being in

meaningful *as* what it 'is' (*as* threatening, *as* sacred, *as* prey and so on. From an archaeological perspective, the likelihood of the animal appearing *as* prey for a group, for example, will be evidenced by the presence and abundance of its remains in a state of predation and consumption by humans). This occurs in terms of the dwelling place of a group of humans who have simultaneously cleared or appropriated an environment *as* a place to dwell. This process is grounded in the care structure of Dasein: as care, Dasein is enabled to care for others, including animal others, and objects in their environment. The meaning that the animal, the place and the humans have come to presence in this essentially relational context (Heidegger will later speak of a 'mirroring' relationship between elements where the meaning of each is 'mirrored' in the other: see Figure 6.7). What the animal 'is' for the group (what it *counts* for; what it *means*) emerges in and is 'fixed'/set into the sculptural work. Consider here White's account of the Aivilik Inuit carver: this will shed some light on the dwelling perspective[56].

Discussing the ethnographic work of Edmund Carpenter in the 1950s White reminds us that a landscape can appear very differently to individuals who have different relationships to it. For Carpenter, the arctic environment was barren and 'hard on man' whereas for the Inuit this same landscape was revealed very differently:

> Of course, what appeared to me as a monotonous land was, to the Aivilik, varied, filled with meaningful reference points…By and large these are not

its 'truth' is to know that being as what 'it is' (in its being) within a context, for a group of dwellers (see Wartenberg 2001: 150).

[56] Naturally, more or less contemporary Inuit carvers are not Ice Age artists. This should be borne in mind. Nevertheless, taking them as an example should help to elucidate aspects of Heidegger's thinking about art while serving as a possible analogue for certain aspects of Ice Age art.

> actual objects or points, but *relationships*: relationships between, say, contour, type of snow, wind, salt, air, ice crack. I can best explain this with an illustration: two hunters casually followed a trail which I simply could not see, even when I bent close to scrutinize it; they did not kneel to examine it, but stood back, examining it at a distance (E. Carpenter, *Eskimo Realities*, New York: Holt, Rinehart and Winston, 1973, 21: quoted in White 2003: 26. Italics: my emphasis).

Heidegger and the phenomenologists attempt to describe these kinds of relationships in terms of their relation to agents. For example, the threatening animal or threatening weather front is threatening only because it is taken that way (seen *as* threatening) by an agent or group of agents. What is missing from Carpenter's account here is a discussion of the relationships he mentions as relationships to the Aivilik within their environment. In other words, what did the 'snow, air or ice crack' *mean* to them and how did that meaning affect them? While this is suggested by the invisible trail it is not spelled out. Giving a phenomenological account of these relationships would utilise all the available (ethnographic) evidence (including evidence of these relationships as revealed to the phenomenologist) in order to try and flesh them out. It is these kind of relationships (presented as possibilities) that Heidegger believes are crystalised in artistic production. These relationships give a particular dwelling place (along with the beings encountered within it) its character and this character is reflected in the work.

Significant here is Carpenter's account of the Inuit experience of time and space. According to Carpenter, the Inuit's conception of space and time is a unity (this is reflected in the Inuit word *tima*, which means, "here-now" (White 2003: 27)) and of each situation as a 'dynamic process'. This resonates with Heidegger's view (and Deleuze's, with regard to process) that space and time form a unity that is delivered over to historical agents by way of the giving characteristic of appropriation

(*Ereignis*). He says: 'There is only giving in the sense of extending which opens up time-space' (Heidegger 1972: 16). Time-space (*Zeit-Raum*) is, to paraphrase Dahlstrom (2013: 218), the 'when and where' of the history of the ways in which things can become meaningful to a historically situated group of embedded and embodied agents. In fact, the very character of these agents (who and what they 'are') is decided only within time-space. Without ground or foundation itself, neither objective nor subjective, time-space grounds the 't/here' (the 'Da', the 'there' in being-there-here-now) as a site where something is to be decided[57]. What is to be decided, for Heidegger, is the 'fate and destiny' of a world: and that is a decision over how things are going to matter within it. Time-space is 'the site of the grounding of the truth of historical being' (Dahlstrom 2013: 218).

Heidegger's view is that the relationships intimated by Carpenter that characterise the Aivilik world can be materialized in a work. In fact, they are decided in the spatio-temporal moment of the creation of the object. Art doesn't just emerge from a cultural landscape it has a role in producing it or enabling it to 'happen' in the first place. The act of sculpting enables the settling of the land. Sculpting, on Heidegger's account, is an act of domestication that enables the land to emerge as a safe place to live: it enables a wilderness to become habitable for dwelling. Heidegger deliberately speaks of audiences as 'preservers': they have to maintain this set of relationships that are materialised in the work through their acts. If they don't, their world will end (see Tonner 2010).

[57] Recall the problematic of phenomenology that the ground of anything must not resemble or presuppose what it grounds. Time-space is the spatial-temporal emergence of the site of the meaning and ground of beings.

For Heidegger, from his evaluative standpoint, a "great" work of art is a 'cultural paradigm'. Such paradigms inaugurate the history of a community. Cultural paradigms work by focusing and directing the lives of individuals and they put up for decision the highest values of a group, *what is to count as holy and what unholy* (Heidegger 1971: 43). Art works do this by defining and determining how the beings that agents can meet in their experience can 'show up', phenomenologically, as meaningful to them. Works of art, for Heidegger, include all manner of world defining events, such as the building of a temple (Dreyfus 1993; Young 2001: 18) and, as I suggest here, the painting of a cave. Art, on Heidegger's account, is essentially an origin and works of art reveal what ordinarily remains out of sight to agents, namely, their world.

Artists, on Heidegger's account, are not motivated by 'fame' and they are not affected by 'disregard' either. Not only that, Heidegger presents an account of their works that sees them as withdrawn from both 'public' and 'private' consumption in a modern sense. That is, for Heidegger, works of art are not to be understood as 'objects' that can be held up for 'subjects' (in a modern sense) to be seen and consumed as an object of aesthetic appreciation. In fact, Heidegger's view is that works of art do not 'belong to man' at all (Heidegger 2006: 28). Rather, the function and importance of a work of art is to form a 'site of decision'. This site is, on his account, restricted to what he calls 'rare ones'. These individuals are 'poets' and 'thinkers'. Poets articulate the truth of the Dasein (being-there-here-now) of the people in their group/world. Thinkers elucidate the way in which things can become meaningful for a group on the basis of how the world was opened up by the poet (Taminiaux 1994: 5).

What is important to a dwelling perspective account that would seek to utilise Heidegger's thought here is that these agents are taken to partake in an act of originary meaning making in and for a group. It is this act that makes these agents what they are within a context. The social function and role that these poets and thinkers take on might be that of the 'shaman' or 'big man' but Heidegger's point is that their activity is presupposed if we say that the group inhabited a meaningful world with meaningful material objects 'shaped by human hands'.

The production of a work of art belongs to what Heidegger designated a 'going under' that can become 'foundational history'. This kind of historical 'event' leaves in its wake a clearing of being. It leaves a world that has been opened wherein 'things' have taken on a particular significance for the agents who make up the world and who can tell a tale of their history. For Heidegger, artworks are self-subsistent. They lack a relation to beings in their familiar organization. Yet, the self-subsistence of the work marks it out as something created. This self-subsistence, argues Heidegger, relates the work to its creator but at the same time marks that creator's Da-sein as 'sacrifice'.

This is not a literal sacrifice (it is not necessarily an event of cultural mourning or revering). Rather, the notion of sacrifice that Heidegger is interested in here is a 'reticent dwelling in awaiting' that which is given over to a group as the meaning of being of their age (Heidegger 2006: 29). This is a sacrifice on the part of the artist to something greater than them: it is sacrifice to an emergence of meaning that is prior to and would enable any ontic (particular or regional) constructions of the meaning

of a world to be set up. It is the ground of the world and of the beings that are meaningful within the world. This sacrifice is sacrifice unto the *abyss of being* (sacrifice unto *das Ereignis*). It is sacrifice to the event of the coming to presence of meaning that grounds Dasein and world. In such acts of sacrifice the artist-poet-agent awaits what is to be given over to them and their group, in their historical dwelling, as the truth of being (meaning of being) (Heidegger 2006: 29). One can readily understand the historical association of art and religion here. The creation of an art work involves awaiting a revelatory event that is creatively received in originary meaning making by a Dasein.

In so far as a work of art continues to "work" in Heidegger's sense it continues to hold 'open the open region of the world' (Heidegger 1993: 170). Just because of this a work of art can preserve the space of communal questioning that puts up for decision how things are going to matter for those who dwell in the world that has been opened up by the work. Art puts up for decision for a group what will become their highest values (the gods) while at the same time pursuing what will prove to be essential for human dwelling (the meaning(s) of life) in their world. On a Heideggerian account Ice Age 'art' opened up a 'hunter-gatherer world' in the same way that medieval 'art' opened up a medieval world (see Tonner 2010). After Heidegger, art history *is* world history because reading a work of art can reveal the way in which things are/were meaningful to/for a historically situated people (see Tonner 2014). When taken as a cultural paradigm Heidegger's account of art enables just about anything to count as "art" so long as the work, construct or event in questions *holds open the open region of the world*.

Interpreting the art: a survey

Interpretations of cave art vary considerably. They range from 'art for art's sake' to totemism, to sympathetic magic, to structuralist interpretations, to contemporary shamanic interpretations. However, many would suggest that, in the words of Paul Mellars, this art reflects some kind of 'spiritual belief system', representing an early form of religious expression (Mellars 2009: 212)[58]. The kind of elementary religiosity attributed to *H. heidelbergensis* and Neanderthals would require no more than fourth level intentionality to have been reached. Assuming the cave painters to be anatomically modern humans, they would have reached fifth level intentionality and would thus have myths and other complex narratives of various kinds. Given the presence of a significant amount of art in caves it is plausible that this early religious expression, that on a Heideggerian account amounts to a group establishing its highest values (its holy), has a spatial dimension. It is tied to particular sites in the landscape. Painted caves can be thought of as 'sacred spaces' (or 'sanctuaries') in Heideggerian terms since "art" puts up for decision what are to be the highest values of a group, 'what is to count as holy and what unholy' (see Heidegger 1971: 43).

Leaving a possible 'religious dimension of experience' interpretation of Palaeolithic art to one side one might still agree with Margaret Conkey in upholding that the art of the last Ice Age reflects 'meaning-making' in a broad sense carried out by

[58] Cave painting is the second 'Rorshack blot', after Neanderthal burial, dogging palaeoanthropology, according to Coolidge and Wynn (2009: 191). Conkey (1999) provides a useful history of the interpretation of European Palaeolithic art. See also Conkey 1987; Davis 1986; Dutton, Mirimanov and Halverson 1987; Moro-Abadía and González-Morales 2008 and White 1992. I do not intend to provide a comprehensive survey like Conkey's here. Instead, I will focus on interpretations that have proven durable or that relate to the themes I am developing with respect to dwelling.

Palaeolithic peoples, considered to be active social agents, who constructed vibrant socio-cultural worlds. For her part, Conkey advocates approaching this art in terms of 'meaning making' together with a consideration of its materiality (Conkey 2009: 180).

This resonates well with a dwelling perspective approach. It is precisely in these terms that the account offered here should be read. A Heidegger inspired 'dwelling perspective' account of prehistoric art in Europe stresses the meaning-making dimension of artistic production just in terms of its capacity to open up prehistoric worlds[59]. The production of art makes meaning in the sense of establishing the correspondence of agent and world in a reciprocal and co-constituting fashion. Heidegger puts it like this: 'the work opens up a *world* and keeps it abidingly in force' (Heidegger 1971a: 44). Works of art open worlds and (as Vattimo has suggested) invite audiences to live in them.

The starting point for a discussion of Palaeolithic art from the perspective of dwelling is the realisation that Palaeolithic art admits no single interpretation (Conkey 1999: 289; White 2003: 58). For Heidegger (and for hermeneutic thinkers more generally) the meaning of past works of art, including that of the last Ice Age, is *still* unfolding and contemporary commentators on the art are participating in this historical unfolding. Palaeolithic art is polysemic and semiotically open. The

[59] Moro-Abadía and González-Morales (2008) borrow Clarke's terminology when characterising contemporary Palaeolithic art research in so far as it has undergone a disciplinary 'loss of innocence' (Moro-Abadía and González-Morales 2008: 531). In connection to this there has been a flourishing of theoretical discussions surrounding Palaeolithic image making. The dwelling perspective, drawing on Heidegger, focuses on 'artists' as social agents who participate in acts of originary meaning-making. The dwelling perspective can make a contribution to this theoretical discussion after the 'loss of innocence' in Palaeolithic art research.

account of it developed here from a perspective of dwelling via a reading of Heidegger (world opening), Foucault (heterotopoanalysis) and Deleuze and Guattari (capture of forces) remains at an abstract level in order to discuss the structure of meaning-making as a world-opening event that occurred through an "encounter" with meaning within heterotopic space that allowed for the "capture of 'forces"[60].

Palaeolithic cave art occurs in a concentrated area of Western Europe (with some notable exceptions, such as Creswell Crags) extending from the Loire valley in central France to the Cantabrian mountains of northwest Spain (see Table 6.1). During the Upper Palaeolithic the temperature ranges in the oceanic southwest French region ranged from between around -2°C in winter to around 12°C in summer, notwithstanding rapid climatic oscillations now identified from deep-sea core and ice-core oxygen-isotope records and associated pollen sequences from this period. As a result of these low summer temperatures the landscape of the Franco-Cantabrian region would have been generally open tundra/steppe with rich vegetation, due to exposure to sunlight, supporting a variety of herbivorous animal species populations. Particularly notable, of course, were the rich migratory populations of reindeer, which account for over 90 percent of the total faunal

[60] Ambrose (2006) argues that Deleuze and Guattari's philosophical aesthetics offers the 'necessary conceptual resources in order to begin to restore…[a]…necessary radical graphic "holism" to prehistoric art' (Ambrose 2006: 140). Starting from the insights offered by Lorblanchet (who develops an account of prehistoric art as a primeval magma wherein living and imaginary beings merge and from which they emerge) and Anati (who suggests that prehistoric art is a form of writing in a 'primary language' that, when decoded, will serve as a basis for universal history) Ambrose argues that a 'unified plane of composition' (the 'plane' upon which a work of art is created or formed, subdivided into technical [materials] and aesthetic [sensations] planes) evolved in prehistory that allowed prehistoric artists to develop 'styles' of figuration that could migrate or transgress 'from one organism or creature to another' (Ambrose 2006: 138). Prehistoric art challenges representationalist paradigms of art since it renders 'sensible within the visual fabric what representationalist modes of seeing regard as "invisible"'; namely, 'certain intensities of Life – affects, energies, rhythms, and forces' (Ambrose 2006: 140; Deleuze and Guattari 1994: 191-199). Deleuze understands the 'capture of forces' as an attempt to 'render visible forces that are not themselves visible' (Deleuze 2003: 56).

remains in nearly half of the documented Upper Palaeolithic sites in this region (Mellars 2009: 214-217; see also White 2003; Bahn and Vertut 1997; Pettitt 2005). (This would suggest to the phenomenological archaeologist that reindeer were seen predominately *as* prey).

Human populations would have been able to subsist on a relative diversity of animal food resources at this time, even during periods of maximum scarcity or population crash and migration failure of reindeer herds in the valleys of the Dordogne, Vézère and elsewhere. Human groups could have been relatively large and possibly oriented toward large-scale communal hunting of migrating reindeer herds for at least part of the year. Although this is still controversial, occupation sites at Laugerie Haute, Abri Pataud, Laussel, La Madeleine and at other places in the Vézère valley indicate occupation areas extending to between seventy and two hundred metres. At Abri Pataud, for example, several of the occupations may be characterized by large and more or less evenly spaced hearths (Mellars 2009: 219-221).

It is even possible that, in the early Aurignacian layers of sites in the nearby Castelmerle valley, for example, adjacent rock shelters might have been occupied simultaneously – leaving the impression that at least some large scale reindeer hunting was possible if not probable at this time. Some of these large reindeer hunting sites might have been occupied for weeks if not months at a time. Given all of this it is possible that, due to competition for economic resources, sharply defined territorial and ethnic divisions between different communities might have appeared at this time in South-Western France, although this does not rule out the possibility

that networks of alliance were also in existence at this time to facilitate the sharing of resources, information, territories and so on, during periods of scarcity (Mellars 2009: 221-223).

Mellars suggests that it is possible to read Upper Palaeolithic art, both portable and parietal, in terms of ethnic and/or territorial divisions within groups. Perhaps such divisions would integrate aspects of 'totemic' symbolism, but this is a moot point as we will see. Alternatively, such art could be read in terms of religion and ritual, in terms that might stress its role in binding groups together, perhaps in the face of hard times. On both of these accounts the Heideggerian interpretation offered in this chapter would provide additional interpretive resources since, on the former view, the ethic/territorial divisions would be constituted in the act of producing world-opening art. The territories would essentially be the interpretive parameters of the opened world. On the latter view, the act of producing the work of art issues from anxiety and amounts to establishing the 'holy and unholy' which can be re-established through acts during hard times. Such art, it is suggested, might be thought of in terms of the power and authority of individuals within these Upper Palaeolithic communities: perhaps shamans or 'big men' who might have emerged within the larger semi-permanent groups, the existence of which could be inferred from the larger settlement sites. Many would agree that the production of the art itself would have been the responsibility of specialists within any group, whose work would either reinforce their own prestige or reflect and reinforce some other power structure within society (Mellars 2009: 223-224).

There are thousands of examples of portable art objects from the Upper Palaeolithic of Eurasia and while it isn't obvious what most of these items were 'for' (if they were 'for' anything) a function for some of them can occasionally be inferred from the context where they were found (while others are found amidst the remains of everyday life in campsites (White 2003: 58)). Paul Bahn's example for one of these occasions is the Magdalenian rock shelter of Duruthy (Landes, France) where a 'sanctuary' was discovered in 1961 that yielded four carvings of horses in a restricted area together with the remains of two horse skulls, the fragments of six horse jaws, two of which were arranged such that they formed some kind of box (function) (Bahn 2011: 348). The horse might have played a prominent role in Magdalenian belief systems (particularly, of the Pyrenees) since horse skulls or teeth have been placed in, and subsequently discovered in, the fireplaces of a number of important decorated caves (such as Erberua and Labastide. In Cantabria, at La Garma cave, an equid skull with part of its dome removed was discovered inside a structure) (Bahn 2011: 348).

Engraved plaquettes of stone and stone and bone cut-outs (in Pyrenean caves) have been recovered but in a broken and dispersed state, which in some cases (at the German open-air site of Gönnersdorf, for example, and in the French cave of Labastide amongst others), appear to have been the result of deliberate acts of dispersal (Bahn 2011: 348). The Moravian sites of Dolní Vestonice and Pavlov evidence a potentially ritual breakage of terracotta figurines when around 22,000 years ago a significant number of them were heated to breaking point in a hearth or oven. Thousands of fragments of figurines have been discovered (representing animals and a small number of humans): experiment has shown that such figurines

were heated to between 500˚ and 800˚ centigrade so that they would fracture due to thermal shock: these figurines were caused to explode deliberately (Bahn 2011: 348).

Following the acceptance of Palaeolithic art as genuinely ancient the earliest interpretations of both portable and parietal art was aesthetic. Edouard Lartet and Henry Christy argued in the 19th Century prior to the discovery of Altamira that Palaeolithic representation amounted to 'art for art's sake' (White 2002: 45; see also Conkey 1987; Conkey 1999; Dutton, Mirimanov and Halverson 1987). Despite the fact that such art might have been deployed in storytelling and recording, on this view, Palaeolithic art was merely decorative and not essentially meaningful having been made by hunters with 'time on their hands' (Bahn 2011: 349). However, the fact that a vast amount of this art was found in the depths of caves began to cast doubts over this interpretation. In addition, the growth of ethnography and of serious studies of hunting and gathering societies, such as of the Australian Aborigines and the South African San 'Bushmen', at the end of the nineteenth century and beginning of the twentieth century produced scholarly descriptions of the art, society and religion of these cultures that demonstrated that representation and figuration amongst them was by no means just 'for its own sake' (White 2003: 50).

Stimulated by the new ethnography were the two interpretive themes of totemism and sympathetic magic. Totemism has lost favour as a useful way to describe the relationship between human groups and animal and plant species ("the horse clan", "the lion clan" and so on). The view that Ice Age art is bound up with sympathetic

magic has been described by Conkey as the ‘foundation interpretation’ of Palaeolithic art (Conkey 1999: 299; White 2003: 231). Early shamanic interpretations drew on Siberian shamanism, despite the worries voiced by Leroi-Gourhan (who studied Siberian ethnography), while contemporary shamanic interpretations draw largely upon ethnographic parallels from South Africa (Lewis-Williams; Clottes). The late 1960s (Glory 1968) saw an interpretation of many of the figures in the art as ‘ongones’, spirits taking the form of zoomorphs, anthropomorphs and polymorphs who could be appealed to by human beings for help (Bahn 2011: 350).

Contemporary shamanic accounts (Clottes and Lewis-Williams 1998) have suggested that the paintings in the deep caves relate to pursuit of contact with a parallel spiritual universe. Geometric images might, on this account, be interpreted as ‘entopic images’ spontaneously produced by the brain by its neural structures either under normal conditions or by deliberate practices aimed at achieving altered states of consciousness and trance, such as sensory deprivation, sleep deprivation and the use of hallucinogenic drugs. Clottes and Lewis-Williams put it like this:

> The induction, control, and exploitation of altered states of consciousness are at the heart of shamanism the world over. We therefore approach shamanism from a neuropsychological perspective. Recent neuropsychological research on altered states of consciousness provides the principal access that we have to the mental and religious life of the people who lived in western Europe during the Upper Palaeolithic…and we may confidently assume, had the same nervous system as all people today. Contrary to what is commonly thought, we have better access to the religious experiences of Upper Palaeolithic people than to many other aspects of their lives (Clottes and Lewis-Williams 1996: 12-13).

On a methodological level Clottes and Lewis-Williams' claim is implicitly phenomenological. As noted, phenomenologists work out of the first-person perspective; they are committed to rigorous research that produces intersubjectively verifiable results that is considered veridical for other agents in the past as well as in the present. The point must be made, however, that it is only access to the 'mental and religious lives' of people in the present that can be provided by both phenomenology and neuropsychology. The phenomenological dimension of such research puts experiential description and testimony on the bare bones of the neuropsychological data. This approach to the art of the past is controversial. I would like to briefly explore this view in terms that will highlight its differences to a phenomenological-dwelling perspective-based interpretation. Importantly, a phenomenological account of art as a response to presencing does not require the use of narcotics and it does not necessitate a shamanic interpretation.

On Clottes and Lewis-Williams' view Palaeolithic peoples explored deep caves as part of a quest for 'spiritual visions'. Where the represented images make use of the natural contours of the cave walls (which will be important for other commentators such as Lorblanchet and Vialou, albeit in a different context) representation is construed as a ritual process materializing the already present animal spirit (the notion of materialization is important for Heidegger and others too):

> As in other cultures, the chances that people hallucinated in these spaces is…high indeed…The desired spirit-animals appeared to them out of the rock. Then, as some altered states of consciousness permit, the questers may have swiftly sketched their projected visions in an attempt to fix them [Heidegger's notion of 'fixing' or 'setting in to a work' should be noted here as should Deleuze's notion of 'capturing forces'], to gain control over them. Or, perhaps recovering from a trance…they may have examined the rock surface to find vestiges of their visions and then, by painting or engraving a

> few lines, have been able to re-create them (Clottes and Lewis-Williams 1996: 110; square bracket: my addition).

Not pulling his punches, Bahn refers to the return of shamanic interpretations of Palaeolithic art as a "great leap backwards" and goes on to reject this view. He says: 'this entire approach proved bogus, being founded on a distortion, misuse, or misunderstanding of the term 'shaman' and the phenomenon of 'shamanism'; on outdated, distorted, or utterly erroneous neuropsychological data; and on highly selective and distorted data from Southern African rock art motifs and ethnographic testimony' (Bahn 2011: 350). Bahn's reservations help us to understand the phenomenological thinker Tilley's worry about the recent inroads that this 'altered states of consciousness' view has had to interpretations of the Neolithic of Ireland in the figure of Dronfield who has argued that Irish temple art was 'induced through mind-altering techniques and substances' (Tilley 2008a: 169). It came as no surprise to Tilley that Lewis-Williams and Pearce (2005: 264) endorsed Dronfield's interpretation since it was their (Lewis-Williams') 'earlier work [that] inspired it' (Tilley 2008a: 169. Square bracket: my addition).

Tilley shares Bahn's reservation that this perspective is based upon overly reductive neuropsychology but he also argues that an entopic approach might actually render this art essentially meaningless since it is just the effect of the kind of states (sensory deprived, drug induced) that were required to produce it. It would presumably be the experiences in the altered state that were primarily meaningful and not the art on this account. Tilley's worry holds just as true of the interpretation of Palaeolithic art as it does of the temple art of the Irish Neolithic. Namely, that 'entopically induced imagery, if it ever existed, bears little relationship to what

people actually chose to depict in practice…precisely because it is not meaningful' (Tilley 2008a: 170). So, contrary to emphasising the meaningful, materialising and meaning-making nature of Palaeolithic imagery (howsoever that meaningfulness should be understood) that a dwelling interpretation stresses, the shamanism interpretation in fact runs the risk of rendering the phenomena represented essentially meaningless, in so far as the images are not related to a world of pragmatic action. If the art is related to a world, it is to another, parallel, world or universe only contingently accessible by agents in this one by way of a spirit quest. By contrast, a dwelling perspective interpretation views the world opened up by art (even if that world is populated by forces or spirits and so on) to be one inhabited by agents who live in it. In other words, the world opened by Palaeolithic art (or just, Palaeolithic cultural paradigms) is a "this world" for the agents who dwell in it.

The 'foundation interpretation' of Palaeolithic art as sympathetic magic is still important for commentators (although the evidence would seem to agree with Conkey's view that the art represents a bestiary rather than a menu: after all, representations of reindeer in Palaeolithic art are comparatively few despite their dietary importance (Conkey 1999: Mellars: 2009; White 2002)). As an example of sympathetic magic deployed for hunting the 'work' of cave paintings was to facilitate a successful hunt. Sympathetic hunting magic operates on the basis of a direct relationship between the image and what the image represents and so any action carried out on the image will have an effect on what it represents, the actual animal or person (Clottes 2008: 23).

Sympathetic magic deployed in aid of fertility was also a popular view. On this account, increased animal or female fertility is petitioned through representational acts (sculpting, painting (perhaps including of the body) and engraving). This view was held despite the absence of any known scenes of copulation in Ice Age art. As Ucko and Rosenfeld put the problem, 'If fertility magic was the aim of many parietal representations it is extraordinary that there is no sure example within Palaeolithic parietal art which certainly represents a copulation scene' (Ucko and Rosenfeld 1967: 183)[61].

On the sympathetic hunting magic view it was the act of painting or engraving that was paramount rather than the work produced since that work would only be seen by a select few, if it were seen at all[62]. The art works produced were intended to ensure the success of the hunt, the killing of dangerous animals (lions and bears) and the plenty of game. This theory would explain the images of animals that appear to be wounded: in sympathetic magic the world may be affected through the representational act. It may be further affected by the ritual killing of what is represented. The human and composite creatures might be sorcerers or shamans dressed in animal skins so as to manifest the qualities of the animal. Alternatively, they may be representations of a god. Somewhat unconvincingly, the geometric signs present in caves might represent weapons or traps.

[61] There is also a tendency to exaggerate the ubiquity and significance of the human vulva in Palaeolithic representation. Nevertheless, such an interpretation does seem to be plausible when accounting for fissures in caves (small: Ekain; large: Gargas, Tito Bustillo) whose entrances and sides are heavily coated with red ochre (Bahn 2011: 349).

[62] This view would, of course, have to be significantly revised in order to take account of open air sites at, for example, Foz Côa in Portugal.

Both Abbé Breuil and Count Bégouën were supporters of versions of the 'art-as-magic' view that had been suggested by Salomon Reinach in 1903[63]. Bégouën was forthright:

> With every fresh discovery two facts stand out more and more clearly. The drawings are generally found as far removed as possible from the entrance of the cave, and in nooks and corners very remote and difficult of access…[For example]…The various engravings in the cave of the Trois-Frères are arranged at two different levels about 867 and 1085 yards (800 to 1000 metres) from the entrance, and in passages where one must sometimes go à plat ventre. It is at this point that I would challenge those who uphold the theory that primitive art was purely decorative, art for art's sake in fact (Henri Bégouën, 'The Magic Origin of Prehistoric Art' in, *Antiquity*, 1929, 7 quoted in White 2003: 50-51. Square bracket: my addition).

This is not to say that the art-as-magic interpretations of Ice Age art were the thesis of universal assent. Luquet argued (in 1926) that while scenes depicting wounded animals may represent hunting magic there are large numbers of images and objects that are not well accounted for by this theory. Furthermore, he argues that significant numbers of images (that lack ritual 'overmarkings') are not to be found in remote and difficult to access locations. There are also problems of preservation for images that, for example, might have been depicted at the mouths of caves or in open air sites. Indeed, while hunting magic might have been deployed to improve the chances of success in a hunt and/or to increase the amount of game, hunters and gatherers tend not to want to increase their own populations through fertility magic (as Ucko and Rosenfeld would argue forty years later). White notes that hunters and gatherers seem more interested in limiting population growth and that if true this casts doubt on the fertility magic interpretation (White 2003: 51-54).

[63] Reinach's was a qualified interpretation of Palaeolithic art in magical terms that left room for the importance of mimesis, body decoration and the social expression and communication of thought (White 2003: 50).

Despite Luquet's criticisms which, together with his writings on Palaeolithic art more generally, have been somewhat ignored by the scholarly community the 'art as sympathetic magic' (to enhance both hunting success and animal/human reproduction) interpretation of cave art dominated the scene until the 1950s and the advent of structuralism, largely through the persistence of Breuil. Another figure who has been generally ignored – his work being seen as of only 'debatable interest…[to]…prehistorian[s]' (Delluc, Delluc and Bahn 1986 in Ruspoli 1986: 204. Square bracket: my addition) – but who is a transitional figure sitting between sympathetic magic and structuralist interpretations of Ice Age art is Bataille. Bataille had had actually reviewed Luquet's *L'Art primitif* in 1930. He would devote a work to Lascaux in 1955 that would ultimately present a religious interpretation of prehistoric art (Bataille 1989a: 46; Guerlac 1996: 10). Transgression is the focal point of Bataille's interpretation of Lascaux precisely because of the view that he developed from his reading of Levi-Strauss that human society is founded upon prohibition with regard to both sex and death (Kendall 2005: 12; White 2009: 324)[64].

Although Bataille initially accepted the sympathetic magic interpretation of Upper Palaeolithic art (he explicitly acknowledges his indebtedness to the 'brilliant achievements' of Breuil in the 1955 work) he would in *Eroticism* (1957) depart from that view. He says: 'Prehistorians usually ascribe a magical significance to cave paintings. The hunters were after these animals, and they were depicted in the

[64] The "Holy of Holies" in Lascaux depicts that primitive form of transgression, the hunt, the moment of both the appearance of and slaying of the animal; a moment which is 'at once inevitable and reprehensible' (Bataille 2006: 74) precisely because prehistoric peoples do not distinguish themselves from animals (Lot-Falk 1953 in Kendall 2005: 24). The dying shaman stands in for the hunter and shares the fate of his (murder) victim in order to make amends for its killing (Kendall 2005: 25).

hope that pictorial expression of the wish would make the wish come true. I am not so sure that this was so' (Bataille 2006: 74). It is at this point that Bataille substitutes a religious interpretation focusing on the 'alternation of taboo and transgression' for a magical interpretation of cave art as wish fulfilment. Representation (or 'sacred figuration') follows from the dynamism of transgression in the development of the human species. The origin of art is bound up with prohibition, transgression, horror, the erotic and actual death in the form of the hunt (Guerlac 1996: 10. See Tonner 2014 for a discussion of Bataille's account in relation to Heidegger).

The Abbé Breuil's starting point was the assumption that the painted caves were chaotic and unstructured accumulations of works by individual artists over the course of many hundreds of years. They can be explained by the theory that individual acts of painting were acts of sympathetic magic attempting to herald a successful hunt, the abundance of prey or population growth. It would have been impossible for Breuil to imagine that close attention to all of the images represented within a cave, together with the careful study of their organisation, would yield anything of interest. It was just this kind of analysis that began to make real inroads in the 1950s and while much of these analyses are no longer accepted it is the case that contemporary understandings of cave art and the expansion of knowledge concerning them in recent years owes a debt of gratitude to Raphael (1945) Laming-Emperaire (1962) and Leroi-Gourhan (1965) (as witness Bahn 2011: 349; White 2003: 56).

Moving away from ethnography and toward studies of the cave art itself that emphasised regularity and rules it was proposed that individual caves are highly structured. This suggests that they were planned, both in terms of where images were to be depicted and with respect to which species were to be depicted. Geometric forms were now no longer interpreted as weapons or traps but as meaningful in themselves as counterparts to the representative images. In fact, the multitude of images were interpreted as mythograms and their structures might be revealed in the same way as the structure of myths that had been recounted by living peoples could be revealed. The result of the works of Raphael, Laming-Emperaire and Leroi-Gourhan has been to see each cave as structured wholes, unique in terms of layout and decoration, if not as single compositions. As a result, painted caves have been (and continue to be, in line with discovery) exhaustively documented and mapped (Bahn 2011; Conkey 2009; White 2003).

Leroi-Gourhan, in a representative passage, sums up the ethos of the structuralist approach as follows:

> Thanks to the uniformity and the elaboration of…figure symbolism, the study of variants permits us to establish a chronological framework controlled both by the archaeologically dated evidence and by the evolution of style…it no longer seems possible to maintain that the figures in the caves are the result of the random accretion, from the Aurignacian to the terminal Magdalenian, of images of animals magically wounded by hunters. The sanctuaries have a well-determined structure of figure composition, corresponding to religious representations linked with the opposition and complementarity of male and female elements. This summation…introduces…an attempt at an over-all synthesis of Palaeolithic art (Leroi-Gourhan 1968: 205).

A result of structuralist approaches has been the analysis of spatial relationships among representations and figurations within caves together with their relationship

to the natural structure and surfaces of the cave itself. Most recently, subsequently to the structuralists, Michel Lorblanchet and Denis Vialou have focussed attention on aspects and particularities of individual caves in terms of an encounter between Palaeolithic artists and 'complex underground spaces' that has been described as a 'dialogue with the cave'. For White, the focus now 'is on the ways in which complex and variable three-dimensional underground spaces were appropriated by Palaeolithic people in the process of representation'. Now, 'choices of subject, technique, and colour are seen in relation to the preexisting form of the cave and its surfaces, textures, light conditions, preexisting forms and volumes, and even acoustic qualities' (White 2003: 57). For his part, Lorblanchet engages in experimental archaeology: this is an implicitly phenomenological project since understanding the past is pursued through experience in the present.

Lorblanchet and Vialou take each cave on its own terms and develop interpretations that emphasise the process of creating images as an encounter between artist and cave. On this view, caves are appropriated through the act of representation. Denis Vialou, for his part, puts it this way:

> Palaeolithic artists chose caves for their special topographical features and walls for their particular natural formations…[there were times when]…Palaeolithic artists were inspired by the rock surface to create magnificent examples of figurative art. At Pech-Merle…[Lot, France]…a protruding wall in a vast chamber defines the shape of the head, neck and chest of a horse that probably dates from the Gravettian period. Large dots and some hand stencils…surround and cover the animal…[In Palaeolithic art]…There is a symbiosis of wall-animal-sign' (Vialou 1996: 91-93. Square brackets: my additions).

Characterising Palaeolithic artistic activity as an appropriative, productive dialogue that involves touch brings Lorblanchet's and Vialou's accounts into proximity with

Heidegger's phenomenological account, recalling as it does Heidegger's account of the cabinet maker (discussed in Chapter Four) in *What is Called Thinking?* (1993: 379-81) who creatively receives, responds to and develops that which is coming to presence in the material that he is working. What is distinctive about Palaeolithic artists is not so much that they creatively respond to that which is coming to presence, since, if Heidegger is right, so do contemporary artisans, rather it is that they did so in such a way as to appropriate a place in and through their artistic work. This appropriation of a place was, on a dwelling perspective, simultaneously an event of opening a world.

For Heidegger, the embodied-embedded agent is responsive to the materials that they appropriate to their tasks. The maker approaches and responds to what comes to presence in the materials that they are working. Recall that when characterising the apprentice Heidegger will say that: 'If he is to become a true cabinet maker, he makes himself answer and respond above all to the different kinds of wood and to the shapes slumbering within the wood' (Heidegger 1993: 379). These shapes have to be brought out through the experience of touch in such a way as to respond to what is suggested by the material. What is suggested will be something already (culturally) available to the artist but that is prompted and appropriated afresh in the creative act. Applying this insight to the Upper Palaeolithic creator enables an interpretation of them as an agent who brings forth shapes or images that are 'slumbering in the rock' when they paint or sculpt without any necessary reference to shamanism or to a self-conscious spirit quest (and so on). By contrast, this interpretation emphasises the expressing of what comes to presence in a material in the production of an object as a this-worldly activity: it is a this-worldly event of

meaning-making. What comes to presence in the material is self-showing or self-presentative in the phenomenological sense of coming to presence/being disclosed to a disclosing agent. What is disclosed is creatively appropriated by the maker in such a way as to bring it out *as* appropriated to a particular form (fixed in a particular way; represented) that is/was available to the maker even if only implicitly. Crucially, from the perspective of dwelling, such a process admits phenomenological description in the present and this description is suggestive in terms of our understanding of the past.

This view of artistic production is suggestive to accounts of the origin of art that would stress the importance of touch. For example, the forms present in early *pierres figures* might be accounted for in terms of the appropriation of what was coming to presence (in this case, as a form approaching that of the agent) in the object as these objects were manipulated or otherwise handled by agents in the remote past. After Heidegger, artistic production can be rethought as a form of agency that responds to presence, that appropriates and that forms matter. Art follows upon the appropriation of presence in such a way as to cast it forward in interpretation.

This emphasis on embodied responsive production links the interpretations of Lorblanchet, Vialou, Heidegger and Randall White in terms of a broadly phenomenological approach to artistic production. Even though we should be wary of any over-simplified identification of Ice Age peoples and contemporary ethnographic accounts White's discussion of the Aivilik artisan is suggestive in this context. When discussing the Aivilik carver White emphasises the fact that the

closest word to ‘create’ or ‘make’ that the Aivilik have is equivalent more to ‘to work on’ and that this activity would only include a restrained act of the will on the part of the carver. An Aivilik carver does ‘not try to force the ivory [that they are working on] into uncharacteristic forms, but [instead allows] the material to express itself’ (White 2003: 27. Square bracket: my addition). The raw material worked, the ivory, is not taken to be lifeless or passive matter. Actually, it is taken to harbour a spirit within it which, we could say, comes to presence in the manipulation of the object. In the act of carving the Aivilik carver enters into ‘a dialogue with the ivory, talking to it, coaxing the spirit within to identify itself to the ever-moving, experienced hands of the carver’ (White 2003: 27). The phenomenological reading of this appropriative activity is compatible with a religious interpretation of the material to be formed but it does not presuppose it. It is a spirit that comes to presence in the matter precisely because the world being opened in this act is a world inhabited by spirits as well as by humans, animals and objects. Spirits and any spiritual or transcendent reality are part of the interpretive tapestry of the world and not something set apart from it. In the words of Carpenter, the Aivilik enabled the seal that was carved to ‘step forth’; this is consonant with what Heidegger means when he speaks of art as a ‘bringing forth’.

The Aivilik do not distinguish aesthetic, decorative and utilitarian objects nor do they seem to place any significant investment in individual expression. The Aivilik had no word for ‘art’ or ‘artist’ (note here Heidegger’s use of ‘creators’ in place of artist). There were only ‘people’ amongst them. Each object produced is allowed to ‘fill its own space, create its own world’ (Carpenter in White 2003: 27). The finished object was not to be set up as an object of aesthetic appreciation but was

intended to be held in the hand or worn by an agent. The Aivilik logic of representation emphasises the perception that things are in a state of becoming or of transformation. As such, three-dimensional ivory sculptures 'were turned in the hand, fondled, [and were] viewed in continuous dynamic perspective' (White 2003: 29). For this reason, the assumption that a number of animals represented on an object actually represents a number of different animals is, in fact, mistaken. Such cases might well represent one animal or creature 'through time: in different phases of movement, from different points of view, in different life stages, or in different seasons of the year' (White 2003: 29). This resonates with White's interpretation of the panel of horses in Chauvet (Figure 6.2) and with the Deleuzian notion of fixing or capturing a 'force'. In each case it is left to the viewer of the images to make the logical connections between the phases represented.

To conclude, White sums up the contemporary 'loss of innocence' in Palaeolithic art studies well when he says:

> There has always been a tendency…to attempt to account for all of Palaeolithic cave art with a single explanatory model: art for art's sake, hunting magic, fertility magic, mythograms, shamanism. As a result, carefully selected images are often presented to bolster one or another of these interpretations, leaving the vast majority of images unexplained. For example, perhaps 10% of the known images conform to the expectations of a shamanistic interpretation. What, then, do we do with the remaining 90%? (White 2003: 57).

Such grand narratives of cave art also tend to ignore portable art and open air art (Foz Côa). In parallel with such an interpretive strategy has been the tendency to generalise about the physical composition of the caves: that they are difficult to access, deep and womblike. This does not bear up to scrutiny: some caves might be

5,000 metres deep but others are just 5 metres deep; some caves might be hard to access but others aren't; some caves are more like tunnels as opposed to labyrinthine. In fact, not only is every cave now considered unique, they are regarded as vastly complex in nature, admitting of both temporal and regional variation. As White puts it, 'No single characterization of the cave environment is adequate and no single interpretation of cave painting will suffice' (White 2003: 58). Approaching cave art from the perspective of dwelling holds out the possibility to archaeology of an understanding of agency and world that can contribute to an understanding of cave art but that does not seek to extrapolate a grand narrative. Instances of artistic production are understood as events of meaning-making and world-opening: what meaning is made and what world opened remains speculative. Going beyond the broadly functional-ontological claim that it was a hunter-gatherer world that was opened toward an ontic account of that world as shamanic will remain problematic and inconclusive. The dwelling perspective will focus on the phenomenology of human experience and of making and it will eschew a theoretically-laden foundation.

Caves, heterotopias and dwelling

Certainly, shortly after their appearance in Europe modern human beings entered deep caves and produced art. They would do so from around c.36,000 to c.14,000 years before present (from 32 thousand to 13 thousand years ago in uncalibrated radiocarbon terms) (Mellars 2009: 213-214; see Table 6.1 and footnote 54). This long period of human prehistory, marked by the steady cultural appropriation of caves is unique. Outside Europe caves were mostly avoided. In Europe, over a 100

(so far discovered) separate painted caves, occurring in southern France and northern Spain, seem to have been visited, but only on rare occasions.

The contextual background to my discussion here is the argument that I have given that we can think of caves as heterotopias: caves are heterotopic, uncanny (not necessarily frightening), numinous spaces and because of this, I suggest, they enable human beings to produce art as a world opening event. This does not prevent other spaces from functioning as heterotopias but it does suggest that there is something significant about human experience in caves. Let me try to make the connection between heterotopic space, Heidegger's account of Dasein and dwelling more explicit.

One feature of heterotopic spaces is that they enable the 'contestation' of the relationships that operate within and characterise a group/society/culture. Heidegger's point would be that such spaces also enable the originary setting up of these relationships themselves. It is these relationships and networks of relations that enable agent's projects to take on the shapes that they do within any particular cultural and historical context. Now, according to Heidegger, a central constitutive feature of Dasein is being-towards-death: death, on this account, is understood as the annihilation of an agent's individual projects (Moran 2000: 24). Heidegger's account of anxiety is bound up with his account of being-towards-death: anxiety is ultimately about Dasein's being-in-the-world, its basic state; anxiety is about death. Anxiety lets a Dasein encounter the fact that there is a contingency or groundlessness to its existence and so enables their familiarity with their everyday world to be seen to be contingent. This experience of anxiety is a structural

dimension of Dasein as being-there. Where and when there is Dasein there is anxiety and anxiety, because of its revelation of contingency or groundlessness, discloses existential possibilities that are there for appropriation into one's existence. In other words, because an agent or group of agents is revealed to be contingent so too are their projects: this enables a decision to be made as to what projects to appropriate for the agent or the group. The disclosure of these possibilities of existence discloses a world to a Dasein or group of Daseins as a relational network (Moran 2000: 241). Anxiety enables individual and communal self-interpretation to take place and it is these interpretations that enact a rule or set of rules to live by.

In essence, the experience of anxiety reveals Dasein's essential 'homelessness' in the world. The world is revealed as something uncanny (*unheimlich*) and it is the unsettling nature of such experiences that explains the general human tendency to 'turn away' from (perhaps through ritualization or some other means) the things that provoke them. Such experiences can be disruptive to established social norms and require management. The experience of anxiety reveals that human existence or dwelling is bound up with the world in an appropriative co-constituting relationship of practical coping (*Sorge*) (Higginbottom and Tonner 2010). This co-performative relationship generates cultural worlds: Dasein co-insides with and co-instantiates its world but Dasein is not wholly 'at home' in it: because of this Dasein needs to create cultural worlds to live in. These worlds then enable Dasein to act deceptively as if it were wholly at home in the world (and, in echo of Husserl, as if these worlds were somehow independent of it and so do not rely on its constituting activity).

My suggestion here is that socially-constructed or appropriated aspects of the natural environment can be considered heterotopias and could function to manage such experiences in the Upper Palaeolithic. Recall here the features of heterotopias identified by Foucault. Heterotopias are diverse in form but are a constant of 'every human group'. Heterotopias have precise operations that can change. Heterotopias enable the juxtaposition of incompatible emplacements within a society. Heterotopias open heterochronias: temporally discontinuous places; places of all times (museums) and places of transitory time (annual festival sites). Heterotopias presuppose systems whereby they are opened and closed. Heterotopias are isolated but enterable and they function in relation to the remaining spaces of the group (Foucault 1998: 179-184).

Events of anxiety are revelatory in the sense that they disclose the contingent and constructed nature of human cultural worlds. Because they are potentially disruptive such events need to be attended to in order to enable agents to reteritorialise on 'homely', well-known, mundane and securely established possibilities for self-interpretation and living (Moran 2000: 241). For these reasons a carefully stage-managed heterotopic experience, such as might have gone on in the painted caves, whether in the act of painting or otherwise, might very well reinvigorate established cultural norms. As Lefebvre suggested, the function of the cave in the cultural landscape of the group might have been to 'be known to 'be' there' even when an experience in or of it was not on the immediate horizon (Lefebvre 1991: 254)[65]. Knowledge that there were these sites, even if there wasn't explicit knowledge of

[65] 'What is the *raison d'être* of Lascaux's frescoes…? The answer is that these paintings were made not to be seen, but merely to 'be' – and so that they might be known to 'be' there' (Lefebvre 1991: 254).

exactly what was in them or what went on in them, could have served to reinforce cultural norms. That is, decorated caves could have functioned as heterotopic places (perhaps among other places) for Ice Age communities.

The phenomenological claim that caves participated in the emergence of the meaning of things in a rich and vibrant 'this world', that they and their artworks 'first [gave] to things their look and to men their outlook on themselves' (Heidegger 1971: 43. Square bracket: my addition), as Heidegger would say, amounts to the claim that caves were part of the manifold of the disclosure of beings that occurred in acts of originary meaning-making for Ice Age peoples. That heterotopic cave space had this effect may partly account for their role in the production of world opening art during the last Ice Age: caves enabled art to occur as a bringing forth of worlds. All of this is grounded in Dasein's being as care.

Before we built heterotopias like museums and cathedrals we constituted them through art and burial and through other productive activities in the natural environment. Caves might be paradigms of such spaces but prehistoric heterotopias might also include waterfalls, cliff tops and rock shelters amongst other potential candidates. What is important is the relationship of these spaces to possible experience. Heterotopic spaces are uncanny; they provoke the realisation that a place must be cleared in order to function as a home, as a dwelling place. Artistic practice is central to this process on Heidegger's view.

For Heidegger, works of art are self-subsistent and the process of their creation is destructive of the artist: the artist is inconsequential when compared to their work.

The art work is not a symbolic object nor is it an ‘installation’ that gives order to beings; rather, it is the ‘clearing of be-ing as such’. Works of art do not ‘belong to man’ as objects of subjective appreciation. Instead, Heidegger suggests (*Mindfulness* 1938-9), art itself takes on the character of Da-sein, of being ‘the there’, the site for the revelation of meaningful presence. The work of art is the site of decision for the ‘rare ones’, thinkers and poets capable of a ‘poetic thinking’ that does not represent beings but that ‘lets them be’ (Heidegger 2006: 28; Heidegger 1993: 167).

Heidegger’s approach to art proceeds on the basis that art issues from the interplay of the structures of Dasein (being-there) and unconcealment. His account also insists on taking each work of art individually on its own terms since it is the job of *each* work of art to open a world. When it occurs in a cave, as I suggest it did during the last Ice Age in Europe, then the opening of worlds occurred in heterotopic space. Art has a focal function for Heidegger: its purpose is to focus and direct the lives of individuals. We can accept the claim that European Ice Age cave paintings focused and directed the lives of individuals in a group without having to suggest that each individual in the group had to go and visit the works to see them for themselves, after Lefebvre (1991). And we also don’t have to commit to an overarching narrative of shamanism or the like to uphold this phenomenological claim. In order for these works to have had an effect on the group, it might have been enough to know that they were there. Knowledge of the production of and presence of cave art could well have created and maintained a heterotopic, liminal underworld-landscape or “underscape” even if this underscape were only to be explored by the few.

The ‘work’ of a work of art is to open up or disclose a world. Truth (*aletheia*) is composed in a work of art for Heidegger in the intimacy of its creation and it is for this reason that all art is essentially poetry[66]. Poetry is what Heidegger calls ‘projective saying’; it is an original naming of things. In artistic composition the meaning of being constitutive of an age or of a group is ‘materialised’. Art (as disclosure; *aletheia*) establishes what Heidegger called the ‘meaning of being’ in *Being and Time*. When a work of art ‘speaks’ to an audience (Heidegger’s ‘preservers’) then these agents are wrested out of ordinary or mundane experience and engagement into a ‘truth event’ which is the event of world disclosure. This is the ‘work character’ of the work of art and each individual work does this in its own way in terms of the world that it opens.

Resistance to human appropriation and control is ‘concealment’ on Heidegger’s account and it is just this resistance to total control by humans that can be set into an art work. Works of art, prehistoric or modern, maintain within them the historical contingency and precariousness of human worlds. This is what Heidegger is getting at when he discusses the ‘strife between world and earth’, or between unconcealment and concealment, in his work on art (Tonner 2010, Tonner 2014). As an unfolding historical event of meaning-making the meaning of works of art cannot be fully determined.

From a dwelling perspective the production of art in caves can be interpreted as a projective/clearing event that enabled a world, a historically negotiated and

[66] ‘[t]ruth, as…clearing and concealing…happens in being composed’ (Heidegger 1993: 197).

contingent relational network of interpretative meanings, to emerge for a group of dwellers. Such events are necessary for events of self-interpretation to happen. They enable the multitude of 'things' in the surrounding environment (animals, objects, 'others' and events) to be appropriated into the life of a group. The example that Heidegger discusses is Van Gogh's *Pair of Shoes* (Figure 6.1). This painting discloses a pair of shoes in their use for their owner, in their reliability and sturdiness, in their worn-in durability and material resistance to bodily movement. Heidegger will say of this work that 'Van Gogh's painting is the disclosure of what the equipment, the pair of peasant shoes, *is* in truth' (Heidegger 1993: 161. Italics in the original). By displacing an audience into the place of the event of the disclosure of this truth the 'work' of the work of art is happening: it is an event where truth (*aletheia*, unconcealment) itself discloses the being of the shoes and opens up or brings forth the world of their use by their owner, who Heidegger takes to be a peasant woman (Heidegger 1971a: 44-45; Tonner 2014).

Figure 6.1. *Vincent van Gogh (1853 - 1890), Shoes, 1886-09 Paris, oil on canvas, 38.1 x 45.3 cm. [s11V/1962. F255]. Reproduced with permission of the Van Gogh Museum, Amsterdam (Vincent van Gogh Foundation).* © Van Gogh Museum, Amsterdam (Vincent van Gogh Foundation).

Heidegger says: 'From the dark opening of the worn insides of the shoes the toil-some tread of the worker stares forth…This equipment [the shoes] belongs to the *earth*, and it is protected in the *world* of the peasant woman' (Heidegger 1993: 159-160. Italics in the original; square brackets: my addition). A 'world' is a context of significance: it is that open space wherein the owner of these shoes conducts their

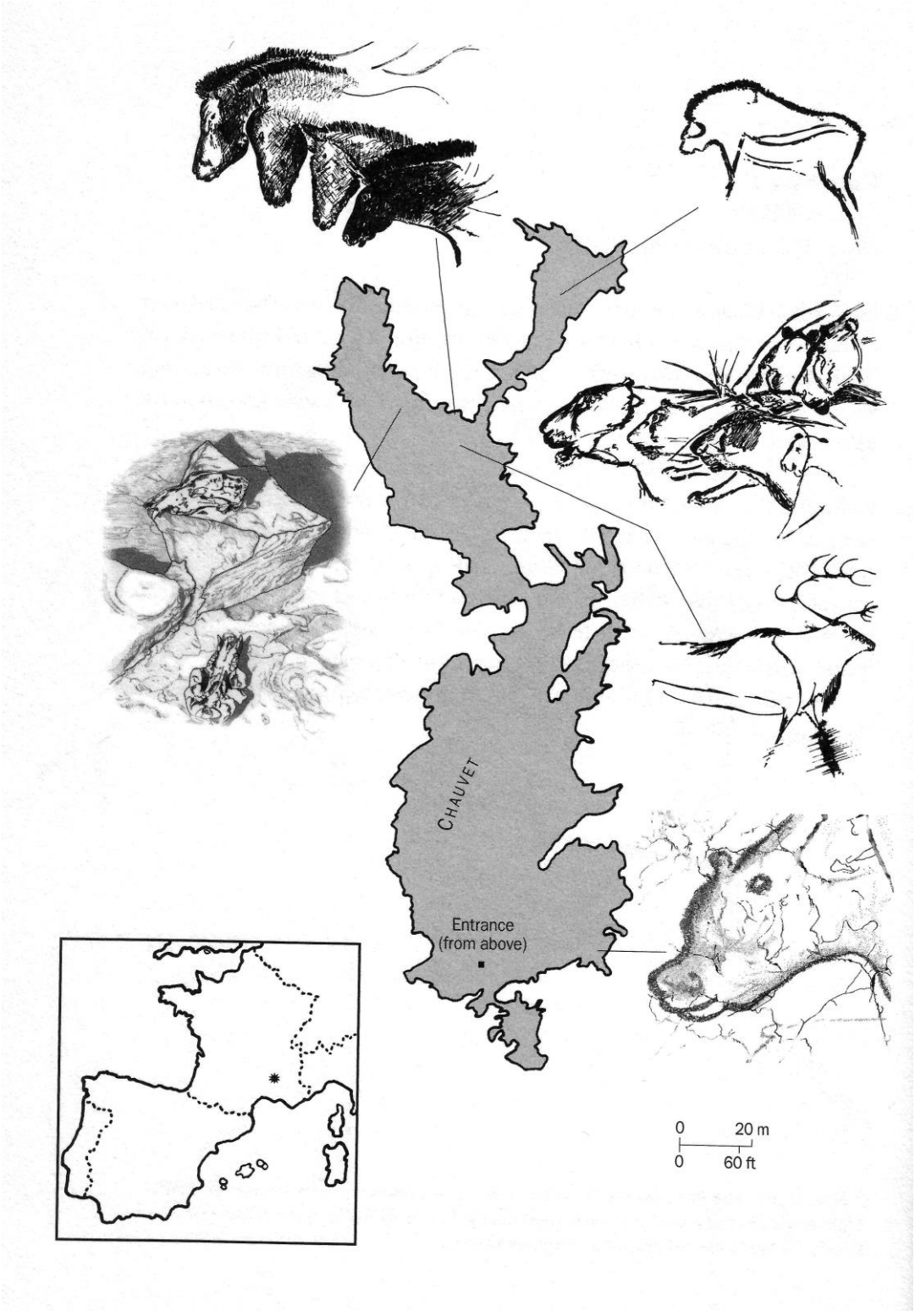
daily activities. It is where they dwell. When a viewer looks at the represented shoes in their worn-in state these shoes ‘refer to’ or ‘point at’ other aspects of the woman’s embodied-embedded life as her life unfolds in her environing world that are not represented: how she goes about her daily business of sowing plants, how she is aware of the subtle changes in the weather and how such changes will impact upon her life (Wartenberg 2001: 152). The world of the peasant woman is disclosed to the agents who preserve the work as a hermeneutic totality. The non-represented features ‘brought to presence’ for viewers of a work require of them some prior knowledge of the worlds intimated in representation (as noted in connection to Martin’s discussion of vanitas works in Chapter Three). In Ice Age art these non-represented features brought to presence or ‘gathered’ for viewers, both in the present and in the past, might be ‘the hunt’, relations of power and exchange, kinship or religion, but all of these features must, in the past, assume existential familiarity with such a world, and in the present, they must be evidenced by archaeological research.

It is in such a way that Heidegger’s notion of ‘bringing forth’ reveals the basic character of the beings that this peasant woman meets as she dwells in her world. Van Gogh’s painting reveals the world of the peasant woman and it also reveals that world in terms of its emergence from earth (for example, the material resistance of newly worked leather to comfortable human movement). The earth is that out of which the peasant’s world is fashioned, but not in terms that would relegate it to passive matter. Earth relates to concealment for Heidegger and so, a little loosely, it refers to the pre-cultural ground that tends to resist human attempts to establish coherent worlds upon it.

Within the context of Palaeolithic representation, there is a sense in which we might want to think of the animals depicted, while they are encountered within worlds, to nevertheless be somewhat on the side of the 'earth' (concealment) in Heidegger's sense since they resist attempts to be wholly incorporated or appropriated into worldly frames of meaning. (Perhaps this fact accounts in part for the infrequency of representations of prey animals: perhaps they were less resistant to incorporation into human frames of meaning precisely because of their status *as* prey). Consider in this regard the *frieze of horses* depicted in Chauvet (Ardèche, France) (Figure 6.2 and Figure 6.3).

Figure 6.2: *Frieze of Horses, Stone Age Cave Paintings, Chauvet, France. Reproduced by permission of the Science Photo Library. © Science Photo Library*.

Figure 6.3. *Outline map of the Cave of Chauvet. Reproduced by permission of David Lewis-Williams and the Rock Art Research Institute, University of Witwatersrand:* (© Rock Art Research Institute, University of Witwatersrand).



Recall here Martin's discussion (Chapter Three) of a phenomenological-semiotic decoding of representations in connection to van Oosterwijk's 'Vanitas Still Life' (1668) (Figure 3.1). Van Oosterwijk's painting presents a symbolic code and for an agent to 'see' this work correctly partly depends upon their ability to understand and respond in an appropriate way to this symbolic code. A viewer's literacy with this symbolic order is directly related to their familiarity with a common set of culturally defined symbols derived from their lifeworld together with their ability to read 'natural signs' (as noted above) (Martin 2006: 8).

Further, we suggested, following Martin, that semiotic systems of representation can be open or closed. In a closed system one set of meanings is dominant and dictates a particular interpretation while in an open system the meaning(s) of the work is left unresolved. Upholding the thesis of Chapter Three a dwelling perspective will recognise that while Ice Age art is resistant to closure (being polysemic and semiotically open) it is not resistant to interpretation. For his part, Randall White (with Gerri Sawicki) has suggested that the *frieze of horses* is not a scene depicting horse behaviour within the context of a particular group of horses active at the same time within the same spatial context. On his view, what seems to be represented on this panel in Chauvet (see Figure 6.2) is, from left to right, a 'calmly walking horse; a second horse…in an aggressive posture with its ears flatted backward; a third…in a relaxed posture…with its ears up and oriented forward…[and]…a fourth, alert…[and open mouthed]…suggesting vocalization or snorting…[and that]…seems to be a pony' (White 2002: 79. Square brackets: my additions).

White's suggestion is that this panel may in fact represent the 'same horse in four different behaviours or life-phases' or it might represent the 'postures themselves' without attempting to represent one animal (White 2002: 79). Both of these possibilities would be representations of something autonomous, something beyond human control, a collection of 'forces', something resistant to human domination (the earth, unconcealment, becoming) but that are nevertheless related to human activities within a landscape (hunting, for example, or religious practices). Whether in the domain of observable behaviours, or in terms of the 'becoming of a horse', or in terms of the 'constellation of forces' constitutive of the identity of a behavioural posture (such as snorting, neighing or squealing) White speculates that it might in fact be 'time' that is the primary concern of this scene in Chauvet rather than a particular narrative and for this reason his reading suggests an ethnographic parallel with Inuit logic of representation[67].

Whatever the narrative content revealed in a work from a dwelling perspective it should be remembered that the role of a work of art is to hold open a world (Heidegger 1993: 170). Works of art ought to preserve the space of questioning wherein what was once inchoate, located in the background practices of a group (their 'know-how'), becomes taken as intrinsically mysterious and worthy of question. Art enables a 'decision' to be made by a group regarding how things are going to matter for and to them as dwellers in their world. In essence, works of art, on Heidegger's account, put up for decision what will count as the highest values

[67] For Deleuze and Guattari forces produce identity in all its forms. For them, Smith and Protevi suggest, 'constellations of constitutive forces…can be abstracted from bodies and states of affairs'. While science explores how these forces are concretised in a particular body or states of affairs philosophy explores them by mapping 'the range of connections a thing is capable of' (Smith and Protevi 2013). These are its 'becomings' or 'affects'. For Deleuze and Guattari forces are an essential part of a world.

(the gods) for a group while determining what will prove essential for human dwelling in a world (Tonner 2014: 125).

From an archaeological perspective informed by phenomenology and Heidegger any reference to non-represented features of works must be grounded in the wider archaeological context of the site. An archaeological/dwelling perspective representation of this might be possible with regard to the image of the horse from the Panel of Horses, Grotte Chauvet (Figure 6.4 and 6.5).

The 'work' of artworks is to open a historical world. In so doing, works of art define and determine how objects, animals and agents are going to 'appear' within that opened world. The meaning of the arrows within the circle of the world (as a site of dwelling *qua* being-in-the-world) in our diagrams is to bring out the 'directions' that appearing and appropriating can have within a context. These arrows are vectors: they indicate the back and forth movements of appearing and appropriating. In this case, the imagery depicted on the Panel of Horses works to open up a hunter-gatherer world. The work of art 'works' to enable real horses, other agents and objects (in the example, of portable art representing a horse) to take on the meaning (and so being) that they have within the understanding and interest of a particular Dasein/group of Daseins in terms of their being-in-the-world (as unified in the structure of care/*Sorge*, which has its ontological meaning in the structure of Dasein's temporality. Heidegger puts it this way: 'The totality of being of Da-sein as care means: Ahead-of-itself-already-being-in (a world) as being-together-with (beings encountered within the world)…*The primordial unity of the structure of care lies in temporality*' (Heidegger 1996: pp300-301). The present (being-together-

with) presses into the future (ahead-of-itself) while being informed by the past (already-being-in), in the sense of carrying it with it. As ‘carers’ or dwellers, who clear a space for their dwelling in the world (as we noted in connection to the ‘space of art’), Daseins enable the ‘wilderness’, including the animals that inhabit it and that are represented in their art, to become meaningful to them in terms of their projects/lives). Discovering what the actual meaning of real horses, other agents and objects was within this context should be approached in terms of the project of phenomenologically-informed archaeology as outlined here. That they were meaningful (the ontological level of description) can be understood in terms of formal structures while their narrative meaning (ontical level of description) remains obscure.

Figure 6.4. *An abstract representation of the 'work' of the work of art.*

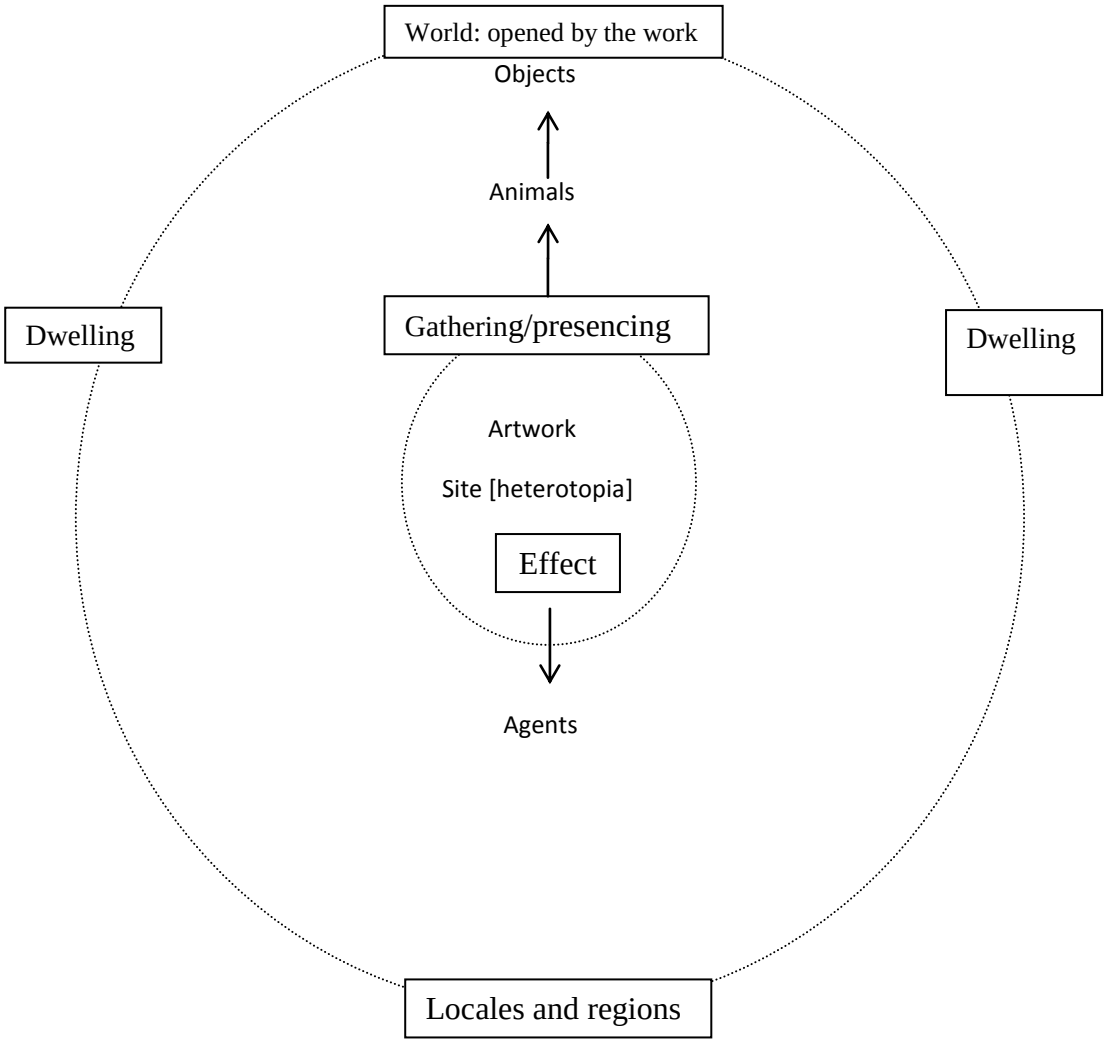
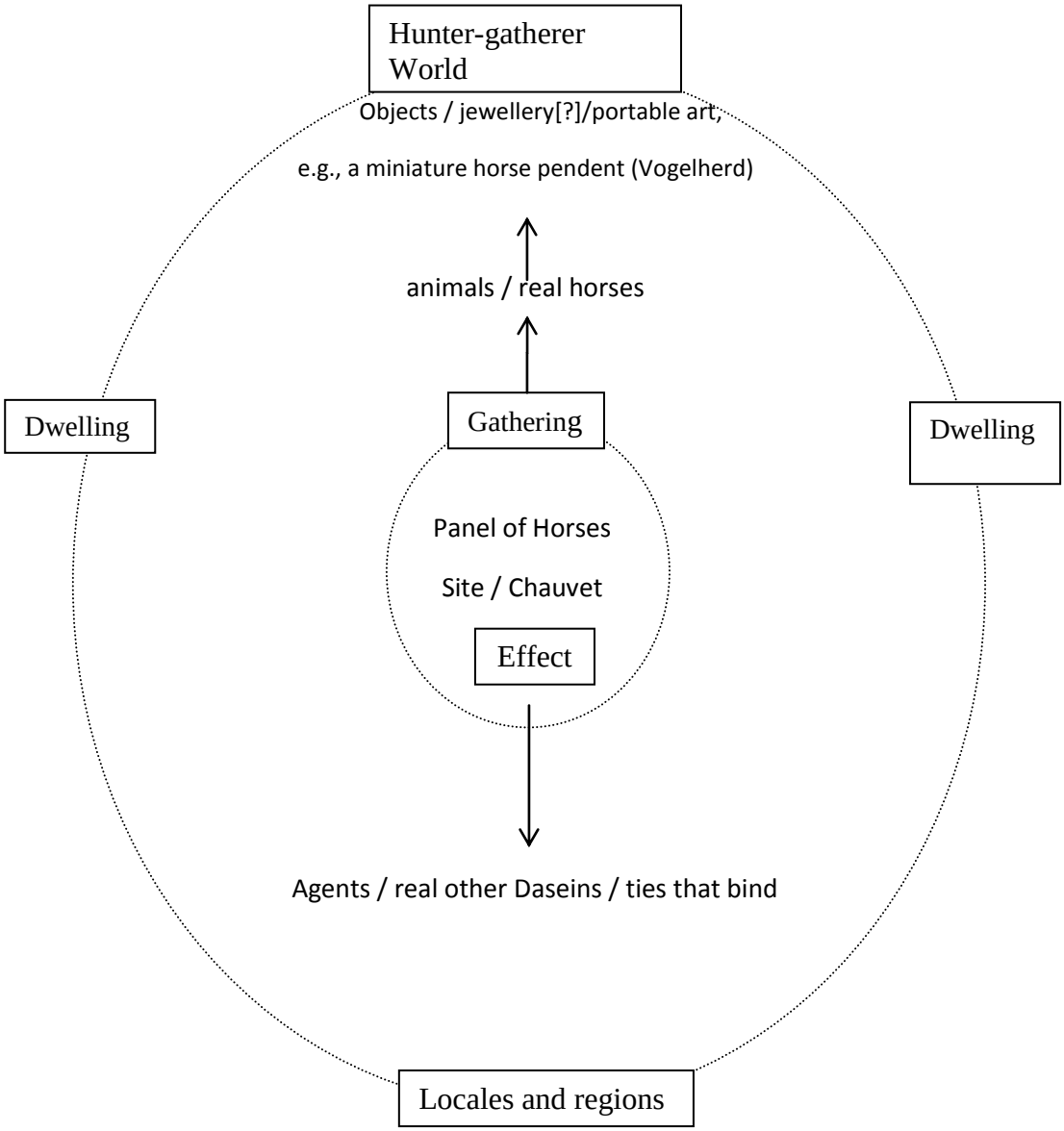


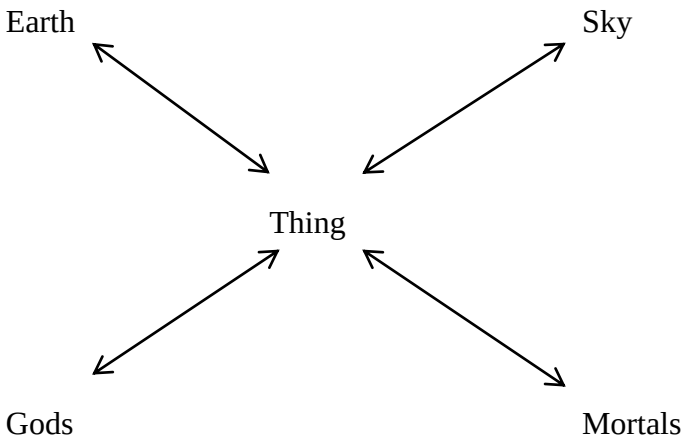
Figure 6.5. *The work of the Panel of Horses in Chauvet.*



The Fourfold

An additional resource for situating, for example, the horse from a dwelling perspective is suggested by Heidegger's account of 'things' more generally as occurring at the intersection of the fourfold (*das Geviert*) of earth and sky, gods and mortals (Figure 6.6).

Figure 6.6. *The Fourfold of earth and sky, gods and mortals*.



In his later writings Heidegger outlines a notion of the "thing" as 'gathering' (bringing to presence) the 'fourfold' of earth and sky, gods and mortals. When discussing the fourfold Heidegger concentrates on seemingly mundane items that surround agents within an equipmental context but in terms that do not subordinate them to either readiness to hand or presentness to hand (for a discussion see Tonner 2014). Heidegger's examples include jugs, benches, ploughs, hills, horses and deer, books, pictures, crowns and the cross (Heidegger 1971b: 182). Every*thing* and any*thing* that an agent meets in their experience may be designated a 'thing' in Heidegger's sense of the term. This account of things provides a further dimension

to proposed phenomenological analysis in archaeology and to the dwelling perspective.

Heidegger's account of the fourfold is intended to indicate the essential 'relationality of worldly existence' (Mitchel 2010: 208). The fourfold is taken by Heidegger to be a phenomenological unity, a 'simple oneness', that allows the earth and the sky, the gods and mortals to come to presence phenomenologically in the life of an agent. The fourfold comes to presence in a play of mirroring relations. He says

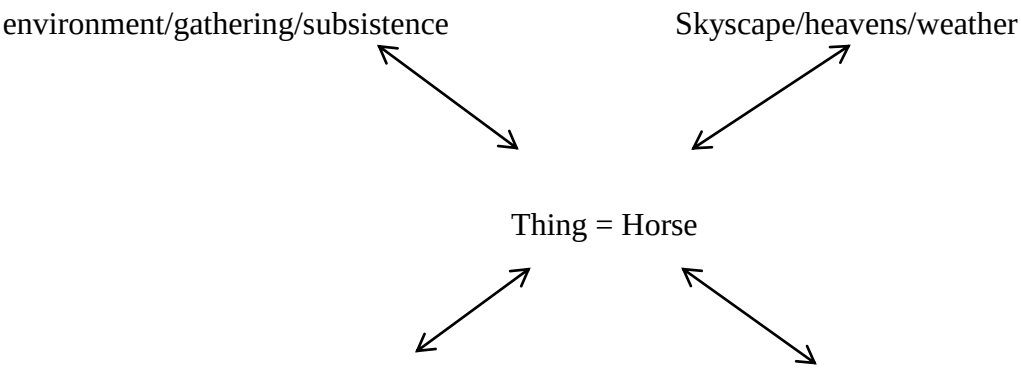
> Earth and sky, divinities and mortals … belong together by way of the simpleness of the united fourfold. Each of the four mirrors in its own way the presence of the others … Mirroring in this appropriating-lightening way, each of the four plays to each of the others … This appropriating mirror-play of the simple onefold of earth and sky, divinities and mortals, we call the world (Heidegger 1971b: 179).

Things 'gather' the fourfold as a play of mirroring relations (what mortals 'are' (their being/self-interpretation) in any world or context comes to presence in what the gods (the mortal's highest values) 'are' in that world or context; and what the sky 'is' taken to be in that world or context comes to presence in what the earth 'is' taken to be and what the earth 'is' comes to presence in what the sky 'is', and so on). Any account of things or objects as stable present-to-hand entities is undermined. Things, like artworks, are culturally paradigmatic and in 'thinging' (working, *Ereignis*) the fourfold 'disaggregates' or 'desubstantializes' the thing. In working, by bringing to presence the mirroring play of the fourfold (what each term of the four is in their interconnection and inter-determination), things are released or 'freed-up' from an 'encapsulated self-identity' as an object of a particular kind; this freeing up enables a thing to enter a world, taken as a relational context of significance and involvements (Mitchel 2010: 209-10). Strictly speaking, things are

not ‘in’ a world. Instead, they are collections of relations that participate in the originary opening and reciprocal determination of a world.

Applying this notion of ‘thingness’ to a horse that has been materialised by artistic figuration, and extending the notions of ‘sky’, ‘gods’, ‘mortals’ and the ‘earth’ to outline the meaning that each of these and associated phenomena might have had in the life of a group, we can construct a diagram outlining the mutual referentiality of these terms (Figure 6.7). This shows the ‘being of the horse’, what it is, ‘gathers together’, what the earth ‘is’ (*qua* environment,) what the sky ‘is’ (*qua* threatening or oppressive) due to the weather, what the community of Dasein’s ‘is’ (*qua* hunters of horses and other animals) and what gods ‘are’ (*qua* any possible religious significance that horses may have had within a context in relation to the group’s highest values) are mirrored in each other.

Figure 6.7. *The Four-fold applied*.



Understanding the ‘thing’ (the horse) at the centre of this set of mirroring relations within any cultural context will also involve coming to terms with these other aspects of life as these are brought to presence or ‘mirrored’ in one another within the world of an agent. The dwelling perspective will maintain a holistic approach to archaeological phenomena. What a horse might have been taken to be by a group of agents cannot be understood without reference to how they understood their physical environment (the earth). Nor can it be understood without reference to their cosmology (sky) and/or their religious practices (gods) and self-interpretation (mortals). For Heidegger, every*thing* in a context bears these narrative interrelations: Heidegger’s position is a form of phenomenological holism. The challenge of the dwelling perspective to archaeology is to begin to flesh out these phenomenological dimensions of experience (the “categories” of earth and sky, gods and mortals) in the present and then to begin to apply them in service of our understanding of the past.

Chapter Seven

Conclusion

I have covered a lot of ground. Let me try to bring things together in this concluding chapter in such a way that will summarise what I have discussed while at the same time indicating what might now be done in connection to the exchange of ideas between the disciplines of archaeology and phenomenology in service of the dwelling perspective.

I have argued that phenomenology can contribute to method in archaeology since it provides access to contemporary dwelling. Dwelling emphasises embedded and embodied action and agency in worlds of pragmatic concern. I have argued that integrating phenomenology and archaeology will result in the production of the best available accounts of past 'ways of thought and action' to be revealed and hermeneutically reconstructed on the basis of the archaeological record and phenomenological accounts of experience in the present. A revised Heideggerian position that takes into consideration contemporary insights from both phenomenology and the cognitive sciences may be deployed when thinking about the beings whose activities make up the archaeological record. Progressing cautiously, while being informed by the most up-to-date science, in every sense of that term, will enable us to approach our ancestors' engagement with the world in the past from the standpoint of phenomenological accounts of experience in the present. Phenomenological approaches to agency will enable archaeologists to

overcome the spectre of Cartesianism (Coward and Gamble 2009: 52) when trying to account for prehistoric agency. Phenomenological analysis can open up 'moments', snapshots of events past and present, as these events are concretised in the life of an agent, in the creation of an artefact, such as the stone tool, fresco or burial.

Heidegger's novel account of 'Dasein' as 'care' should be approached non-anthropocentrically. This allows us to deploy this notion to our early ancestor's dwelling in their worlds. Care is pre-theoretical 'openness' to a world. It is a fundamentally social existence. Phenomenological archaeology going 'beyond the human' will usefully augment Heidegger's own perspective and will allow us to view the archaeological record differently.

The dwelling perspective is a thoroughly reflexive position. For Heidegger, finite mortality enables originary meaning-making in the present and in the past. As humic foundation, as foundational act, originary meaning-making may occur as both artistic and mortuary practice. Both are prehistoric instances of cultural production that leave a tangible material trace and both invite interpretation from a dwelling perspective rooted in a non-anthropocentric philosophy of care (*Sorge*). Heidegger's key contribution is the insight that modern human beings dwell and do so poetically. This dwelling is made possible by finitude. Ultimately, death makes human life and art possible. An indicator of dwelling in the remote prehistoric past is mortuary practice. What Pettitt has called 'elementary religiosity' could equate to what Heidegger described as a 'cult of graves' and both of these are grounded in *Sorge* and *Fürsorge*. The agents who deposited their dead in the Sima de los Huesos

were incorporating places in the landscape into their mortuary practices. Such places might provoke the kind of uncanny experiences associated with heterotopic spaces. The archaeological record of the Sima de los Huesos suggests that *H. heidelbergensis* were behaving in a way that indicates 'proto-dwelling' in Heidegger's sense: their mortuary practice evidences the foundation stone of dwelling, a complex relationship to both death and the dead. By the time of the Upper Palaeolithic the artists of Chauvet *dwelled poetically on this earth*. Heidegger's philosophy of dwelling and his concepts of care, temporality and finitude, while requiring some revisions, do enable us to look at the archaeological record from a fresh perspective.

As a result of archaeology becoming (after Clarke) critically self-conscious, a number of questions can now be posed by archaeologists. Perhaps the fundamental question is that of the role that philosophy or 'theory' should play in archaeology? I argue that an engagement with Heidegger and the phenomenological tradition is central to becoming a theoretically reflexive archaeologist whether in the field or in the library. I argue that the phenomenological tradition, of which Heidegger is a key representative, has methodological resources that can be utilised by archaeologists working on sites representative of our remote past. In fact, phenomenology has something to say to human evolutionary studies in general and not just to archaeology.

Already in 1995 Shanks and Hodder (see Chapter Two) posed a number of questions that can now be asked in archaeological theory from an interpretive point of view. These included the extent to which humans were more 'animal' in the

remote past? Whether there were radical differences between the conceptual abilities of humans and animals? And whether and to what extent contemporary studies of non-human animals were relevant to archaeological studies of the remote past?

I have addressed some of Shank's and Hodder's questions here but I have done so in terms of an analysis of Heideggerian phenomenology and Heidegger's account of finitude and the power that its revelation in experience has on agents. The history of death and of our dealings with it is a history of self-reflection (Davies 2005: 1). I suggest that further investigation of this fundamental disclosure of finitude in the life of an agent (human and non-human) will provide a platform from which to determine how relevant contemporary animal studies might be to beginning to understand Palaeolithic lives while at the same time enabling researchers to further develop accounts of intentionality as a basis for discussion of comparative cognition. I have also indicated places where those who wish to draw on Heidegger's thought should be prepared not to take his views over into their own work to the letter. For example, with regard to Heidegger's account of animals, commentators should seek to avoid his metaphysical anthropocentrism (Tonner 2011).

There remains a lot to do in pursuit of the dwelling perspective. For a start, scholars should not restrict their reading to Heidegger. While I could not do this here I believe that an engagement with other thinkers in the phenomenological and hermeneutic traditions, in particular Merleau-Ponty and Gadamer, would prove very promising to augmenting the dwelling perspective. Key contemporary

phenomenologists, archaeologists and anthropologists, such as Zahavi, Gallagher, Gosden, Tilley, Gamble and Ingold to name but a few, should be engaged with in their own right and not just as commentators on the phenomenological tradition or on the history of the dwelling perspective. Contemporary innovations in enactivism and phenomenology in the work of Thompson and others should also be explored by those provoked to action by the account of dwelling provided here. Important early contributions, such as that by Sheets-Johnstone (1990), should be revisited in light of contemporary advances in archaeology and related fields. Thinkers out-with the phenomenological tradition (in the strict sense), such as Foucault, Deleuze and Stiegler should also be read in service of augmenting what it might mean to dwell on this earth both in the present and in the past. While I have begun some of these tasks here I could not pursue them beyond, in some cases, intimation. There was simply too much to do with Heidegger alone. In this regard, their still remains much in Heidegger's thought itself (for example, his accounts of technology, language, or historicality) that I have not attempted to deal with in any depth here, if at all, not to mention the critical issue of his politics. These are all important issues or areas of analysis, in one way or another, to those who would seek to develop the dwelling perspective. It is certainly the case that subsequent work on Heidegger and archaeology that attempts to build on what I've done here must confront the issue of Heidegger's relationship to the sciences. Hard choices had to be made as to what to cover and what to omit. This text is an attempt to engage with Heidegger, to deploy his thinking, it isn't an attempt to stick to the letter of his analyses or to present a comprehensive and authoritative reading of his oeuvre. As such, I have freely moved away from aspects of his thought where I have considered this necessary. One danger of this kind of interdisciplinary engagement is that it might leave its

audience dissatisfied: archaeologists will not find enough archaeology in it and phenomenological philosophers will be frustrated by its necessary omission of extended textual analysis. I hope that this is not the case here and that this text finds an audience that will engage with it in the spirit in which it is intended.

The fundamental question of the application of the dwelling perspective to fieldwork should be central to subsequent investigations. I have begun to open up this discussion by virtue of my methodological discussion in Chapter Four and in my 'case studies' but I think that much more could now be done on the basis of this. I would envisage subsequent work going beyond what I have done here. Given that I had to argue for the method itself I felt that I could not launch straight into a case study that deployed it. I had to justify the method first. If, on the basis of my discussion, a phenomenological approach seems justified then subsequent analysis need not spend as much time on theoretical and historical questions as I have done here. I do not pretend to have cleared up once and for all phenomenological method but perhaps what I have done is enough to enable subsequent analysts to engage in separate studies of method, on the one hand, and application, on the other.

While I believe that my method – which amounts to working out of the dwelling perspective, a perspective that deploys a non-anthropocentric notion of care while emphasising meaning making by our ancestors – has been successful to the extent that we can now begin to view the Palaeolithic record from a phenomenological perspective (emphasising the relationality of worldly existence and the meaningfulness of our ancestors lives within the context of social existence in a group) I think that starting from an engagement with a site might now be possible.

That is, subsequent analysis in archaeology might be more practical. I have been concerned to elucidate the contributions of phenomenology and Heidegger but I can readily imagine subsequent studies investigating, for example, a contemporary enactivist position or starting from an engagement in experimental archaeology. The challenge to any study will be to integrate abstract theory and archaeological practice. Perhaps the best way to do this might be to start with an object, perhaps a site or an artefact, and to begin the analysis of that object by deploying the method outlined in Chapter Four. My contribution might then be seen as a prolegomenon to such studies.

I think that my review of the evidence of mortuary practice in the Palaeolithic sheds light on key aspects of hominization from the point of view of death awareness and the manner of dwelling that it testifies to. Further, my survey of Palaeolithic 'art' and my attempt at an interpretation of aspects of it from a dwelling perspective should help serve the possibility of engaging with Palaeolithic social ontologies or "worlds" in the phenomenological sense since it is just such social ontologies/worlds that Heidegger thinks art opens. One key area where phenomenology can contribute to our contemporary understandings of the past is in experimental archaeology. The individual agent is, after all, an agent *of* their world or social ontology. Experimental archaeologists working in the present can deploy phenomenological analysis in order to investigate the experiences of, for example, tool manufacture or artistic production in the present in order to bring their experiences in the present to bear on our understanding of the past. Phenomenological description is, after all, open to intersubjective corroboration and it is veridical for other agents. I could not attempt such analysis here but I suggest

that such a project would yield fascinating and suggestive results. It would start from the object itself and not from a more abstract historical analysis. The structures investigated by the experimental archaeologist in the present can provide the basis for description of acts in the past. This move takes the dwelling perspective away from a concern with the texts of the phenomenological tradition to a broader and more hands-on approach to the archaeology of human becoming.

One lesson of the dwelling perspective is that the individual has to be rethought as a creature whose productive agency must be construed as being-in-the-world: that is, they must be approached not as an atomised individual but as a being whose agency is embedded in and extended into a shared world. As Gamble and Porr have suggested, there is a place within the framework of Palaeolithic archaeology for analysis of the individual, taken as an agent who 'structured the archaeological record' from the earliest times. My suggestion here is that Heidegger's thought and phenomenology more generally can provide a way into this analysis.

When it comes to theory, we should think in terms of 'dwelling perspectives' rather than of a single dwelling perspective. The term 'dwelling' is a convenient one but should a better one be proposed that serves as a coherent description for the general concerns that characterise the group of thinkers loosely grouped together under the current banner of dwelling then this author would not seek to rule out adopting it *a priori*. One danger, however, is that any revised nomenclature might block important theoretical connections to Heidegger's philosophy and to phenomenology being made at the outset. This might serve to obscure some of the commitments that the perspective entails. Ingold (2011) for his part, regrets his use of the term

'dwelling' because of its connotations of 'snug localism'. He now prefers the 'less loaded concept of habitation' (Ingold 2011: 12). Only time will tell if we reach the point where a collection of 'habitation perspectives' has developed. In favour of retaining the term 'dwelling' is that it retains explicit reference to the original inspiration for the perspective in such a way to provoke discussion of the important facts of mortuary practice and art.

Heidegger's position on animality is a source of persistent unease for Ingold. For him, Heidegger's limit can be expressed as follows: 'the animal mingles freely in its environment, it lacks the capacity to apprehend the things it encounters there for what they are, *as things*. It has an environment, but remains deprived of a world' (Ingold 2011: 11). Heidegger's position has been dubbed 'deprivational zoology' (starting from human Dasein and then subtracting traits and abilities analogically until reaching animality (Barbaras 2010: 111)). Remaining suspicious of Heidegger's essentialism, I argue that further augmentation of the term 'dwelling' is required: this will enable a non-chauvinistic hearing of how ancestral others dwelt on *their* earth. We shouldn't think of animals, or of our ancestors, as "us minus something"; we should attempt to think of them and of their worlds on their own terms. This is especially merited when they have their own archaeological record. Dwelling (and care) should become (if it isn't already) another way about talking about situated embedded-embodied existence. We should be wary of restricting dwelling to just humans and their ancestors[68]. Perhaps the promise of dwelling might be to help unite 'the approaches of ecology and phenomenology within a single paradigm' (Ingold 2011: 11).

[68] One of Ingold's aims when developing the dwelling perspective 'was to show that organism-and-environment and being-in-the-world offer points of departure for our understanding that are ontologically equivalent' (Ingold 2011: 11).

Thinkers influenced by Heidegger and the dwelling perspective will provide an additional voice in discussions of human becoming and they will do so in ways that place death awareness, embodiment, care and solicitude, the referentiality of existence and pre-theoretical dwelling at the heart of the discussion. Phenomenology is not a form of solipsistic subjectivism: it is a form of research in the present that articulates embodied and embedded experiences within worlds of pragmatic concern. Worlds change, but they are/were all characterised by particular relations of reference and they are/were all inhabited by embedded, embodied beings. Phenomenological philosophy has a contribution to make to archaeology and Heidegger's account of dwelling adds something to archaeological accounts of mortuary practice and art even if, in the final analysis, his thought requires something of a renovation. Phenomenological research adumbrates experiences and puts flesh on the bone of the world.

Bibliography

Abadía, O. M. and Morales, M. R. G. (2013) 'Paleolithic Art: A Cultural History', in *Journal of Archaeological Research, 21*(3), 269-306.

Adorno, T. W. (1967) *Prisms*, Trans. S. Weber and S. Weber, Cambridge Massachusetts: The MIT Press.

Agamben, G. (2002) *The Open: Man and Animal*, California: Stanford University Press.

Aiello, L.C. (1996) 'Homo erectus', in *The Oxford Companion to Archaeology*, ed. B.M. Fagan, New York and Oxford: Oxford University Press, pp. 311-313.

Ambrose, D. (2006) '30,000 BC: Painting Animality: Deleuze and prehistoric painting', in *Angelaki: journal of the theoretical humanities*, Volume II, no 2, pp.137-152.

Anderson, J.R, A. Gillies, L. Lock (2010) 'Pan thanatology', in *Current Biology, Volume 20, Issue 8*, 27 April, pp.349-351.

Andrews, P. and Fernandez Jalvo, Y. (1997) Journal of Human Evolution 33 (2-3), 191–217.

Apel, K, O. (1996) 'Wittgenstein and Heidegger: language games and life forms', in *Critical Heidegger*, ed. C. Macann, London and New York: Routledge, pp. 241-274.

Appenzeller, T. (2013) 'Neanderthal Culture: Old masters', in *Nature*, Vol 497, Issue 7449, http://www.nature.com/news/neanderthal-culture-old-masters-1.12974. Last accessed: 29.3.15

Arsuaga, J.L. (2001) *The Neanderthal's Necklace: In Search of the First Thinkers*, New York: Four Walls Eight Windows.

Arsuaga, J.L, Martínez, I, Gracia, A, Carretero, J.M, Lorenzo, C and García, N (1997) 'Sima de los Huesos (Sierra de Atapuerca, Spain). The Site', in *Journal of Human Evolution* 33: pp. 109-27.

Ashworth, E. Jennifer, "Medieval Theories of Analogy", in *The Stanford Encyclopedia of Philosophy* (Fall 2009 Edition), Edward N. Zalta (ed.), URL =<http://plato.stanford.edu/archives/fall2009/entries/analogy-medieval/>. Last accessed: 08.10.09.

Attenton, P and Calarco, M. (2004) *Animal Philosophy - Ethics and Identity – Essential Readings in Continental Thought*, London and New York: Continuum.

Baggini, J. and Fosl, P. S. (2010) *The Philosopher's Toolkit: A Compendium of Philosophical Concepts and Methods*, Second Edition, Oxford: Wiley-Blackwell.

Bahn, P.G. (2011) 'Religion and Ritual in the Upper Palaeolithic', in *The Oxford Handbook of The Archaeology of Ritual and Religion*, ed. T. Insoll, Oxford: Oxford University Press, pp. 344-357.

Bahn, P. and Vertut, J. (1997) *Journey Through the Ice Age*, London: Weidenfeld and Nicholson.

Barbaras, R. (2010) 'Life and Exteriority: The Problem of Metabolism', in *Enaction: Toward a New Paradigm for Cognitive Science*, ed. J. Stewart, O. Gamenne and E.S. Di Paolo. Cambridge Ma: The MIT Press.

Barber, M. (2008) "Alfred Schutz", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/schutz/.
Last accessed: 29.3.15

Barton, N. (1997) *Ice Age Britain*, BT Batsford.

Barrett, J. (2009) 'A phenomenology of landscape: A crisis in British landscape archaeology?' in, *Journal of Social Archaeology*, October 2009, vol.9 no. 3, 275-294.

Bataille, G. (1955) *Prehistoric Painting: Lascaux; or, The Birth of Art*, trans. A. Wainhouse, Geneva: Skira.

Bataille, G. (1988) *Inner Experience*, Trans. L.A. Boldt, New York: State University of New York Press.

Bataille, G. (1989a) *Tears of Eros*, Trans. P. Connor, San Francisco: City Lights Books.

Bataille, G. (1989b) *Theory of Religion*, Trans. R. Hurley, New York: Zone Books.

Bataille, G. (1989c) *The Accursed Share: An Essay on General Economy, Volume I*, Trans. R. Hurley, New York: Zone Books.

Bataille, G. (2005) *The Cradle of Humanity: Prehistoric Art and Culture*, Trans. M. Kendall and S. Kendall, ed. S. Kendall, New York: Zone Books.

Bataille, G. (2006) *Eroticism*, Trans. M. Dalwood, London and New York: Marion Books.

Beistegui, M, de. (2003) *Thinking with Heidegger, Displacements*, Indiana University Press.

Beistegui, M, de. (2005) *The New Heidegger*, Continuum.

Benjamin, A and Osborne, P. (2000) *Walter Benjamin's Philosophy, Destruction and Experience*, Manchester: Clinamen Press.

Benjamin, W. (1999) ‘Unpacking My Library, A Talk about Book Collecting’, in *Illuminations*, Trans. H. Zorn, Pimlico.

Benjamin, W. (1999) ‘The Work of Art in the Age of Mechanical Reproduction’, in *Illuminations*, Trans. H. Zorn, Pimlico.

Benjamin, W (1999) *Illuminations*, ed. H. Arendt, Trans. H. Zorn, London: Pimlico.

Bergson, H. (1912) *An Introduction To Metaphysics*, Trans. T.E. Hulme, Hackett.
Bergson, H. (1946) ‘The perception of change’, in *The Creative Mind, An Introduction to Metaphysics*, Trans. M. L. Andison, Citadel Press.
Bergson, H. (1998) *Creative Evolution*, Trans. A. Mitchell, Dover.

Bermúdez de Castro, J.M and Nicolás, E. (1997) ‘Palaeodemography of the Atapuerca-SH Middle Pleistocene hominid sample’, in *Journal of Human Evolution* 33(2/3), pp. 333-55.

Bermúdez de Castro, J.M, Arsuaga, J.L, Carbonell, E, Rosas, A, Martínez, I and Mosquera, M. (1997) ‘A hominid from the Lower Pleistocene of Atapuerca, Spain: possible ancestor to Neanderthals and modern humans’, in *Science* 276: pp. 1392-5.

Bermúdez de Castro, J.M, Martinón-Torres, M, Carbonell, E, Sarmièntо, S, Rosas, A et al. (2004) ‘The Atapuerca sites and their contribution to the knowledge of human evolution in Europe’, in *Evolutionary Anthropology* 13 pp. 25-41.

Bermúdez de Castro, J.M, Pérez-González, Martinón-Torres, M, Gómez-Roblez, A Rossell, J. et al. (2008) ‘A new Early Pleistocene hominin mandible from Atapuerca-TD6, Spain’, in *Journal of Human Evolution* 55 pp. 729-35.

Biletzki, Anat, Matar, Anat, "Ludwig Wittgenstein", in *The Stanford Encyclopedia of Philosophy* (Spring 2010 Edition), Edward N. Zalta (ed.), forthcoming URL = <http://plato.stanford.edu/archives/spr2010/entries/wittgenstein/>.
Last accessed: 06.01.2010.

Bintliff, J. (2000) ‘Archaeology and the philosophy of Wittgenstein’, in *Philosophy and Archaeological Practice*, ed. C. Holtorf and H. Karlsson, Göteberg: Bricoleur Press, pp. 152-172.

Bintliff, J. (2004) ‘Introduction’, in *A Companion to Archaeology*, ed. J. Bintliff, Oxford: Blackwell, pp. xvii-xxiv.

Blattner, W. (2005) ‘Temporality’, in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 311-324.

Bowie, F. (2006) *The Anthropology of Religion: An Introduciton*, Second Edition, Oxford, Blackwell.

Bräuer, G. (1995) ‘Homo sapiens, Archaic’, in *The Oxford Companion to Archaeology*, ed. B.M. Fagan, New York and Oxford: Oxford University Press, pp..313-314.

Brentano, F. (1995) *Psychology from an Empirical Standpoint*, ed. O. Kraus; English edition ed. L.L. McAlister, Trans. A.C. Rancurello, D.B. Terrell and L.L McAlister, Routledge.

Brooks, A.S. (2000) 'Palaeolithic', in *Encyclopedia of Human Evolution and Prehistory*, ed. E. Delson, I. Tattersall, J.A. Van Couvering and A. Brooks, New York and London: Garland Publishing, Taylor and Francis, pp. 514-518.

Brose, D, and Wolpoff, M. (1971) 'Early Upper Paleolithic man and Late Middle Paleolithic tools', *American Anthropologist 73* pp. 1156-1194.

Browman, D.L, Fritz, G.J, Watson, P.J. (2005) 'Origins of Food-Producing Economies in the Americas', in *The Human Past, World Prehistory and the Development of Human Societies*, ed. C. Scarre, London: Thames and Hudson, pp. 306-349.

Buchli, V. (1995). 'Interpreting material culture, The trouble with text', in *Interpreting Archaeology, Finding meaning in the past*, ed. I. Hodder, M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas, Routledge.

Buchli, V. (2002) 'Introduction', in *The Material Culture Reader*, Berg.

Buchli, V. (2002) *The Material Culture Reader*, Oxford and New York: Berg.

Byrne, R and Whiten, A. (1988) *Machiavellian Intelligence: Social Expertise and the Evolution of Intellect in Monkeys, Apes and Humans*, Oxford: Clarendon Press.

Calarco, M. (2004) 'Heidegger's Zoontology', in *Animal Philosophy: Essential Readings in Continental Thought*, ed. M. Calacro and P. Atterton, Continuum.

Calarco, M. (2008) *Zoographies, The Question of the Animal from Heidegger to Derrida*, Columbia University Press.

Callaway, E (2012) 'Spain claims top spot for world's oldest cave art', in *Nature*, doi:10.1038/nature.2012.10838 http://www.nature.com/news/spain-claims-top-spot-for-world-s-oldest-cave-art-1.10838.

Campbell, D. (2009) 'Heidegger and Mind, Objects, and Virtue' in *Hey J L* (*The Heythrop Journal*), pp. 271-283.

Caputo, J.D. (1982) *Heidegger and Aquinas, An Essay on Overcoming Metaphysics*, Fordham University Press.

Caputo, J.D. (1993) *Demythologizing Heidegger*, Indiana University Press.

Carbonell, E. and Mosquera, M. (2006) 'The emergence of a symbolic behaviour: the sepulchral pit of Sima de los Huesos, Sierra de Atapuerca, Burgos, Spain', in *Human Palaeontology and Prehistory, C.R. Pale vol* 5 pp. 155-160.

Cardinal, R, and Elsner, J, ed. (1994) *The Cultures of Collecting*, Reaktion Books.

Carman, T. (1996) 'Husserl and Heidegger', in *The Blackwell Companion to Philosophy, second edition*, ed. N. Bunnin and E.P. Tsui-James, Blackwell, pp. 842-859.

Carman, T. (2008) *Merleau-Ponty*, Routledge.

Carruthers, P, and Chamberlain, ed. (2000). 'Introduction', in *Evolution and the human mind, Modularity, language and meta-cognition*, Cambridge University Press.

Cartmill, M and Smith, F.H (2009) *The Human Lineage*, Hoboken, New Jersey: Wiley-Blackwell.

Casey, E.S. (1997) *The Fate of Place: A Philosophical History*, Berkley and London: University of California Press.

Caygill, H. (1995) 'phenomenology', in *A Kant Dictionary*, Blackwell, pp. 316-317.

Cazeaux, C. (2000) *The Continental Aesthetics Reader*, ed. C. Cazeaux, London and New York: Routledge.

Chamberlain, A. (2008) 'Pre-Homo sapiens Place-Worlds', in *Handbook of Landscape Archaeology*, ed. B. David and J. Thomas, California: Left Coast Press, pp. 102-108.

Chaplin, A. D. (2001) "Phenomenology: Merleau-Ponty and Sartre", in *The Routledge Companion to Aesthetics*, ed. B. Gaut and D. McIver Lopes, London and New York: Routledge, pp. 159-171.

Childe, V.G. (1951) *Social Evolution*, London: Watts.

Childe, V.G. (1956) *Piecing Together the Past, The Interpretation of Archaeological Data*, Frederick A. Praeger, Publishers.

Cioffi, F. (1998) *Wittgenstein on Freud and Frazer*, Cambridge: University Press.

Clark, A. (1998) *Being There: Putting Brain, Body and World Together Again*, Cambridge, Ma: The MIT Press.

Clark, D. (1973) 'Archaeology: the loss of innocence', in *Antiquity*, March 1973 vol. 47: 6-18. http://antiquity.ac.uk/Listing/lossclarke.html.

Clark, J.D, Beyenne, Y, WoldeGabriel, G, hart, W.K, Renne, P, Gilbert, H, Defleur, A, Suwa, G, Katoh, S, Ludwig, K,R, Boisserie, J,-R, Asfaw, B and White, T.D. (2003) 'Stratigrafic, chronological and behavioural contexts of Pleistocene Homo sapiens from Middle Awash, Ethiopia, in *Nature 423* pp. 747-752.

Clottes, J. (1990) ‘The parietal art of the late Magdalenian’ in *Antiquity* 64(244), 527–48.

Clottes, J. (2008) *Cave Art*, London and New York: Phaidon.

Colebrook, C. (2002) *Gilles Deleuze*, Routledge.

Conkey, M. W. (1987) ‘New Approaches in the Search for Meaning? A Review of Research in “Paleolithic Art “’ in *Journal of Field Archaeology*, *14*(4), 413-430.

Conkey, M. (1997) ‘Beyond art and between the caves: thinking about context in the interpretive process’ in M. Conkey, O. Soffer, D. Stratmann and N.G. Jablonski (eds), *Beyond art: Pleistocene image and symbol*, pp.343-367. San Francisco: The California Academy of Sciences. 3.

Conkey, M.W. (1999) ‘A history of the interpretation of European ‘palaeolithic art’: magic, mythogram, and metaphors for modernity’, in *Handbook of Human Symbolic Evolution*, ed. A. Lock and C.R. Peters, Oxford: Blackwell, pp. 288-349.

Conkey, M.W. (2009) ‘Materiality and meaning-making in the understanding of the Palaeolithic ‘arts’’, in *Becoming Human: Innovations in Prehistoric Material and Spiritual Culture*, ed. C. Renfrew and I. Morley, Cambridge: Cambridge University Press, pp. 179-194.

Cook, J. (2013) *Ice Age art: the arrival of the modern mind*, London: The British Museum Press.

Coolidge F. and Wynn T. (2005) ‘Working memory, its executive functions, and the emergence of modern thinking’, in *Camb. Archaeol. J.*, 15: 5–26.

Coolidge, F.L, and Wynn, T. (2009) *The Rise of* Homo Sapiens, *The Evolution of Modern Thinking*, Oxford: Blackwell.

Cooper, D.E. (1990) *Existentialism, A Reconstruction, Second Edition*, Oxford: Blackwell.

Cooper, D.E. (1996) *Thinkers of Our Time, Heidegger*, The Claridge Press.

Coward, F and Gamble, C. (2009) ‘Big brains, small worlds: material culture and the evolution of the mind’, in *The Sapient Mind: Archaeology meets neuroscience*, ed. C. Renfrew, C. Frith and L. Malafouris, Oxford: Oxford University Press, pp. 51-69.

Cox, J.L (2010) *An Introduction to the Phenomenology of Religion*, London and New York: Continuum.

Coyne, J.A. (2009) *Why Evolution is True*, Oxford: Oxford University Press.

Cullen, B. (1994) 'Philosophy of existence 3: Merleau-Ponty', in *Continental Philosophy in the 20th Century, Routledge History of Philosophy Volume 8*, ed. R. Kearney, London and New York: Routledge.

Cutrofello, A. (2005) *Continental Philosophy, A contemporary introduction*, New York and London: Routledge.

Davey, N., "Gadamer's Aesthetics", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/gadamer-aesthetics/.
Last accessed: 29.3.15

Davidson, I. (1997) 'The power of pictures', in Conkey, M., Soffer, O., Stratmann, D., and Jablonski, N. G. (eds.). *Beyond Art: Pleistocene Image and Symbol*, Memoirs of the California Academy of Sciences 23, San Francisco, pp. 125–159.

Davis, D.J. (2005) *A Brief History of Death*, Oxford: Blackwell.

Dawkins, R. (2009) *The Greatest Show on Earth: The Evidence for Evolution*, London: Black Swan.

Deacon, T.W. (1992) 'Primate brains and senses', in *The Cambridge Encyclopedia of Human Evolution*, ed. S. Jones, R. Martin, D. Pilbeam. Cambridge: Cambridge University Press, pp. 109-114.

Deacon, T.W. (1992) 'The human brain', in *The Cambridge Encyclopedia of Human Evolution*, ed. S. Jones, R. Martin, D. Pilbeam. Cambridge: Cambridge University Press, pp. 115-123.

de Castro, J. and Nicholas, M. (1997) 'Palaeodemography of the Atapuerca-SH Middle Pleistocene hominid sample', in *Journal of Human Evolution* 33 pp. 333-55.

Deleuze, G. (1968) *Difference and Repetition*, Trans. P. Patton, The Athlone Press.

Deleuze, G, 'Seminar Session on Scholasticism and Spinoza', Vincennes, 14th January 1974, Trans. T.S. Murphy,
http://www.webdeleuze.com/TXT/ENG/140174.html.

Deleuze, G, 'Seminar Session on SPINOZA, 25/11/80, Trans. T.S. Murphy,
http://www.webdeleuze.com/php/texte.php?cle=17&groupe=Spinoza&langue=2
Last accessed: 29.3.15

Deleuze, G. (1988) *Foucault*, Trans and ed. S. Hand, University of Minnesota Press.

Deleuze, G. (1990) *The Logic of Sense*, Trans. M. Lester with C. Stivale, ed. C.V. Boundas, The Athlone Press.

Deleuze, G. (1995) *Negotiations, 1972-1990*, Trans. M. Joughin, Columbia University Press.

Deleuze, G. (2003) *Francis Bacon: The Logic of Sensation*, Trans. D. Smith, London: Continuum.

Deleuze, G. (2004) *Desert Islands and Other Texts, 1953-1974*, ed. D. Lapoujade, Trans. M. Taormina, Semiotext(e), Foreign Agents Series.

Deleuze, G. (2004) 'How Jarry's Pataphysics Opened the Way for Phenomenology', in *Desert Islands and Other Texts, 1953-1974*, ed. D. Lapoujade, Trans. M. Taormina, Semiotext(e), Foreign Agents Series.

Deleuze, G and Guattari, F. (1994) *What is Philosophy?,* Trans. H. Tomlinson and G. Burchill, Verso.

Delluc, B, Delluc, G and Bahn, P.G (1986) 'Bibliographic notes', in *The Cave of Lascaux: The Final Photographs*, New York: Harry N. Abrams, Inc.

Dennell, R. (2008) *The Palaeolithic Settlement of Asia*, Cambridge: Cambridge University Press.

d'Errico, F. et al. (2003) 'The invisible frontier: a multiple species model for the origin of behavioral modernit', in *Evolutionary Anthropology*, 12, 188–202.

d'Errico, F., Henshilwood, C., Lawson G. et al. (2003) 'Archaeological evidence for the emergence of language, symbolism and music – an alternative multidisciplinary perspective', in *Journal of World Prehistory* 17(1), pp. 1-70.

Derrida, J. (1987) 'Restitutions of the truth in pointing [*pointure*]', in *The Truth in Painting*, Trans. G. Bennington and I. McLeod, Chicago, IL: University of Chicago Press, pp. 255-382.

Descartes, R. (1968) *Discourse on Method And The Meditations*, Trans. F.E. Sutcliffe, Penguin.

Di Paolo, E.A., M. Rohde, M., De Jaegher, H. (2010) 'Horizons for the Enactive Mind: Values, Social Interaction, and Play', in *Enaction: Toward a New Paradigm for Cognitive Science*, ed. J. Stewart, O. Gamenne and E.S. Di Paolo. Cambridge Ma: The MIT Press.

Diprose, R and Jack Reynolds (editors) (2008) *Merleau-Ponty: Key Concepts*, Stocksfield: Acumen.

Donald, M. (1991) *Origins of the Modern Mind: Three Stages in the Evolution of Culture and Cognition*, Harvard: Harvard University Press.

Douglas, M. (1976) *Purity and Danger: an Analysis of Concepts of Pollution and Taboo*, London and Henley: Routledge and Kegan Paul.

Downes, Stephen M., "Evolutionary Psychology", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/fall2008/entries/evolutionary-psychology/.
Last accessed: 29.3.15

Dunbar, R. (2004) *The Human Story: A new history of mankind's evolution*, Chatham: Faber and Faber.

Dreyfus, H.L. (1991) *Being-in-the-World, A Commentary on Heidegger's Being and Time, Division I*, The MIT Press.

Dreyfus, H.L. (1993) 'Heidegger on the connection between nihilism, art, technology, and politics', in *The Cambridge Companion to Heidegger*, ed. C.B. Guignon, Cambridge: Cambridge University Press, pp. 289-316.

Dreyfus, H.L. (2005) 'Heidegger's Ontology of Art', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 407-419.

Dreyfus, H.L, and Wrathall, M.A. (2005) 'Martin Heidegger: An Introduction to His Thought, Work and Life', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 1-15.

Dreyfus, H.L, and Wrathall, M.A. (2009) *A Companion to Phenomenology and Existentialism*, United Kingdom: Wiley-Blackwell.

Dronsfield, J. L. (2009) 'Philosophies of Art', in *The Continuum Companion to Continental Philosophy*, ed. J. Mullarkey and B. Lord, London and New York: Continuum, pp. 219-237.

Dronsfield, J. (2010) 'The work of art', in *Martin Heidegger: Key Concepts*, ed. B.W. Davis, Durham: Acumen, pp. 128-139.

DuBois, James, Smith, Barry, "Adolf Reinach", in *The Stanford Encyclopedia of Philosophy (Winter 2008 Edition)*, Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/win2008/entries/reinach/.
Last accessed: 29.3.15

Dufrenne, M. (2000) 'The World of the Aesthetic Object', in *The Continental Aesthetics Reader*, ed. C. Cazeaux, London and New York: Routledge, pp. 129-150.

Dunbar, R. (2014) *Human Evolution: A Pelican Introduction*, London: Penguin Books.

Edie, J.M. (1987) *Edmund Husserls's Phenomenology, A Critical Commentary*, Indiana University Press.

Elden, S. (2006) 'Heidegger's animals' in *Continental Philosophy Review* 39 pp. 73-291.

Elliott, B. (2005) *Phenomenology and Imagination in Husserl and Heidegger*, Routledge.

Evans-Pritchard, E.E. (1956) *Nuer Religion*, Oxford: Clarendon Press.

Fagan, B.M. (2010) *People of the Earth: An Introduction to World Prehistory*, Upper Saddle River NJ: Pearson.

Fleming, A. (2006) 'Post-processual landscape archaeology: A critique', *Cambridge Archaeological Journal* 16 pp. 267-80.

Foley, F. (1992) 'Studying human evolution by analogy' in, *The Cambridge Encyclopedia of Human Evolution*, ed. S. Jones, R. Martin and D. Pilbeam, Cambridge: Cambridge University Press, pp335-340.

Foley, R.A. (1995) 'Language and thought in evolutionary perspective', in *Interpreting Archaeology, Finding meaning in the past*, ed. I. Hodder, M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas, Routledge.

Foley, R.A. (2001) 'In the Shadow of the Modern Synthesis? Alternative Perspectives on the Last Fifty Years of Paleoanthropology', in *Evolutionary Anthropology* 10 pp.5-14.

Foley, R. and Lahr, M.M. (2003) 'On Stony Ground: Lithic Technology, Human Evolution, and the Emergence of Culture', in *Evolutionary Anthropology* 12 pp. 109-122.

Forster, Michael, "Friedrich Daniel Ernst Schleiermacher", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2008/entries/schleiermacher/> Last accessed 12.10.09.

Foucault, M. (1988) *Michel Foucault. Politics, Philosophy, Culture: Interviews and Other Writings 1977-1984*, Trans. A. Sheridan et al, ed. L.D. Kritzman, Routledge: London and New York.

Foucault, M. (1998a) 'A Preface to Transgression', in *Bataille: A Critical Reader*, ed. F. Botting and S. Wilson, Oxford: Blackwell, pp. 24-40.

Foucault, M. (1998b) 'Different Spaces', in *Aesthetics, Method and Epistemology, Essential Works of Foucault 1954-1984, Volume Two*, ed. J. Faubion, Trans R. Hurley, London: Penguin Books.

Foucault, M. (2002) *The Order of Things: an archaeology of the human sciences*, London and New York: Routledge.

Frede, D. (1993) 'The question of being: Heidegger's project', in *The Cambridge Companion to Heidegger*, ed. C.B. Guignon, Cambridge: Cambridge University Press, pp. 42-69.

Frey, S. (2009) 'Tool use, communicative gesture and cerebral asymmetries in the modern human brain', in *The Sapient Mind: Archaeology meets neuroscience*, ed. C. Renfrew, C. Frith and L. Malafouris, Oxford: Oxford University Press, pp. 21-31.

Gadamer, H.G. (1975) *Truth and Method*, Trans. J. Weinsheimer and D.G. Marshall, Sheed and Ward London.

Gadamer, H.G. (2000) 'Aesthetics and Hermeneutics', in *The Continental Aesthetics Reader*, ed. C. Cazeaux, London and New York: Routledge, pp. 181-186
Gallagher, S. (2005) *How the Body Shapes the Mind*, Clarendon Press: Oxford.

Gallagher, S. (2007) 'Phenomenological Approaches to Consciousness', in *The Blackwell Companion to Consciousness*, ed. M. Velmans and S. Schneider, Oxford: Blackwell.

Gallagher, S. (2012) *Phenomenology*, Basingstoke: Palgrave Macmillan.

Gallagher, S and Zahavi, D. (2008) *The Phenomenological Mind, An Introduction to Philosophy of Mind and Cognitive Science*, London and New York: Routledge.

Gallagher, S and Zahavi, D. (2012*) The Phenomenological Mind, 2nd Edition,* London and New York: Routledge.

Galt Crowell, S. (2005) 'Heidegger and Husserl: The Matter and Method of Philosophy', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 49-64.

Gamble, C. (1999) *The Palaeolithic Societies of Europe*, Cambridge: Cambridge University Press.

Gamble, C. (2007) *Origins and Revolutions: Human Identity in Earliest Prehistory*, Cambridge: Cambridge University Press.

Gamble, C. (2008) *Archaeology: The Basics, 2nd Edition*, London and New York: Routledge.

Gamble, C. (2010) 'Thinking Through the Upper Palaeolithic Revolution', in *The Upper Palaeolithic Revolution in global perspective: Papers in honour of Sir Paul Mellars*, ed. K.V. Boyle, C. Gamble and O. Bar-Yosef, Cambridge: McDonald Institute for Archaeological Research, pp. 45-52.

Gamble, C and Porr, M. (2005) 'From empty spaces to lived lives: Exploring the individual in the Palaeolithic', in *The Hominid Individual in Context: Archaeological investigations of Lower and Middle Palaeolithic landscapes, locales and artefacts*, ed. C. Gamble and M. Porr, London and New York: Routledge.

Gamble, C., Gowlett, J. and Dunbar, R. (2014) *Thinking Big: How the Evolution of Social Life Shaped the Human Mind*, London: Thames and Hudson.

Garcia N and Arsuaga J.L, (2011) 'The Sima de los Huesos (Burgos, northern Spain): palaeoenvironment and habitats of Homo heidelbergensis during the Middle Pleistocene', in *Evolution and Human Behaviour*, Volume 30 (11-12), pp. 1413–1419.

Gargett, R.H. (1989) 'Grave Shortcomings: The Evidence for Neanderthal Burial', in *Current Anthropology*, vol. 30 no. 2, pp. 157-190.

Garver, N. (1994) *This Complicated Form of Life: Essays on Wittgenstein*, Chicago and La Salle, Illinois: Open Court.

Gell, A. (1998) *Art and Agency, An Anthropological Theory*, Oxford: Clarendon Press.

Gellner, E. (1995) 'Interpretive Anthropology', in *Interpreting Archaeology: Finding meaning in the past*, ed. I. Hodder, M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas, London and New York: Routledge.

Gelven, M. (1989) *A Commentary on Heidegger's* Being and Time, Northern Illinois University Press.

Gibson, K.R. and Ingold, T. (1993) *Tools, Language and Cognition in Human Evolution*, Cambridge: Cambridge University Press.

Giddens, A. (1984) *The constitution of society*, Berkley: University of California Press.

Glasgow Museums. (2009) *Kelvingrove Art Gallery and Museum A Souvenir Guide*, Glasgow: Glasgow Museums Publishing in association with Philip Wilson Publishers.

Glendinning, S. (1998) *On Being With Others: Heidegger – Derrida – Wittgenstein*, London and New York: Routledge.

Glock, H.J. (1996) *A Wittgenstein Dictionary*, Blackwell.

Gosden, C. (1999) *Anthropology and Archaeology: A Changing Perspective*, London and New York: Routledge.

Gosden, C and Knowles, C. (2001) *Collecting Colonialism: Material Culture and Colonial Change*, London: Bloomsbury.

Gosden, C. (2009) 'Social ontologies', in *The Sapient Mind: Archaeology meets neuroscience*, ed. C. Renfrew, C. Frith and L. Malafouris, Oxford: Oxford University Press.

Gräslund, B. (2005) *Early Humans and Their World*, London and New York: Routledge.

Grayling, A.C. and Weiss, B. (1998) 'Frege, Russell and Wittgenstein', in *Philosophy 2: Further Through The Subject*, ed, A.C. Grayling, Oxford: University Press.

Grenfell, M. (2004) *Pierre Bourdieu Agent Provocateur*, London and New York: Continuum.

Griffith-Dickson, Gwen, "Johann Georg Hamann", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/hamann/.
Last accessed: 29.3.15

Grim, J. (2006) 'Indigenous lifeways and knowing the world', in *The Oxford Handbook of Religion and Science*, ed. P. Clayton and Z. Simpson, Oxford: Oxford University Press, pp. 87-107.

Guerlac, S. (1996) 'Bataille in Theory: Afterimages (Lascaux)', in *Diacritics*, Vol. 26, No 2, Georges Bataille: An Occasion for Misunderstanding (Summer, 1996), pp. 6-17.

Guignon, C.B. (1993) 'Introduction', in *The Cambridge Companion to Heidegger*, ed. C.B. Guignon, Cambridge University Press.

Guignon, C.B. (1995) 'Heidegger', in *A Companion to Metaphysics*, ed. J. Kim and E. Sosa, Blackwell, 1995, pp. 203-206.

Guignon, C, (2005) 'The History of Being', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 392-406.

Gutting, G. (2001). *French Philosophy in the Twentieth Century*, Cambridge University Press.

Gutting, G. (2005) *Foucault, A Very Short Introduction*, Oxford University Press.

Hacker, P.M.S, (2003) 'Wittgenstein', in *The World's Great Philosophers*, ed. R.L. Arrington, Oxford: Blackwell, pp. 316-332

Halverson, J. (1987) 'Art for art's sake in the Paleolithic', in *Current Anthropology* 26, 63–89.

Haslam, M, Hernandez-Aguilar, A, Ling, V, Carvalho, S, de la Torre, I, DeStefano, A, Du, A, Hardy, B, Harris, J, Marchant, L, Matsuzawa, T, McGrew, W, Mercader, J, Mora, R, Petraglia, M, Roche, H, Visalberghi, E, & Warren, R. (2009), Primate Archaeology, *Nature*, 460, 339-344.

Hawkes, T. (1977) *Structuralism and Semiotics*, Methuen.

Hegel, G.W.F. (2000) 'Extracts from Aesthetics', in Cazeaux (2000). See above.

Heidegger, M (1962) *Being and Time*, Trans. J. Macquarrie and E. Robinson,

Oxford:Basil Blackwell.

Heidegger, M. (1963) *What is Philosophy?* Trans. W. Kluback and J.T. Wilde, Vision Press.

Heidegger, M. (1966) *Discourse on Thinking*, A Translation of Gelassenheit, Trans. J.M Anderson and E. Hans Freund, Harper Torchbooks.

Heidegger, M. (1966) 'Memorial Address', in *Discourse of Thinking*, Trans. J.M. Anderson and E.H. Freund, Harper Torchbooks.

Heidegger, M. (1968) *What is Called Thinking?* Trans. J. Glen Gray, New York: Harper and Row.

Heidegger, M. (1969) *Identity and Difference*, Trans. J. Stambaugh, The University of Chicago Press.

Heidegger, M. (1969) 'The Onto-theo-logical constitution of Metaphysics', in *Identity and Difference*, Trans. J. Stambaugh, The University of Chicago Press.

Heidegger, M. (1969) 'The Principle of Identity', in *Identity and Difference*, Trans. J. Stambaugh, The University of Chicago Press.

Heidegger, M. (1971) 'The Thinker as Poet', in *Poetry, Language, Thought*, Trans. A. Hofstadter, Harper and Row.

Heidegger, M. (1971a) 'The Origin of the Work of Art', in *Poetry, Language, Thought*, Trans. A. Hofstadter, New York: Harper and Row.

Heidegger, M. (1971b) 'Building Dwelling Thinking', in *Poetry, Language, Thought*, Trans. A. Hofstadter, New York: Harper and Row.

Heidegger, M. (1971c) 'The Thing', in *Poetry, Language, Thought*, Trans. A. Hofstadter, New York: Harper and Row.

Heidegger, M (1971d) 'Language', in *Poetry, Language, Thought*, Trans. A. Hofstadter, New York: Harper and Row.

Heidegger, M. (1971) ''Epilogue' to The Thing', in *Poetry, Language, Thought*, Trans. A. Hofstadter, Harper and Row.

Heidegger, M (1971d) *Poetry, Language, Thought*, New York: Harper and Row.

Heidegger, M. (1971) 'The Way to Language', in *On The Way to Language*, Trans. P.D. Hertz, Harper and Row.

Heidegger, M. (1972) 'Time and Being', in *On Time and Being*, Trans. J. Stambaugh, The University of Chicago Press.

Heidegger, M. (1972) ‘My Way to Phenomenology’, in *On Time and Being*, Trans. J. Stambaugh, The University of Chicago Press.

Heidegger, M. (1972) *On Time and Being*, Trans. J. Stambaugh, The University of Chicago Press.

Heidegger, M. (1973) ‘Recollection in Metaphysics’, in *The End of Philosophy*, Trans. J. Stambaugh, Condor, Souvenir Press.

Heidegger, M. (1973) ‘Metaphysics as History of Being’, in *The End of Philosophy*, Trans. J. Stambaugh, Condor, Souvenir Press.

Heidegger, M. (1975) ‘The Anaximander Fragment’, in *Early Greek Thinking, The Dawn of Western Philosophy*, Trans. D.F Krell and F.A. Capuzzi, Harper and Row.

Heidegger, M. (1975) ‘Moira (Parmenides VIII, 34-41)’, in *Early Greek Thinking, The Dawn of Western Philosophy*, Trans. D.F Krell and F.A. Capuzzi, Harper and Row.

Heidegger, M. (1977) ‘The Age of the World Picture’, in *The Question Concerning Technology and Other Essays*, Trans. W. Lovitt, Harper Torchbooks.

Heidegger, M. (1977) ‘The Question Concerning Technology’, in *The Question Concerning Technology and Other Essays*, Trans. W. Lovitt, Harper Torchbooks.

Heidegger, M. (1978) *Duns Scotus’ Theory Of The Categories And Of Meaning*, Trans. H. Robbins, De Paul University Chicago, Illinois.

Heidegger, M. (1978) *Basic Writings*, ed, D.F. Krell, Routledge, p. 231.

Heidegger, M. (1978) ‘What Is Metaphysics?’, in *Basic Writings*, ed. D. Farrell Krell, Routledge.

Heidegger, M. (1978) ‘Letter on Humanism’, in *Basic Writings*, ed, D.F. Krell, Routledge.

Heidegger, M. (1978) ‘The End of Philosophy and the Task of Thinking’, in *Basic Writings*, ed, D.F. Krell, Routledge.

Heidegger, M. (1979) *Nietzsche. Volume I: The Will to Power as Art*, Trans. D. F. Krell, San Francisco: Harper and Row.

Heidegger, M. (1985) *Schelling’s Treatise On The Essence Of Human Freedom*, Trans. J. Stambaugh, Ohio University Press.

Heidegger, M. (1988) *The Basic Problems of Phenomenology*, Trans. A. Hofstadter, Indiana University Press.

Heidegger, M. (1990) *Kant and The Problem of Metaphysics*, Trans. R. Taft, Indiana University Press.

Heidegger, M. (1992) *The Concept of Time,* Trans. W. McNeill, Blackwell.

Heidegger, M. (1992) *History of the Concept of Time, Prolegomena,* Trans. T. Kisiel, Indiana University Press.

Heidegger, M. (1992) *The Metaphysical Foundations of Logic*, Trans. M. Heim, Indiana University Press.

Heidegger, M. (1993) 'Letter to Bultmann', in Kisiel, T, *The Genesis of Heidegger's Being and Time,* University of California Press.

Heidegger, M. (1993) 'Letter to Krebs, 1919', quoted in, Sheehan, T. 'Reading a life: Heidegger and hard times', in *The Cambridge Companion to Heidegger,* ed. C. Guignon, Cambridge University Press.

Heidegger, M. (1993) *Basic Writings, Revised and Expanded Edition,* ed. D. F. Krell, London: Routledge.

Heidegger, M. (1993) 'The Origin of the Work of Art', in *Basic Writings*, ed. D. F. Krell, London: Routledge, pp. 143-212.

Heidegger, M (1995) *The Fundamental Concepts of Metaphysics,* World, Finitude, Solitude, Trans. W. McNeill and N. Walker, Indiana: Indiana University Press.

Heidegger, M. (1995) *Aristotle's Metaphysics Θ 1-3, On the Essence and Actuality of Force,* Trans. W. Brogan and P. Warnek, Indiana University Press.

Heidegger, M. (1996) *Being and Time*, Trans. J. Stambaugh, State University of New York Press.

Heidegger, M. (1996) *Hölderlin's Hymn 'The Ister',* Trans. W. McNeill and J. Davis, Bloomington: Indiana University Press.

Heidegger, M. (1997) *Phenomenological Interpretation of Kant's Critique of Pure Reason,* Trans. P. Emad and K. Maly, Indiana University Press.

Heidegger, M. (1997) *Plato's Sophist,* Trans. R. Rojcewicz and A. Schuwer, Indiana University Press.

Heidegger, M. (1998) Pathmarks, ed. W. McNeill, Cambridge University Press.

Heidegger, M. (1998) 'What Is Metaphysics?', in *Pathmarks,* Trans. D.F. Krell, ed. W. McNeill, Cambridge University Press.

Heidegger, M. (1998) 'Plato's Doctrine of Truth', Trans. T. Sheehan, in *Pathmarks,* ed. W. McNeill, Cambridge University Press.

Heidegger, M. (1998) 'On the Essence of Ground (1929)', in *Pathmarks,* Trans. W. McNeill, Cambridge University Press, pp. 97-135.

Heidegger, M. (1998) ‘Introduction to “What Is Metaphysics?”’ Trans. W. Kaufmann, in *Pathmarks*, Cambridge University Press.

Heidegger, M. (1999) *Ontology – The Hermeneutics of Facticity*, Trans. J. van Buren, Indiana University Press.

Heidegger, M. (1999) *Contributions to Philosophy (From Enowning)*, Trans. P. Emad and K. Maly, Bloomington: Indiana University Press.

Heidegger, M. (2000) *Towards The Definition of Philosophy*, Trans. T. Sadler, The Athlone Press.

Heidegger, M. (2000) *Introduction to Metaphysics*, Trans. G. Fried and R. Polt, Yale University Press.

Heidegger, M. (2000) ‘Hölderlin and the Essence of Poetry’, in *Elucidations of Hölderlin’s Poetry*, Trans. K. Hoellner, Humanity Books.

Heidegger, M. (2001) *Phenomenological Interpretations of Aristotle, Initiation into Phenomenological Research*, Trans. R Rojcewicz, Indiana University Press.

Heidegger, M. (2002) ‘Author’s Book Notice’ (1917), in *Supplements, From the Earliest Essays to Being and Time and Beyond*, ed. J. Van Buren, State University of New York Press.

Heidegger, M. (2002) ‘The Problem of Reality in Modern Philosophy’ (1912), in Supple*ments, From the Earliest Essays to Being and Time and Beyond*, ed. J. Van Buren, State University of New York Press.

Heidegger, M. (2002) ‘The Theory of Categories and Meaning in Duns Scotus’, in *Supplements, From the Earliest Essays to Being and Time and Beyond*, ed. J. Van Buren, State University of New York Press.

Heidegger, M. (2003) ‘Preface’, in, Richardson, W.J, *Heidegger, Through Phenomenology to Thought*, Fordham University Press.

Heidegger, M. (2006) *Mindfulness*, Trans. P. Emad and T. Kalary, London and New York: Continuum.

Heidegger, M. (2009) *The Heidegger Reader*, ed. G. Figal, Trans. J. Veith, Bloomington and Indianapolis: Indian University Press.

Heidegger, M. (2009) ‘Art and Space’, in *The Heidegger Reader*, ed. G. Figal, Trans. J. Veith, Bloomington, IN: Indiana University Press.

Henshilwood, C.S. and C.W. Marean. (2003) ‘The origin of modern human behaviour: critique of the models and their test implications’, in *Current Anthropology* 44(5), pp. 627-651.

Henshilwood, C.S. and d'Errico, F. (2011) *Homo Symbolicus: The dawn of language, imagination and spirituality*, Amsterdam/Philadelphia: John Benjamins Publishing Company.

Herbert, D. (2008) 'Towards a Global Theory of Religious Publicisation: The Role of Media Processes', paper presented at 'Religion, Media Processes and the Transformation of the Public Sphere: A Day Symposium', CRESC: ESRC Centre For Research on Socio-Cultural Change, The Open University.

Hertz, R. (1960) *Death and The Right Hand*, Trans. R. Needham and C. Needham, London and New York: Routledge.

Hewes, G.W. (1996) 'A history of the study of language origins and the gestural primacy hypothesis', in *Handbook of Human Symbolic Evolution*, ed. A. Lock and C.R. Peters, Oxford: Blackwell, pp. 571-595.

Higginbottom, G. and Tonner, P. (2010) 'Archaeologies and Geographies of Value', in *Unquiet Pasts: Risk Society, Lived Cultural Heritage, Re-designing Reflexivity*, ed. I. Russell and S. Koerner, Ashgate.

Hodder, I. (1990a) *The domestication of Europe*, Oxford: Blackwell.

Hodder, I (1990b) 'Commentary', in *Archaeological Review from Cambridge* 9 pp. 154-7.

Hodder, I. (1999) *The Archaeological Process: An Introduction*, Oxford: Blackwell.

Hodder, I. (2001) 'Introduction: A Review of Contemporary Theoretical Debates in Archaeology, in *Archaeological Theory Today*, ed. I. Hodder.

Hodder, I. (2001) *Archaeological Theory Today*, Polity Press.

Hodgson, D. and Helvenston, P.A. (2006) 'The emergence of the representation of animals in palaeoart: insights from evolution and the cognitive, limbic and visual systems of the human brain.' in *Rock Art Research* 23(1), 3–40.

Hofstadter, A. (1988) 'Translators Appendix', in *The Basic Problems of Phenomenology*, Trans. A. Hofstadter, Indiana University Press.

Holtorf, C and Karlsson, H (2000) *Philosophy and Archaeological Practice: Perspectives for the 21st Century*, Gothenburg: Bricoleur Press.

Houlgate, Stephen, "Hegel's Aesthetics", in *The Stanford Encyclopedia of Philosophy (Spring 2009 Edition)*, Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/spr2009/entries/hegel-aesthetics/. Last accessed: 29.3.15

Housley, R.A., Gamble, C.S., Street, M., Pettitt, P. (1997) 'Radiocarbon evidence for the Late glacial human recolonisation of Northern Europe', in *Proceedings of the Prehistoric Society* 63 pp. 25-54.

Howells, C and Moore, C. (2013) *Stiegler and Technics*, ed. C. Howells and G. Moore, Edinburgh: Edinburgh University Press.

Hublin, J.-J. (2009) 'The prehistory of compassion', *Proceedings of the National Academy of Sciences of the USA*, 106(16):6429-6430.

Huemer, W. (2008) "Franz Brentano", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/brentano/
Last accessed: 29.3.15

Humphrey, N. (1976) 'The social functions of intellect', in P.P.G. Bateson and R.A. Hinde (eds) *Growing Points in Ethnology*: 303-17. Cambridge: Cambridge University Press.

Humphrey, N., (1998) 'Cave art, autism, and the evolution of the human mind', in C*ambridge Archaeological Journal* 8 (2), 165–91.

Husserl, E. (1960) *Cartesian Meditations, An Introduction to Phenomenology*, Trans. D. Cairns, Martinus Nijhoff, The Hague.

Husserl, E. (1966) *The Phenomenology of Internal Time-Consciousness*, ed. M. Heidegger, Trans. J.S. Churchill, Indiana University Press.

Husserl, E. (1970) *Logical Investigations*, Vol 1, Trans. J.N. Findlay, ed. D. Moran, Routledge.

Husserl, E. (1970) *Logical Investigations*, Vol 2, Trans. J.N. Findlay, ed. D. Moran, Routledge.

Husserl, E. (1983) *Ideas Pertaining To A Pure Phenomenology And To A Phenomenological Philosophy*, first book, Trans. F. Kersten, Kluwer Academic Publishers.

Husserl, E. (1989) *Ideas Pertaining To A Pure Phenomenology And To A Phenomenological Philosophy*, second book, Trans. R. Rojcewicz and A. Schuwer, Kluwer Academic Publishers.

Hutchins, E. (2008) 'The role of cultural practices in the emergence of modern human intelligence', in *Philosophical Transactions of the Royal Society of London*. Series B, 363, 2011–2019.

Ihde, D. (2009) *Postphenomenology and Technoscience, The Peking University Lectures*, New York: State University of New York Press.

Ingold, T. (1986) *Evolution and social life*, Cambridge: Cambridge University Press.

Ingold, T. (1994) ‘Introduction to culture’, in *Companion Encyclopedia of anthropology*, ed. T. Ingold, London: Routledge, pp. 329-49.

Ingold, T. (1995) ‘Building, dwelling, living: How animals and people make themselves at home in the world’, in *Shifting Contexts: Transformations in Anthropological Knowledge*, ed. M. Strathern, London: Routledge.

Ingold, T. (2000) ‘Making Culture and Weaving the World’, in *Matter, Materiality and Modern Culture*, ed. P.M. Graves-Brown, London and New York: Routledge.

Ingold, T. (2000) *The Perception of the Environment, Essays on livelihood, dwelling and skill*, London and New York: Routledge.

Ingold, (T). (2011) *Being Alive: Essays on movement, knowledge and description*, London and New York: Routledge.

Insoll, T. (2004) *Archaeology, Ritual, Religion*, London and New York: Routledge.

Inwood, M. (1992) *A Hegel Dictionary*, Oxford: Blackwell.

Inwood, M. (1992) ‘phenomenology’, in *A Hegel Dictionary*, Blackwell, pp. 214-216.

Inwood, M. (1995) ‘Heidegger, Martin’, in *The Oxford Companion To Philosophy*, ed. T. Honderich, Oxford University Press, pp. 345-349.

Inwood, M. (1997) *Heidegger, A Very Short Introduction*, Oxford University Press.

Inwood, M. (1999) ‘art and the work’, in *A Heidegger Dictionary*, Oxford: Blackwell, pp. 18-20.

Inwood, M. (1999) *A Heidegger Dictionary*, Oxford: Blackwell.

Inwood, M. (2001) ‘Hegel’, in *The Routledge Companion to Aesthetics*, ed. B. Gaut and D. McIver Lopes, London and New York: Routledge, pp. 71-81.

Jaffro, L. (2005). ‘Ludovic Carrau’s Refutation of William Hamilton’s Theory of the Relativity of Knowledge: A Clue to the Bergsonian Concept of Metaphysical Intuition’. (Unpublished manuscript: presented at a conference on Scottish philosophy and French spiritualism, University of St Andrews, 2005).

Johnson, A.W and Earle, T. (1987) *The evolution of human societies*, Stanford: Stanford University Press.

Jones, S, Martin, R and Pilbeam, D. (1992) *The Cambridge Encyclopedia of Human Evolution*, Cambridge: Cambridge University Press.

Kearney, R and Rasmussen, D (2001) *Continental Philosophy, Romanticism to Postmodernism*, Oxford: Blackwell.

Kendall, S. (2005) 'Editor's Introduction: The Sediment of the Possible', in Georges Bataille, *The Cradle of Humanity: Prehistoric Art and Culture*, Trans. M. Kendall and S. Kendall, ed. S. Kendall, New York: Zone Books.

Kenny, A, (1973) *Wittgenstein*, Penguin.

Kim, Alan, "Paul Natorp", *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/natorp/
Last accessed: 29.3.15

King, M. (2001) *A Guide to Heidegger's Being and Time*, ed. J. Llewelyn, State University of New York Press.

Kisiel, T. (1993) *The Genesis of Heidegger's Being and Time*, University of California Press.

Kisiel, T. (1994) 'Introduction', in *Reading Heidegger from the Start, Essays in His Earliest Thought*, ed. T. Kisiel and J. van Buren, State University of New York Press.

Kisiel, T. (2002) *Heidegger's Way of Thought, Critical and Interpretative Signposts*, ed. A. Denker and M. Heinz, Continuum.

Klein, R.G, (1995) 'Anatomy, behaviour and modern human origins', in *Journal of World Prehistory 9* pp. 167-198.

Klein, R.G. (with B. Elgar) (2002) *The Dawn of Human Culture*, New York: John Wiley.

Klein, R.G. (2005) 'Hominin Dispersals in the Old World', in *The Human Past, World Prehistory and the Development of Human Societies*, ed. C. Scarre, London: Thames and Hudson, pp. 84-123.

Klein, R.G. (2009) *The Human Career, Human Biological and Cultural Origins, Third Edition*, Chicago and London: The University of Chicago Press.

Kohn, M and Mithen, S. (1999) 'Handaxes: Products of sexual selection?' *Antiquity 73*, pp. 518-26. http://www.antiquityofman.com/handaxes.html
Last accessed: 29.3.15

Krantz, S.F. (1999) 'Intentionality and Consciousness: Brentano', in *The Edinburgh Encyclopedia of Continental Philosophy*, ed. S. Glendinning, Edinburgh University Press.

Krell, D. F. (1986) *Intimations of Mortality, Time, Truth and Finitude in Heidegger's Thinking of Being*, The Pennsylvania State University Press.

Krell, D. F. (1992) *Daimon Life: Heidegger and Life-philosophy*, Indiana University Press.

Kripke, S, (1984) *Wittgenstein on Rules and Private Language*, Blackwell.

Kuklick, H. (1996) 'Functionalism', in *Encyclopedia of Social and Cultural Anthropology*, ed. A. Barnard and J. Spencer, London and New York: Routledge.

Kurtén, B. (1993) *Our Earliest Ancestors*, Trans. E.J. Friis, Columbia University Press.

La Capra, D. (2009) *History and Its Limits, Human, Animal, Violence*, Ithaca and London: Cornell University Press.

Ladyman, J. (2002) *Understanding Philosophy of Science*, Routledge.

Lahr, M.M, and Foley, R. (2004). 'Human evolution writ small', in *Nature* Vol 431, pp. 1043-1044.

Latour, B, and Strum, S.C, (1986) 'Human social origins: oh please, tell us another story', *Journal of Social and Biological Structure* 9 pp. 169-87.

Latour, B. (1993) *We Have Never Been Modern*, Trans. C. Porter, Cambridge, MA: Harvard University Press.

Latour, B. (2005) *Reassembling the social: an introduction to actor-network theory*, Oxford: Oxford University Press.

Lawlor, L. (2003) *Thinking through French Philosophy, The Being of the Question*, Bloomington and Indianapolis: Indiana University Press, 2003.

Lawlor, L. (2012) 'Phenomenology and metaphysics, and chaos: on the fragility of the event in Deleuze', in, The Cambridge Companion to Deleuze, ed. D.W. Smith and H. Somers-Hall, Cambridge: Cambridge University Press.

Lawlor, L. (2013) 'Heidegger and Foucault', in *The Bloomsbury Companion to Heidegger*, ed. F. Raffoul and E.S. Nelson, London and New York: Bloomsbury.

Lawlor, Leonard and Valentine Moulard, "Henri Bergson", *The Stanford Encyclopedia of Philosophy (Winter 2008 Edition)*, Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/win2008/entries/bergson/.
Last accessed: 29.3.15

Layton, R. (2000) 'Shamanism, totemism and rock art: Les Chamanes de la Prehistoire in the context of rock art research', in *Cambridge Archaeological Journal* 10(01):169-186.

Layton, R. (2004) 'Henri Breuil', in *Encyclopedia of Modern French Thought*, ed. C.J. Murray, Routledge.

Leach, E. (1994) 'A view from the bridge', in *Interpreting Objects and Collections*, ed. S.M. Pearce, London and New York: Routledge, pp. 53-58.

Leakey, R, Butzer, K.W, Day, M. (1969) Early Homo sapiens remains from the Omo River region of south-west Ethiopia, *Nature* 222 pp. 1132-1138.

Leakey, R. (1994) *The Origin of Humankind*, London: Phoenix.

Lear, J, (1983) 'Ethics, Mathematics and Relativism', *Mind*, New Series, 92(365), pp. 38-60.

Lear, J, (1984) 'The Disappearing 'We'', *The Aristotelian Society, Supplementary Volume LVIII 1984, The Aristotelian Society*.

Lechte, J. (1994) *Fifty Key Contemporary Thinkers, From structuralism to postmodernity*, London and New York: Routledge.

Lee, P.C, (1995) 'Cognitive and behavioural complexity in non-human primates', in *Interpreting Archaeology, Finding meaning in the past*, ed. I. Hodder, M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas, Routledge, 1995.

Lefebvre, H. (1991) *The Production of Space*, Trans. D. Nicholson-Smith, Oxford: Blackwell.

Leroi-Gourhan, A. (1968) *The Art of Prehistoric Man In Western Europe*, Trans. N. Guterman, London: Thames and Hudson.

Leroi-Gourhan, A. (1982) *The Dawn of European Art: An Introduction to Palaeolithic Cave Painting*, Trans. S. Champion, Cambridge: Cambridge University Press.

Leroi-Gourhan, A. (1993) *Gesture and Speech*, Cambridge, MA: MIT Press.

Lewin, R and Foley, R. (2004) *Principles of Human Evolution, Second Edition*, Oxford: Blackwell.

Lewin, R. (2005) *Human Evolution: An Illustrated Introduction, Fifth Edition*, Oxford Blackwell.

Lewis, M. and Staehler, T. (2010) *Phenomenology: An Introduction*, London and New York: Continuum.

Lewis-Williams, D. (2003) 'Overview (in review feature): 'The Mind in the Cave: Consciousness and the Origins of Art'' in *Cambridge Archaeological Journal* 13(2), 263–79.

Lock, G. (2009) 'Human activity in a spatial context', in *The Oxford Handbook of Archaeology*, ed. B. Cunliffe, C. Gosden and R.A. Joyce, Oxford: Oxford University Press, pp. 169-188.

Lorblanchet, M. (1989) 'From man to animal and sign in Palaeolithic art', in *Animals into Art*, ed. H. Morphy, London: Unwin Hyman, pp. 109-143.

Lord, B. (2006) 'Foucault's museum: difference, representation, and genealogy', in *Museum and Society*, March 2006. 4 (1) pp. 11-14.

Lot-Falk, E. (1953) *Les Rites de chasse chez les peuples sibériens*, Paris: Gallimard.

Lovejoy, A.O. (1990) *The Great Chain of Being*, Harvard: Harvard University Press.

Lewis-Williams, D. (2002) *The Mind in the Cave: Consciousness and the Origins of Art*, London: Thames and Hudson.

Lewis-Williams, Pearce, D and D. (2005) *Inside the Neolithic Mind: Consciousness, Cosmos and the Realm of the Gods*, London: Thames and Hudson.

Louwe Kooijmans, L.P., Smirnov, Y, Solecki, R.S, Villa, P, Weber, T, and Gargett, R.H, (1989) 'On the Evidence for Neanderthal Burial', in *Current Anthropology*, vol. 30 no. 3, pp. 322-330.

Lozano,M, Marina Mosquera, José María Bermúdez de Castro, Juan Luis Arsuaga, Eudald Carbonell. (2009) 'Right handedness of *Homo heidelbergensis* from Sima de los Huesos (Atapuerca, Spain) 500,000 years ago', in *Evolution and Human Behaviour*, Volume 30, Issue 5, pp. 369-376.

Luft, S and Søren Overgaard, (2012) *The Routledge Companion to Phenomenology*, London and New York: Routledge.

Macann, C. (1993) *Four Phenomenological Philosophers, Husserl, Heidegger, Sartre, Merleau-Ponty*, Routledge.

Macann, C. (1996) *Critical Heidegger*, ed. C. Macann, Routledge.

Madison, G.B. (1994) 'Hermeneutics: Gadamer and Ricoeur', in *Continental Philosophy in the 20th Century, Routledge History of Philosophy Volume 8*, ed. R. Kearney, London and New York: Routledge.

Makkreel, Rudolf, "Wilhelm Dilthey", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/dilthey/.
Last accessed: 29.3.15

Malafouris, L. (2004) 'The cognitive basis of material engagement: where brain, body and culture conflate', in *Rethinking materiality: the engagement of mind with the material world*, ed. E. DeMarrais, C. Gosden, and C. Renfrew, Cambridge, UK: McDonald Institute.

Malafouris, L. (2007). 'Before and beyond representation: Towards an enactive conception of the Paleolithic image', in Renfrew, C., and Morley, I. (eds.*), Image and Imagination: A Global Prehistory of Figurative Representation,* Cambridge University Press, Cambridge, pp. 289–302.

Malafouris L. (2008) ‘Beads for a Plastic Mind: The ‘Blind Man’s Stick’ (BMS) hypothesis and the active nature of material culture’, in *Cambridge Archaeological Journal* 18:3, 401-14.

Malpas, Jeff, "Hans-Georg Gadamer", in *The Stanford Encyclopedia of Philosophy (Summer 2009 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/sum2009/entries/gadamer/.
Last accessed: 29.3.15

Marshack, A. (1972a) *The Roots of Civilization*, London: McGraw Hill.

Marshack, A. (1972b) ‘Upper Palaeolithic notation and symbol’, in *Science* 178 pp. 817-28.

Martin.W. (2006) ‘Bubbles and Skulls: The Phenomenology of Self-Consciousness in Dutch Still-Life Painting’, in *A Companion to Phenomenology and Existentialism*, ed. H.L. Dreyfus and M. Wrathall, Oxford: Blackwell, pp. 559-584.

Marzke, M.W. (1999) ‘Evolution of the hand and bipedality’, in *Handbook of Human Symbolic Evolution*, ed. A. Lock and C.R. Peters, Oxford: Blackwell, pp. 126-154.

McBrearty, S, and Brooks, A.S. (2000) ‘The revolution that wasn’t: a new interpretation of the origin of modern human behaviour’, in *Journal of Human Evolution* 39 pp. 453-563.

McBrearty, S. and Brooks, A.S. (2000) ‘The revolution that wasn’t: a new interpretation of the origin of modern human behaviour’, in *Journal of Human Evolution*, 39(5), 453–563. 4.

McGinn, M, (1997) *Wittgenstein and the Philosophical Investigations*, Routledge.

Mellars, P (1996) *The Neanderthal Legacy: An Archaeological Perspective from Western Europe*, Princeton, New Jersey: Princeton University Press.

Mellars, P. (2009) ‘Cognition and climate: why is Upper Palaeolithic cave art almost confined to the Franco-Cantabrian region?’, in *Becoming Human: Innovations in Prehistoric Material and Spiritual Culture*, ed. C. Renfrew and I. Morley, Cambridge: Cambridge University Press, pp. 212-231.

Merleau-Ponty, M. (1962) *Phenomenology of Perception*, Trans. C. Smith, London and Henley: Routledge and Kegan Paul.

Merleau-Ponty, M. (1964a) ‘An Unpublished Text by Maurice Merleau-Ponty: A Prospectus of His Work’, Trans. A.B. Dallery, in *The Primacy of Perception*, ed. J.M. Edie, Northwestern University Press.

Merleau-Ponty, M. (1964b). ‘The Metaphysical in Man’, in *Sense and Non-Sense*, Trans. H.L. Dreyfus and P. Allen Dreyfus, Northwestern University Press.

Merleau-Ponty, M. (2004) *The World of Perception*, Trans. O. Davis, Routledge.

Milchman, A. and Rosenberg, A. (2003) 'Towards a Foucault/Heidegger Auseinandersetzung', in *Foucault and Heidegger Critical Encounters, Contractions*, Volume 16, ed. A. Milchman and A. Rosenberg, University of Minnesota Press.

Miller, D. (1994) 'Things ain't what they used to be', in *Interpreting Objects and Collections*, ed. S. Pearce, Routledge.

Miller, D. (2010) *Stuff*, Cambridge: Polity.

Mithen, S. (1996) *The Prehistory of the Mind, A search for the origins of art, religion and science*, London: Phoenix.

Mithen, S, (2001) 'Archaeological Theory and Theories of Cognitive Evolution', in *Archaeological Theory Today*, ed. I. Hodder.

Mitchell, A.J. (2010) 'The fourfold', in *Martin Heidegger: Key Concepts*, ed. B.W. Davis, Durham: Acumen, pp. 208-218.

Mohanty, J.N. (2003) 'Husserl', in *The World's Great Philosophers*, ed. R.L. Arrington, Oxford: Blackwell, pp.138-147.

Moran, D. (2000) *Introduction to Phenomenology*, London and New York: Routledge.

Moran, D. (2002) 'Editor's Introduction', in *The Phenomenology Reader*, ed. D. Moran and T. Mooney, London and New York: Routledge, pp. 1-26

Moran, D and Mooney, T. (2002) *The Phenomenology Reader*, London and New York: Routledge.

Moran, D and Mooney, T. (2002) 'Introduction: Han-Georg Gadamer', in *The Phenomenology Reader*, ed. D. Moran and T. Mooney, London and New York: Routledge, pp. 311-313.

Moran, D and Cohen. J. (2012) *The Husserl Dictionary*, London: Continuum.

Morris, D. (2008) 'Body', in Diprose, R and Jack Reynolds (editors) (2008) *Merleau-Ponty: Key Concepts*, Stocksfield: Acumen, pp. 111-120.

Morrison, K. (1995) *Marx, Durkheim, Weber, Formations of Modern Social Thought*, SAGE Publications.

Mueller-Vollmer, Kurt, "Wilhelm von Humboldt", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/wilhelm-humboldt/.
Last accessed: 29.3.15

Mulhall, S. (2005) 'Human Mortality: Heidegger on How to Portray the Impossible Possibility of Dasein', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 297-310.

Noland, C, Buchli, V. (2004) 'Bataille Looking/Response to Carrie Noland', in *Modernism/Modernity*, January 2004, Vol. 11 Issue 1 pp. 125-160.

Nowell, A. (2006) 'From a Paleolithic art to Pleistocene visual cultures (introduction to two special issues on 'advances in the study of Pleistocene imagery and symbol use')', in *Journal of Archaeological Method and Theory*, 13(4), 239–249.

Nowell, A. (2010) 'Defining behavioural modernity in the context of Neandertal and Anatomically Modern Human populations', in *Annual Review of Anthropology*, 39, 437-452.

Oksala, J. (2012) 'Post-structuralism: Michel Foucault', in *The Routledge Companion to Phenomenology*, ed. S. Luft, and S. Overgaard, London and New York: Routledge.

Olafson, F.A. (1993) 'The unity of Heidegger's thought', in *The Cambridge Companion to Heidegger*, ed. C.B. Guignon, Cambridge University Press.

Osborne, P. (2000) 'Appendix 1 Philosophizing beyond philosophy: Walter Benjamin reviewed', in *Walter Benjamin's Philosophy, Destruction and Experience*, ed. A. Benjamin and P. Osborne, Manchester: Clinamen Press.

Oyama, S. (1985) *The Ontogeny of Information*, Cambridge: Cambridge University Press.

Palacio-Pérez, E. (2013) 'The Origins of the Concept of 'Palaeolithic Art': Theoretical Roots of an Idea', in *Journal of Archaeological Method and Theory*.20(4) 682-714.

Pallen, M. (2009) *The Rough Guide to Evolution*, London: Rough Guides.

Parker Pearson, M. (1999) *The Archaeology of Death and Burial*, Gloucestershire: The History Press.

Pearce, S. (1994) 'Objects as meaning; or narrating the past', in *Interpreting Objects and Collections*, ed. S. Pearce, Routledge.

Pearce, S. (2000) 'Researching Material Culture: Introduction', in *Researching Material Culture*, Leicester Archaeology Monographs 8, Material Culture Research Group, Occasional Papers No 1.

Pears, D, (1971) *Wittgenstein*, Fontana/Collins.

Pears, D, (1987) *The False Prison, A Study of the Development of Wittgenstein's Philosophy, Volume One*, Oxford: Clarendon Press.

Pears, D, (1988) *The False Prison, A Study of the Development of Wittgenstein's Philosophy, Volume Two*, Oxford: Clarendon Press.

Pettitt, P. (2005) 'The Rise of Modern Humans', in *The Human Past, World Prehistory and the Development of Human Societies*, ed. C. Scarre, London: Thames and Hudson, pp. 124-173.

Pettitt, P. (2011a) *The Palaeolithic Origins of Human Burial*, London and New York: Routledge.

Pettitt, P. (2011b) 'Religion and Ritual in the Lower and Middle Palaeolithic', in *The Oxford Handbook of The Archaeology of Ritual and Religion*, ed. T. Insoll, Oxford: Oxford University Press, pp. 329-343.

Pettitt, P. (2011c) 'The living as symbols, the dead as symbols: Problematising the scale and pace of hominin symbolic evolution', in *Homo Symbolicus: The dawn of language, imagination and spirituality*, ed. C.S. Henshilwood, and F. d'Errico Amsterdam/Philadelphia: John Benjamins Publishing Company.

Pettitt, P., Bahn P. and Züchner. C. (2009) 'The Chauvet Conundrum: Are Claims for the 'Birthplace of Art' Premature?', in *An Enquiring Mind: Studies in Honor of Alexander Marshack*, ed. P. G. Bahn, Oxford and Oakville: Oxbow Books.

Pfeiffer, J.E. (1982) *The Creative Explosion: an inquiry into the origins of art and religion*, New York: Harper Row.

Philipse, H. (1998) *Heidegger's Philosophy of Being, A Critical Interpretation*, Princeton University Press.

Piaget, J. (1971) *Structuralism*, Trans. C. Maschler, London and New York: Routledge.

Pilbeam, D. (1992) 'General Introduction', in *The Cambridge Encyclopedia of Human Evolution*, ed. S. Jones, R. Martin, D. Pilbeam. Cambridge: Cambridge University Press, pp. 1-5.

Pinkard, T. (2002) *German Philosophy 1760-1860, The Legacy of Idealism*, Cambridge University Press.

Pinney, C. (2002) 'The Indian Work of Art in the Age of Mechanical Reproduction: Or, What Happens When Peasants "Get Hold" of Images', in *Media Worlds, Anthropology on New Terrain*, ed. F.D. Ginsburg, L. Abu-Lughod and B. Larkin, University of California Press.

Pogue Harrison, R. (2003) *The Dominion of the Dead*, Chicago and London: The University of Chicago Press.

Pojman, L.P. (1995) 'Relativism', in *The Cambridge Dictionary of Philosophy*, ed. R. Audi, Cambridge: University Press.

Polt, R. (1999) *Heidegger, An Introduction*, UCL Press.

Polt, R. (2005) '*Ereignis*', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 375-391.

Protevi, J. (2009) 'Philosophies of Consciousness and the Body', in *The Continuum Companion to Continental Philosophy*, ed. J. Mullarkey and B. Lord, London and New York: Continuum: pp. 69-92.

Protevi, J. (2009) *Political Affect: Connecting the Social and the Somatic*, Minneapolis and London: University of Minnesota Press.

Putnam, H. (1995) *Renewing Philosophy*, Harvard University Press, new edition

Quinn, P. (2005) *Philosophy of Religion A-Z*, Edinburgh University Press.

Rajchman, J. (2000) *The Deleuze Connections*, The MIT Press.

Ramberg, Bjørn, Gjesdal, Kristin, "Hermeneutics", in *The Stanford Encyclopedia of Philosophy (Summer 2009 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/sum2009/entries/hermeneutics/.
Last accessed: 29.3.15

Ratcliffe, M. (2009) 'Phenomenology, Neuroscience, and Intersubjectivity', in *A Companion to Phenomenology and Existentialism*, ed. H.L. Dreyfus and M. Wrathall, Oxford: Blackwell, pp. 329-345.

Redding, Paul, "Georg Wilhelm Friedrich Hegel", in *The Stanford Encyclopedia of Philosophy (Winter 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/win2008/entries/hegel/.
Last accessed: 29.3.15

Redmond, I. (2008) *Primates of the World: The Amazing Diversity of our Closest Relatives*, London: New Holland.

Renfrew, C. (1983) *Towards an Archaeology of Mind*, Cambridge: Cambridge University Press.

Renfrew, C. (1993) 'What is cognitive archaeology?', in *Cambridge Archaeological Journal* 3 (2), pp. 248-50.

Renfrew, C. (1994) 'Towards a cognitive archaeology', in *The ancient mind, Elements of cognitive archaeology*, ed. C. Renfrew and E.B.W. Zubrow, Cambridge: Cambridge University Press.

Renfrew, C. (2007) *Prehistory, The Making of the Human Mind*, London: Weidenfeld and Nicolson.

Renfrew, C. (2009) 'Neuroscience, evolution and the sapient paradox: the factuality of value and of the sacred', in *The Sapient Mind: Archaeology meets neuroscience*, ed. C. Renfrew, C. Frith and L. Malafouris, Oxford: Oxford University Press.

Renfrew & I. Morley (eds) (2007) *Image and Imagination: a Global History of Figurative Representation.* (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research (Introduction).

Richardson, W.J. (2003) *Heidegger, Through Phenomenology to Thought*, Fordham University Press.

Rockmore, T. (1995) *Heidegger And French Philosophy, Humanism, antihumanism and being*, Routledge.

Rockmore, T. (2003) 'Hegel' in, *The World's Great Philosophers*, ed. R.L. Arrington, Oxford: Blackwell, pp. 92-104.

Rodrigues, A. (unpublished paper presented to the Royal Institute of Philosophy Annual Conference 2013; Philosophy and Museums: Ethics, Aesthetics and Ontology, University of Glasgow and the Burrell Collection, 24th-26th of July 2013 on the 26th of July) 'People and Things: questions museums make us ask and answer'.

Rodseth, L, Wrangham, R.W, Harrigan, A, Smuts, B.B. (1991) 'The human community as a primate society', in *Current Anthropology* 32 pp. 221-54.

Roe, D.A, (1981) *The Lower and Middle Palaeolithic periods in Britain*, London: Routledge and Kegan Paul.

Roebroeks, W. (2001) 'Hominid behaviour and the earliest occupation of Europe: An exploration', *Journal of Human Evolution*, 41(5) pp. 431-67.

Rowlands, M. (2002) 'Heritage and Cultural Property', in *The Material Culture Reader*.

Ruspoli, M. (1986) *The Cave of Lascaux: The Final Photographs*, New York: Harry N. Abrams, Inc.

Ryle, G. (1929) 'Sein und Zeit' in, *Mind*, New Series, Volume 38, Issue 151, July 1929, pp. 355-370.

Sacks, O. (1985) *The Man Who Mistook His Wife for a Hat*, London: Picador.

Safranski, R. (1999) *Martin Heidegger, Between Good and Evil*, Harvard University Press.

Sajama, S and Kamppinen, M. (1987) *A Historical Introduction to Phenomenology*, Croom Helm.

Sala, N. et al. (2014) Quaternary Science Reviews. 97, 71–83.

Sartre, J.P. (2001) *Basic Writings*, ed. S. Priest, Routledge.

Saussure, F. (1959) *Course in General Linguistics*, trans. W. Baskin, Peter Owen.

Savage-Rumbaugh, E.S, and Fields. W.M. (2011) 'The evolution and the rise of human language: Carry the baby', in *Homo Symbolicus: The dawn of language, imagination and spirituality*, ed. C.S. Henshilwood, and F. d'Errico Amsterdam/Philadelphia: John Benjamins Publishing Company.

Scarre, C. (2005) 'Introduction: The Study of the Human Past', in *The Human Past, World Prehistory and the Development of Human Societies*, ed. C. Scarre, London: Thames and Hudson, pp. 24-43.

Scharf, R.C. and Dusek, V. (2003) *Philosophy of Technology: The Technological Condition, An Anthology*, ed. R.C. Scharf and V. Dusek, Oxford: Blackwell.

Schrift, A.D. (2006) *Twentieth-Century French Philosophy, Key Themes and Thinkers*, Blackwell.

Schroeder, W.R. (2005) *Continental Philosophy, A Critical Approach*, Blackwell.

Sedgwick, P. (2001) *Descartes to Derrida, An Introduction to European Philosophy*, Blackwell.

Shanks, M. (2005) 'Public Archaeology / Museology / Conservation / Heritage', in *Archaeology: The Key Concepts*, ed. C. Renfrew and P. Bahn, Routledge.

Shanks, M and Hodder. (1995) 'Interpretive archaeologies: some themes and questions', in *Interpreting Archaeology, Finding meaning in the past*, ed. I. Hodder, M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last and G. Lucas, London and New York: Routledge, pp. 30-33.

Shanks, M and Hodder, I. (2007) 'Processual, postprocessual and interpretive archaeologies', in *Museums in the Material World*, ed. S. J. Knell, Routledge, pp. 144-165.

Shanks, M and Tilley, C. (2007) 'Material Culture', in *Museums in the Material World*, ed. S.J. Knell, Routledge, pp. 79-94.

Shea, J. (2011) 'Homo sapiens Is as Homo sapiens Was', in *Current Anthropology*, 52(1), 1-35.

Sheehan, T. (1981) 'Introduction: Heidegger, the Project and the Fulfillment', in *Heidegger, The Man and the Thinker*, ed. T. Sheehan, Precedent Publishing, Inc. Chicago.

Sheehan, T. (1993) 'Reading a Life: Heidegger and hard times', in *The Cambridge Companion to Heidegger*, ed. C.B. Guignon, Cambridge: Cambridge University Press, pp. 70-96.

Sheehan, T. (2001) 'Kehre and Ereignis: A Prolegomenon to Introduction to Metaphysics', in *A Companion to Heidegger's Introduction to Metaphysics*, ed. R. Polt and G. Fried, Yale: Yale University Press, pp. 3-17.

Sheehan, T. (2003) 'Heidegger', in *The World's Great Philosophers*, ed. R.L. Arrington, Oxford: Blackwell, pp. 105-117.

Sheehan, T. (2005) 'Dasein', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Blackwell.

Sheehan, T. (2005) 'Heidegger, Martin (1889-1976)', in *The Shorter Routledge Encyclopedia of Philosophy*, ed. E. Craig, London and New York: Routledge, pp. 354-366.

Sheets-Johnstone, M. (1990) *The Roots of Thinking*, Philadelphia: Temple University Press.

Sholtz, A.J and Lawlor. L. (2013) 'Heidegger and Deleuze', in *The Bloomsbury Companion to Heidegger*, ed. F. Raffoul and E.S. Nelson, London and New York: Bloomsbury.

Simons, P. (1995) 'Introduction to the Second Edition', in Brentano, F. (1995) *Psychology from an Empirical Standpoint*, ed. O. Kraus; English edition ed. L.L. McAlister, Trans. A.C. Rancurello, D.B. Terrell and L.L McAlister, Routledge.

Singer, P. (2004) 'Preface', in *Animal Philosophy: Essential Readings in Continental Thought*, ed. M. Calarco and P. Atterton, London and New York: Continuum.

Smith, D. (2004) 'Beyond the Cave: Lascaux and the Prehistoric in Post-War French culture', in *French Studies*, Vol. LVIII, No 2, pp. 219-232.

Smith, D.W, and Thomasson, A.L. (2005) 'Introduction', in *Phenomenology and Philosophy of Mind*, ed. D. Woodruff Smith and A.L. Thomasson, Oxford: Clarendon Press.

Smith, David Woodruff, "Phenomenology", in *The Stanford Encyclopedia of Philosophy* (Summer 2009 Edition), Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/sum2009/entries/phenomenology/
Last accessed 09.09.09.

Smith, J, 'Phenomenology', in *The Internet Encyclopedia of Philosophy*
http://www.iep.utm.edu/phenom/
Last accessed 09.09.09.

Sokolowski, R. (2000) *Introduction to Phenomenology*, Cambridge University Press.

Solecki, R.S. (1975) 'Shanidar IV, a Neanderthal flower burial in northern Iraq', in *Science* 190, 880-881. Abstract available here: http://www.jstor.org/discover/10.2307/1741776?uid=3738032&uid=2&uid=4&sid=21101672351877.

Speight, Allen, "Friedrich Schlegel", in *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/fall2008/entries/schlegel/.
Last accessed: 29.3.15

Spiegelberg, H. (1978) *The Phenomenological Movement, A Historical Introduction*, Vol 1, Martinus Nijhoff

Spiegelberg, H. (1978) *The Phenomenological Movement, A Historical Introduction*, Vol 2, Martinus Nijhoff.

Spiegelberg, H. (1994) *The Phenomenological Movement, A Historical Introduction, Third Revised and Enlarged Edition*, Dordrecht, The Netherlands: Kluwer Academic Publishers.

Stanford, C, Allen, J.S, Antón S.C, (2006) *Biological Anthropology: The Natural History of Humankind*, New Jersey: Prentice Hall.

Stewart, J., Gamenne O. and Di Paolo. E.S. (2010) *Enaction: Toward a New Paradigm for Cognitive Science*, Cambridge Ma: The MIT Press.

Stiegler, B. (1994) *Technics and Time, 1: The Fault of Epimetheus*, Trans. R. Beardsworth and G. Collins, Stanford, California: Stanford University Press.

Stout, D, Toth, N, Schick, K and Chaminade, T. (2009) 'Neural correlates of Early Stone Age toolmaking: technology, language and cognition in human evolution', in *The Sapient Mind: Archaeology meets neuroscience*, ed. C. Renfrew, C. Frith and L. Malafouris, Oxford: Oxford University Press.

Stringer, C.B, and Gamble, C.S. (1993) *In search of the Neanderthals: solving the puzzle of human origins*, London: Thames and Hudson.

Stringer, C. (2006) *Homo britannicus, The Incredible Story of Human Life in Britain*, London: Penguin.

Stringer, C, Andrews, P. (2011) *The Complete World of Human Evolution, Revised Edition*, London: Thames and Hudson.

Stringer, C. (2012) 'The Status of Homo heidelbergensis (Schoetensack 1908)', in Evolutionary Anthropology 21, (3) 101-107.

Sutton, J. (2008) 'Material Agency, Skills and History: Distributed Cognition and the Archaeology of Memory', in Material Agency: Towards a Non-Anthropocentric Approach, New York: Springer.

Taminiaux, J. (1994) 'Philosophy of existence I Heidegger', in *Continental Philosophy in the 20th Century, Routledge History of Philosophy Volume 8*, ed. R. Kearney, London and New York: Routledge.

Taylor, C. (1993) 'Engaged agency and background in Heidegger', in *The Cambridge Companion to Heidegger*, Second Edition, ed. C.B. Guignon, Cambridge: Cambridge University Press.

Taylor, T. (2002) *The Buried Soul: How Humans Invented Death*, London and New York: Fourth Estate.

Taylor, T. (2011) 'Death', in *The Oxford Handbook of The Archaeology of Ritual and Religion*, ed. T. Insoll, Oxford: Oxford University Press, pp. 89-104.

Thomas, H. (1994) *The First Humans, The Search for our Origins*, Trans. P. Bahn, Thames and Hudson.

Thomas, J. (1991) *Rethinking the Neolithic*, Cambridge: Cambridge University Press.

Thomas, J (1998) *Time, Culture and Identity: An Interpretative Archaeology*, London: Routledge.

Thomas, J. (2000) 'Introduction: The Polarities of Post-Processual Archaeology', in *Interpretive Archaeology: a reader*, ed. J. Thomas, London and New York: Leister.

Thomas, J. (2008) 'Archaeology, Landscape, and Dwelling', in *Handbook of Landscape Archaeology*, ed. B. David and J. Thomas, Walnut Creek, CA: Left Coast Press, pp. 300-306.

Thomas, N. (1991) *Entangled Objects: Exchange, Material Culture, and Colonialism in the Pacific*, Harvard University Press.

Thomasson, Amie, "Roman Ingarden", in *The Stanford Encyclopedia of Philosophy (Winter 2008 Edition)*, Edward N. Zalta (ed.),
URL = http://plato.stanford.edu/archives/win2008/entries/ingarden/
Last accessed: 29.3.15

Thompson, E. (2007) *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, Cambridge, Ma: Harvard University Press.

Tietz, U. (2009) 'German Existence-Philosophy', in *A Companion to Phenomenology and Existentialism*, ed. H.L. Dreyfus and M. Wrathall, Oxford: Blackwell, pp. 162-187.

Tilley, C. (1994) *A Phenomenology of Landscape*, Oxford/Providence, USA: Berg Publishers.

Tilley, C. (1994) 'Interpreting material culture', *Interpreting Objects and Collections*, ed. S. Pearce, Routledge.

Tilley, C. (1996) *An ethnography of the Neolithic*, Cambridge: Cambridge University Press.

Tilley, C. (1999) *Metaphor and Material Culture*, Oxford: Blackwell.

Tilley, C. (2004) *The Materiality of Stone: Explorations in Landscape Phenomenology 1*, Oxford and New York: BERG.

Tilley, C. (2008a) *Body and Image: Explorations in Landscape Phenomenology 2*, Walnut Creek, CA: Left Coast Press.

Tilley, C. (2008b) 'Phenomenological Approaches to Landscape Archaeology', in, *Handbook of Landscape Archaeology*, ed. B. David and J. Thomas, California: Left Coast Press, pp. 271-276.

Tobias, P. (1994) 'The evolution of early hominids', in *Companion Encyclopedia of Anthropology*, ed. T. Ingold, London and New York: Routledge, pp. 33-78.

Tonner, P. (2008) *The Significance of the Thing: The Importance of Collecting*, Glasgow: Glasgow Caledonian University Research Collections.

Tonner, P. (2008) 'The Return of the Relative: Hamilton, Bergson, Merleau-Ponty and French Phenomenology', in *Janus Head*, Summer/Fall 2008.

Tonner, P. (2008) 'Haecceitas and the question of being: Heidegger and Duns Scotus', in *Kritike: An Online Journal of Philosophy*, December, 2008.

Tonner, P. (2009) 'Foucault', in *The Continuum Companion to Continental Philosophy*, London and New York: Continuum, pp. 293-294.

Tonner, P. (2009) 'Structuralism', in *The Continuum Companion to Continental Philosophy*, London and New York: Continuum, pp. 322-323.

Tonner, P. (2010) 'Heidegger, Gadamer and the work of archaeology', in *Rundbrief der Arbeitsgemeinschaft Theorie in der Archäologie*.

Tonner, P. (2010) *Heidegger, Metaphysics and the Univocity of Being*, London and New York: Continuum.

Tonner, P. (2011) 'Are animals poor in the world? A critique of Heidegger's anthropocentrism', in *Anthropocentrism: Investigations into the History of an Idea*, ed. R. Boddice, Brill.

Tonner, P. (2014) 'Art, Materiality, and the Meaning of Being: Heidegger on the Work of Art and the significance of Things' in, *Heidegger and the Work of Art History,* ed. A. Boetzkes and A. Vinegar, Surrey: Ashgate.

Tonner, P. (2015) 'Did Homo erectus dwell? Heidegger, archaeology and the future of phenomenology' in, *Heidegger in the Twenty-First Century*, ed. G. Tziovanis and P. Ennis, New York: Springer.

Tooby, J. and Cosmides, L. (1992) 'The psychological foundations of culture', in *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, ed. J.H. Barkow, L. Cosmides and J. Tooby, New York: Oxford University Press.

Toth, N, Schick, K. (2005) 'African Origins', in *The Human Past, World Prehistory and the Development of Human Societies,* ed. C. Scarre, London: Thames and Hudson, pp. 46-83.

Trakakis, N. (2009) 'Bataille', in *The Continuum Companion to Continental Philosophy,* ed. J. Mullarkey and B. Lord, London and New York: Continuum, pp. 283-284.

Trigger, B. (1996) *A History of Archaeological Thought*, Cambridge University Press.

Trinhaus, E. (1983) *The Shanidar Neanderthals*, New York: Academic Press.

Ucko, P.J. and Rosenfeld A. (1967) *Palaeolithic Cave Art*, London: World University Library, Weidenfeld and Nicholsen.

Vaishnavi, S, Calhoun, J and Chatterjee, A. (2001) 'Binding Personal and Peripersonal Space: Evidence from Tactile Extinction', in *Journal of Cognitive Neuroscience 13:2*, pp. 181-189.

Vallega-Neu, D. (2003) *Heidegger's Contributions to Philosophy, An Introduction*, Indiana.

Vallega-Neu, D. (2010) '*Ereignis*: the event of appropriation', in *Martin Heidegger: Key Concepts*, ed. B.W. Davis, Durham: Acumen, pp. 140-154.

Van Andel, T.H, and Runnels, C.N. (1995) 'The earliest farmers in Europe', in *Antiquity* 69 pp. 481-500.

Van Buren, J. (2002) 'Editor's Introduction', in *Supplements, From the Earliest Essays to* Being and Time *and Beyond,* ed. J. Van Buren, State University of New York Press.

Van Buren, J. (2005) 'The Earliest Heidegger: A New Field of Research', in *A Companion To Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Blackwell.

Van Gennep, A. (1960) *The Rites of Passage*, Trans. M.B. Vizedom and G.L. Caffee, Chicago: The University of Chicago Press.

Varerla, F.J., Thompson, E. and Rosch, E. (1991) *The Embodied Mind: Cognitive Science and Human Experience*, Cambridge, MA: MIT Press.

Vialou, D. (1996) *Our Prehistoric Past, Art and Civilization*, Trans. P. Bahn, Thames and Hudson.

Volpi, F. (1996) 'Dasein as *praxis*: the Heideggerian assimilation and radicalisation of the practical philosophy of Aristotle', in *Critical Heidegger*, ed. C. Macann, Routledge.

Ward, J. (2006) *The Student's Guide to Cognitive Neuroscience*, Hove and New York: Psychology Press, Taylor and Francis.

Wartenberg, T.E. (2001) 'Heidegger', in *The Routledge Companion to Aesthetics, 2nd Edition*, ed. B. Gaut and D. McIver Lopes, London and New York: Routledge.
Watson, P. (2005) *Ideas: A History from Fire to Freud*, Phoenix.

Webb, J, Schirato, T, and Danaher, G. (2002) *Understanding Bourdieu*, London, Thousand Oaks, New Delhi: SAGE.

Weiss, G. (1999) 'Phenomenology: Introduction', in *The Edinburgh Encyclopedia of Continental Philosophy*, ed. S. Glendinning, Edinburgh University Press.

Wheeler, Michael, "Martin Heidegger", *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2014/entries/heidegger/>.
Last accessed: 30.3.15

White, C.J. (2005) 'Heidegger and the Greeks', in *A Companion to Heidegger*, ed. H.L. Dreyfus and M.A. Wrathall, Oxford: Blackwell, pp. 121-140.

White, M. and Plunkett, S. (2004) *Miss Layard Excavates: a Palaeolithic site at Foxhall Road, Ipswich, 1903-1905*, Liverpool, England: Western Academic and Specialist Press Limited.

White, R.K. (1999) 'On the evolution of human socio-cultural systems', in *Handbook of Human Symbolic Evolution*, ed. A. Lock and C.R. Peters, Oxford: Blackwell.

White, R. (1992) -Beyond art-toward an understanding of the origins of material representation in Europe' in *Annual Review of Anthropology* 21: 537–564.

White, R. (2003) *Prehistoric Art: the symbolic journey of humankind*, New York: Abrams.

White, R. (2009) 'Bataille on Lascaux and the Origins of Art', in *Janus Head*, Volume 11, issue 1 & 2.

Whittle, A. (1996) *Europe in the Neolithic: the creation of new worlds*, Cambridge: Cambridge University Press.

Williams, B, (1981) 'Wittgenstein and idealism', *Moral Luck, Philosophical Papers 1973-1980*, Cambridge: University Press.

Wilson, P.J. (1980) *Man the promising primate: the conditions of human evolution*, New Haven: Yale University Press.

Winch, P. (2007) *The Idea of a Social Science and its Relation to Philosophy* (Routledge Classics), Routledge.

Whitney, D. (1986) 'The Origins of Image Making', in *Current Anthropology*, 27: 3, pp. 193-215.

Wittgenstein, L. (1953) *Philosophical Investigations*, Trans. G.E.M. Anscombe, ed. G.E.M. Anscombe and R. Rhees, Oxford: Blackwell.

Wittgenstein, L. (1958) *Philosophical Investigations*, Trans. G.E.M. Anscombe, ed. G.E.M. Anscombe and R. Rhees, Oxford: Blackwell.

Wittgenstein, L. (1958) *The Blue and Brown Books, Preliminary studies for the 'Philosophical Investigations'*, Blackwell.

Wittgenstein, L. (1961) *Tractatus Logico-Philosophicus*, Trans. D.F. Pears and B.F. McGuinnes, Routledge.

Wittgenstein, L. (1966) *Lectures and Conversations on Aesthetics, Psychology and Religious Belief*, Blackwell.

Wittgenstein, L. (1967) *Zettel*, ed. G.E.M. Anscombe and G.H. von Wright, Trans. G.E.M. Anscombe, Blackwell.

Wittgenstein, L. (1969) *On Certainty*, ed. G.E.M. Anscombe and G.H. von Wright, Trans. D, Paul and G.E.M. Anscombe, Blackwell.

Wittgenstein, L. (1979) *Remarks on Frazer's Golden Bough*, ed. R. Rhees, Trans. A.C. Miles, revised by R. Rhees, Brynmill.

Wolfreys, J. (2004) 'Art', in *Understanding Derrida*, ed. J. Reynolds and J. Roffe, London and New York: Continuum, pp. 84-92.

Wood, D. (2002) *Thinking after Heidegger*, Polity.

Woodward, I. (2007) *Understanding Material Culture*, Los Angeles, London, New Delhi, Singapore, Washington DC: SAGE.

Wylie, A. (2002) *Thinking from Things: Essays in the Philosophy of Archaeology*, Berkeley: University of California press.

Wynn, T. (1979) 'The intelligence of later Acheulian hominids', in *Man* 14, pp. 371-91.

Wynn, T. (1981) 'The intelligence of Oldowan hominids', in *Journal of Human Evolution* 10, pp. 529-41.

Wynn, T. and Coolidge, F. L. (2008) 'A stone-age meeting of minds' in *American Scientist*, 96(1), 44-51.

Wynne, C.D.L. (2001) *Animal Cognition: The Mental Lives of Animals*, Hampshire: Palgrave.

Young, J. (2001) *Heidegger's Philosophy of Art*, Cambridge: Cambridge University Press.

Young, J. (2002) *Heidegger's Later Philosophy*, Cambridge: Cambridge University Press.

Young, J. (2006) 'The fourfold', in *The Cambridge Companion to Heidegger, Second Edition*, ed. C.B. Guignon, Cambridge University Press, pp. 373-392

Zimmer, C. (2005) Smithsonian Intimate Guide to Human Origins, Toronto: Madison
Press Books.

Zimmerman, M.E. (2002) 'Heidegger's Phenomenology and Contemporary Environmentalism', in *Eco-Phenomenology: Back to the Earth Itself*, ed. T. Toadvine,
SUNY.

Žižek, S. (2004) *Organs without Bodies, Deleuze and Consequences*, Routledge.

Web resources

http://www.atapuerca.tv/
Last accessed: 29.3.15

https://files.nyu.edu/mjr318/public/language08/Language%208%20-%20Grice.pdf
Last accessed: 29.3.15

http://homepages.nyu.edu/~mjr318/language08/
http://privatewww.essex.ac.uk/~wmartin/BubblesTextOnly.pdf
Last accessed: 29.3.15

'Paua' http://en.wikipedia.org/wiki/Paua
Last accessed 27.10.09.