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Excerpt

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## CHAPTER I

WHAT USE IS THE PALAEOLITHIC  
IN PROMOTING NEW  
PREHISTORIC NARRATIVES?

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Imagine a situation in which the world and the universe are as old as we know them to be, but in which people came into being in 4004 BC. Let us think for a minute about what implications such a scenario would have for our notions of the historical process. However people came to be (and we might have to invoke some form of divine intervention for such a sudden appearance), it is likely that people would be disengaged from the physical and causal processes of the rest of the universe. With our biological ties severed and the work of Darwin undone for the human realm, culture and human exceptionalism would inevitably loom large. Humans could not be seen as emerging through an evolutionary process in tandem with other organisms, nor would we be linked to the broader history of the universe through the operation of physical or chemical processes as normally understood. The radical discontinuity between people and everything else would require a special explanatory framework for humans. This might in turn lead to a division of knowledge, in some parts of the world at least, between those who study the social, cultural, philosophical, anthropological and historical aspects of people and those interested in the physical and biological worlds.

No reputable humanities scholar or social scientist believes that people are 6004 years old. But many act as if this were the case, so that the last few thousand years are when people became interestingly human, started farming for a living, dwelling in cities and commenced mass production and consumption. The rest is history: mass-consuming urbanites demonstrating culture at a level not glimpsed in any other species, the origins of which lie in a control of natural resources from which we are set apart. It is as if the Palaeolithic never happened.

## NEW NARRATIVES FOR OLD PERIODS

I first properly got to know Clive in 1984 when we were both visitors at the Australian National University in Canberra. We drove out to Lake Mungo, which was described by the ranger there as ‘an archaeological site the size of

Belgium'. Later Clive gave a seminar in the Department of Prehistory, Research School of Pacific Studies, known to people inside the department and outside as 'the piranha pool'. Seminars could be vicious and the department was particularly on the lookout for British visitors who might feel they were intellectually or socially superior. Clive, I know, was slightly nervous at this prospect, but predictably all went well, with Jack Golson, head of the department, describing it as the best seminar he had ever heard.

The basis of the seminar was the then in-press book *The Palaeolithic Settlement of Europe* (Gamble 1986). What impressed people was the tripartite synthesis of global hunter-gatherer studies, the new synthesis of the climatic and environmental data for the last 2 million years and a concerted attempt at archaeological analysis. It is interesting to look back at the reception of that book in the light of how Clive's thought has developed subsequently. The processualists claimed Clive as one of their own (see a representative review by L. Straus [1987]), and not just due to the Foreword by Lew Binford. The environmental framework in this book was strong, dividing Europe into nine cells on the basis of divisions by latitude and longitude, which allowed for the effects of temperature gradients on plants and animals to be felt. What complicated this framework were chapters 7 (Demography and Style) and 8 (Society, Sediments and Settlement), which together focused on the linkedness between individuals and groups into networks that covered huge areas of the continent, cutting across any ecological zones.

In many ways these two chapters became the starting point for the second incarnation of the book *The Palaeolithic Societies of Europe* (Gamble 1999). The one word change in the title belies a more fundamental shift in Clive's thought and the start of a sustained argument against teleological forms of prehistory writing. As is too well known to rehearse in any detail here, archaeology post-Childe has been structured around three revolutionary moments of the Neolithic, urbanism and industrialisation. These have never quite been joined by a fourth revolution concerning the emergence of fully modern humans and fully modern human behaviour. This very ancient modernity has never formed a convincing revolutionary moment because doubts exist over the basis for modernity (was it language, symbolism, a more joined up brain, better technology, body decoration and art?), doubts over chronology (did features picked out as modern come together too slowly to be a revolution?) and impact. The last issue has been raised most clearly and provocatively by Colin Renfrew through his idea of the Sapient Paradox (Renfrew 2004; Renfrew et al. 2009). To paraphrase somewhat, this paradox focused attention on this question: If humans became modern in the late Pleistocene, why did it take them so long to become fully human, through developing farming, sedentary ways of life and, eventually, a rich civil society with considerable productive power, social differences, art, writing and organised religion? These issues are laid out and critiqued much more

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effectively than I can in *Origins and Revolutions* (Gamble 2007), a book whose full impact has yet to be felt.

There are theoretical links between *Palaeolithic Societies* and *Origins and Revolutions*. In the former the individual is privileged, and this may be surprising to some, but Clive's emphasis was partly for empirical reasons – knapping episodes, butchery and the deposition of rubbish around a hearth can all be linked to skilled individuals performing social actions and create a mode of social reality as a result. This bottom-up view allows individuals to be combined into intimate (c. 5 people), effective (c. 20 people) and extended (100–400 people) networks. In the latter book the individual is still central but now more fully embodied, and this body helps give rise to instruments and containers as extensions of and metaphors for the body. The body is more deeply relational, so that substances, be they stone, clay, wood or leather, are worked on by the skilled body, but also act back upon it, socialising it and skilling it in new ways. Relatedness between humans is part and parcel of relations with many other entities. Once one allows such a complexity of relations between humans and the world, then neat chains of cause and effect are jettisoned, along with clear direction to human prehistory. Change happens, but each significant change opens up a new space of possibility within which a range of directions can potentially be taken. Which direction is followed is momentarily under-determined. People may go from being mobile to sedentary, but the consequences of such a move are not always the same, nor is the move itself necessarily irreversible.

The argument is condensed into a key diagram (Gamble 2007, 9.1) and into this much complex argument is packed. The lack of a single direction is emphasised, except for a general shift from instruments to containers, and continuity over long periods is emphasised. Interestingly, Clive's argument overlaps in many ways with recent discussions of material engagement (Renfrew 2004, 2009) and entanglement (Hodder 2012). However, both these authors are in great agreement and both emphasise the post-Neolithic world, with the implicit assumption that humans are more deeply entangled or engaged once farming has laid the basis for a more materially complex form of life. A basic narrative structure has run through archaeology from at least Lubbock's *Pre-Historic Times* (1865) onwards. Post-processualism helped curb some of the emphases on progress and directionality, but much emphasis in post-processual thought has been on the world from the mid-Holocene onwards in Europe. Archaeology needs to expand its narrative structures to do justice to the full scope of prehistory over several million years, but also all those parts of the world in recent millennia which do not witness a straightforward transition to farming with its anticipated consequences. Huge swathes of Eurasia in the steppe and the forest regions, much of North America, most of the tropics, large areas of Africa and South America, and all of Australia do not fit easily into the

farming–urbanism–industry teleology. Clive has been one of the most powerful voices arguing for a new, more open and varied narrative.

Clive's intellectual career has been unusual. Many move from young rebel to an established and dominant intellectual position. Binford in the 1980s found it very hard to be rebelled against once processualism had become a norm. Many of the 1980s rebels now constitute the archaeological mainstream. Clive's earliest major works were lauded by processualists as a most sophisticated expression of a global hunter-gatherer model applied systematically to a major set of Palaeolithic data. The exploration of art, style and human connections across ecological zones indicate the existence of a strand in Clive's thinking that would eventually lead to a stress on the senses, the emotions and the intelligent body. These are all aspects developed too by post-processualists (and by Colin Renfrew, whose own intellectual trajectory is intriguing). What differentiates Clive's position from that of many of the other major influences on the broader discipline is his vantage point from within Palaeolithic studies, requiring a more subversive stance towards the deep narratives of direction and increasing complexity. Archaeology is an odd discipline, the science of rubbish over the long term. We have not made enough of our oddness within the spectrum of the historical and social sciences. In insisting on a different view and through developing an intellectual framework that supports that view Clive's work is unusual and valuable. What follows is my small contribution towards an archaeology of oddness, drawing on Palaeolithic data, but unburdened by any great knowledge of it.

#### EVERYTHING IS IN MOTION

As I look out of the window, I can see rain falling from the sky, birds flying back and forth, various plants swaying in the wind. The mobile aspects of the scene are juxtaposed to the houses, fences and the earth itself which appear static. My view of what is mobile and what is not is an illusion (or function) of the nature of my perception, the timescales in which my organism and its movements (sensory, neural, etc.) mesh with those of the world. Either a smaller spatial scale or a longer time period would reveal different movements. Molecules are mobile and atoms are buzzing beyond my ken, so that the microprocesses (to us) of growth, chemical recombination and decay take place continually. Slow and lengthen the process of perception and it would become obvious that the houses have only been here some 130 years, together with their land divisions and gardens. At some point in the future all I can see will be replaced by other things which will have equal solidity and fixity to a human viewer.

Those philosophers of flux, Deleuze and Guattari (1987), developed new sets of terms to shake us out of our everyday view. 'The Body without Organs' (BwO) was one way of getting us to think about flows. At a series of different

levels, from the sub-atomic, to the expansion of the universe after the Big Bang, the material world is in motion. We do not feel the universe expanding, the earth orbiting the sun, continental plates shifting or atoms recombining to form a new molecule, but all these things are happening now. Matter can be conceived of as existing at a series of strata of different temporal and spatial levels, where the word level only refers to scale and not to some area of more effective or ultimate cause. The BwO exists at each of these strata, being the most mobile manifestation of that stratum. So for what we would call life, the microbial level is volatile and motile, with much evolution taking place as cells or microbes combine, as Lynn Margulis (e.g., 1998) has shown. Evolution through cellular recombination, which embeds mitochondria into cells, has at least as much effect as that taking place through larger organisms. Nor is the boundary between the chemical and the biochemical totally distinct as entities like viruses show. However, it may be useful to distinguish the chemical and biochemical at their lowest scales of movement, which for the latter is the molecular and not microbial. In effect, such boundaries can be placed anywhere that seems helpful, rather than having any ultimate existence.

As well as movement in Deleuze and Guattari's world there is also (temporary) stasis, which they call territorialisations. The world takes on a temporary set of forms, bringing about particular modes of cause and effect. These can often appear solid and self-evident – like the houses and gardens out of my window – but such appearances depend on taking a single scale for granted. Just as a particularly convincing film or book will pull us into a time-space reality that makes temporary sense, so too do the temporal and spatial conventions we apply to the world (we should note here that Deleuze [1989] was amongst other things the philosopher of cinema). This is not to say that we make the world up, but that the universe is so vast that we can only attend to a tiny percentage of its properties, mistaking our modes of action, perceptions and tropes of explanation for reality more generally. We have a tendency to concentrate on territorialisations and not flows, maybe because a static picture is easier to discuss, analyse and grasp. But beneath each territorialisation is a flow, so that there are flows all the way down (and up).

For political theorists, a politics with materials left out or through some brute, inert materialism is just too human. Many of our most urgent problems derive from the pressing environmental problems mass consumption causes, so that to leave out the allure of objects or the broader processes of the planet as it responds to massed humanity is to have too partial a view of cause and effect. Causes are multiple and conditions deriving from people in the world are continually emergent through a series of complex, contradictory or concatenating forces. Jane Bennett identifies a strand of vitalism in western thought, deriving from (amongst others) Spinoza, Nietzsche, Darwin, Bergson and Deleuze (Bennett 2010: vii). For these varied thinkers not only life is alive,

so that we should attribute as much liveliness as possible to matter-energy. Bennett follows them in recognising the vibrancy of matter and the power of material things to organise themselves. She uses the compelling example of the grid blackout across a large area of the northern United States and Canada in August 2003. Bennett feels that

the electrical grid is better understood as a volatile mix of coal, sweat, electromagnetic fields, computer programs, electron streams, profit motives, heat, lifestyles, nuclear fuels, plastic, fantasies of mastery, static, legislation, water, economic theory, wire and wood.

(Bennett 2010: 25)

Although the grid never rose ‘to the level of an organism’ (Bennett 2010: 24), it was a complex assemblage with its own unexpected properties. As automatic systems caused some power stations to shut down when parameters of heat and power loads were exceeded, the grid started to behave unpredictably, so that at one stage the electricity reversed its flow for reasons that even subsequent analysis struggled to reveal (Bennett 2010: 27–28). Such alarmingly emergent properties were due to no one element or aspect of the power system, but of many, often trivial, causes combining.

William Connolly is gripped too by the notion of emergent causality, where new conditions and properties emerge out of a series of influences. He acknowledges that linear or efficient causality is useful to explain situations that are stable or relatively simple (Connolly 2011: 171). However, in many more complex circumstances Connolly finds it useful to play with ideas of intersecting force fields, so that perturbations in ecological systems can feed through into market conditions, before restabilising in a novel form. ‘Such complexity is endemic to an econo-political world bound to natural and cultural systems of multiple sorts . . . sometimes, of course, a system expires, leaving simmering remains behind available for scavenging or colonisation by others at another time’ (Connolly 2011: 172).

Such historical thoughts have been developed by Manuel De Landa (1997) using a philosophical approach to history directly inspired by Deleuze and Guattari. De Landa advocates not just a move away from Eurocentrism, but, more importantly, from anthropocentrism in which people are inevitably and always centre stage. He notes along the way how many disciplines have embraced history, so that physics now sees many processes involved in the expansion of the universe after the Big Bang as irreversible. In evolutionary biology too animals and plants seem to be ‘piecemeal historical constructions, slow accumulations of adaptive traits cemented together via reproductive isolation’ (De Landa 1997: 13). We are often guilty of category mistakes in fixing on the wrong units of change: ‘Over the millennia, it is the flow of biomass through food webs, as well as the flow of genes through generations, that matters, not the bodies and species that emerge from these flows’

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(De Landa 1997: 259). He also mixes up categories generally considered separate, so that the flow of information and the creation of languages, as temporary stabilisations of the norms of transmitting information, are considered alongside ecosystems, geological strata or the generation of urban forms. Such a mixing up of domains that have been radically separated provokes us to think about both the original categories (biology, economy, language, etc.) and their recombination to create new understandings of emergence (a term De Landa also plays with).

In mixing up what we have come to separate as nature on the one hand and culture on the other, obvious intellectual dangers occur. We are all well familiar with mechanical or biological explanations for cultural forms through environmental or genetic determinism. But equally in vivifying or humanising matter-energy we can fall into the trap of anthropomorphism, where matter-energy comes to seem exactly like life, or even like human life. The idea of the assemblage is useful in mixing everything up, but it still begs the question of what the links might be between information flows and genetic changes, for instance. Perhaps rather than deciding issues of complex causality in advance, we can try to establish empirically how complicated emergent systems might operate?

It *might* be clear now where I am taking my argument: the Palaeolithic is the period of flux, change and transformation, being both an aid and challenge to the ideas I have just been outlining. If notions of flux and occasional fixity work anywhere, they should do so in a period in which ice caps grew and retreated, new ecologies came into being and are then extinguished and humans change from being an African ape to a global species. In what follows, I shall address two questions very briefly – how can the ideas I have sketched here help in the understanding of very long-term histories? In what ways can we think about human diversity? I am very aware that Clive has tackled both these questions before me and with much greater knowledge of the period. Rather than completely re-invent the handaxe, I will draw on empirical evidence synthesised by Clive and on the broader patterns of thought he has developed.

## THE MAMMOTH STEPPE

From around 2.5 million years ago, relatively minor changes in the earth's orbit, spin and tilt began to cause the climate to fluctuate between warm and cold periods, affected also by the influence of the Himalayas and Tibetan Plateau on global circulation systems (Gamble 1999: 99). This fluctuating climatic system provided the context for both hominin evolution and subsequent global expansion. The framework of late Pliocene and Pleistocene global climatic fluctuation is represented in continuous records of changing proportions of oxygen isotopes  $^{16}$  and  $^{18}$  in deep ocean sediments, known as

marine isotope stages (MIS). Starting with MIS 1 in the present and stretching back through more than 100 cycles of cold and warm of varying lengths (Shackleton et al. 1991), the MIS framework now provides the climatic and ecological framework for Palaeolithic archaeology.

To gain some sense of variety at any one time and how this changes over time we can focus briefly on the cold stage MIS 12 (c. 480,000–425,000 years ago) in Eurasia, when large carnivores decline in number and a set of cold steppe ecosystems came into being with mammoths, woolly rhinos and reindeer as the most common large mammals – these ecosystems are now known by the shorthand of ‘the mammoth steppe’.

The mammoth steppe was an ecologically complex, medium-to-high-latitude suite of vegetation mosaics that produced a diverse fauna of grazing generalists. These mosaics depended primarily on the length of the growing seasons and these varied between regions ... the mosaic of conditions ... produced a structure whose “fabric” is compared to the weave in a plaid, rather than a striped, textile.

(Gamble 1999: 111–112)

The mammoth steppe existed in cold periods for almost half a million years and with each warming the cold-loving plants and animals were driven to the tundra regions to the east and north, recolonising a huge swathe of Eurasia and Alaska with each downturn in temperature. An upswing of the temperature saw pulses of warm-loving ecosystems colonising from the south, with these ecosystems being erased again except for relatively small refugia as the ice sheets and tundra moved in from the north. Each iteration of the cold- and warm-loving ecosystems were broadly similar, but never quite the same; a series of complex variations on an already variegated theme. Both cold and warm adapted communities have no modern analogues, including the hominin communities that lived within them.

Not only did biotic communities fluctuate, but the surface of the earth was radically transformed. The ice sheets of MIS 12, for instance, pushed major river systems such as the Thames and the Seine to the south, close to their present positions: ‘The same landscapes were also subjected to intense periglacial activity, with frost wedges, cryoturbation and mass wasting of sediments downslope’ (Gamble 1999: 110). From this period on major depositions of loess occurred across Eurasia to become the focus, many millennia later, of intense agricultural systems from central Europe to China.

Gamble (1999: 107) calls MIS 12 ‘the hinge’ partly because the evidence comes into new focus through extensive correlations of stratigraphy and fauna, in which small fast-evolving creatures like voles are key to understanding dates and temperatures. For a long period hominins were part of the warm adapted plant and animal communities. From around 500,000 years ago there was probably a thin, but even, distribution of hominins across all areas of Europe, apart from the northeast, making complex bifaces (handaxes) and flaked stone



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tools. These creatures were large, like the 1.8 m tall *Homo heidelbergensis*, and they lived in local groups without wide connections, as shown by the distances which raw material travel from their source (30–80 km). Against the background of the long cycle of climates and ecosystems, startling snapshots stand out, such as the knapping episodes which produced bifaces at the site of Boxgrove, near Chichester, southern England. Here blocks of stone can be fitted back together to show how knapping took place a few hundred metres from where the stone was procured, with the handaxes then being used to butcher animal carcasses on these tidal flats (Gamble 1999: 121). There was a strong investment in the emotional affective ties that bound the local group, with the symmetry of handaxes which is in excess of any demands of function, showing that there was a link between form and social relations: ‘Hominids lead complex social lives with only minimum extension of co-presence beyond the gathering. The archaeological record across the eight occupied regions of Europe is very comparable’ (Gamble 1999: 173).

As hominins spread across Europe half a million years ago, occupying a mosaic of ecosystems, it might seem that they existed in many natures, but with one culture. This is true to some degree as the thin spread of handaxes and flakes shows in assemblages with bones of local animals. Very subtle differences existed in the ways landscapes were created and used. As noted above, at Boxgrove knapping episodes can be reconstructed and in some instances bifaces are made, used and discarded all in the same place. But in others bifaces are removed from the vicinity, raising the question of where they were taken and finally deposited. Some places on the landscape may have been marked in memory, so that a waterhole at Boxgrove in Quarry 1/B had ‘the richest density of cores and struck flakes but also a set of 321 bifaces, not all of them showing traces of being used’ (Gamble 2007: 238). Some handaxes may have been made purely as forms of performance, demonstrating the skill of making but with no evidence of use along their cutting edges. Landscapes were being structured in subtle ways through memories of what had gone before in a particular spot. Localised acts of deposition form a pattern found wherever handaxes were used, although the exact modes of making and deposition may have varied in subtle ways between east Africa and Europe (Gamble 2007: 239). In a world of flux and becoming, subtle territorialisations were assayed – sets of connections with place, other species, stone and wood. The last substance is known from a number of middle Pleistocene locations, the most remarkable of which is Schöningen in eastern Germany where throwing and thrusting spears have been found, one of which may have had a hafting for a stone tool. Many were left to be preserved in peats while still in serviceable condition, raising the question of why, like handaxes they should have been deposited in that particular location and time. The tips of some spears were also made from the hard heartwood of spruce, showing a considerable appreciation for the variability and properties of materials (Gamble 1999: 135–136).

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The evidence is sparse and difficult to interpret, and it is usually hard to know to which particular wiggle of the MIS climatic framework particular sites date. However, a picture is emerging of the long fluidity and occasional fixity of human becoming. The creatures we have been considering so far were not human in a biological and cultural sense. The early northwest European *Homo heidelbergensis* was probably part of a flow of genes and mutations linking African *Homo erectus* and the later European *Homo neanderthalensis*. None of these species led on to *Homo sapiens*, which emerged out of Africa after 100,000 years ago to eventually replace the Neanderthals (whether or not with any inter-breeding and hence genetic mixture is currently hotly debated; see Endicott et al. 2010; Stringer 2011a). Taxonomic methods attempt to fix the flows of genes into species, which is problematic in itself, especially given the paucity of physical remains for creatures like *Homo heidelbergensis*. The linking of these gene sequences to tools and sites is even trickier. There was a slow sedimentation of skills and abilities to join up time and space, but not in any progressive and irreversible manner. The flows of hominin genetic materials were not sufficient unto themselves, but linked to those of a great range of other species and we can see the bones of herbivore and carnivore animal species in sites across the European continent, hints as to the networks of relationships hominins had. By the Upper Palaeolithic it becomes obvious that some human groups, at least, had become entangled with reindeer, possibly following migratory herds, but similar close relationships may have been found with a range of species, the earlier of which are hardest to discern. Hominin society did not just include other co-specifics, but a range of other plants and creatures, with whom emotional relations were set up – certainly fear for some, possibly love or affection (if such terms are not too ‘presentist’ to be meaningful). Notions of animism are common to many human groups today, in which stones may seem active, or animals are humans in different bodily form. Who knows quite what notions of relationship, cause and effect would have existed half a million years ago, but we can be fairly sure that ideas and feelings about animals and plants would have been developed, communicated and contested in many ways, even without language as we have come to know it. On this last point an absolute division should not be seen between language and non-language, but instead we can see a spectrum of communication in which the making of a handaxe was a meaningful and communicative act, surrounded by gesture, forms of bodily comportment and some vocalisations, even though the nuances of the act could not be discussed using syntactic language.

The broader ecological situation of all our remote ancestors is only partly clear. We do not know with certainty whether hominins lived in Europe only in warm periods, or also in cold. Some of the oldest evidence in Britain and indeed in Europe, from Happisburgh, Norfolk over 800,000 years ago (Parfitt et al. 2010) appears to come from a period with boreal conditions