

## 6 Biases and double standards in palaeoanthropology

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The terms Lower, Middle, and Upper Palaeolithic are more than just neutral and straightforward divisions of 2.5 million years of human cultural development. They are essential building blocks for our understanding of the prehistoric past. Periodizations are, in fact, never neutral or 'objective.' In historical disciplines they are, in the first instance, working hypotheses that order the confusingly large amount of historical data and developments into more or less digestible time-slices, while at the same time expressing specific views on how best to segment time sequences, preferring specific characteristics to delineate periods rather than alternative ones. As such, they express specific viewpoints on how best to approach a study of the past and on the chronology of key events and transitional periods.

As working hypotheses, periodizations should ideally be subjected to continuous testing and re-assessment. Remarkably, this is rarely done in archaeology, and when it is, it is mostly done in an implicit and unsystematic way. In fact, our basic divisions of the prehistoric past have survived all kinds of major changes on both the theoretical and the empirical levels since the emergence of the basic framework in the second half of the 19th century. Periodizations can actually become dangerous instruments when long periods of uncritical usage have incised them too deeply in the sedimentary bedrock of scientific practice. Their longevity may seduce scholars to treat these working hypotheses, these abstractions, as realities and to take them too seriously. In the case of palaeolithic archaeology, there is the extra danger of thinking in teleological sequences. As Gamble and Roebroeks have noted, archaeologists' preference to think in threes (ages of stone, bronze and iron; Gordon Childe's three revolutions: Neolithic, urban, and industrial; etc.) has led to a type of thinking in which the period in the middle is compared favourably to the lower and unfavourably to the upper one, with Upper Palaeolithic humans often treated as the ultimate goal of all preceding evolutionary processes.<sup>1</sup>

Periodizations are also 'fossilized expectations', and expectation is a powerful guide to action and interpretation. Conkey has given a clear example of how such expectations provoke what she calls 'spatio-temporal collapse'-approaches: the lumping of sociocultural phenomena which are distributed both in space and time into sets of attributes considered characteristic for one specific period. For instance, the whole Middle Palaeolithic, a period of roughly 250,000 years, is thus contrasted with 'the' Upper Palaeolithic for its absence of art, despite the fact that there were many regions and periods within the latter that had no archaeologically visible art production at all.<sup>2</sup> In the same vein, the Lower and Middle Palaeolithic are often portrayed as periods of stable, unchanging and monotonous adaptations, in contrast to 'the' Upper Palaeolithic cultural bonanza. In such a scientific climate, the position on either side of the Middle/Upper Palaeolithic boundary greatly determines the scientific treatment that finds receive: the inferred level of 'humanity' of the hominid involved forms the basis of behavioural reconstruction. Similar finds are interpreted differently. The fact that many researchers tend to focus on specific time periods also triggers a social and institu-

<sup>1</sup> Gamble and Roebroeks 1999.

<sup>2</sup> Conkey 1985, 301.

tional clustering of researchers around the time blocks and hence a continuous reinforcement of such periodizations.

There have been a few explicit attempts to break through this state of affairs and to treat the three periods under discussion as periods in themselves according to their own, however heterogeneous structure, not as a part of the ascendancy of modern humans. One of these attempts consisted of a series of meetings organized by the European Science Foundation Network on the Palaeolithic Occupation of Europe. One of the explicitly stated goals of this network was to get rid of such teleological approaches. This, however, proved to be difficult at the workshop that dealt with the period from 30,000 to 20,000 years bp. Despite these explicit goals and an awareness of the problems just mentioned, various participants commented upon the striking differences in the approach to the archaeology of that period as compared with the workshops on earlier periods. In dealing with the Lower and Middle Palaeolithic, a highly critical attitude prevailed in which, for instance, hearths and dwelling structures were concepts to be applied only after a careful scrutiny of the archaeological data. Similarly, there was also a double standard with regard to the association of faunal remains and stone artefacts: at earlier sites, the actual degree and type of interaction between humans and animals had to be convincingly demonstrated time and time again, whereas in the context of modern humans, such critical examinations seemed less important and interpretations of stones and bones flowed more freely in terms of hunters and their prey.<sup>3</sup>

Apparently, evidence from different periods is treated differently, as we will illustrate with a few more examples of analogous double-standard operations below. They show how we use broader categories in our studies of the past, and how important the role of implicit bias is in such studies. After a few examples of double-standard operations, we will move to a tentative explanation of what may be at stake here, and end with some suggestions as to how to deal with such double-standard approaches.

## DOUBLE STANDARDS AT WORK

Most readers are aware of examples of double standards in their own field of expertise. We shall present five cases here: four very specific ones, and a more general one, which perhaps touches most clearly on what may be the core issue here.

### *Grave shortcomings*

In a paper aptly entitled "Grave Shortcomings", Robert Gargett has given a critical review of the evidence for intentional burial by Neanderthals. The criteria he developed to recognize purposeful interment – a new stratum, i.e., a well-defined grave fill and grave walls with visible contact between the fill and the overlying sediments – removed intentional burying entirely from the Neanderthal behavioural repertoire. But as Paola Villa remarked, if this criterion was applied as strictly to the Upper Palaeolithic evidence, 22 of 28 Upper Palaeolithic burials in France and Italy would not classify as burials, including the double burial at Grotte des Enfants and the Grotte Paglici burial of a boy covered with ochre.<sup>4</sup> That did not bother Gargett that much ("so be it"); from the beginning he argued that in contrast to the Middle Palaeolithic evidence, in the majority of Upper Palaeolithic cases the inference of deliberate mortuary interment is probably well founded. In the same vein, Antonio Gilman pointed out in his comments on the paper that it is apparent that the critical procedures

<sup>3</sup> Mussi and Roebroeks 1996.

<sup>4</sup> Gargett 1988; Villa 1989.

Gargett used to rightly cast doubt on textbook burials such as Shanidar and La Chapelle-aux-Saints would sweep away the evidence from virtually all pre-1960 excavations for periods prior to the Neolithic.<sup>5</sup>

In an examination of the attitudes to the problem of Middle Palaeolithic burials found in current research, Belfer-Cohen and Hovers (1992) compared interpretations of Natufian burials with interpretations of the controversial Levantine Mousterian interments. The description of the common Natufian burial is identical to that of many of the Mousterian inhumations, but nevertheless Natufian burials are generally seen as intentional, while Middle Palaeolithic burials are given differential treatment and are hotly debated. Within the group of Levantine Middle Palaeolithic burials, the anatomically modern Qafzeh/Skhul hominids have been credited with some symbolic behaviour, e.g. intentional burial, whereas Neanderthal skeletons in comparable settings are not seen as reflecting mortuary practices. Belfer-Cohen and Hovers conclude that there is a clear bias against Middle Palaeolithic hominids other than *Homo sapiens sapiens*. They are treated as poor relations who did not survive and “must therefore have been inferior to their *H. sapiens sapiens* contemporaries” (1992, 470).<sup>6</sup>

#### *Repetitive behaviour*

In the discussion on the behavioural differences between ‘ancients’ and ‘moderns’ a significant part of the debate has focused on differences in the way both ‘groups’ operated in their respective landscapes, among other things with respect to the distances over which raw materials were transported,<sup>7</sup> the spatial organization on the site-level,<sup>8</sup> and the geographical expansion of ‘Ancients’ and ‘Moderns’. In general, these inferred differences have been summarized and explained in terms of Binford’s distinction between a niche and a cultural geography: “We can imagine two very different types of organized land use. One articulates a cultural geography with an environmental geography; the other simply creates an archaeological landscape in direct response to the structure of the natural geography as it differentially offers ‘need servicing’ and conditions the behaviour of an animal species.”<sup>9</sup> Whereas modern human populations construct environments (residences, settlements, etc.) and operate out of ‘camps’ into an environment, pre-modern archaeological landscapes were probably generated episodically, in the same way many animals “move within their natural environments among the places where they may obtain the resources essential to their biological success. We commonly say that, although animal behaviour is not organized culturally, it is nevertheless not random in an environment. It produces a pattern of differential placement, differentiation of behaviour, and intensity of use within a habitat, resulting in a ‘niche geography’.”<sup>10</sup>

While this is certainly a valuable distinction, its application to concrete archaeological material is not unproblematic and, in some cases, very obviously steered by expectations. A good example is furnished by two recent papers, one on intrasite spatial data from Middle Palaeolithic sites and one on the archaeology of Paviland Cave, Wales, more specifically, on the ‘Red Lady’ burial there.<sup>11</sup> In his review of Middle Palaeolithic intra-site spatial data, which includes the Kebara (Israel) Middle Palaeolithic burial, Pettitt stresses that most Middle Palaeolithic occupation horizons are palimpsests and that repetition is a striking character of the pre-modern archaeological record: “...it would seem

<sup>5</sup> Gilman, in Gargett 1988.

<sup>6</sup> Belfer-Cohen and Hovers 1992, 470.

<sup>7</sup> Roebroeks *et al.* 1988; Stringer and Gamble 1993.

<sup>8</sup> Gamble 1986; Pettitt 1997; Kolen 1999.

<sup>9</sup> Binford 1987, 18.

<sup>10</sup> *Ibid.*

<sup>11</sup> Pettitt 1997, and Aldhouse-Green and Pettitt 1998, respectively.

that the repetition observable in other areas of Neanderthal behaviour, e.g. lithic technology, which has been described as archaic and repetitive ... is equally observable in their use of space. Where such repetition is observable within the discrete geological horizon, I interpret this as reflecting behaviour that was both limited in variability and *habitual in nature*... The Neanderthal organization of space, where observable, seems to have been along very simple lines, which cannot be distinguished from that of non-human carnivores."<sup>12</sup>

In 1823, Paviland Cave (Wales) yielded fossil human remains stained in red ochre, which became known as the "Red Lady of Paviland". Nowadays we know that the bones belonged to a young adult male, who has a radiocarbon age of c. 26,000 bp.<sup>13</sup> The new AMS dates for Paviland Cave also show that after the burial of the "Red Lady", brief visits to the cave occurred between 25,000-21,000 bp. Apart from the Gravettian presence, there is evidence of an Aurignacian phase of settlement c. 29,500-28,000 bp. Before these dates became available, typology was the only tool to interpret the Paviland sequence, as the 19th- and early 20th-century excavations yielded only poor documentation. Yet, despite the absence of solid stratigraphical and spatial data on the skeleton, the ceremonial burial character of the human remains are simply taken for granted. It is from that point of departure that a 'cultural geography' speculation starts which is strongly at odds with the critical treatment of the Middle Palaeolithic record by Pettitt, one of the authors of the Paviland Cave article. Now the numinosity of the site, "a sensation experienced by many at the present day who are able – at low tide – to view the cave as its prehistoric occupants did, from below on the plain" is brought into the debate.<sup>14</sup> Next, the observation that natural landmarks, including mountains or hills, were often perceived as sacred or imbued with mythic importance in the ancient and pre-industrial world takes us to the coincidence of hill and cave at Paviland and to the idea of the *mons sacra* (sic) as a ladder between Earth and Heaven in Asiatic shamanism: "The concept of the site as a sacred hill and/or cave implies that it was a well-established landmark, perhaps reflecting folk memory of an earlier phase of ancestral, probably Aurignacian settlement. It may be, indeed, that Paviland was simply a *locus consecratus* whose mythic significance did not depend upon its topographical situation or features. In either case, this model may explain the evidence for repeated visits, perhaps episodes of pilgrimage, to the site which seem to have continued until a time when the British isles were otherwise virtually depopulated."<sup>15</sup>

Who would seriously think of invoking folk memory and ceremonial pilgrimage in interpreting multi-level Middle Palaeolithic sites, even such spectacular 'landmark' sites as La Cotte de Saint Brelade (Jersey) or Kebara (Israel) with its well-documented burial? Poorly documented modern human remains can become the relics of Gravettian pilgrimages to a *mons sacer*, while repetition in a Middle Palaeolithic context is interpreted as habitual, and animal-like in nature.

#### *Palaeolithic 'dwelling structures'*

Despite the large number of fanciful reconstruction drawings of Palaeolithic huts we encounter in archaeology textbooks – e.g. the ones on the southern French beach of Terra Amata – most scholars would argue that structural features such as constructed hearths or the remains of 'dwellings' are very rare or even completely absent in the Lower and Middle Palaeolithic record. Well-known exceptions such as the mammoth bone piles uncovered at Molodova are all relatively late, dating from the last glacial, and even these later ones are in no way convincing as remains of former dwellings.<sup>16</sup> Many ar-

<sup>12</sup> Pettitt 1997, 219.

<sup>13</sup> Aldhouse-Green and Pettitt 1998.

<sup>14</sup> Ibid., 767.

<sup>15</sup> Ibid., 768.

<sup>16</sup> Cf. Stringer and Gamble 1993; Kolen 1999.

chaeologists hold that, in contrast to the Lower and Middle Palaeolithic, the situation in 'the' Upper Palaeolithic was significantly different, as exemplified by Paul Mellars' treatment of the subject: "There can be no doubt that many Upper Palaeolithic sites show far clearer and more sharply defined evidence for deliberate living structures than anything so far documented from Middle Palaeolithic sites". Furthermore, there is "evidence for some kind of clearly structured, preconceived form in the design and construction of many Upper Palaeolithic living structures", and "one of the most striking features of many documented Upper Palaeolithic settlements is the way in which the principal areas of occupation can usually be seen to be centred around one major and centrally located hearth".<sup>17</sup> Richard Klein is even more pertinent: "Well-excavated Upper Palaeolithic sites almost always contain unambiguous and often spectacular evidence of structures, in the form of artificially excavated depressions and pits, patterned arrangements of large bones or stones, postholes, or some combination of these".<sup>18</sup>

These quotes give, we believe, a fair representation of the common view of Upper Palaeolithic on-site patterns as compared to earlier ones. It is significant that various authors, including Mellars, have suggested that even the appearance of Châtelperronian structures in the Grotte du Renne at Arcy, occurring "long after the Moderns arrived in central Europe and the Iberian peninsula", was an 'archaic' behavioural novelty "influenced by the Moderns ... not developed independently by the Neanderthals".<sup>19</sup> However, in an important reappraisal of Middle Palaeolithic 'dwelling structures' and other features, Jan Kolen has recently shown that those who adhere to such an imitation-scenario tend to forget that there are no known contemporary prototypes whatsoever from which the Neanderthals could have copied. In fact, with regard to the spatio-temporal collapse image of the Upper Palaeolithic use of space formulated by Mellars, Kolen argues that the European Aurignacian is remarkably devoid of on-site structures, all the more so if we evaluate the few claims according to the same critical standards he applied to Lower and Middle Palaeolithic 'habitation structures'.<sup>20</sup> Not only are supposed dwellings from early 'modern' sites as ambiguous as the ones from the Middle Palaeolithic, even constructed hearths are quite rare until later in the Upper Palaeolithic, and in fact, while unquestionable Upper Palaeolithic dwellings and hut constructions are known from Gravettian contexts, most date from after the Last Glacial Maximum.

#### *Ancient technologies*

Another clear example of a double standard is the way lithic assemblages from the Lower and Middle Palaeolithic are often treated as opposed to those from the Upper Palaeolithic. While the uniformity of pre-modern assemblages with little variation is usually treated as a reflection of a 'tool-assisted' rather primitive behaviour,<sup>21</sup> comparable patterns in the Upper Palaeolithic can be interpreted in a diametrically opposed way. "Despite its remoteness and ecological difference with other Aurignacian sites," Chilardi *et al.* write on the Aurignacian site Fontana Nuova in Sicily, "the lithic assemblage shows no fundamental variance from sites many kilometres away. This suggests that Aurignacian assemblages reflect the ability of human groups to adapt to a variety of ecological situations, without substantially altering the technological, typological and, probably, functional characteristics of stone tools."<sup>22</sup> Where uniformity through various ecological zones is seen as a manifestation of a lack of

<sup>17</sup> Mellars 1996, 313.

<sup>18</sup> Klein 1989, 315.

<sup>19</sup> Stringer and Gamble 1993, 200-201.

<sup>20</sup> Kolen 1999.

<sup>21</sup> Cf. Binford 1989; Mithen 1996.

<sup>22</sup> Chilardi *et al.* 1996, 562.

flexibility, as an expression of 'cognitive constraints',<sup>23</sup> and an almost biological role of stone tools in the case of earlier hominids, uniformity in the Upper Palaeolithic can be interpreted unproblematically as suggestive of considerable flexibility and adaptive capacity.

#### *'Anatomically modern humans'*

The last two decades have witnessed the rise of a concept and a key character in palaeoanthropology whose impact is matched only by its vagueness: the anatomically modern human. As various scholars have argued, the phrase 'anatomically modern' has no clear or established meaning, and is basically "a scientific sounding way of evading the fact that there is no agreement on the list and distribution of the defining autapomorphies of the human species".<sup>24</sup> Anatomically modern humans, 'people like us', are supposed to possess all the characteristics essential to our species, with the capacity for a complex symbolic language being a major attribute. What makes the Gravettians different from us westerners nowadays is not a matter of innate capacities, that is, biological endowment, but simply some 25,000 years of history and cultural development. The differences between *Australopithecus*, *Homo erectus*, and the Neanderthals, however, concern manipulative abilities, structure of the brain, etc. In short, they fall in the domain of biological evolution. In Tim Ingold's view, "from the moment when 'modern human' capacities were established, technology 'took off', following a historical trajectory of its own, thenceforth effectively decoupled from the process of evolution".<sup>25</sup> But in what sense, Ingold asks, did the (presumed) failure of Neanderthals or earlier hominids to speak differ from the Upper Palaeolithic failure to read and write as we do? Why is biology invoked in the first case and unfulfilled historical conditions in the second? "If Cro-Magnon Man, had he been brought up in the 20th century, could have mastered the skills of literacy, why should not *Homo erectus*, had he been brought up in the Upper Palaeolithic, have mastered language?"<sup>26</sup>

#### WHAT'S AT STAKE?

The latter case, that of the anatomically modern humans, gives an indication of why such double standards are applied. The implicit starting assumption often seems to be that there is a kind of 'in-group' of 'anatomically modern' actors, who possess all the 'essentially human' capacities considered characteristic of 'people like us', even when the archaeological record shows no traces of these competences, i.e., when these inferred competences are not manifested. The older 'out-group' is defined in a negative way, as not yet being capable of doing what the 'in-group' is supposed to be capable of. To paraphrase in juridical terms, one could say that the 'Moderns' are capable until proven incapable, whereas the 'Ancients' can be summarized as incapable, until proven capable. These implicit but germane assumptions keep the building blocks of our interpretive frameworks and our archaeological scenarios nice and tidy, and fit very well in a discipline which has always predominantly been focused on the emergence of modern humans.

Matt Cartmill has dealt extensively with the focus on (modern) human uniqueness in the field of palaeoanthropology. His basic thesis is that palaeoanthropology (and one has to include Palaeolithic archaeology here) has suffered from its persistent anthropocentric approach and its constant efforts to police the human-animal boundary. In this context, human essentials such as upright posture, large

<sup>23</sup> Mithen 1996, 131-132.

<sup>24</sup> Cartmill, this volume.

<sup>25</sup> Ingold 1995, 243.

<sup>26</sup> Ibid., 245-246.

brains, technology, or language are defined which are thought to be characteristic of humans and which separate them from animals. The history of palaeoanthropology shows that these characteristics are redefined every time they do not manage to keep animals out, to such a degree that, for example in the case of the 'uniquely human' capacity for language, "...what we mean by 'language' is whatever substantiates the judgment that nonhuman animals are unable to talk."<sup>27</sup>

Following Cartmill's argument in Chapter 8 of the present volume, one could say that Palaeolithic archaeologists tend to approach the past in terms of a mixture of descriptive (focused on essentials, as mentioned above) and historical (genealogy, evolutionary descent) classification, where from a certain point in time onwards, all descendants (historical part) are supposed to possess all the autapomorphies (descriptive essentials) characteristic of 'people like us.' The *Grave Shortcomings*-case mentioned above again illustrates this nicely, when Gargett states that burial "clearly, is a derived characteristic and one which, on the evidence, is manifested only by Upper Palaeolithic, morphologically modern *H. sapiens*".<sup>28</sup>

To keep the in- and outgroups clear, and our theoretical building blocks nice and tidy, it is usually sufficient to reformulate the defining essentials, as shown for palaeoanthropology by Cartmill, who reports a number of historical cases of redefinition of human essentials such as brain size and organization, toolmaking and language.<sup>29</sup> In all these cases, the autapomorphies, the unique essential characteristics that distinguish a descendant taxon from its more primitive ancestor, have a history of redefinitions that serve to keep humans in and animals out (in the case of language, for instance, the goalposts were moved from semantics to syntax). But there is an alternative to redefining the essentials: If necessary, even the genealogical groups, the 'bearers' of the essentials, can simply be changed. This is illustrated by the history of the acceptance of Upper Palaeolithic art, where the set of defining essentials stays the same, while the historical 'owners' of these characteristics have changed in such a way that today's 'moderns' are in fact yesterday's 'ancients'. Nathalie Richard has given a detailed description of this important period in Palaeolithic archaeology and the shift in interpretation of Upper Palaeolithic art from the simplicity of *art ludique* to the complexity of *art magique*.<sup>30</sup>

The case is the following. In the second half of the 19th century, *art mobilier* was seen as an expression of an 'archaic', 'primitive' style of cognitive functioning (Richard 1993). Early interpreters of small figurative objects from the Upper Palaeolithic like Édouard Piette (1874, 1875) and Gabriel De Mortillet (1879, 1883) postulated that these artefacts mechanically reproduced nature as perceived with the senses – a naive realism, without composition, perspective, or indeed any traces of symbolism or abstract thought. A few typical quotes from that period illustrate the basic attitude: the Upper Palaeolithics were supposed to have an "esprit léger", an "absence de symbolisme", they lacked "réflexion et prévoyance", were only capable of imitation, and their art was one "né de l'instant, non d'une réflexion esthétique".<sup>31</sup> This kind of thinking initially stood in the way of the acceptance of the 'big art' from the caves, e.g. Altamira. In fact, Upper Palaeolithic foragers were interpreted in very much the same way as Middle Palaeolithic Neanderthal foragers are now interpreted by many, mostly Anglo-Saxon, authors. They were assumed, to put it in modern scientific idiom, not to have entered the domain of 'cognitive and behavioural modernness', and to be

<sup>27</sup> Cartmill 1990, 184.

<sup>28</sup> Gargett 1989, 188.

<sup>29</sup> Cartmill 1990.

<sup>30</sup> Richard 1993.

<sup>31</sup> Quoted by Richard, *ibid.* According to Wiktor Stocz-

kowski (pers. comm.), the terminology used in the debate on *art ludique* as quoted above (lack of foresight, reflection etc.) was used in the 18th century to differentiate westerners from 'Hottentots' and other 'non-whites'.

unable to perform the complex actions we see later on, which presuppose the ability to abstract and organize mentally.

This attitude can of course be situated within what Herbert Kühn has called the dominant framework of materialistic philosophy and the concomitant complete rejection of religiosity and metaphysics by virtually all 19th-century archaeologists.<sup>32</sup> Even the large number of skeletons found in the second half of the 19th century (Aurignac, Cro-Magnon, Solutré, Grimaldi, Predmost, Brno) only very gradually convinced the wider scientific community that there was more in the Upper Palaeolithic than Gabriel De Mortillet thought. To him, *art mobilier* was decoration, and "[les] gravures et les sculptures, dans leur ensemble aussi bien que dans leur détails, conduisent à la même conclusion, l'absence complète de religiosité. Ce ne sont que de simples motifs d'ornementation des plus élémentaires ou des reproductions plus ou moins réussis d'objets naturels".<sup>33</sup> "Il n'y a pas de trace de pratiques funéraires dans tous les temps quaternaires. L'homme quaternaire était donc complètement dépourvu du sentiment de la religiosité."<sup>34</sup> Piette's remarkable (and exceptional) suggestion that female figurines might have been a kind of amulet, was fiercely rejected by De Mortillet.<sup>35</sup>

These interpretations of the Upper Palaeolithic started to change around the turn of the century. Archaeologists showed real amazement over the burials that were discovered and were impressed by the ritual character of the Grimaldi burials. Émile Cartailhac, Gustave Chauvet, and Salomon Reinach began to stress the considerable complexity of Upper Palaeolithic graves and cave paintings, which they compared to similar practices among contemporary 'primitives'.<sup>36</sup> Verneau has given a review of the history of the interpretation of the Grimaldi burials (intentional burials or not, Palaeolithic or Neolithic, etc.).<sup>37</sup> Reading his *résumé historique* on the age of the burials makes one fully aware of the fact that the acceptance of the skeletons as Upper Palaeolithic burials had a long history, filled with quite intense debate. Although the final acceptance did not automatically imply that Upper Palaeolithic humans and the 'contemporary ancestors' were as fully modern as contemporary Europeans, they now came to be seen as being on the modern side of the boundary, while older hominids like the Neanderthals were assigned a place on the other side of the fence.

We agree with Richard that this shift was an important one, but at the same time we are convinced that this did not represent "the collapse of the insights of 19th-century prehistorians",<sup>38</sup> for the basic conceptual structure of those insights did survive the shift in interpretations. The difference was that the scheme now came to be applied to the forerunners of the Cro-Magnons, the Neanderthals. Hence, the set of defining essentials stayed the same, but was transferred to another genealogical group. The character of the boundary between 'modern' and earlier humans stayed intact, while only the group qualifying for 'modernity' had changed.

## DISCUSSION

A persistent focus on inferred essentials of 'modern humanity' seems to be the heart of the issue. However, that having been said, how should we deal with this problem? Two basic answers are possi-

<sup>32</sup> Kühn 1976.

<sup>33</sup> De Mortillet 1900, 335.

<sup>34</sup> De Mortillet 188, 476.

<sup>35</sup> Kühn 1976, 120.

<sup>36</sup> Cartailhac 1902; Chauvet 1903; Reinach 1903.

<sup>37</sup> Verneau 1906.

<sup>38</sup> Richard 1993, 60.

ble: a pragmatic one which takes double-standard operations for granted, and one which takes them to be methodologically unsound and redundant.

Pragmatically speaking, double-standard approaches have the advantage of provoking reactions against one-sided studies of the past, and in the end the most reasonable perspective will probably emerge from the struggle. Kolen's 1999 study of palaeolithic dwelling structures was in fact partly triggered by scientific unease with teleological approaches to the earlier palaeolithic record, where Palaeolithic data are interpreted in a retrospect perspective centered on the emergence of modern behaviour without trying to study the various periods on their own terms. Likewise, boundary policing tends to generate sharper definitions and concepts, for instance, in the case of 'planning', 'curation', etc. In such a pragmatic approach, double standards thus serve an important heuristic function by keeping the dynamics of the dialectic process of thesis, antithesis, and synthesis going.

However, on another level, double standards are quite revealing with respect to the character of palaeolithic archaeology, with its tendency towards dichotomies, essentials, boundaries, and discontinuities. The way out of a double-standard archaeology may be to get rid of the top-down approach with modern humans as a starting-point for analysis and to opt for a continuity approach which works from the bottom up: observing and documenting what Palaeolithic hominids actually did and how their behaviour changed over time, not just whether or not they could do what modern humans did.<sup>39</sup> A more 'historical' approach may be called for in palaeolithic archaeology, a discipline which has traditionally had only a limited interest in regional developments, and a very strong focus on universal principles of adaptation and evolutionary changes, probably as a result of the domination of functionalist approaches.

The last decade has, however, seen a shift towards the documentation of regional diversity and Pleistocene 'polyphony'.<sup>40</sup> This development may to some extent be related to developments in cultural anthropology, e.g. the 'revisionist' debate in hunter-gatherer studies. Contrary to the evolutionary-ecological school in hunter-gatherer studies, the revisionists were not so much interested in the modelling of human behaviour as in situating each foraging group in its own history, stressing the importance of varying degrees of contacts and interrelationships with neighbours during centuries or millennia.<sup>41</sup> Historic-particularistic approaches have prevailed over the image of the archetypical and timeless, unchanging and pristine 'essential' hunter-gatherer, which archaeologists liked to project into the past. Eric Wolf's criticism of anthropologists' treatment of non-Westerners as 'people without history' contributed much to the historization of this field.<sup>42</sup>

To varying degrees, archaeologists have always been aware of the problems discussed here.<sup>43</sup> Some of the recent proposals for more fine-grained divisions of the Upper Palaeolithic into two or more phases<sup>44</sup> are probably partially rooted in analogous lines of reasoning. However, such divisions, again, run the risk of caricaturization of the Pleistocene past in terms of periods with 'those who have' and

<sup>39</sup> Cf. King 1994, 138.

<sup>40</sup> Cf. Soffer and Gamble 1990.

<sup>41</sup> Stiles 1992.

<sup>42</sup> Wolf 1982; cf. Myers 1988; Lee 1992.

<sup>43</sup> For example Lewis Binford 1989, 22: "Consideration of the transition from earlier forms to fully modern man often takes the form of citing the earliest evidence for certain categorical forms of behaviour recognized

as characteristic of the latter – the earliest evidence for symbolism, for an aesthetic sense, for a 'human' form of social organization. There is, I think, a kind of chauvinism, ethnocentrism or even racism associated with this approach. It is not uncommon to hear that the properties we consider most admirable in our behaviour are those to be differentially investigated."

<sup>44</sup> E.g. Lindly and Clark 1990; Enloe 1993.

preceding periods with 'those who have not.' Whether the Last Glacial Maximum was a crucial Rubicon or, on the contrary, the Middle to Upper Palaeolithic transition, is irrelevant as long as such divisions run the risk of throwing large blankets over the past and hiding more variation than they uncover. Variation is the key word here, because, as Binford states, "... if culture is subject to evolutionary conditioning, then surely the early days of populations possessing a cultural capacity must have been importantly different from other times. For example, while the early Aurignacian remains from Germany have a very modern feel ... the contemporary and even more recent 'Aurignacian' of central France, which sometimes alternates in a 'Mousterian' fashion with the Châtelperronian (Roc de Combe) ... does not."<sup>45</sup> It is not important here whether Binford's assessment of Aurignacian and Châtelperronian chronology<sup>46</sup> is right; what counts is the underlying view of archaeology as a discipline which tries to chart and explain cultural developments in evolutionary terms rather than in typological modes.

In order to do so, we have to get rid of double-standard approaches and remain open to mosaical and non-linear developments, in short, to 'history'. And like our colleagues in history, we should use our old and worn periodizations as loose and flexible ways of organizing our primary data, not as the typological straightjackets they gradually have become.

<sup>45</sup> Binford 1989, 36-37.

<sup>46</sup> See D'Errico *et al.* 1998.