

Chapter 2

A Tale of Two Countries: Contrasting Archaeological Culture History in British and French Archaeology

Marc Vander Linden and Benjamin W. Roberts

Introduction

The definition of an archaeological culture and its subsequent application throughout Europe during the first half of the twentieth century tends to be presented as a straightforward process. Scholars in each country simply adopted ideas advocated by Gustaf Kossinna (e.g. Kossinna 1911) and V. Gordon Childe (e.g. Childe 1925) to create a mosaic of archaeological cultures which continue to structure the archaeological record. When surveying the varying directions of archaeological theory in Europe, culture-history is portrayed as a traditional and deeply flawed approach that is unusually stubborn in refusing to be consigned to oblivion, despite the presence of newer and fresher processual and post-processual theories (e.g. papers in Hodder 1991; Ucko 1995; Biehl et al. 2002). Yet, the methodology underlying archaeological cultures and their interpretation varied considerably, and each country subsequently experienced very different trajectories in the development of culture histories. At one extreme, this locally contingent development has led to the majority of archaeologists in Britain to reject culture-historical traditions while in neighbouring France archaeological cultures are still regarded as an essential tool for the spatial and temporal classification of the archaeological record. In this frequently difficult and distant relationship (Scarre 1999), the British regard much of the archaeology done in France as having been conducted within an outdated framework; yet, they predominantly derive their theoretical approaches from translations of theories by French sociologists and anthropologists. In order to explore the underlying reasons for this apparent archaeological paradox, it is necessary to compare the development of the culture-history perspective and archaeological culture structure within Britain and France, and to trace the changes and continuities in each nation.

M. Vander Linden (✉)
School of Archaeology and Ancient History,
University of Leicester, Leicester, UK
e-mail: mmagvl1@leicester.ac.uk

In reviewing the publications and personalities that shaped the direction of culture-history over the decades, there is a natural, though not exclusive, bias towards prehistory and prehistorians, and a particular emphasis on certain periods in each country – the Palaeolithic in France and the Neolithic, Bronze and Iron Ages in Britain. It would seem that the absence of the written record provided not only the necessary encouragement, but also the relative lack of interpretative restrictions to facilitate theoretical and methodological experimentation. The intellectual founders of culture-history during the second half of nineteenth century employed a social evolutionary perspective to identify stages of human development in the archaeological record. Beyond being indicative of social or technological complexity, object distributions were also occasionally thought to represent the migration of peoples, or the diffusion of new objects and practices. It was only in the early to mid-twentieth century that archaeological cultures were explicitly defined, stimulated by the need to analyse and compare ever-increasing assemblages. The identification of archaeological cultures with past peoples represented the pinnacle of culture-history, both intellectually and methodologically, especially in Britain. Yet, in France, while scholars analysed the spatial dimension of assemblages, their research remained entrenched in older and more chronologically orientated questions concerning the definition of apparent gaps or “transition horizons” in the archaeological record. The mid-late twentieth century and the early years of the twenty-first century have seen a series of substantial challenges to the established dominance of culture-history in each country that have resulted in very different outcomes. The application of radiocarbon dating shattered many of the relative chronologies that provided the temporal span of each archaeological culture. Furthermore, the assumptions underlying the development of culture histories and the identification and interpretation of archaeological cultures were challenged by new theoretical approaches in processualism and later post-processualism. In Britain, this development led to intense theoretical debates that eventually resulted in the apparent abandonment of archaeological cultures while in France the same process culminated in their restricted application as classificatory tools. However, as we shall demonstrate, not only is the demise of archaeological cultures exaggerated, but in neither country have the implications of the concept been addressed.

Culture-History Before Archaeological Cultures: Prehistory in Britain and France During the Nineteenth-Early Twentieth Centuries

The classification and interpretation of prehistoric archaeology in Britain and France during the nineteenth century largely reflected broader preoccupations with technological progress and social evolution. Despite early uses (e.g. Wilson 1851), the widespread adoption of the Scandinavian scheme, which divided prehistory into Stone, Bronze and Iron Ages, took place very gradually and amidst considerable resistance (Rowley-Conwy 2007). Explanations for the appearance of new

technologies or object types tended to be interpreted as the result of the migration of past peoples (e.g. Latham and Franks 1856). The desire to identify stages of social and cultural development became more pronounced during the second half of the nineteenth century with the rise of evolutionary approaches in both countries (e.g. Lubbock 1865; de Mortillet 1883). Debates concerning the cultural evolution of humanity led to the development of definitions of culture, most famously Edward B. Tylor's construction of it being "that complex whole which includes knowledge, belief, art, morals, law, custom, and other capabilities and habits acquired by man as a member of society" (Tylor 1871, 1). However, the concept tended to be used as a singular, in the sense of a human universal that became increasingly complex as it was transmitted through time (Trigger 2006, 232–235).

The classification of material culture into evolutionary schemes found its purest expression in the work of Gabriel de Mortillet who, from his prominent institutional position, first at the Musée des Antiquités Nationales in Saint-Germain-en-Laye and then as professor of prehistoric anthropology at the Ecole d'Anthropologie de Paris, dominated Palaeolithic research in France (Richard 2008, 165–174), and was highly influential in Britain (O'Connor 2007, 115–125). He stressed the necessity of defining archaeological periods on the basis of corresponding artefact types (*fossiles-directeurs*), which he grouped into industries (*industries*) (Coye 1997, 136–146). Under the strong influence of transformist theory, according to which the laws of evolution are universal and apply to biological beings as well as to man-made tools, de Mortillet assigned each of his industries to a given place in a strict succession that did not allow any geographical or chronological overlap. In his scheme, the Acheuléen is followed by the Moustérien, the Solutréen and the Magdalénien (all terms which are still used today in Palaeolithic archaeology), while the entire Neolithic was subsumed under the Robenhausien which is, in contrast, no longer in use (de Mortillet 1872). This primacy of chronological classification ran parallel to the development of trench excavation and the recording of vertical stratigraphy was seen as a means of confirming the validity of the evolutionary schemes (Richard 2008, 173). Despite its adoption in both Britain and France (Coye 1997, 146–149; O'Connor 2007, 115–125; Richard 2008, 176), de Mortillet's approach did receive criticism – most pertinently from the Belgian geologist and prehistorian Edouard Dupont who proposed the possibility of distinct contemporary populations living in different regions rather than in different periods (Dupont 1874).

While prehistory in France was strongly shaped by the Palaeolithic at the expense of subsequent periods which were believed to occur after a gap in the archaeological record, in Britain there was a strong emphasis on the Neolithic, Bronze and Iron Ages. The idea of invasions and migrations shaping Britain's past was deeply rooted in the mentalities of scholars whose historical education had featured the conquest of the island by Romans, Saxons, Danes and Normans (Holmes 1907). Rather than praising racial purity as otherwise occurred within the underlying evolutionary paradigm of the period, British scholars believed that multiple invasions bought a form of "hybrid vigour" to the population that ensured and justified their supremacy in the world (Rouse 1972, 71–72). This openness to the

influence of outsiders ensured that the publication of later prehistoric archaeological sites (e.g. Greenwell 1877) and corpuses (e.g. Evans 1881) led scholars to explore the relationship between the appearance of prehistoric artefacts and peoples. Migrating or invading peoples were identified on the basis of distribution maps of object types which themselves could be placed in relative chronologies. In the absence of any potential written sources, the identification of different types of Bronze Age pottery vessels in Britain as well as their potential equivalents on the continent provided the foundations for identifying a series of prehistoric invaders (Abercromby 1904, 1912). Similarly, the Late Iron Age cremation cemetery at Aylesford, Kent, was interpreted in light of the Belgic invaders into southeast Britain that had first been mentioned by Julius Caesar (Evans 1890). In France, although Alexandre Bertrand argued against the identification of megaliths and Celts, he nevertheless put forward a diffusionist scenario, megalithic builders spreading from northern Europe to southern Africa (Bertrand 1889; Coye 1997, 183–186). This movement of peoples in later prehistory was the main mechanism for social change, though crucially they were not always explicitly linked to defined archaeological assemblages (e.g. Myres 1911). In Britain, these trends led to increasing spatial analyses of archaeological data within defined periods allowing scholars to propose “cultures” (e.g. Peake 1922; Myres 1923a, b), define units, such as “cultures”, “industries” and “civilizations” (e.g. Burkitt 1921), and explore geographical methods for analysing cultural origins and boundaries (e.g. Crawford 1912, 1921). The impact in France was to reinforce the primary purpose of archaeological analysis remained the construction of more detailed artefact typologies (e.g. Déchelette 1908; see also Briard 1989 on the long-lasting influence of Déchelette on French Bronze and Iron Age research). Scholars active in Britain and France during the nineteenth to early twentieth century did not explicitly define archaeological cultures. They were nonetheless seeking to unravel a culture-history in the sense that the narratives drew on the archaeological record to follow the movements of peoples and objects.

Culture-Historical Syntheses in Britain During the Early Mid-Twentieth Century

The post-war generation of scholars in the early twentieth century did not seek to provide new definitions of culture, and neither could they claim to have invented the spatial analysis of archaeological finds or their interpretation of the patterns as past peoples. However, what they did do was develop a systematic theoretical and methodological approach towards the construction of a cultural, rather than an evolutionary, history of the past from the archaeological record. This was achieved by stressing the temporal and spatial coherence of archaeological assemblages over the analysis of individual object types. Yet, this was more than simply a re-styling of

the historical narrative. By defining an archaeological culture so clearly as “certain types of remains – pots, implements, ornaments, burial sites, house forms, constantly recurring together” and emphasising that it could be assumed that this is “the material expression of what today would be called a people” (Childe 1929, v–vi), it provided an approach that could be easily applied to the dramatically expanding archaeological record. The impetus was, therefore, to analyse and catalogue archaeological features and artefacts, and then explore their relationship with other sites and cultures. This privileging of the material provided the stimulus both to those excavating sites and regional assemblages and those constructing national and continental syntheses. For the practitioners of the new culture-history, including those that would go on to develop approaches beyond it, such as Grahame Clark, “the Science of Archaeology might well be defined as the study of the past distribution of culture traits in space and time, and of the factors governing their distribution” (Clark 1933, 232).

These archaeological cultures represented past peoples whose collective dynamics could be interpreted from the changes in their material remains. The cause of any changes in the archaeological cultures of Britain lay invariably with continental invaders or traders bringing new objects or practices across the Channel, thus continuing the notion of migration or diffusion from the east as shaping the island’s past. A flavour of this new history seen retrospectively through the eyes of the main pioneer, V. Gordon Childe saw its aims as “distilling from archaeological remains a preliterate substitute for the conventional, politico-military history, with cultures, instead of statesmen, as actors, and migrations in place of battles” (Childe 1958, 70). The immediate effect of the culture-history approach on British archaeology, and especially prehistory, was the creation of major syntheses which would only be replaced with the advent of radiocarbon dating several decades later. The veritable avalanche of fundamental publications saw the definition and division of the Upper Palaeolithic (Garrod 1926), Mesolithic (Clark 1932), Neolithic (Piggott 1931), Bronze Age (Childe 1930; Kendrick and Hawkes 1932; Piggott 1938) and Iron Age (Hawkes 1931) as well as seminal national and international syntheses (e.g. Childe 1925, 1940; Fox 1932; Childe and Burkitt 1932). In contrast, the subsequent two decades of culture-historical scholarship reflected a period of synthetic consolidation rather than intellectual innovation (e.g. Piggott 1954; Hawkes 1959). The main thread that ran throughout these publications was the identification and tracking of cultures and the postulation of immigrant communities responsible for change. Whether this was the Iron Age A, B or C peoples defined by Hawkes (1931, 1959) or the Early Bronze Age Wessex elites identified by Piggott (1938), they all came from the continent to Britain. Where the movement of peoples was not clear under the culture model, routes of cultural diffusion across Europe were cited to explain the appearance of seemingly novel objects, materials or practices, such as the building of megalithic monuments (Daniel 1958). This definition and systematic application of the culture-historical perspective represented a fundamental transformation in the understanding of the past and the approach in Britain.

Industries in France During the Early Mid-Twentieth Century

The early decades of the twentieth century in France witnessed the continuing concentration of scholarly energies and innovation in the Palaeolithic with a growing reaction against rigid approaches based solely on *fossiles-directeurs* and strictly chronologically and spatially sequential *industries* (Coye 1997, 253–254; O’Connor 2007, 203–38). Perhaps one of the most sophisticated proposals argued for the existence of a common component (*fonds commun*) shared by all lithic industries, regardless of their geography and chronology. It was therefore necessary to study the entire range of each lithic industry, and in particular the debitage, in order to ascertain the distinctive aspects in identifying a given assemblage (Vayson 1921, 1922). Such analyses, potentially carried using statistical tools (Vayson 1921, 346), would enable a classification of sites within a region which would then allow each to be placed in a relative chronology (Vayson 1922). Using numerous archaeological and ethnographic examples, it was also argued that there could not be any straightforward relationship between the morphology and function of artefacts, as well as any one-to-one assimilation of a particular type of tool with a given population or civilisation (Vayson 1922). Despite these pioneering insights, this approach did not prove to be entirely influential. Instead, it was the proposal of distinct, yet contemporary, lithic industries that won recognition throughout France and Britain (e.g. Breuil 1932). This new model of parallel Palaeolithic industrial cultures, though most clearly articulated by Breuil, also reflected broader discussions within the discipline (O’Connor 2007, 285–288). This conception of industries encouraged a vision of the Palaeolithic where each distinct industry was correlated to a distinctive population or human species (Coye 1997, 263–273) whose movements could be tracked through the landscape. This could be applied to bifacial and flake industries during the Lower Palaeolithic (e.g. Breuil 1930, 1932) or to the proposed material expressions of native Neanderthal populations, labelled the Périgordien industry, and invading tribes of Cro-Magnons, corresponding to the Aurignacian industry, in south-western French Upper Palaeolithic (Peyrony 1933).

This conception of industry had the same potential to address the geographical variability of archaeological assemblages in later periods as archaeological cultures had in Britain (Coye 1997, 254–255) yet relatively little progress was made (Schnapp 1981, 470; Demoule 1989). The new classification of the Neolithic into entities, such as Dommartinien, Gérolfinien and Vadémontien (Goury 1936; Desmaisons 1939) has not resisted the passage of time, in contrast to the still familiar classification employed for the Palaeolithic or the Mesolithic. Since the Neolithic was defined in reference to the Palaeolithic, rather than on basis of the sparse available data, most interpretative scenarios involved the mixing of residual Palaeolithic populations with various incoming groups, especially of Mediterranean origin (Coye 1997, 259). In a survey of Neolithic research (Octobon 1927), a series of damaging factors was listed, most noticeably the absence of stratigraphy, leading to the damning commentary that “one gathers the Neolithic, one excavates the Palaeolithic” (Octobon 1927, 253, personal translation). It is only with the publication

of the stratigraphy of the Italian site of Arene Candide in 1946 (Brea 1946) that a robust classification of the Neolithic in the western Mediterranean basin was recognised (Arnal and Bénazet 1951).

The over-reliance on pottery as a chronological marker in later prehistory was hampered by the reluctance of French scholars to conduct ceramic, rather than lithic, research (the over-reliance on lithics being sometimes identified as one of the key reasons underlying the delay of French Neolithic research: e.g. Riquet 1959, 365). Despite earlier work (e.g. Fourdrignier 1905; see Coye 2001), the criticisms by Joseph Déchelette on the multiplicity and heterogeneity of the ceramic typological criteria as employed by German scholars doing comparable research proved to be highly influential (Déchelette 1908). In the resulting absence of any clear classificatory scheme, most contributions were thus either short notices describing surface finds (e.g. Octobon 1928), or regional gazetteers of sites and finds (e.g. de Pardieu 1937). Whether it was the relatively late translation of culture-historical publications by V. Gordon Childe (Childe 1949), it was foreign scholars who identified and interpreted later prehistoric archaeological cultures in France (e.g. Bosch-Gimpera and de Serra-Rafols 1926; Childe and Sandars 1950). This did not go unnoticed by French researchers who felt that the situation was “a permanent embarrassment for our foreign scholars. There have been several attempts to modify this state of affairs by doing the work themselves that should be ours. It is often difficult for them, and very humiliating for us” (Hatt 1954, 101, personal translation).

Cultural Critiques, New Chronologies and Theoretical Upheavals in Britain during the mid-late Twentieth Century

The assumptions underpinning culture-history were being questioned soon after their application, even by the main advocates of the approach, such as V. Gordon Childe, who questioned whether the idea of ethnicity should or could be central to prehistoric scholarship (Childe 1930, 240–247). The identification of invading or migrating populations was also a source of dissatisfaction to a later generation of scholars, such as Hodson (1964), whose careful reading of the archaeological evidence led him to question the framework proposed by Hawkes (1931, 1959). Just a few years later, the invasionist hypothesis that had governed British prehistory was dealt a fatal blow in an incisive and broad ranging paper (Clark 1966), but by this stage there were other challenges to the carefully constructed framework of archaeological cultures.

The application of radiocarbon dating from the late 1950s introduced an independent dating scheme which entirely undermined relative typological and cultural schemes, whether through the dramatic extension back in time for the Neolithic (e.g. contrast Piggott 1954 with Clark and Godwin 1962), or the disconnection of the much-cited links between Wessex and Mycenae (Renfrew 1968). The stark demonstration of its temporal failure was matched by doubts arising regarding the assumptions of archaeological cultures as entities that could be straightforwardly

equated with people (e.g. Clarke 1968; Ucko 1969; Renfrew 1973). Whether being criticised for an absence of a scientific methodology (Renfrew 1973), a reliance on external, rather than internal, dynamics (Clarke 1968), or the ambiguous nature of cultural boundaries (e.g. Renfrew 1978; Hodder 1978a, b) to explain the archaeological record, the culture-historical approach was unable to address its deficiencies.

The proposal of a processual archaeology to replace a culture-historical archaeology should not be seen as simply an attack on archaeological cultures as it is sometimes perceived. Indeed, David Clarke, one of the leaders of the theoretical upheaval in Britain, brought the concept of archaeological cultures to a new, still unsurpassed, level of complexity (Clarke 1968). He argued that archaeological cultures arose due to the necessity of interpreting spatial patterns in the archaeological record leading Colin Renfrew to suggest that Clarke's (1968) *Analytical archaeology* was "really a treatise on patterns in archaeology" (Renfrew 1969, 242). Strongly influenced by systems theory (e.g. von Bertalanffy 1950), Clarke adopted a systemic vision of culture, conceptualised as a combination of specialised subsystems, which conveyed information flows in a structured manner. In this view, archaeology becomes the explication of the relationship between the material culture subsystem and the rest of the higher level cultural system. This theoretical goal is implemented through a thorough examination of fundamental concepts, such as type, assemblage or culture, organised into a strict, but not exclusive, hierarchical order. According to this systemic approach, an archaeological culture is no more the closed box of the culture-historians, but itself a dynamic construct, a polythetic set defined in famous terms as "a group of entities such that each entity possesses a large number of attributes of the group, each attribute is shared by large numbers of entities and no single attribute is both sufficient and necessary to the group membership" (Clarke 1968, 36). This terminological effort constituted the first stage of an ambitious reclassification of the archaeological record, a necessary prelude to new, more rigorous and complex interpretations of material patterns. Clarke's vocabulary remains the sole legacy of *Analytical Archaeology*. Indeed, partly because of the opacity of his style and his untimely death in 1976, his systemic programme was never really followed up (Shennan 1989b).

Since Clarke, British theoretical archaeology took a new direction, where material culture patterning first played a founding role before gradually being more and more neglected. In the late 1970s, Ian Hodder published a series of seminal contributions based on his ethnoarchaeological fieldwork in Zambia and, most famously, the Baringo district in Kenya (Hodder 1979a, b, 1982a). In the latter area, Hodder observed that "there is great uniformity in material culture over the extensive areas occupied by each of these acephalous tribes, and there are relatively sharp boundaries between them" (Hodder 1979b, 447). Although this research could, therefore, have provided an empirical justification for putting archaeological cultures back on the theoretical agenda, Hodder took another interpretative direction. Considering the amount of interaction between individuals and the physical distance separating them could not explain this patterning alone, Hodder stressed that material culture was not the passive recipient of human behaviour but rather one of its active components: "Material culture can be used to express and reinforce aspects of

social relationships that are related to economic and political strategies” (Hodder 1979b, 448). When elaborated as an explicit reaction to the ecological determinism which then personified processualism, this statement formed the foundations for his subsequent research as well as that of his students into what came to be known as post-processual archaeology (see contributions in Hodder 1982b). By stressing the active role of material culture, Hodder erased the link between material culture and culture that Clarke had attempted to define. Indeed, in the new framework, material culture now occupied the same ontological level as the culture of the anthropologists so that any material trait could potentially have and produce meanings which could be directly translated into human terms. Drawing extensively on the translations of post-structuralist French philosophers, sociologists and anthropologists, such as (Bourdieu 1972; translated 1977), (Foucault 1969; translated 1965) and (Merleau Ponty 1945; translated 1962), who were ignored by French archaeologists (see Cleuziou et al. 1999; Coudart 1999), this subsequent generation rejected any engagement with culture-history to explore the meanings of monuments, burials and landscapes (e.g. Parker-Pearson 1999; Tilley 1994). The intellectual drive towards an increasingly contextual archaeology has meant that the scale of analysis has been reduced to the site or locale within a broader region. Furthermore, the lack of emphasis on material culture has meant that questions relating to broader scale spatial patterning that inspired archaeological cultures could be ignored.

While archaeological cultures started their career in Britain as material expressions of past ethnic realities, they lost their *raison d'être* in the sheer complexity of unravelling issues of identity from the archaeological record (see Shennan 1989a; Jones 1997). Culture-history was rejected as an explanatory body by most archaeologists, but archaeological cultures are generally covertly retained, either with reference to continental material (e.g. Hodder 1990; Bradley 2007) or where they stretch beyond Britain (e.g. Needham 2005). Likewise, the validity of archaeological cultures would appear to underlie the broader discussion on cultural transmission from a Darwinian archaeological perspective (e.g. Shennan 2002; see Chapter 1).

Archaeological Cultures as Classificatory Tools in France During the Mid-Late Twentieth Century

The fundamental redefinition of French prehistory occurred during the decades of the mid-twentieth century and can be seen in the changing status of archaeological cultures, or rather, using the contemporary French vocabulary, *industries*, *civilisations*, or *faciès* (see Lenoir 1974; Gaucher 1989). French Palaeolithic research was dominated by two contrasting figures, André Leroi-Gourhan and François Bordes. While the influence of the first is still shaping most of the contemporary agenda and extends well beyond France, Bordes' typological approach is less influential today (Audouze 2002, 277; but see Moyer and Rolland 2002). Originally trained as a geologist, François Bordes is best known for developing a rigorous quantitative approach to Palaeolithic lithic assemblages. Bordes' methodology involved firstly

the constitution of lists of tools specific to the period being investigated (*listes types*), as exemplified by Bordes himself for the Middle Palaeolithic (Bordes 1953) and by his wife for the Upper Palaeolithic (Sonneville-Bordes and Perrot 1954, 1955, 1956a, b). The frequency of these types by site was then counted and plotted on a cumulative graph. This provided a graphical representation of the variability of the studied assemblage. It must be noted that, despite having been a pioneer of experimental flint knapping (see Johnson 1968, and subsequent comments by Bordes), technology only played a minor secondary role in his classification of lithic industries (Julien 1993, 166–168). Working on these premises, Bordes identified four markedly different industries for the Middle Palaeolithic (e.g. Bordes 1961). He considered these to be the material expressions of distinct past human communities: “We tend to interpret these differences as reflecting cultural differences of human groups in possession of different traditions” (Bordes and de Sonneville-Bordes 1970, 64). This general interpretation was challenged by Lewis and Sally Binford, who used Bordes’ own classification and new statistical approaches to suggest that assemblage variability was related to functional and adaptive factors (Binford and Binford 1966). Regardless of the actual outcome of this debate (e.g. Dibble 1991; Chapter 12), Bordes undeniably brought a new level of methodological rigour to the study of lithic industries.

As the Bordes were compiling their *listes types*, the ethnologist turned prehistorian André Leroi-Gourhan was taking French (prehistoric) archaeology into a new direction. It is impossible here to review his extensive oeuvre and impact (e.g. Stiegler 1994; Groenen 1996; Audouze 2002; Audouze and Schlanger 2004). One of the founding figures of cultural technology, Leroi-Gourhan was first and foremost interested in the interaction between man and technique (e.g. Leroi-Gourhan 1964), and introduced the concept of *chaîne opératoire* into archaeology (Audouze 2002). In order to implement his programme, he revolutionised French archaeological excavation techniques by introducing carefully conducted and recorded horizontal excavations, applied to either Palaeolithic (e.g. Pincevent: Leroi-Gourhan and Brézillon 1966) or Neolithic sites (e.g. hypogeum of the Mournouards: Leroi-Gourhan et al. 1962). It is this focus on high-quality excavations and associated techniques (e.g. intra-site variability, lithic technology and refitting etc.) that still characterises most of the French archaeological agenda, especially in Palaeolithic studies (Audouze 1999). However, it also led to less interest in the question of archaeological cultures which, despite Leroi-Gourhan’s own personal and fluid perception of ethnicity, did not have any reward in his intellectual and philosophical framework (Demoule 1999, 196–197).

The mid-twentieth century also witnessed the floruit of archaeological cultures throughout French later prehistoric research. The following discussion, however, mostly focuses on the Neolithic, for which the concept of “archaeological cultures” appears to be most crucial. After decades of demise, the successful classification of the Neolithic period began due especially to the growing recognition of the important role of ceramic analysis (e.g. Arnal and Bénazet 1951) and the dismissal of some of the categories inherited from the late nineteenth century. These include the Campignien, a proposed hiatus horizon between the Mesolithic and Neolithic that still had influential adherents (Nougier 1954a, b), but was completely

demolished by Bailloud and Mieg de Boofzheim in their seminal *Civilisations néolithiques de la France dans leur contexte européen* (Bailloud and Mieg de Boofzheim 1955). This last book is in many respects exemplary of this renewed French Neolithic research. In their introduction, Bailloud and Mieg de Boofzheim defined their methodology into three successive stages (Bailloud and Mieg de Boofzheim 1955, 3): firstly, “defining sufficiently stable and homogeneous cultural groups” on basis of the available documentation, especially, but not only through pottery (“ethnographic stage”); secondly, defining the geographical extension of these groups (“geographic stage”); thirdly, organising these groups into a coherent chronology (“historical stage”). They argued that these three steps together comprise the necessary requirements for any synthesis. The methodological influence of Childe’s archaeological cultures is obvious, and indeed acknowledged (Bailloud and Mieg de Boofzheim 1955, 213), but these similarities should not be overstated. The discussion on the explanatory role of diffusion is reduced to the mere recognition of three major diffusionist streams (Near East, Continental and Mediterranean: Bailloud and Mieg de Boofzheim 1955, 6–10). Their volume is otherwise a thorough description, admittedly organised in archaeological cultures, of extensive data that was previously scattered with little order.

This classification of the French Neolithic continued in the 1970s and the 1980s (e.g. Guilaine 1980; Blanchet 1984). It is very much perceived as unfinished due to the self-proclaimed primacy of ongoing fieldwork, leading to the constant revision of cultural frameworks (Cleuziou et al. 1973; Audouze and Leroi-Gourhan 1981, 174–178; Schnapp 1981; Demoule 1989). This situation has now intensified under the pressure of the vast amount of data produced by development-led archaeology (Demoule 2005a). It is probably in this sense that many British archaeologists would consider the bulk of contemporary French research as culture-history. Such a dismissal is slightly unfair since, in the modern French tradition, archaeological cultures are first and foremost considered as a necessary classificatory tool, without prejudging of an interpretation which can be set in ecological or social terms, but very rarely, if ever, in terms of migrations (e.g. Demoule 2005b). This apparently paradoxical situation is best exemplified by the “culture” entry of the *Dictionnaire de la Préhistoire*: “Association of a given number of elements of the material culture of a population, those which are preserved and that [prehistorians] can recognise [...]. It is necessary that the elements used allow each [archaeological culture] to be placed within relatively precise chronological limits. It is obvious that, by defining a culture on basis of partial and disparate elements, prehistorians must admit that they make whatever formed the unity and internal coherence of this potential culture disappear. Nobody knows which reality the defined entities could correspond to. Their creation is however necessary, for the description of chronological sequences and for the palethnological study. It is however important not to see this convenient classification as the direct expression of a past reality” (Leclerc and Tarrête 1994, personal translation). In this sense, archaeological cultures appear as a fundamental tool, although perhaps not the one best suited for the “palethnological” goals which characterise the practices of the archaeological discipline since Leroi-Gourhan.

There have been very few attempts within French archaeology to reconcile archaeological cultures and cultural technology. One notable exception must, however, be mentioned. In a lengthy paper published in the late 1980s, Pierre Pétrequin and his collaborators put forward a reinterpretation of the Late Neolithic (i.e. mid third millennium BC) *Saône-Rhône* “civilisation”, distributed in central eastern France and western Switzerland (Thévenot et al. 1976; Pétrequin et al. 1987/1988; see also Pétrequin 1993). The basis of their work is twofold: firstly, the existence of a series of waterlogged lake sites with perfect organic preservation which enabled the creation of a high-resolution dendrochronology (e.g. Pétrequin and Pétrequin 1988); secondly, informed by decades of ethnoarchaeological fieldwork first in western Africa and then in Papua New Guinea (e.g. Pétrequin and Pétrequin 1984, 1993), an ethnoarchaeological approach which presupposes that “each element of the material culture can possess its specific dynamics” (Pétrequin et al. 1987/1988, 4, personal translation) so that ceramics, lithics and ornaments (or any other relevant artefact) are independently studied. It is only after this initial analytical stage that Pétrequin and colleagues looked for “the essential links, parallels, complementaries or oppositions between the evolutionary dynamics of each category of artefacts, in order to try to suggest a more nuanced picture of the content of the *Saône-Rhône* civilisation (Pétrequin et al. 1987/1988, 4, personal translation)”. The influence of David Clarke’s polythetic model here is obvious (see also Shennan 1989b, 833), although in their conclusion Pétrequin and colleagues distance themselves from this particular stance on archaeological cultures. Indeed, they stress that the high level of spatial and temporal variation in the various facets of the material culture they analysed stretches the conceptual limits of both archaeological and polythetic cultures (Pétrequin et al. 1987/1988, 73–77). They consider that the region under investigation was set at a crossroad of influences so that “the civilisation [culture] has progressively become an area of technological transfer, which is a form of originality as important as the concept of the culture-block or of the polythetic culture” (Pétrequin et al. 1987/1988, 77, personal translation). In their scenario, the flux of influences is not simply a typological construct, but the result of continuing small-scale movements of populations related to ever-changing ecological and demographic pressures (Pétrequin et al. 1998, 1987/1988; see also Shennan 2000).

Conclusion

The image of the chest of drawers is sometimes invoked by its critics to describe culture-history, with its apparent seamless succession of archaeological cultures. Unsurprisingly perhaps, the same scholars have a similar vision of the history of archaeology, with culture-history giving way to processualism, which is then followed by post-processualism (e.g. Jones 2008). Obviously, the historical reality is much more complex between these various paradigms. Culture-history in Britain always possessed a strong geographical and social component, O.G.S. Crawford

being the first to coin the term “social archaeology” (Crawford 1921, 100). In contrast, French scholars were (and still are) more concerned with temporal and classificatory issues than identifying, for example, wandering tribes. These differences are partly explained by the general orientation of the archaeological research, with British archaeologists having paid more attention to later prehistory, while the Palaeolithic period was given primacy in France (see also Scarre 1999, 156). Culture-history was thus never a coherent tradition (see also Chaps 1, 3 and 4).

It is therefore necessary to disentangle the systematic association of culture-history and archaeological cultures. Archaeological cultures were a conceptual and methodological addition to the culture-history perspective with its over-reliance on diffusion and migration as explanations. Archaeological cultures and industries were initially devised to enable a more sophisticated level of analysis of the archaeological record, especially its spatial dimension. That they started as a foundation for an “event history” based on migrations is thus more informative of the intellectual context of their elaboration and early use, rather than of their intrinsic nature. This last point is demonstrated by the role played by archaeological cultures in French Neolithic research since its renewal in the mid-1950s. In this case, archaeological cultures have been stripped of their diffusionist dimension and, although remaining a challenging concept, still constitute an elementary stage of any work. It is tempting to conclude that the various problematic issues associated with archaeological cultures are related to their uncritical use or rejection by exclusive theoretical schools, ranging from diffusionism to post-processualism. Rare studies, such as Clarke’s systemics (Clarke 1968) or Pétrequin’s ethnoarchaeological approach (Pétrequin et al. 1987/1988), demonstrate the great potential in considering archaeological cultures, not as a ready-made ill-suited tool for a given theoretical goal, but as an object of empirical investigation per se.

Acknowledgements We are very grateful to Cate Frieman, Jody Joy and Chris Scarre for reading and commenting on earlier drafts of this paper.

References

- Abercromby, J. (1904). A proposed chronological arrangement of the Drinking-Cup or Beaker class of fictilia in Britain. *Proceedings Society Antiquaries of Scotland* 37: 323–410.
- Abercromby, J. (1912). *A Study of the Bronze Age Pottery of Britain and Ireland and its associated Grave Goods*, Oxford University Press, Oxford.
- Arnal, J. and Bénazet, G. (1951). Contribution à l’étude de la poterie néolithique. *Bulletin de la Société Préhistorique Française* 48: 541–564.
- Audouze, F. (1999). New advances in French prehistory. *Antiquity* 73: 167–175.
- Audouze, F. (2002). Leroi-Gourhan, a philosopher of technique and evolution. *Journal of Archaeological Research* 10: 277–306.
- Audouze, F. and Leroi-Gourhan, A. (1981). France: a continental insularity. *World Archaeology* 13: 170–189.
- Audouze, F. and Schlanger, N. (eds.) (2004). *Autour de l’homme: contexte et actualité d’André Leroi-Gourhan*, APDCA, Antibes.

- Bailloud, G. and Mieg de Boofzheim, P. (1955). *Les civilisations néolithiques de la France dans leur contexte européen*, Picard, Paris.
- Bertalanffy, L. von (1950). An outline of general systems theory. *The British Journal for the Philosophy of Science* 1: 134–165.
- Bertrand, A. (1889). *Archéologie Celtique et Gauloise: mémoires et documents relatifs aux première tempes de notre histoire nationale*, Ernest Leroux, Paris.
- Biehl, P.F., Gramsch, A. and Marciniak, A. (eds.) (2002). *Archaeologies of Europe: History, Methods and Theories*, Waxmann Verlag, New York.
- Binford, L.R. and Binford, S.R. (1966). A preliminary analysis of functional variability in the Mousterian Levallois facies. *American Anthropologist* 68: 238–295.
- Blanchet, J.-C. (1984). *Les premiers métallurgistes en Picardie et dans le nord de la France. Chalcolithique, âge du Bronze et début du premier âge du fer*, Société Préhistorique de France, Paris.
- Bordes, F. (1953). Essai de classification des industries “moustériennes”. *Bulletin de la Société Préhistorique Française* 50: 457–466.
- Bordes, F. (1961). Mousterian cultures in France. *Science* 134: 803–810.
- Bordes, F. and de Sonneville-Bordes, D. (1970). The significance of variability in Palaeolithic assemblages. *World Archaeology* 2: 61–73.
- Bosch-Gimpera, P. and Serra-Rafols, J. de C. (1926). Etudes sur le Néolithique et l’Enéolithique de France. *Revue anthropologique* 17: 318–345.
- Bourdieu, P. (1972). *Esquisse d’une théorie de la pratique, précédé de trois études d’ethnologie kabyle*, Éditions Droz, Paris.
- Bradley, R. (2007). *The Prehistory of Britain and Ireland*, Cambridge University Press, Cambridge.
- Brea, L.B. (1946). *Gli scavi nella caverna delle Arene Candide. Parte I. Gli strati con ceramiche*, Bordighera, Istituto di Studi Liguri.
- Breuil, H. (1930). Le Clactonien et sa place dans la chronologie. *Bulletin de la Société Préhistorique Française* 27: 221–227.
- Breuil, H. (1932). Le Paléolithique ancien en Europe occidentale et sa chronologie. *Bulletin de la Société Préhistorique Française* 29: 570–578.
- Briard, J. (1989). Des “trois âges” de C.J. Thomsen à la chronologie de J. Déchelette. In Mohen, J.-P. (dir.), *Le temps de la préhistoire*, Société Préhistorique Française, Paris, pp. 24–25.
- Burkitt, M.C. (1921). *Prehistory: A study of early cultures in Europe and the Mediterranean Basin*, Cambridge University Press, Cambridge.
- Childe, V.G. (1925). *The Dawn of European Civilization*, Kegan Paul, London.
- Childe, V.G. (1929). *The Danube in Prehistory*, Oxford University Press, Oxford.
- Childe, V.G. (1930). *The Bronze Age*, Cambridge University Press, Cambridge.
- Childe, V.G. (1940). *The Prehistoric Communities of Britain*, W and R Chambers, London.
- Childe, V.G. (1949). *L’aube de la civilisation européenne. Traduction de la quatrième édition anglaise entièrement refondue par l’auteur avec cent-cinquante-neuf figures et cartes*, Payot, Paris.
- Childe, V.G. (1958). Retrospect. *Antiquity* 32: 69–74.
- Childe, V.G. and Burkitt, M.C. (1932) A Chronological Table of Prehistory. *Antiquity* 6: 185–205.
- Childe, V.G. and Sandars, N. (1950). La civilisation de Seine-Oise-Marne. *L’anthropologie* 54: 1–18.
- Clark, J.G.D. (1932). *The Mesolithic Age in Britain*, Cambridge University Press, Cambridge.
- Clark, J.G.D. (1933). Reviews. *Antiquity* 7: 506–8.
- Clark, J. G.D. (1966). The invasion hypothesis in British prehistory. *Antiquity* 33, 170–82.
- Clark, J.G.D. and Godwin, H. (1962). The Neolithic in the Cambridgeshire Fens. *Antiquity* 36: 10–23.
- Clarke, D.L. (1968). *Analytical Archaeology*. Methuen, London.
- Cleuziou, S., Demoule, J.-P., Schnapp, A. and Schnapp, A. (1973). Renouveau des méthodes et théorie de l’archéologie (note critique). *Annales. Economies, Sociétés, Civilisations* 28: 35–51.
- Cleuziou, S., Coudart, A. and Demoule, J.-P. (1991). The use of theory in French archaeology. In Hodder, I. (ed.), *Archaeological theory in Europe: the last three decades*, Routledge, London, pp. 91–128.
- Coudart, A. (1999). Is post-processualism bound to happen everywhere? The French case. *Antiquity* 73: 161–7.

- Coye, N. (1997). *La préhistoire en parole et en actes. Méthodes et enjeux de la pratique archéologique (1830-1950)*, L'Harmattan, Paris.
- Coye, N. (2001). Humanité et pots cassés. La tentative céramologique des préhistoriens français (1900–1918). In Blanchet, C. (dir.), *Les politiques de l'anthropologie. Discours et pratique en France (1860–1940)*, L'Harmattan, Paris, pp. 231–267.
- Crawford, O.G.S. (1912). The distribution of Early Bronze Age settlement groups in Britain. *Geographical Journal* 40: 184–283.
- Crawford, O.G.S. (1921). *Man and his Past*, Oxford University Press, Oxford.
- Daniel, G. (1958). *The Megalith Builders of Western Europe*, Hutchinson, London.
- Déchelette, J. (1908). *Manuel d'archéologie préhistorique, celtique et gallo-romaine*, Picard, Paris.
- Demoule, J.-P. (1989). Les âges du Néolithique français. In Mohen, J.-P. (dir.), *Le temps de la préhistoire*, Société Préhistorique Française, Paris, pp. 36–40.
- Demoule, J.-P. (1999). Ethnicity, culture and identity: French archaeologists and historians. *Antiquity* 73: 190–198.
- Demoule, J.-P. (ed.) (2005a). *La révolution néolithique en France*, La Découverte, Paris.
- Demoule, J.-P. (2005b). Théorie et interprétations en archéologie. In Demoule, J.-P., Giligny, F., Lerhoëff, A., and Schnapp, A., *Guide des méthodes de l'archéologie*, La Découverte, Paris, pp. 187–233.
- Desmays, H. (1939). Essai de nomenclature des noms attribués aux divers horizons préhistoriques. *Bulletin de la Société Préhistorique Française* 36: 416–420.
- Dibble, H.L. (1991). Mousterian assemblage variability on an interregional scale. *Journal of Anthropological Research* 47: 239–257.
- Dupont, E. (1874). Théorie des âges de la pierre en Belgique. *Bulletins de la Société d'anthropologie de Paris* IX: 728–761.
- Evans J. (1881). *The Ancient Bronze Implements, Weapons and Ornaments of Great Britain and Ireland*, Longmans, London.
- Evans, A.J. (1890). On a late Celtic urn-field at Aylesford, Kent. *Archaeologica* 52: 315–88.
- Foucault, M. (1969). *L'archéologie du savoir*. Gallimard, Paris.
- Fourdrignier, E. (1905). Céramographie préhistorique. *Bulletin de la Société Préhistorique Française* 2: 57–63.
- Fox, C. (1932). *The Personality of Britain*, National Museum of Wales, Cardiff.
- Garrod, D.A.E. (1926). *The Upper Palaeolithic Age in Britain*, Clarendon Press, Oxford.
- Gaucher, G. (1989). Cultures et chronologie. In Mohen, J.-P. (dir.), *Le temps de la préhistoire*, Société Préhistorique Française, Paris, pp. 68–70.
- Greenwell, W. (1877). *British barrows: a record of the examination of sepulchral mounds in various parts of England*, Clarendon Press, Oxford.
- Goury, G. (1936). Génèse d'une classification du Néolithique. *Bulletin de la Société Préhistorique Française* 33: 203–216.
- Groenen, M. (1996). *Leroi-Gourhan. Essai et contingence dans la destinée humaine*, De Boeck, Bruxelles.
- Guilaine, J. (ed.). (1980). *Le groupe de Vézère et la fin des temps néolithiques dans le sud de la France et la Catalogne*, CNRS, Paris.
- Hatt, J.-J. (1954). De l'Age du Bronze à la fin du 1er Age du Fer. Problèmes et perspectives de la protohistoire française. *Bulletin de la Société Préhistorique Française* 51: 101–110.
- Hawkes, C.F.C. (1931). Hillforts. *Antiquity* 5: 60–97.
- Hawkes, C.F.C. (1959). The ABC of the British Iron Age. *Antiquity* 33: 172–182.
- Hodder, I. (1978a). Spatial correlations between material culture and society: a review. In I. Hodder (ed.) *The Spatial Organisation of Culture*, Duckworth, London, pp. 3–24.
- Hodder, I. (1978b). The spatial structure of material 'cultures': a review of some of the evidence. In I. Hodder (ed.) *The Spatial Organisation of Culture*, Duckworth, London, pp. 93–111.
- Hodder, I. (1979a). Pottery distributions: Service and tribal areas. In Millett, M. (ed.), *Pottery and the Archaeologist*, Institute of Archaeology, Occasional Publication No. 4, London, pp. 7–24.
- Hodder, I. (1979b). Economic and social stress and material culture patterning. *American Antiquity* 44: 446–454.

- Hodder, I. (1982a). *Symbols in action*. Ethnoarchaeological studies of material culture, Cambridge University Press, Cambridge.
- Hodder, I. (1982b). *Symbolic and structural archaeology*, Cambridge University Press, Cambridge.
- Hodder, I. (1990). *The Domestication of Europe*, Blackwell, Oxford.
- Hodder, I. (ed.) (1991). *Archaeological theory in Europe: the last three decades*, Routledge, London.
- Hodson, F.R. (1964). Cultural grouping within the British pre-Roman Iron Age. *Proceedings of the Prehistoric Society* 30: 99–110.
- Holmes, T.R. (1907). *Ancient Britain and the invasions of Julius Caesar*, Oxford University Press, Oxford.
- Johnson, L.L. (1968). A history of flint-knapping experimentation, 1838-1976 (with comments and reply). *Current Anthropology* 19: 337–372.
- Jones, S. (1997). *The Archaeology of Ethnicity: Constructing Identities in the Past and Present*, Routledge, London.
- Jones, A. (2008). Introduction. In Jones, A. (ed.), *Prehistoric Europe: theory and practice*, Blackwell, Oxford, pp. 1–14.
- Julien, M. (1993). La technologie et la typologie. Du fossile-directeur à la chaîne opératoire. Evolution de l'interprétation des ensembles lithiques et osseux en France. In Garanger, J. (ed.), *La Préhistoire dans le monde*, Presses Universitaires de France, Paris, pp. 163–193.
- Kendrick, T.D. and Hawkes, C.F.C. (1932). *Archaeology in England*, Methuen, London.
- Kossinna, G. (1911). *Der Herkunft der Germanen*, Kabitzsch, Leipzig.
- Latham, R.G. and Franks, A.W. (eds.) (1856). *Horae Ferales; or Studies in the Archaeology of the Northern Nations, by the late John M. Kemble*, Lovell, Reeve, London.
- Leclerc, J. and Tarrête, J. (1994). Culture. In Leroi-Gourhan, A. (ed.), *Dictionnaire de la Préhistoire*, Presses Universitaires de France, Paris, pp. 295.
- Lenoir, M. (1974). Faciès et culture. *Bulletin de la Société Préhistorique Française* 71: 58–64.
- Leroi-Gourhan, A. (1964). *Le geste et la parole I—Technique et langage*, Albin Michel, Paris.
- Leroi-Gourhan, A., and Brézillon, M. (1966). L'habitation magdalénienne n° 1 de Pincevent, près Montereau (Seine-et-Marne). *Gallia-Préhistoire* 9: 263–385.
- Leroi-Gourhan, A., Brézillon, M. and Bailloud, G. (1962). L'hypogée II des Mournouards (Mesnil-sur-Oger, Marne). *Gallia Préhistoire* 5: 23–133.
- Lubbock, J. (1865). *Pre-historic Times*, Williams and Norgate, London.
- Merleau Ponty, M. (1945). *Phénoménologie de la perception*, Gallimard, Paris.
- Mortillet, G. de (1872). Classification des diverses périodes de l'âge de la pierre. *Revue d'anthropologie* 1: 432–435.
- Mortillet, G. de (1883). *Le Préhistorique. Antiquité de l'homme*, Reinwald, Paris.
- Moyer, C.C. and Rolland, N. (2002). Understanding the Middle Palaeolithic assemblage typology. *Antiquity* 75: 39–43.
- Myres, J.L. (1911). *The Dawn of History*, Williams and Norgate, London.
- Myres, J.L. (1923a). Primitive Man, in geological time. In Bury, J.B., Cook S.A., Adcock, F.E. (eds.) *Cambridge Ancient History, Volume 1*, Cambridge University Press, Cambridge, pp. 1–56.
- Myres, J.L. (1923b). Neolithic and Bronze Age cultures. In Bury, J.B., Cook S.A., Adcock, F.E. (eds.) *Cambridge Ancient History, Volume 1*, Cambridge University Press, Cambridge, pp. 57–111.
- Needham, S.P. (2005). Transforming Beaker Culture in North-West Europe. *Proceedings of the Prehistoric Society* 71: 171–217.
- Nougier, L.R. (1954a). Le Campignien. *Bulletin de la Société Préhistorique Française* 51: 76–78.
- Nougier, L.R. (1954b). Le Néolithique de tradition campignienne. *Bulletin de la Société Préhistorique Française* 51: 89–95.
- Octobon, E. (1927). Etat des connaissances actuelles sur le Néolithique en France. *Bulletin de la Société Préhistorique Française* 24: 252–277.
- Octobon, E. (1928). Contribution à l'étude du Néolithique. *Bulletin de la Société Préhistorique Française* 25: 150–151.
- O'Connor, A. (2007). *Finding Time for the Old Stone Age: A History of Palaeolithic Archaeology and Quaternary Geology in Britain, 1860–1960*, Oxford University Press, Oxford.

- Pardieu, M. de (1937). Le Néolithique en Bourbonnais. *Bulletin de la Société Préhistorique Française* 34: 303–316.
- Parker-Pearson, M. (1999). *The Archaeology of Death and Burial*, Stroud, Sutton.
- Peake, H.J.E. (1922). *The Bronze Age and the Celtic World*, Benn, London.
- Pétrequin, A.-M. and Pétrequin, P. (1988). *Le Néolithique des lacs. Préhistoire des lacs de Chalain et de Clairvaux*, Errance, Paris.
- Pétrequin, P. and Pétrequin, A.-M. (1984). *Habitat lacustre du Bénin: une approche ethno-archéologique*, Editions Recherche sur les civilisations, Paris.
- Pétrequin, P. and Pétrequin, A.-M. (1993). *Ecologie d'un outil: la hache de pierre en Irian Jaya (Indonésie)*, CNRS, Paris.
- Pétrequin, P. (1993). North wind, South wind. Neolithic technical choices in the Jura Mountains, 3700–2400 BC. In Lemonnier, P. (ed.), *Technological choices. Transformations in material cultures since the Neolithic*, Routledge, London, pp. 36–76.
- Pétrequin, P., Arbogast, R.-M., Bourquin-Mignot, C., Lavier, C. and Viellet, A. (1998). Demographic growth, environmental changes and technical adaptations: responses of an agricultural community from the 32nd to the 30th centuries BC. *World Archaeology* 30: 181–192.
- Pétrequin, P., Chastel, J., Giligny, F., Pétrequin, A.-M. and Saintot, S. (1987/1988). Réinterprétation de la civilisation Saône-Rhône. Une approche des tendances culturelles du Néolithique final. *Gallia Préhistoire, Fouilles et Monuments archéologiques en France métropolitaine* 30: 1–89.
- Peyrony, D. (1933). Les industries “aurignaciennes” dans le bassin de la Vézère. *Bulletin de la Société Préhistorique Française* 30: 543–559.
- Piggott, S. (1931). The Neolithic Pottery of the British Isles. *Archaeological Journal* 88: 67–158.
- Piggott, S. (1938). The Early Bronze Age in Wessex. *Proceedings of the Prehistoric Society* 4: 52–106.
- Piggott, S. (1954). *Neolithic Cultures of the British Isles*. Cambridge University Press, Cambridge.
- Renfrew, C. (1968). The autonomy of the south-east European Copper Age. *Proceedings of the Prehistoric Society* 35, 12–47.
- Renfrew, C. (1969). Review of David Clarke, Analytical archaeology, and Sally Binford and Lewis Binford, eds, New perspectives in archaeology. *Antiquity* 43: 241–244.
- Renfrew, C. (1973). *Before Civilization: the radiocarbon revolution and Prehistoric Europe*. London: Jonathan Cape.
- Renfrew, C. (1978). Space, Time and Polity. In J. Friedman and M.J. Rowlands (eds.) *The Evolution of Social Systems*, 89–112. London: Duckworth.
- Richard, N. (2008). *Inventer la préhistoire. Les débuts de l'archéologie préhistorique en France*, Vuibert, Paris.
- Riquet, R. (1959). Chassey où es-tu? *Bulletin de la Société Préhistorique Française* 56: 364–374.
- Rowley-Conwy, P. (2007). *From Genesis to Prehistory. The archaeological Three Age System and its contested reception in Denmark, Britain and Ireland*. Oxford University Press, Oxford.
- Rouse, I. (1972). *Introduction to Prehistory*, McGraw-Hill, New York.
- Scarre, C. (1999). Archaeological theory in France and Britain. *Antiquity* 73: 155–161.
- Schnapp, A. (1981). Les Annales et l'archéologie: une rencontre difficile. *Mélanges de l'Ecole Française de Rome Antiquité* 93: 469–478.
- Shennan, S. (1989a). Introduction. In S. Shennan (ed.), *Archaeological Approaches to Cultural Identity*, Unwin-Hyman, London, pp. 1–32.
- Shennan, S. (1989b). Archaeology as archaeology or as anthropology? Clarke's *Analytical archaeology* and the Binford's *New perspectives in archaeology* 21 years on. *Antiquity* 63: 831–835.
- Shennan, S. (2000). Population, culture history, and the dynamics of change. *Current Anthropology* 41: 811–835.
- Shennan, S. (2002). *Genes, Memes and Human History: Darwinian Archaeology and Cultural Evolution*, Thames and Hudson, London.
- Sonneville-Bordes, D. and Perrot, J. (1954). Lexique typologique du Paléolithique supérieur. Outillage lithique: I grattoirs – II outils solutréens. *Bulletin de la Société Préhistorique Française* 51: 327–335.

- Sonneville-Bordes, D. and Perrot, J. (1955). Lexique typologique du Paléolithique supérieur. Outillage lithique - III outils composites - perçoirs. *Bulletin de la Société Préhistorique Française* 52: 76–79.
- Sonneville-Bordes, D. and Perrot, J. (1956a). Lexique typologique du Paléolithique supérieur. Outillage lithique – IV burins. *Bulletin de la Société Préhistorique Française* 53: 408–412.
- Sonneville-Bordes, D. and Perrot, J. (1956b). Lexique typologique du Paléolithique supérieur. Outillage lithique (suite et fin) – V outillage à bord abattu – VI pièces tronquées - VII lames retouchées – VIII pièces variées – IX outillage lamellaire – pointe azilienne. *Bulletin de la Société Préhistorique Française* 53: 547–559.
- Stiegler, B. (1994). *La technique et le temps. 1. La faute d'Epiméthée*, Galilée/Cité des Sciences et de l'Industrie, Paris.
- Thévenot, J.-P., Strahm, C., Beeching, A., Bill, J., Bocquet, A., Gallay, A., Pétrequin, P. and Schifferdecker, F. (1976). La civilisation Saône-Rhône. *Revue Archéologique de l'Est et du Centre-Est* 27: 331–420.
- Tilley, C. (1994). *A Phenomenology of Landscape Places, Paths and Monuments*, Berg, London.
- Trigger, B.G. (2006). *A History of Archaeological Thought*, Second edition, Cambridge University Press, Cambridge.
- Tylor, E.B. (1871). *Primitive Culture*, John Murray, London.
- Ucko, P. (1969). Ethnography and archaeological interpretation of funerary remains. *World Archaeology* 1: 262–280.
- Ucko, P. (ed.) (1995). *Theory in Archaeology: a world perspective*, Routledge, London.
- Vayson, A. (1921). Le fonds commun aux industries de la pierre. *L'anthropologie* 31: 345–347.
- Vayson, A. (1922). L'étude des outillages en pierre. *L'anthropologie* 32: 1–38.
- Wilson, D. (1851). *Archaeology and Prehistoric Annals of Scotland*, Sutherland and Knox, Edinburgh.