dressed remain parallel and often equal in separated regions, so non-regionally specific contributions rise. What kind of changed great world ANTIQUITY will inhabit by 2028 inside its own little universe of research archaeology, I cannot even begin to guess. One of the many political schemes compatible with those numbers would be a strong United European State, concerned rather with its own affairs and keen to know how and where and why in ancient times within itself its singular and manifest European destiny chanced to arise; that certain slant on what archaeology can contribute to the contemporary world has already been evident in some of the European Commission's cultural initiatives in recent years.

Acknowledgements. I thank Roger Mercer, Preston Miracle, Stuart Piggott, Sarah Tarlow and Timothy Taylor.

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ANTIQUITY and early humanity

P.B. PETTITT*

Introduction

In this paper, I use the first 36 volumes of ANTIQUITY — from 1927 to 1962 — to explore the unfolding of palaeoanthropological studies and knowledge of the process of human evolution. I chose to stop at 1962 as I contend that it is by this time that the general intellectual framework within which we still understand human evolution was in place. Some of the defining characteristics of this framework of relevance here I take to be

a the recognition of a deep time over which human evolution has occurred,
b the arrival of absolute dating methods facilitating for the first time a quantification of this period, and
c the recognition of Africa as the probable cradle of humanity.

In this year, the same that saw the publication of Lewis Binford's 'Archaeology as Anthropology' in ANTIQUITY's American counterpart — and which may therefore also be taken as the instigation of 'processual' techniques — ANTIQUITY (volume 36) carried two major papers on the implications of the Olduvai Gorge discoveries which were representative of the new *zeitgeist*. These, and a number of publications carried by the journal in the decades before, are major contributions to the study of early humans.

This takes me to within only four years of Daniel's editorship. Certain gross observations contrast the pre-1960s Crawford 'epoch' with Daniel's and the others succeeding his. The relative paucity of articles on earlier prehistory is the most obvious of such contrasts. Crawford's rare references to papers on human evolution in his editorials markedly contrast with Daniel's, who quite often begins his editorial with them. Papers tend to be of a general, synthetic nature, and material-based studies are few and far between.[1] Given the importance of lithics to earlier human prehistory these make surprisingly few appearances. The reason for this is, perhaps, clear: Crawford notes early on (volume 4: 140) that 'we have no intention of wearying our readers, in the continental style, with "flints"'!

There is, of course, no absolute Rubicon crossed as Daniel took up the editorial, and the changing intellectual world of palaeoanthropology from the early 1960s is reflected in the journal just as much as the change to Daniel's clearly stronger editorial interest in earlier prehistory. Here, of course, I do not attempt an exhaustive representation of the de-

1 Notable exceptions are Garrod's classic 1934 paper on *The Stone Age of Palestine* (volume 8: 133–50), and Ewing's paper on the excavations at Ksar Akil, Lebanon in 1947 (volume 21).

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ANTIQUITY 76 (2002) 1080–85

https://doi.org/10.1017/S0003598X00091948 Published online by Cambridge University Press

velopment of palaeoanthropology in the first half of the 20th century. I have deliberately restricted my reading to the journal itself, and if I mark out specific papers as being landmarks I do not seek to denigrate the importance of others I have not discussed or that appeared elsewhere. I have chosen to structure my discussion, perhaps unsurprisingly, around three central issues in the field; the geographical pattern of human evolution, the establishment of chronometric dating methods and the quantification of human evolutionary time, and the development of evolutionary phylogenies for the australopithecines and *Homo*. Within these fields important issues were debated, new discoveries, developments and innovations were reported quickly,[2] and major statements were made of human evolution.

Rhodesia, England, Java: the geographical context of human evolution

By 1927 discoveries over the previous three decades allowed Hooton to note in volume 1 that fossil humans were 'distributed from Rhodesia in the south, England in the north and Java in the east' (volume 1: 147), and the stage was clearly set for a discussion as to the geographical origin of humans. England's own claim for an important role in human evolution was in doubt in 1931 when Elliot Smith expressed severe doubts as to the authenticity of the Piltdown skull (volume 5)[3] and would have to wait for the Swanscombe discoveries of 1935 and 1936 (reported in volume 11, 1937: 483) to reprise its role. Despite Dubois' discoveries in the 1890s turning attention to the east, and the recognition of human artefacts in association with extinct Pleistocene mammals in Mexico as reported in volume 11, Eurocentrism is apparent from the inception of the journal and pervades for at least two decades, falling only in the 1950s. Long before 1927 it was well known that Miocene apes were numerous in Europe and the Old World in general, which to Hooton suggested the very real possibility of a European cradle for human evolution. His overview of the state of knowledge on *where did man originate* in the first volume is highly Eurocentric. Despite the overwhelming lack of palaeoanthropological fieldwork outside of Europe and the complete lack of an australopithecine or pithecanthropine grade fossil record within it, he suggested that because 'the archaeological evidence of man's antiquity in Europe is more extensive and complete than for any other continent . . . we cannot pass over casually the claims of this continent for consideration as the original home of man' (volume 1: 140). In the same volume, on an artefactual basis, Crawford noted that 'the archaeological evidence of man's antiquity in Europe is more extensive and complete than for any other continent'.

If humans were believed to originate in Europe, a second form of Eurocentrism can be seen in the interpretation of artefacts found outside of Europe as evidence of *ex Europa lux*. Reference to the typological similarities of artefacts found outside Europe to European forms is common prior to the 1950s. European 'influence' is implicit in Hooton's statement that north African lithic assemblages may be equated with the European Chellean and Acheulian, and it is tempting to see in the same light Le Gros Clark's statement that Rhodesian Man can be viewed as a regional variant of the Neanderthals (volume 14). A Notes and News report (volume 13, 1939) on the discoveries in the Upper Cave at Choukoutien (now Zhoukoudien) emphasizes the similarities in tool types to those of Upper Palaeolithic Europe. Although the Pleistocene antiquity of humans in the Americas was long acknowledged, e.g. through the association in Mexico of Tepexpan Man with Pleistocene mammals, apparently radiocarbon dated to 11–12,000 BP[4] as reported in volume 25, authors were keen to emphasize European origins. Clark's weighty paper on *New World Origins* in volume 14 discussed the Bering land bridge and suggested that the colonists were 'of Mesolithic [i.e. European] status' (1940: 135). European origins were not confined to the Americas either: Burkitt, writing in volume 1 on South African rock art, wonders whether this was evidence of a 'Grimaldi race . . . wan-

2 Crawford's report on the discovery of Lascaux in the editorial for 1942 was delayed '. . . owing to the fog of war.'

3 Certainly by 1961, the half-centenary of Dawson's 'discovery' of the Piltdown skull, its identification as a forgery was established and Daniel included it firmly alongside Glozel and other examples of forgeries (1961: 86).

4 In view of the infancy of the radiocarbon technique at the time, the questionable association of dated bulked samples with the human remains, and the impossibility of dating the remains directly at Oxford due to contamination and lack of surviving collagen these remains should be considered undated.

https://doi.org/10.1017/S0003598X00091948 Published online by Cambridge University Press

dering over all Africa?' In addition, Arkell, writing in 1951, believed he had found evidence of wandersome European Magdalenians in the rock art and organic weaponry of Africa (volume 25: 19–21). These Eurocentric papers contrast markedly with those of 1957 onwards, from which time the importance of Olduvai and Africa in human origins is increasingly apparent in the journal (see below).

Dating methods and the chronology of human evolution

Across the 35 years covered by my sample there is in terms of prehistoric chronology a shift from a position of acknowledged ignorance to one of scientific optimism. In the first editorial to volume 1 (p. 130), Crawford noted that 'chronology is a matter of fundamental importance. Until a reliable chronology has been established, orderly knowledge of the past cannot be said to exist'. Even as late as 1957 Childe (volume 31) noted how archaeology had not been as successful as geology in establishing chronological sequences. This is something that palaeoanthropologists may well note: a glance through even the most recent volumes of ANTIQUITY demonstrates that chronological accuracy and precision is still a highly problematic issue.

In 1927 the chronological time over which human evolution was thought to have occurred was some one-sixth of what it is now; defining the scope of the journal in the first editorial Crawford notes that the chronological remit will 'range in time a million years or so'. The archaeological record was even shorter: Childe (volume 7: 413) notes that 'for perhaps half a million years man has been leaving on the surface of the globe the products of his hands'. Volume 6 carried a chronological table of prehistory by Burkitt and Childe, commissioned by Crawford. In this the successive typological scheme of de Mortillet and others is clear, with the sequence of Pre-Chellean, Chellean, Acheulean, Mousterian, Aurignacian, Solutrean and Magdalenian equated with the Alpine glacial/interglacial scheme, squeezed into this restricted Pleistocene time. In 1938 Breuil (volume 12) suggested that this may have been preceded by an age of bone tools such as those emerging from Choukoutien and presumably reflected by Dart's South African 'osteodontokeratic' culture. Refinements to the relative scheme came from the 1930s. In 1934, volume 8 carried a note by L. Leakey that the Olduvai sites carried for the first time a chronological sequence of Lower Palaeolithic archaeology, and discoveries at Kanam and Kanjera allowed scholars for the first time to 'know something about the makers of the great "handaxe" culture' (1934: 97).

In Crawford's time ANTIQUITY reported the discovery of three chronometric dating techniques, dendrochronology (volume 11), radiocarbon and potassium-argon, the latter two crucial, still, to palaeoanthropology. The discovery of radiocarbon dating was reported in the editorial for September 1949. Crawford saw this as of 'the greatest use to archaeologists' (volume 23: 113), of greater importance than the discovery of the Dead Sea Scrolls (volume 24: 2) and 'the most significant change [since Darwin's *Origin of Species*] in our knowledge of antiquity' (volume 33: 79). By 1950 the technique was proving itself as demonstrated by dates on wood from Star Carr which agreed well with dates that were 'already in vogue for the Boreal period' (Crawford, volume 24: 113). Not everyone was convinced, however, and despite Crawford's contention in 1937 that 'the average Englishman is quite incapable of understanding the outlook of the average scientific research worker' (volume 11: 257) and that the technique's details were 'highly technical and beyond the comprehension of those who are not specialists' (volume 23: 113), the journal nevertheless carried an important debate on the scientific reliability of radiocarbon. In 1958 (volume 32) Harold Barker of the British Museum's Radiocarbon dating laboratory[5] addressed a number of critical issues that had arisen in the techniques ten year history. In 1960 Waterbolk firmly put many of these to rest (volume 34). The advent of Potassium-Argon dating was announced in volume 34, 1960, alongside Daniel's grumblings about the bureaucracy of Radiocarbon. The value of this to Pleistocene chronology was clear to McBurney (volume 35) who, paraphrasing Breuil, noted on the discovery that 'today has certainly aged mankind.'

Human evolution: processes, phylogenies

Hooton (volume 1: 146*ff*) raised an agenda that foreshadowed the 'single origin' versus 'multi-

5 The sad demise of which was recently marked by S. Bowman in ANTIQUITY 76: 56–61.

https://doi.org/10.1017/S0003598X00091948 Published online by Cambridge University Press

regional' approach to modern human origins, apparently advocating the latter: 'why not admit that nature tried a number of experiments . . . in a humanoid direction . . . simultaneously in several parts of the world upon similar generalised anthropoid stocks' (volume 1: 148). Despite this, there is a surprisingly clear gradualistic and anagenetic theme underlying almost all evolutionary papers carried by the journal in this period, and all seek a single geographical cradle for humans.

Since the 1890s one such potential cradle was the east, and by 1945 the remains of at least 17 individuals of *Pithecanthropus* were known from southeast Asia,[6] allowing Le Gros Clark to conclude that this phase of human evolution in the far east was 'becoming rapidly removed from the field of speculation' and forward a 'lumping' perspective that Davidson-Black's *Sinanthropus pekinensis* should be incorporated within the genus *Pithecanthropus* (volume 14: 1). By this time, the evolutionary continuum from this genus, through early Neanderthals such as Steinheim and Ehringsdorf to moderns, was clearly established, although the problems of the relationship between Neanderthals and early modern humans was already fiercely debated. Certainly, the issue of a discrete adaptation in the east is clear from Le Gros Clark's discussion of the Movius line in volume 20: 10.

Despite an apparent trend towards viewing human evolution as a gradual anagenetic 'morphological continuum' (Napier & Weiner, volume 36), recognition of the diversity of later forms of *Homo* is apparent from the 1940s, and to some extent the academic image of the Neanderthals is fixing over this time. In 1945 Le Gros Clark refers to the 'rather extreme' form of European Neanderthals (volume 14) and Matheson's 1942 survey of *Man and bear in Europe* (volume 16) discusses Neanderthal 'cave bear cults', reporting the series of 'stone chests' at Drachenloch in Switzerland and elsewhere as evidence of ritual. In 1957 Singer (volume 31) saw them as 'purely an extension of the *Pithecanthropus* type . . . an evolutionary cul-de-sac' but nevertheless a subspecies of *Homo sapiens*. The Neanderthal controversy was well under way, and as Škerlj noted in 1960 (volume 34), the 'position of the Neanderthals is not settled yet'.

6 12 Chinese *Sinanthropus* and 5 Javanese *Pithecanthropus*.

The emerging importance of Africa can be traced in the journal from the immediate postwar years. Leakey had published Kenyan remains of *Proconsul* in 1946 (volume 20), and in the same article noted the discovery in 1942 of the Middle Pleistocene horizons at Olorgesailie. The first appreciable discussion of australopithecines appears in 1950 (volume 24), and heralded the decade in which an essentially modern paradigm emerged. Twenty-five years after Dart published the Taung skull, and three after Broom's publication in 1947 of the Sterkfontein monograph, Le Gros Clark in *Ape men of South Africa* was at pains to note the hominid, as opposed to pongid, status of the australopithecines. He clearly felt that 'they actually represent a phase in the hominid . . . sequence of evolution' (volume 24: 185–6), and furthermore that they could form the earlier part of an evolutionary sequence continued by *Pithecanthropus*. By 1953 Clark, drawing attention to Oldowan discoveries around the Vaal river was able to ask 'was true man contemporary with the australopithecine man-apes in the later part of the Lower Pleistocene?' By 1962 the essentially modern cladogram had appeared (FIGURE 1).

Singer's 1957 paper on the *evolution of man* really sets the scene for the modern paradigm (volume 31). A variety of later Miocene apes such as *Dryopithecus, Pliopithecus* and the still current *Ramapithecus* are seen as precursors to the *Hominidae*, possibly linked in an evolutionary trajectory running from *Proconsul* through *Dryopithecus* to *Ramapithecus*[7] (viewed as a 'progressive dryopithecine') to the *hominidae*. The prime importance of bipedalism in human evolution was clear, as 'the australopithecines clearly establish the fact that locomotor (bipedal) adaptation (and not brain development) is the evolutionary factor splitting man from the apes' (volume 31: 194). *Pithecanthropus* was seen as 'almost advanced as some of the modern "primitive" races in that they were capable of manufacturing stone tools, apparently practised cannibalism, and allegedly knew of the use of fire' (volume 31: 196).

As the purpose of this paper is to celebrate *Antiquity's* 75th anniversary, it is fitting that

7 Since the early 1980s *Ramapithecus* has been redefined as a small (female?) version of *Sivapithecus*, itself probably ancestral to extant Orang Utans and therefore not of direct relevance to human origins.

https://doi.org/10.1017/S0003598X00091948 Published online by Cambridge University Press

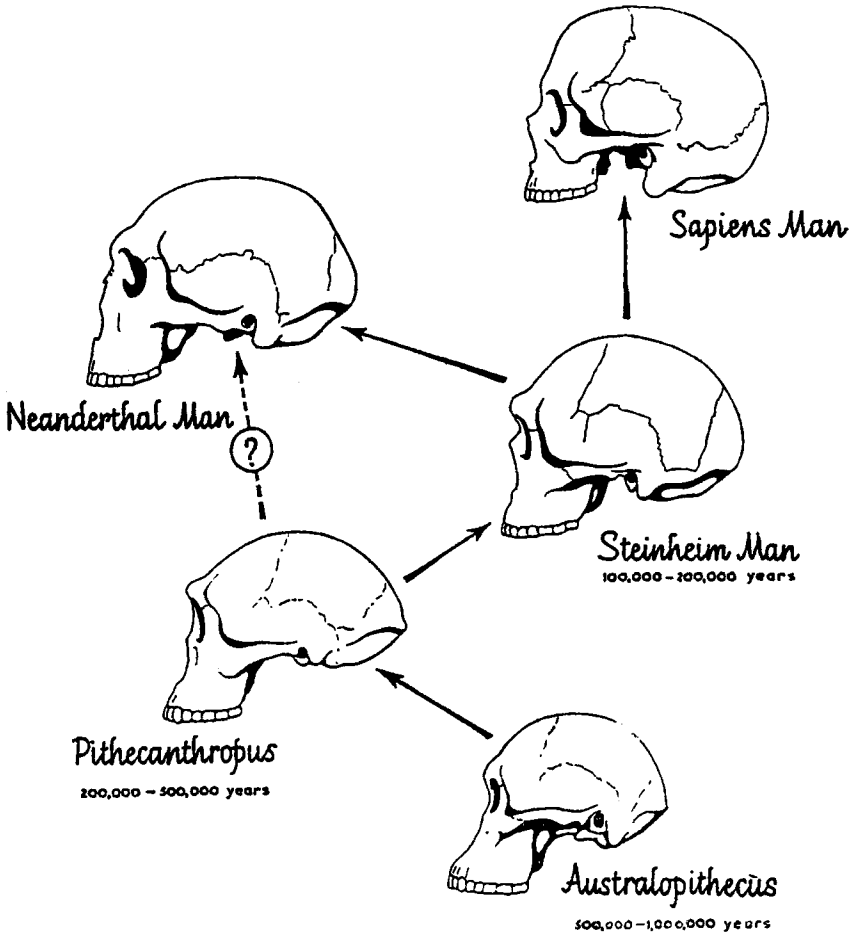


FIGURE 1. *Evolutionary sequence of the* Hominidae c. *1962 according to Napier & Weiner (volume 36: 42).*

the period I have chosen culminates itself in the celebration of two centenaries: in 1957 of Wallace's and Darwin's theories of natural selection being read to the Linnean Society and marked by Oakley (*tools makyth man*), Atkinson on worms, and Childe on the *evolution of society,* and in 1959 of the *annus mirabilis* in which Prestwich and Evans reported the Lower Palaeolithic discoveries at Amiens, Abbeville and Hoxne to the Royal Society and Evans to the Society of Antiquaries, and of the publication of the *Origin of Species*. The latter is marked by an editorial discussion, and it is fitting that in this, Daniel is able to congratulate Leakey on his recently reported discovery of the *Zinjanthropus* skull. The last volume in my selected period ends in a typically modern palaeoanthropological controversy, an exchange between Napier & Weiner and Leakey on the phylogenetic importance of the Olduvai Bed 1 *Zinjanthropus* finds and their relationship to South African australopithecines. All the elements of modern debate are present; competing and unclear reconstructions of fragmentary fossil material, issues of whether the existing hypodigms were at all representative, alternative phylogenetic interpretations, controversial results of the new potassium-argon technique and, of course, thinly disguised personal attacks.

Cnclusion: from cave art magic to Biblical floods; celebrating ANTIQUITY

One of the strengths of a general-purpose journal is that intellectual trends, as documented in this case for the first 35 years of ANTIQUITY, occur alongside others, in the general context of the professional development of archaeology. Early human studies is merely one context alongside several. Few journals could boast in the same issue delightful examples of the

https://doi.org/10.1017/S0003598X00091948 Published online by Cambridge University Press

sheer breadth of archaeological enterprise as Count Bégouen's contention that Upper Palaeolithic cave art 'was born of magic', and Leonard Woolley's excavation report, which as Crawford excitedly reports, demonstrates 'that the flood of Genesis was also the flood of the far older Sumerian records' (both in volume 3).

A maturation of archaeology is evident from this period, one in which a nascent palaeoanthropology working with an extremely poor fossil hypodigm, no absolute chronology and a concomitant falsely short Pleistocene, and within a highly Eurocentric paradigm, evolves into the essentially professional discipline of today. ANTIQUITY was able to report, and in many cases publish for the first time, major signposts of this evolution. As intellectual history the papers by Hooton, Childe, Oakley, Singer, Napier & Weiner and others are major contributions to the field, and document the realization of modern palaeoanthropology. Clearly, by the early 1960s, the new paradigm had arrived, and archaeology was now, in Daniel's phrase 'a humanity scientifically pursued.'

Acknowledgements. I am very grateful to the editor and deputy editor for inviting me to take part in the 'Celebrating ANTIQUITY' symposium at the Society for American Archaeology 67th annual meeting in Denver, Colorado, to all of the symposium speakers for making it such an enjoyable session, and to Mark White for reading a draft manuscript.

ANTIQUITY and the Old World

ALISON SHERIDAN*

Introduction

As with its treatment of world archaeology as a whole, ANTIQUITY's coverage of Old World archaeology has been encyclopaedic. All the important sites, excavations and discoveries are there, from Stonehenge to the frozen tombs of Siberia, and from the Acropolis to Old Zimbabwe. In addition to site-specific contributions there have been many invaluable syntheses of evidence, such as Dilip Chakrabarti's review of the beginning of iron-use in India (1976), or the numerous articles dealing with plant and animal domestication and the transition to farming (e.g. Higgs & Jarman 1969). A wide range of issues affecting Old World archaeology — and equally applicable to the New World — have been covered, with much attention being paid to heritage management topics such as the problem of looting and the restitution of cultural property (e.g. Daniel 1971: 246–8). Methodological advances, and in particular developments in absolute dating techniques, have been followed closely. But perhaps most interestingly, the pages of ANTIQUITY provide us with a chronicle of the development of Old World archaeology itself, with accounts, anecdotes and obituaries concerning the great figures of the day, and also generous references to young scholars of note. Much of this information has been conveyed in the witty and often acerbic Editorials, which have provided an invaluable and unique insight into the world as viewed from Cambridge.

I do not propose to offer a statistical analysis of ANTIQUITY's Old World content, or to attempt a distillation of 75 years' contributions. Rather, I have chosen to highlight some of the topics that have particularly entertained and informed this reviewer over the years and which, arguably, reflect Old World preoccupations, namely: sex, alcohol, scandal and the eccentricities of the British. All have featured prominently in the pages of this august journal.

The Cerne Abbas giant

My first 'case-study' manages to combine three out of these four topics, and concerns a male, ithyphallic, club-wielding figure cut into a chalk hillside in Dorset (FIGURE 1). Archaeological opinion has been divided as to its date, although many favour the view proposed by Stuart Piggott (1932) that it probably dates to around the 1st century AD, was carved by Roman-influenced natives, and may well represent the god Hercules

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ANTIQUITY 76 (200): 1085–8

https://doi.org/10.1017/S0003598X00091948 Published online by Cambridge University Press