CHAPTER 1

INTRODUCING THE AFRICAN RECORD

Humans have inhabited Africa longer than anywhere else on Earth (see inset). Their history there reaches back beyond the oldest known stone tools to the point, 6 million to 7 million years ago (mya), when the evolutionary lineage that ultimately produced *Homo sapiens* finally diverged from that leading to other **hominids**. Investigating the human past in Africa is thus crucial to developing an understanding of our origins and history as a species, to answering the question, 'What makes (and made) us human'? Responding to this challenge, archaeologists have learned that Africa was not once, but three times, humanity's continent of origin: first, as members of the **hominin** lineage itself; second, as members of the genus *Homo*, which emerged around 2 mya; and most recently with the evolution of anatomically modern humans and their subsequent expansion beyond Africa within the past 100,000 years.

Moreover, an emerging body of evidence indicates that distinctively modern forms of behaviour, specifically the constitution of individual and community life through the use of material objects charged with symbolism and socially ascribed meanings, also have their roots in Africa. Darwin's (1871:161) guarded prediction that 'it is somewhat more probable that our early progenitors lived on the African continent than elsewhere' has been more than borne out by events. Reviewing and assessing the archaeological and fossil evidence that demonstrates this is one of the principal objectives of this book and, as a result, for detailed descriptions of stone artefact

assemblages or individual sites, readers should consult the many references that we provide (see J. D. Clark 1982a, Klein 1999, and, for southern Africa, Mitchell 2002a, 2002b as a start here).

A NOTE ON DATING

We express absolute dates in one of three ways, depending upon the time frame in question:

mya and kya These abbreviations, referring respectively to 'millions of years ago' and 'thousands of years ago', are used for the periods covered by Chapters 3–8, with the switch between them arbitrarily set at 1 million years ago. Where appropriate, for example in discussing some of the archaeological evidence relating to the Pleistocene/Holocene transition, fractional forms of them may be employed. We thus talk of the 8.2 kya event when referring to a well-known, sudden reversion to cooler conditions about 8200 years ago. The 'years ago' here and wherever else these abbreviations are used are provided by techniques such as potassium-argon, uranium-series, and radiocarbon dating. The radiocarbon determinations employed in Chapters 7 and 8 have not been calibrated.

bp This abbreviation, meaning 'before present', is employed in Chapters 9 and 10 and is the conventional way of citing uncalibrated radiocarbon dates. The baseline for reference purposes is A.D. 1950 and a date 'bp' is thus so many thousand uncalibrated radiocarbon years older than that.

B.C./A.D. We use the Christian calendar in Chapter 10 when referring to archaeological contexts that can be dated by reference to known historical events, including estimates obtained from oral traditions, or by radiocarbon determinations that have been calibrated to calendar years. Our restriction of the use of calibration to this particular period follows from conventional practice in African archaeology and should make comparison with the wider literature easier. For Chapters 7 and 8, it also reflects continuing difficulties with deriving accurate calibration methods beyond the very end of the Pleistocene.

However, to examine only those parts of the African archaeological record that relate to the *evolution* of the current human species would be to fall into the trap created by generations of progressivist, evolutionary thought. Contrary to the beliefs of mid-nineteenth-century archaeologists, archaeology does not unequivocally document 'la loi du progrès de l'humanité' celebrated by de Mortillet (1867) and others. Still less does it do so when that progress is defined by the archaeological record of just one part of the world (Europe and the Near East) or by criteria (technological complexity) linked directly to the political and economic power base of nineteenth- and twentieth-century Euro-American societies (cf. Lewis-Williams 1993). The growth of archaeological research, especially in those parts of the world previously colonised by Europe, has shown instead that the Three Age System (Stone, Bronze, Iron) defined by Thomsen (1836) and reformulated in socio-economic terms by Childe (1934) is far from being the universal standard that was once imagined. No more universal is the well-known band-tribe-chiefdom-state succession of social formations popularised by Service (1962) and Sahlins (1968). Such models nonetheless continue to influence how archaeologists and others structure and understand their views of the past (for an example, see Johnson and Earle 1987, and for an Africanist critique, Stahl 1999). Typically, whereas Africa is emphasised in those earlier parts of world prehistory that are necessarily common to all human beings, it is excluded from consideration once the magic moment is reached at which hominins (in more recent syntheses, anatomically modern humans) expanded into Eurasia.[1] All too often, the result is a history that confers universal validity and value on the past of Euro-American societies alone (Stahl 2005a).

Our own view, not surprisingly, is that African societies followed historical trajectories of their own making, trajectories that are not to be forced into the same mould, or measured by the same yardstick, as those of Europe and the Near East (S. McIntosh 1999). It follows that Africa's past has a distinctive value and interest of its own. Moreover, comparing and contrasting that past with what is known from other parts of the world should be directed to their *mutual* critical illumination. These few sentences thus identify the second of this book's goals, the presentation of a new synthesis of the archaeology

of more recent hunter-gatherers on the African continent. Themes arising from this that are of wider comparative interest include, but are not limited to:

- the emergence of more sedentary hunter-gatherer societies that emphasised the harvesting of rich, predictable stands of resources such as fish, shellfish, and cereals and that in some cases (but significantly not in all) successfully experimented with the invention of new technologies, such as ceramics and the domestication of wild animal and plant species;
- the integration of Africa's immensely rich rock art record with other components of the archaeological record, its interpretation using insights provided by ethnographic data, and its generation of hypotheses that help explain the production of rock art in quite different parts of the world;
- the many different kinds of relationships that played out between hunter-gatherers and food-producers (horticulturalists, pastoralists, mixed farmers, European settlers) over the past few thousand years.

This last point serves as a reminder that societies depending upon Africa's rich wild plant and animal resources and practising ways of life intimately bound up with them (spiritually as well as economically) survived to the beginning of the twenty-first century. Because of this and the coincidence that they happened to live on the same continent as that in which 'our' (i.e., everyone's) ancestors evolved, groups like the Ju/'hoansi Bushmen[2] have become archetypes of a hunter-gatherer way of life, familiar from introductory anthropology texts, tourism literature, and popular cinema alike. Joined by other African peoples, such as the Hadzabe of Tanzania and the Mbuti foragers of the Congolese rainforests, they have played crucial roles in archaeologists' generation of hypotheses on topics as diverse as the role of carcass scavenging in early hominin subsistence (O'Connell *et al.* 1988), the ways in which hunter-gatherers structure their use of the landscape and thus create a regional archaeological record (Binford 1980), and the viability of human settlement in tropical rainforests in the absence of agriculture (R. Bailey *et al.* 1989).

Rejecting social evolutionary frameworks that once saw contemporary non-Western peoples as conveniently 'frozen' survivals from

earlier evolutionary stages (Stahl 2005a) leaves them instead as products of long and complicated histories of their own making (e.g., Wilmsen 1989). This, in turn, raises serious questions about how archaeologists should employ ethnographic observations of such societies to understand the past. Put simply, can this remain a viable project, or were 'hunter-gatherer' societies so radically transformed by centuries of contact with politically and economically more complex, dominating neighbours as to render such usage vain? Examined further in Chapter 10, this is another comparative theme to which Africa makes a vital contribution.

Moreover, the likelihood that the anthropologically studied sample of hunter-gatherers exhausts all the variability that once existed among such societies is itself challengeable from the African evidence. Many hunter-gatherer groups practising delayed-returns economies may, for example, have become successful agriculturalists or pastoralists (but see Chapters 8 and 9 for further discussion of this). Alternatively, the demographic and territorial expansion of food-producers may have displaced hunter-gatherers from many key environments, East Africa's tropical grasslands being a prime example (Foley 1982; Marean 1997). In both instances, the archaeological record of African hunter-gatherers becomes of more than local significance.

Ours is, of course, not the first attempt to collate and make sense of what, in very broad terms, might be called Africa's palaeolithic archaeology, the material evidence left by those whom we choose to term here 'the first Africans', the continent's past hunter-gatherer and hominin inhabitants. The relevant chapters of the magisterial *Cambridge History of Africa* (J. D. Clark 1982a) still stand as a landmark study, even if it is now somewhat dated. More recently, several authors have surveyed the archaeology of Africa as a whole (Connah 2005; D. Phillipson 2005; Stahl 2005b), or in part (H. J. Deacon and Deacon 1999; Mitchell 2002a). All, however, have had to balance the attention accorded matters palaeolithic with that given to the material record created by herders, farmers, and state-level societies. Even where emphasis has been placed on hunter-gatherer and hominin archaeology, coverage is often partial. Sahnouni's (2005a) extremely welcome French-language overview, for example, provides little coverage of post-Acheulean developments in East Africa,

less of West and Central Africa. Klein's (1999) *The Human Career*, on the other hand, while superb in synthesising the fossil and archaeological evidence for human evolution, tends to confine African topics and data to the predictable grand moments discussed earlier: the origins of the hominin line, the genus *Homo* and *H. sapiens*, the initial development of stone tool-making, carnivory, and 'modern behaviour'. Moreover, its chronological remit, at least for Africa, scarcely extends more recently than 40,000 years ago. Willoughby's (2007) synthesis of genetic, archaeological, and fossil data relating to the evolution of modern humans is significantly more up-to-date and detailed, but necessarily confined to only a part of the period that is dealt with here.

There is, then, we feel, room for a book that tries to be geographically inclusive rather than exclusive and for one that avoids arbitrarily dividing the past at the evolution of modern humans, the emergence of 'Later Stone Age' technologies, or the initiation of food-production. Moreover, combining in a continuous narrative the archaeology of earlier hominins with that of more recent hunter-gatherers opens up possibilities for comparison across the entire length and breadth of humanity's presence on the African continent. How though to structure such a book? Reviewing the history of previous research helps answer this question.

RESEARCH HISTORIES

The history of archaeology in Africa divides into five phases, broadly paralleling those noted elsewhere (Trigger 1989). Each has its own characteristics, but the concerns of one have continued into and helped shape its successors, making the overall effect cumulative rather than revolutionary. Robertshaw (1990a) remains the best overview, amplified by the work of Stahl (1999), Schlanger (2002, 2003, 2005), and others, as well as by a growing recognition of the potential of museum collections and their associated documents (Mitchell 2002b; Milliken 2003). Lack of space prevents us from expanding on such observations to analyse in detail the social, political, and economic forces that have moulded the evolution of palaeoanthropology and hunter-gatherer archaeology in Africa.

Rather, we emphasise the development of those key methodologies, analytical techniques, and classificatory systems that continue to order archaeologists' views of the first Africans.

Whether in myth, in oral histories, or by reference to material objects, African societies have doubtless always preserved and constructed accounts of their pasts. Even when not the work of people practising a hunter-gatherer lifeway, such accounts often refer to hunter-gatherers, for example as aboriginal owners of the land or as inventors of the technologies and social mores seen as crucial to a civilised way of life (Woodburn 1988). Rock paintings and stone tools may thus be acknowledged as the work of earlier inhabitants (Roberts 1984), with most (all?) communities recognising that the present is not the same as the past, however telescoped their understandings of chronology and historical change may be (Suzman 2004). Systematic exploration of ancient landscapes and sedimentary deposits for material evidence of past human societies and a proper recognition of the time depth that this unveils are, however, much more recent phenomena, products of archaeology's early nineteenth-century crystallisation as a scientific discipline.

The Antiquarian Phase of African Archaeology

That crystallisation took place primarily in Europe, but it was informed and shaped by European experience of the rest of the world, including Africa (Gosden 1999). Occasional reports of rock art, stone tool use, or the lifeways of Africa's indigenous inhabitants were succeeded from the mid-1800s by a second phase of more serious research, stimulated in part by the rapidly developing acceptance of the genuineness and deep antiquity of stone artefacts in Europe itself. In colonial South Africa, for example, the emerging Anglophone intellectual community included several individuals who collected stone tools from about 1860, taking advantage of their connections with leading figures in Victorian academic and/or political circles to dispatch them to London for confirmation and publication (Mitchell 2002b; Dubow 2004). By the early 1880s, enough of them had been found to warrant the first attempts at regional synthesis (Gooch 1881), broadly contemporary with the initiation

of the collection of stone tools in Egypt (Milliken 2003), Algeria (Gowlett 1990), and French West Africa (de Barros 1990). Matching the pace of European colonisation, work in the Congo Basin began at about the same time (de Maret 1990). The Horn followed a little later (Brandt and Fattovich 1990), as did East Africa (Robertshaw 1990b), where Gregory's (1921) discovery of the Olorgesailie site and Reck's (1914) investigations of fossil mammal assemblages at Olduvai Gorge foreshadowed the region's later significance.

For the most part, this antiquarian phase was undertaken by amateurs, many of them geologists, military men, or colonial administrators, something that continued to hold true in many areas until after the Second World War. Perhaps inevitably, discovery and classification were often practised as ends in themselves, the goal being to define stages of human cultural development that could be readily compared with the 'master sequence' for the Palaeolithic already known from Europe (Daniel 1975). Museums there and in North America sought out African artefacts to illustrate this evolutionary account, and from the early twentieth century, their curators took an active role in this. Miles Burkitt from Cambridge University, Henri Breuil, founder of the influential Francophone journal *L'Anthropologie*, and Oxford's Henry Balfour all paid numerous visits to Africa, for example, using their friendships with locally based researchers and their attendance at conferences to inform themselves, build collections, and report home (e.g., Burkitt 1928). However, with the exceptions of southern Africa and the sophisticated five-year research programme in Algeria of North America's Logan Museum (Sheppard 1990:179–184), professionally trained archaeologists able or willing to conduct fieldwork within Africa remained thin on the ground. The lingering influence of the Piltdown forgery, European prejudice in favour of a European origin for the genus *Homo*, and real difficulties in dating the African record compounded this problem, along with a genuine scarcity of financial resources and the widespread assumption that Africa had always been the helpless recipient of external influences. The true significance of finds like the archaic *H. sapiens* fossil from Broken Hill (Kabwe), Zambia (Woodward 1921), or the Taung child type-specimen of *Australopithecus africanus* (Dart 1925), was therefore missed (Gowlett 1990).

Africa's 'Three Ages'

Despite this, the 1920s did see determined efforts to establish a more distinctively African past, efforts that help define a third phase in the continent's archaeology. Already at the beginning of the twentieth century, Haddon (1905) had advocated the development of an indigenous terminology, free from assumptions about connections with Europe. This bore fruit when Goodwin and van Riet Lowe (1929) invented their own 'Three Age System' for Africa's hunter-gatherer and hominin past. Eschewing the Eurasian usages 'Lower, Middle, and Upper Palaeolithic', they produced a groundbreaking synthesis of southern African prehistory that employed local 'cultural' names organised under the umbrella terms 'Earlier, Middle, and Later Stone Ages', the latter explicitly linked to surviving hunter-gatherers (the Kalahari Bushmen). As Schlanger (2002) shows, however, this was as much a deliberate act of liberation from European systems of thought (and political control) as a change driven by empirical observations, and its rapid extension north of the Zambezi was not independent of South African political ambitions. Regrettably, however, North Africa and Egypt stayed outside the ambit of the new terminology, retaining Eurasian (often specifically French) terms despite early recognition of the specifically African nature of their own industries (e.g., Reygasse 1922). The result was (and to some degree remains) an unhelpful divide between the archaeologies of supra- and sub-Saharan Africa (Garcea 2005), one founded on little more than the combination of 'scholarly tradition and geographic distance' (Klein 1999:407) with North Africa's close *historical* connections with Europe and the Near East.[3]

A necessary concern of mid-twentieth-century archaeology was the development of sound chronologies within which to locate the material being found. Following European example, river terraces from the Nile to the Vaal were favoured in the search for long stratigraphic sequences, along with the exposures that Louis Leakey (1934) had now begun to explore at Olduvai Gorge. He and Wayland (1929), working in Uganda, were among the first to employ a succession of pluvial (wetter) and interpluvial (drier) climatic phases as a dating tool, a succession thought to

correspond to the glacial/interglacial sequence then known in Europe. Long influential, this pluvial hypothesis took decades to succumb to advances in geological understanding (Flint 1959), by which point the professionalisation of African archaeology had advanced considerably, through the creation of museums[4] and the appointment of archaeologists to them, universities, and government departments. J. Desmond Clark (1990), in what is now Zambia, John Goodwin and Clarens van Riet Lowe in South Africa (J. Deacon 1990a), and Francis Cabu in the then Belgian Congo (de Maret 1990) were among this first cohort, but the detailed excavation of former hominin or hunter-gatherer living sites and the systematic recovery of palaeoenvironmental samples remained the exception rather than the rule. Moreover, whereas the importance of raw material choice and manufacturing techniques was increasingly recognised, explanations of cultural change and variability remained dominated by notions of diffusion and migration that afforded little room to these and other factors (Schlanger 2003). Reconstructing cultural-historical frameworks thus persisted as the key theme of this third phase of African archaeological research, with different stone tool industries typically thought of as the product of different peoples or races; Louis Leakey's (1931) work in Kenya is a classic example of this approach, which prevailed well into the 1950s through most of the continent.

The Expansion of African Archaeology

The Second World War marked an important breakpoint for African archaeology (Gowlett 1990:24), just as it did for the continent's history as a whole. One important step was the 1947 inaugural meeting in Nairobi of the Pan-African Congress of Prehistory and Related Studies, which remains the largest grouping of Africanist archaeologists. Another crucial development was the scientific acceptance of the authenticity as hominins of not just the Taung child, but also of the various gracile and robust australopithecines discovered by Robert Broom in South Africa's Sterkfontein Valley since 1936 (Le Gros Clark 1952). Recognition also spread of the importance of excavating past occupation floors with minute attention to stratigraphic and contextual detail, especially where organic remains were