

First Peoples

Populating the Planet

TO 10,000 B.C.E.

Out of Africa to the Ends of the Earth: First Migrations

Into Eurasia Into Australia Into the Americas Into the Pacific

The Ways We Were

The First Human Societies Economy and the Environment The Realm of the Spirit Settling Down: The Great Transition

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"We do not want cattle, just wild animals to hunt and water that we can drink." That was the view of Gudo Mahiya, a prominent member of the Hadza people of northern Tanzania, when he was questioned in 1997 about his interest in a settled life of farming and cattle raising. With only about 1,000 total members, the Hadza represent one of the very last peoples on earth to continue a way of life that was universal among humankind until 10,000 to 12,000 years ago. At the beginning of the twenty-first century, several hundred Hadza still made a living by hunting game, collecting honey, digging up roots, and gathering berries and fruit. They lived in quickly assembled grass huts located in small mobile camps averaging eighteen people and moved frequently around their remote region. Almost certainly their way of life is doomed, as farmers, governments, missionaries, and now tourists descend on them. The likely disappearance of their culture parallels the experience of many other such societies, which have been on the defensive against more numerous and powerful neighbors for 10,000 years.

NONETHELESS, THAT WAY OF LIFE SUSTAINED HUMANKIND for more than 95 percent of the time that our species has inhabited the earth. During countless centuries, human beings successfully adapted to a wide variety of environments without benefit of deliberate farming or animal husbandry. Instead, our early ancestors wrested a livelihood by gathering wild foods such as berries, nuts, roots, and grain; by scavenging dead animals; by hunting live animals; and

Paleolithic Art: The rock art of gathering and hunting peoples has been found in Africa, Europe, Australia, and elsewhere. This image from the San people of southern Africa represents aspects of their outer life in the form of wild animals and hunters with bows as well as the inner life of their shamans during a trance, reflected in the elongated figures with both human and animal features. (Image courtesy of S.A. Tourism)

by fishing. Known to scholars as "gathering and hunting" peoples, they were foragers or food collectors rather than food producers. Instead of requiring the earth to produce what they wanted, they took—or perhaps borrowed—what nature had to offer. Because they used stone rather than metal tools, they also have been labeled "Paleolithic," or "old stone age," peoples.

History courses and history books often neglect this long phase of the human journey and instead choose to begin the story with the coming of agriculture about 12,000 years ago or with the advent of civilizations about 5,000 years ago. Some historians identify "real history" with writing and so dismiss the Paleolithic era as largely unknowable because its people did not write. Others, impressed with the rapid pace of change in human affairs since the coming of agriculture, assume that nothing much of real significance happened in the Paleolithic era—and no change meant no history.

But does it make sense to ignore the first 200,000 years or more of human experience? Although written records are absent, scholars have learned a great deal about Paleolithic peoples through their material remains: stones and bones, fossilized seeds, rock paintings and engravings, and much more. Archeologists, biologists, botanists, demographers, linguists, and anthropologists have contributed much to our growing understanding of gathering and hunting peoples. Furthermore, the achievements of Paleolithic peoples—the initial settlement of the planet, the creation of the earliest human societies, the beginning of reflection on the great questions of life and death—deserve our attention. The changes they wrought, though far slower than those of more recent times, were extraordinarily rapid in comparison to the transformation experienced by any other species. Those changes were almost entirely cultural or learned, rather than the product of biological evolution, and they provided the foundation on which all subsequent human history was constructed. Our grasp of the human past is incomplete—massively so—if we choose to disregard the Paleolithic era.

Out of Africa to the Ends of the Earth: First Migrations

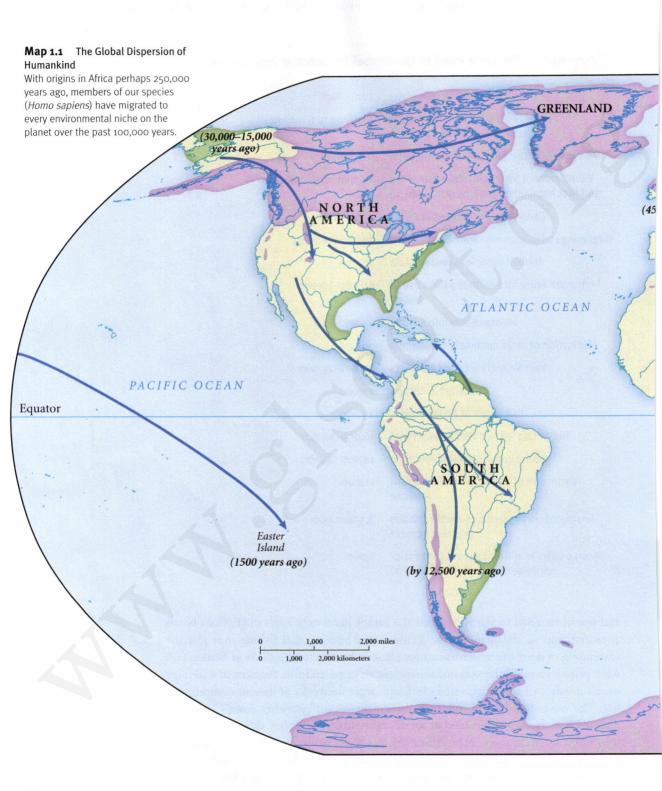
The first 150,000 years or more of human experience was an exclusively African story. Around 250,000 years ago, in the grasslands of eastern and southern Africa, *Homo sapiens* first emerged, following in the footsteps of many other hominid species before it. Time and climate have erased much of the record of these early people, and Africa has witnessed much less archeological research than have other parts of the world, especially Europe. Nonetheless, scholars have turned up evidence of distinctly human behavior in Africa long before its appearance elsewhere. Africa, almost certainly, was the place where the "human revolution" occurred, where "culture," defined as learned or invented ways of living, became more important than biology in shaping behavior.

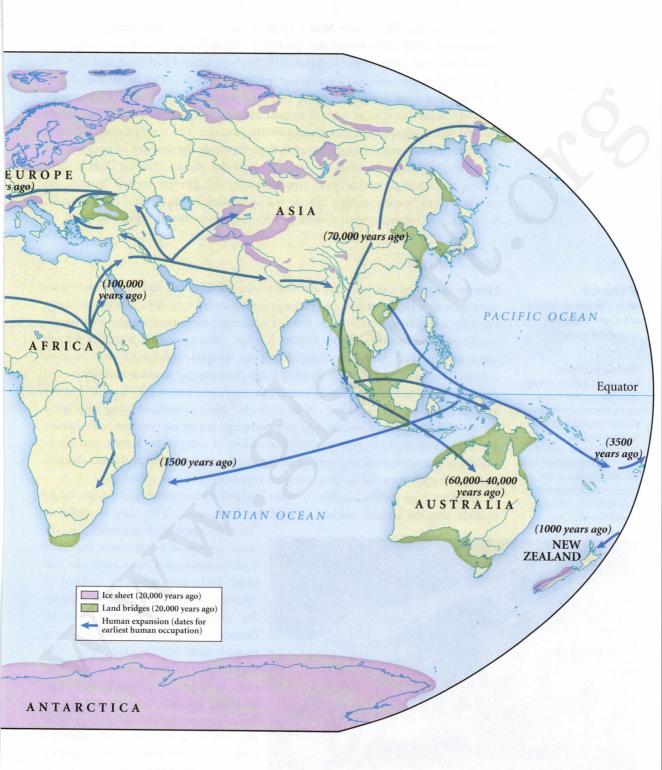
What kinds of uniquely human activity show up in the early African record?² In the first place, human beings began to inhabit new environments within Africa—forests and deserts—where no hominids had lived before. Accompanying these movements of people were technological innovations of various kinds: stone blades

Snapshot The Long Road to the G	lobal Presence of Humankind
(all dates approximate)	Years Ago
Earliest bipedal hominids (walking upright on two legs)	7 million to 6 million
Homo habilis (earliest use of stone tools)	2.5 million
Homo erectus (first controlled use of fire and first hominid migrations out of Africa)	1.9 million to 200,000
Earliest Homo sapiens in Africa	250,000
Beginnings of human migration out of Africa	100,000–60,000
Human entry into eastern Asia	70,000
Human entry into Australia (first use of boats)	60,000–40,000
Human entry into Europe	45,000
Extinction of large mammals in Australia	30,000
Human entry into the Americas	30,000-15,000
Cave art in Europe	25,000
Extinction of Neanderthals	25,000
End of last Ice Age (global warming)	16,000–10,000
Earliest agricultural revolutions	12,000–10,000
Extinction of large mammals in North America	11,000
Austronesian migration to Pacific islands and Madagascar	3,500–1,000
Human entry into New Zealand (last major region to receive human settlers)	1,000

and points fastened to shafts replaced the earlier hand axes; tools made from bones appeared, and so did grindstones. Evidence of hunting and fishing, not just the scavenging of dead animals, marks a new phase in human food collection. Settlements were planned around the seasonal movement of game and fish. Patterns of exchange over a distance of almost 200 miles indicate larger networks of human communication. The use of body ornaments, beads, and pigments such as ocher as well as possible planned burials suggest the kind of social and symbolic behavior that has characterized human activity ever since. All of this occurred before 100,000 years ago and, based on current evidence, long before such activity surfaced elsewhere in the world.

Then, sometime between 100,000 and 60,000 years ago, human beings began their long trek out of Africa and into Eurasia, Australia, the Americas, and, much later,





the islands of the Pacific (see Map 1.1). In occupying the planet, members of our species accomplished the remarkable feat of learning to live in virtually every environmental niche on earth, something that no other large animal had done; and they did it with only stone tools and a gathering and hunting technology to aid them. Furthermore, much of this long journey occurred during the difficult climatic conditions of the last Ice Age (at its peak around 20,000 years ago), when thick ice sheets covered much of northern Eurasia and North America. The Ice Age did give these outward-bound human beings one advantage, however: the amount of water frozen in northern glaciers lowered sea levels around the planet, creating land bridges among various regions that were separated after the glaciers melted. Britain was then joined to Europe; eastern Siberia was connected to Alaska; and New Guinea, Australia, and Tasmania were all part of a huge supercontinent known as Sahul.

Into Eurasia

Human migration out of Africa led first to the Middle East and from there west-ward into Europe about 45,000 years ago and eastward into Asia. Among the most carefully researched areas of early human settlement in Eurasia are those in southern France and northern Spain. Colder Ice Age climates around 20,000 years ago apparently pushed more northerly European peoples southward into warmer regions. There they altered their hunting habits, focusing on reindeer and horses, and developed new technologies such as spear throwers and perhaps the bow and arrow as well as many different kinds of stone tools. Most remarkably, they also left a record of their world in hundreds of cave paintings, depicting reindeer, bulls, horses, and other animals, brilliantly portrayed in colors of red, yellow, brown, and black. Images of human beings, impressions of human hands, and various abstract designs, perhaps an early form of writing, often accompanied the cave paintings.

Scholars have debated endlessly what insights these remarkable images might provide into the mental world of Paleolithic Europeans. Were they examples of

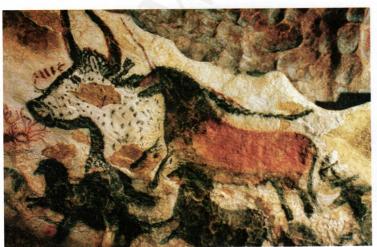
"totemic" thinking—the belief that particular groups of people were associated with, or descended from, particular animals? Did they represent a form of "hunting magic" intended to enhance the success of these early hunters? Because many of the paintings were located deep within caves, were they perhaps part of religious or ritual practices or rites of passage? Were they designed to pass on information to future generations? Or did they symbolize, as some recent scholars contend, a coded representation of a Paleolithic worldview divided into male and female

Change

What was the sequence of human migration across the planet?

The Lascaux Caves

Discovered by four teenage boys in 1940, the Lascaux caves in southern France contain some 2,000 images, dating to perhaps 17,000 years ago. Many of them depict in quite realistic form the wild animals of the region—oxen, bulls, horses, ibex, and birds. (JM Labat/ Photo Researchers, Inc.)



realms, both opposed to and balancing each other? We simply do not know. Nonetheless, these images excite our imagination still, 20,000 years or more after they were created. In them we sense a kinship with the humanity of our distant ancestors.

Farther east, archeologists have uncovered still other remarkable Paleolithic adaptations to Ice Age conditions. Across the vast plains of Central Europe, Ukraine, and Russia, new technologies emerged, including bone needles, multilayered clothing, weaving, nets, storage pits, baskets, and pottery. Partially underground dwellings constructed from the bones and tusks of mammoths compensated for the absence of caves and rock shelters. All of this suggests that some of these people had lived in more permanent settlements, at least temporarily abandoning their nomadic journeys. Associated with these Eastern European peoples were numerous female figurines, the earliest of which was uncovered in 2008 in Germany and dated to at least 35,000 years ago. Carved from stone, antlers, mammoth tusks, or, occasionally, baked clay, these so-called Venus figurines depict the female form, often with exaggerated breasts, buttocks, hips, and stomachs (see image, p. 22). They were not limited to a single region but have been found all across Europe, from Spain to Russia, suggesting a network of human communication and cultural diffusion over a wide area.

Into Australia

Early human migration to Australia, currently dated to around 60,000 years ago, came from Indonesia and involved another first in human affairs—the use of boats. Over time, people settled in most regions of this huge continent, though quite sparsely. Scholars estimate the population of Australia at about 300,000 people in 1788, when the first Europeans arrived. Over tens of thousands of years, these people had developed perhaps 250 languages; collected a wide variety of bulbs, tubers, roots, seeds, and cereal grasses; and hunted large and small animals, as well as birds, fish, and other marine life. A relatively simple technology, appropriate to a gathering and hunting economy, sustained Australia's Aboriginal people into modern times. When outsiders arrived in the late eighteenth century, all of the continent's people still practiced that ancient way of life, despite the presence of agriculture in nearby New Guinea.

Accompanying their technological simplicity and traditionalism was the development of an elaborate and complex outlook on the world, known as the Dreamtime. Expressed in endless stories, in extended ceremonies, and in the evocative rock art of the continent's peoples, the Dreamtime recounted the beginning of things: how ancestral beings crisscrossed the land, creating its rivers, hills, rocks, and waterholes; how various peoples came to inhabit the land; and how they related to animals and to one another. In this view of the world, everything in the natural order was a vibration, an echo, a footprint of these ancient happenings, which link the current inhabitants intimately to particular places and to timeless events in the past. (See Document 1.2, pp. 39–41, and Visual Sources: The Aboriginal Rock Painting of Australia, pp. 42–47.)

The journeys of the Dreamtime's ancestral beings reflect in a general way the networks of migration, communication, and exchange that linked the continent's

many Paleolithic peoples. Far from isolated groups, they had long exchanged particular stones, pigments, materials for ropes and baskets, wood for spears, feathers and shells for ornaments, and an addictive psychoactive drug known as *pituri* over distances of hundreds of miles. Songs, dances, stories, and rituals likewise circulated. Precisely how far back in time these networks extend is difficult to pinpoint, but it seems clear that Paleolithic Australia, like ancient Europe, was both many separate worlds and, at the same time, one loosely connected world.

Into the Americas

The earliest settlement of the Western Hemisphere occurred much later than that of Australia, for it took some time for human beings to penetrate the frigid lands of eastern Siberia, which was the jumping-off point for the move into the Americas. Experts continue to argue about precisely when the first migrations occurred (somewhere between 30,000 and 15,000 years ago), about the route of migration (by land across the Bering Strait or by sea down the west coast of North America), about how many separate migrations took place, and about how long it took for people to penetrate to the tip of South America. There is, however, good evidence of human activity in southern Chile by 12,500 years ago.

The first clearly defined and widespread cultural tradition in the Americas is associated with people who made a distinctive projectile point, known to archeologists as a Clovis point. Scattered all over North America, Clovis culture flourished around 12,000 to 11,000 years ago. Scattered bands of Clovis people ranged over huge areas, camping along rivers, springs, and waterholes, where large animals congregated. Although they certainly hunted smaller animals and gathered many wild plants, Clovis people show up in the archeological record most dramatically as hunters of very large mammals, such as mammoths and bison. Killing a single mammoth could provide food for many weeks or, in cold weather, for much of the winter. The wide distribution of Clovis point technology suggests yet again a regional pattern of cultural diffusion and at least indirect communication over a large area.

Then, about 10,900 years ago, all trace of the Clovis people disappears from the archeological record at the same time that many species of large animals, including the mammoth and several species of horses and camels, also became extinct. Did the Clovis people hunt these animals to extinction and then vanish themselves as their source of food disappeared? Or did the drier climate that came with the end of the Ice Age cause this megafaunal extinction? Experts disagree, but what happened next was the creation of a much greater diversity of cultures as people adapted to this new situation in various ways. Hunters on the Great Plains continued to pursue bison, which largely avoided the fate of the mammoths. Others learned to live in the desert, taking advantage of seasonal plants and smaller animals, while those who lived near the sea, lakes, or streams drew on local fish and birds. Many peoples retained their gathering and hunting way of life into modern times, while others became farmers and, in a few favored regions, later developed cities and large-scale states.⁷

Into the Pacific

The last phase of the great human migration to the ends of the earth took place in the Pacific Ocean and was distinctive in many ways. In the first place, it occurred quite recently, jumping off only about 3,500 years ago from the Bismarck and Solomon islands near New Guinea as well as from the islands of the Philippines. It was everywhere a waterborne migration, making use of oceangoing canoes and remarkable navigational skills, and it happened very quickly and over a huge area of the planet. Speaking Austronesian languages that trace back to southern China, these oceanic voyagers had settled every habitable piece of land in the Pacific basin within about 2,500 years. Other Austronesians had sailed west from Indonesia across the Indian Ocean to settle the island of Madagascar off the coast of eastern Africa. This extraordinary process of expansion—both rapid and extensive—made the Austronesian family of languages the most widespread in the world. With the occupation of Aotearoa (New Zealand) about 1300 C.E., the initial human settlement of the planet was finally complete (see Map 1.2).

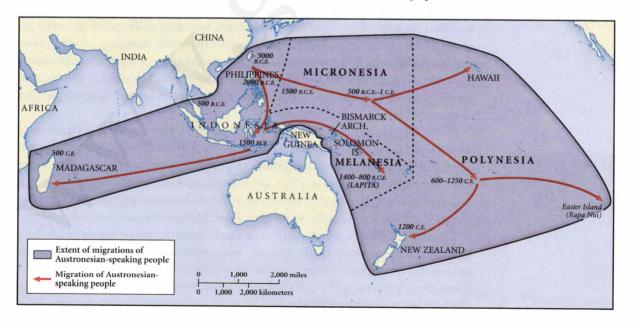
In contrast with all of the other migrations, these Pacific voyages were undertaken by people with an agricultural technology, who carried both domesticated plants and animals in their canoes. Both men and women made these journeys, suggesting a deliberate intention to colonize new lands. Virtually everywhere they went, two developments followed. One was the creation of highly stratified societies or chiefdoms, of which ancient Hawaiian society is a prime example. In Hawaii, an elite class of chiefs with political and military power ruled over a mass of commoners. The other development was the dramatic impact that these migrations had on the environment of previously uninhabited islands. Many species of

Comparison

How did Austronesian migrations differ from other early patterns of human movement?

Map 1.2 Migration of Austronesian-Speaking People

People speaking
Austronesian languages
completed the human settlement of the earth quite
recently as they settled the
islands of the vast Pacific
and penetrated the Indian
Ocean to Madagascar, off
the coast of southeast Africa.



animals quickly became extinct, especially large flightless birds. The destruction of the forests of Rapa Nui (Easter Island) between the fifteenth and seventeenth centuries C.E. brought famine, violent conflict, and a sharp population decline to this small island society, while the absence of large trees ensured that no one could leave the island, for they could no longer build the canoes that had brought them there.⁸

The Ways We Were

During their long journeys across the earth, Paleolithic people created a multitude of separate and distinct societies, each with its own history, culture, language, identity, stories, and rituals, but the limitations of a gathering and hunting technology using stone tools imposed some commonalities on these ancient people. Based on the archeological record and on the example of gathering and hunting societies that still existed in modern times, scholars have sketched out some of the common features of these early societies.

The First Human Societies

Above all else, these Paleolithic societies were small, consisting of bands of twenty-five to fifty people, in which all relationships were intensely personal and normally understood in terms of kinship. No anonymity or hiding in the crowd was possible in a society of relatives. The available technology permitted only a very low population density and ensured an extremely slow rate of population growth. Scholars estimate that world population may have been as low as 10,000 people around 100,000 years ago and grew slowly to 500,000 by 30,000 years ago and then to 6 million by 10,000 years ago. Paleolithic bands were seasonally mobile or nomadic, moving frequently and in regular patterns to exploit the resources of wild plants and animals on which they depended. The low productivity of a gathering and hunting economy normally did not allow the production of much surplus, and because people were on the move so often, transporting an accumulation of goods was out of the question.

All of this resulted in highly egalitarian societies, lacking the many inequalities of wealth and power that came with later agricultural and urban life. With no formal chiefs, kings, bureaucrats, soldiers, nobles, or priests, Paleolithic people were perhaps freer of tyranny and oppression than any subsequent kind of human society, even if they were more constrained by the forces of nature. Without specialists, most people possessed the same set of skills, although male and female tasks often differed sharply. Relationships between women and men usually were far more equal than in later societies. As the primary food gatherers, women provided the bulk of the family income. One study of a modern gathering and hunting society in southern Africa found that plants, normally gathered by women, provided 70 percent of the diet, while meat, hunted by men, accounted for just 30 percent. ¹⁰

Change

In what ways did a gathering and hunting economy shape other aspects of Paleolithic societies? When the British navigator and explorer Captain James Cook first encountered the gathering and hunting peoples of Australia in 1770, he described them, perhaps a little enviously, in this way:

They live in a Tranquillity which is not disturb'd by the Inequality of Conditions: The Earth and sea of their own accord furnishes them with all things necessary for life, they covet not Magnificient houses, Household-stuff.... In short they seem'd to set no value upon any thing we gave them.... They think themselves provided with all the necessarys of Life.



The Europeans who settled permanently among such people some twenty years later, however, found a society in which physical competition among men was expressed in frequent one-on-one combat and in formalized but bloody battles. It also meant recurrent, public, and quite brutal beatings of wives by their husbands. ¹² Although sometimes romanticized by Europeans, the relative social equality of Paleolithic peoples did not always ensure a utopia of social harmony.

Like all other human cultures, Paleolithic societies had rules and structures. A gender-based division of labor usually cast men as hunters and women as gatherers. Values emphasizing reciprocal sharing of goods resulted in clearly defined rules about distributing the meat from an animal kill. Rules about incest and adultery governed sexual behavior, while understandings about who could hunt or gather in particular territories regulated economic activity. Leaders arose as needed to organize a task such as a hunt, but without conferring permanent power on individuals.

Native Australians

A number of Aboriginal Australians maintained their gathering and hunting way of life well into the twentieth century. Here an older woman shows two young boys how to dig for honey ants, a popular food. (Bill Bachman/Alamy)

Economy and the Environment

For a long time, gathering and hunting peoples were viewed as primitive, impoverished, barely eking out a living from the land. In more recent decades, anthropologists studying contemporary Paleolithic societies—those that survived into the twentieth century—began to paint a different picture. They noted that gathering and hunting people frequently worked fewer hours to meet their material needs than did people in agricultural or industrial societies and so had more leisure time. One scholar referred to them as "the original affluent society," not because they had so much, but because they wanted or needed so little. ¹³ Nonetheless, life expectancy was low, probably little more than thirty-five years on average. Life in the wild was surely dangerous, and dependency on the vagaries of nature rendered it insecure as well.

But Paleolithic people also acted to alter the natural environment substantially. The use of deliberately set fires to encourage the growth of particular plants certainly changed the landscape and in Australia led to the proliferation of fire-resistant eucalyptus trees at the expense of other plant species. In many parts of the world—Australia, North America, Siberia, Madagascar, Pacific islands—the extinction of various large animals followed fairly quickly after the arrival of human beings, leading scholars to suggest that Paleolithic humankind played a major role, coupled perhaps with changing climates, in the disappearance of these animals. Other hominid, or humanlike, species, such as the Neanderthals in Europe or the recently discovered Flores man in Indonesia, also perished after living side by side with *Homo sapiens* for millennia. Whether their disappearance occurred through massacre, interbreeding, or peaceful competition, they were among the casualties of the rise of humankind. Thus the biological environment inhabited by gathering and hunting peoples was not wholly natural but was shaped in part by their own hands.

The Willendorf Venus

Less than four and a half inches in height and dating to about 25,000 years ago, this female figure, which was found near the town of Willendorf in Austria, has become the most famous of the many Venus figurines. Certain features—the absence of both face and feet, the coils of hair around her head, the prominence of her breasts and sexual organs-have prompted much speculation among scholars about the significance of these intriguing carvings. (Naturhistorisches Museum, Vienna, Austria/The Bridgeman Art Library)



The Realm of the Spirit

The religious or spiritual dimension of Paleolithic culture has been hard to pin down because bones and stones tell us little about what people thought, art is subject to many interpretations, and the experience of contemporary gathering and hunting peoples may not reflect the distant past. There is, however, clear evidence for a rich ceremonial life. The presence of rock art deep inside caves and far from living spaces suggests a "ceremonial space" separate from ordinary life. (See Visual Sources: The Aboriginal Rock Painting of Australia, pp. 42–47.) The extended rituals of contemporary Australian Aboriginal people, which sometimes last for weeks, confirm this impression, as do numerous and elaborate burial sites found throughout the world. No full-time religious specialists or priests led these ceremonies, but parttime shamans (people believed to be especially skilled at dealing with the spirit world) emerged as the need arose. Such people often entered an altered state of consciousness or a trance while performing the ceremonies, often with the aid of psychoactive drugs.

Precisely how Paleolithic people understood the nonmaterial world is hard to reconstruct, and speculation abounds. Linguistic evidence from ancient Africa suggests a variety of understandings: some Paleolithic societies were apparently monotheistic; others saw several levels of supernatural beings, including a Creator Deity, various territorial spirits, and the spirits of dead ancestors; still others believed in an impersonal force suffused throughout the natural order that could be accessed by shamans during a trance dance. ¹⁴ The prevalence of Venus figurines and other symbols all across Europe has convinced some scholars, but not all, that Paleolithic religious thought had a strongly feminine dimension, embodied in a Great Goddess and concerned with the regeneration and renewal of life. ¹⁵ Many gathering and hunting peoples likely developed a cyclical view of time that drew on the changing phases of the moon and on the cycles of female fertility—birth, menstruation,

Snapshot The Paleolithic Era in Perspective ¹⁶				
	Paleolithic Era (from 250,000 to 10,000 years ago)	Agricultural Era (from 10,000 to 200 years ago)	Modern Industrial Era (since 1800)	
Duration of each era, as a percentage of 250,000 years	96%	4%	0.08%	
Percent of people who lived, out of 80 billion total	12%	68%	20%	
Percent of years lived in each era (reflects chang- ing life expectancies)	9%	62%	29%	

pregnancy, new birth, and death. Such understandings of the cosmos, which saw endlessly repeated patterns of regeneration and disintegration, differed from later Western views, which saw time moving in a straight line toward some predetermined goal.¹⁷

Settling Down: The Great Transition

Though glacially slow by contemporary standards, changes in Paleolithic cultures occurred over time as people moved into new environments, as populations grew, as climates altered, and as different human groups interacted with one another. For example, all over the Afro-Eurasian world after 25,000 years ago, a tendency toward the miniaturization of stone tools is evident. Known as micro-blades, these smaller and more refined spear points, arrowheads, knives, and scrapers were carefully struck from larger cores and often mounted in antler, bone, or wooden handles. This ancient and global technological change was similar perhaps to the miniaturization of electronic components in the twentieth century. Another important change in the strategies of Paleolithic people was the collection of wild grains, which represented a major addition to the food supply beyond the use of roots, berries, and nuts. This innovation originated in northeastern Africa around 16,000 years ago.

But the most striking and significant change in the lives of Paleolithic peoples occurred as the last Ice Age came to an end between 16,000 and 10,000 years ago. What followed was a general global warming, though one with periodic fluctuations and cold snaps. Unlike the contemporary global warming, generated by human activity and especially the burning of fossil fuels, this ancient warming phase was a wholly natural phenomenon, part of a long cycle of repeated heating and

Change

Why did some Paleolithic peoples abandon earlier, more nomadic ways and begin to live a more settled life?

cooling characteristic of the earth's climatic history. Plants and animals unable to survive in the Ice Age climate now flourished and increased their range, providing a much richer and more diverse environment for many human societies. Under these improved conditions, human populations grew, and some previously nomadic gathering and hunting communities, but not all of them, found it possible to settle down and live in more permanent settlements or villages. These societies were becoming both larger and more complex, and it was less possible to simply move away if trouble struck. Settlement also meant that households could store and accumulate goods to a greater degree than previously. Because some people were more energetic, more talented, or luckier than others, the thin edge of inequality gradually began to wear away the egalitarianism of Paleolithic communities.

Changes along these lines emerged in many places. Paleolithic societies in Japan, known as Jomon, settled down in villages by the sea, where they greatly expanded the number of animals, both land and marine, that they consumed. They also created some of the world's first pottery, along with dugout canoes, paddles, bows, bowls, and tool handles, all made from wood. A similar pattern of permanent settlement, a broader range of food sources, and specialized technologies is evident in parts of Scandinavia, Southeast Asia, North America, and the Middle East between 12,000 and 4,000 years ago. Bows and arrows seem to have been invented separately in Europe, Africa, and the Middle East during this period and spread later to the Americas. In Labrador, longhouses accommodating 100 people appear in the archeological record. Far more elaborate burial sites in many places testify to the growing complexity of human communities and the kinship systems that bound them together. Separate cemeteries for dogs suggest that humankind's best friend was also our first domesticated animal friend.

This process of settling down among gathering and hunting peoples—and the changes that followed from it—marked a major turn in human history, away from countless millennia of nomadic journeys by very small communities. It also provided the setting within which the next great transition would occur. Growing numbers of people, living in settled communities, placed a much greater demand on the environment than did small bands of wandering people. Therefore, it is perhaps not surprising that among the innovations that emerged in these more complex gathering and hunting societies was yet another way for increasing the food supply—agriculture. That epic transition is the subject of the next chapter.

Comparing Paleolithic Societies

Over the 200,000 years or more of the Paleolithic era, human societies naturally differed from one another—in their tool kits, their adaptation to the environment, their beliefs, their social organization, and much more. Here we examine more carefully two such societies, the San of southern Africa and the Chumash of southern California. What they shared was a gathering and hunting way of life and a continuing existence into modern times. Unlike the gathering and hunting peoples who

Jomon Figurines

Female figurines, dating to perhaps 4,000 years ago, have been found among Japan's Paleolithic people, known as the Jomon. Many scholars believe these carvings had a ritual function, associated with fertility. (The Granger Collection, New York)



succumbed to the relentless expansion of agricultural or industrial societies, the San and the Chumash maintained their ancient way of life into the eighteenth, nineteenth, and twentieth centuries. Even though modern gathering and hunting societies studied by anthropologists surely differed in many ways from their ancient counterparts, they do allow us to see the human face of a way of life long vanished from most parts of the earth.

The San of Southern Africa

On the northern fringe of the Kalahari Desert, in an area including Angola, Namibia, and Botswana, lies the country of the San people, who numbered 50,000 to 80,000 at the start of the twenty-first century. Linguistically, they are related to the great Khoisan language family, whose speakers have lived throughout eastern and southern Africa for many millennia. The immediate ancestors of the San have inhabited southern Africa for at least 5,000 years. Economically, Khoisan-speaking peoples practiced a gathering and hunting way of life with a technology of stone tools that was recognizable to their twentieth-century San descendants. Another cultural practice of long standing was the remarkable rock art of southern Africa, depicting people and animals, especially the antelope, in thousands of naturalistic scenes of hunts, battles, and dances. Dating to as far back as 26,000 years ago, this tradition persisted into the nineteenth century, making it the "oldest artistic tradition of humankind."19 Modern scholars suggest that this art reflected the religious experience of trance healers, who were likely the artists who painted these images. (See chapter opening photo on p. 10.) When a late-nineteenth-century anthropologist showed some of these rock paintings to an elderly San couple, the woman began to sing and dance, while the man became sad, remembering the old songs. 20 In these and other ways, contemporary San people are linked to an ancient cultural tradition that is deeply rooted in the African past.

Most Khoisan gathering and hunting peoples had long ago been absorbed or displaced by the arrival of Bantu-speaking peoples bearing agriculture, domesticated animals, and iron tools, but the San, living in a relatively remote location, endured. Even the colonization of southern Africa by Europeans left the San largely intact until

the 1960s and later, but not completely, for they traded with their agricultural neighbors and sometimes worked for them. The San also began to use iron arrowheads, fashioned from metals introduced by the newcomers. Drums, borrowed from their Bantu-speaking neighbors, now supplemented their own stringed instruments and became part of San musical tradition. Despite these borrowings, when anthropologists descended on the San in the 1950s and 1960s and studied every aspect of their culture, they found a people still practicing an ancient way of life. (See Document 1.1, pp. 34–39, for a description of San life from a twentieth-century woman's perspective.) The following account of San culture is drawn largely from the work of Richard Lee, an anthropologist who lived with and was adopted by one of

Description
What are the most
prominent features of
San life?

The San of Southern Africa



the San groups who called themselves the Ju/'hoansi.²¹ The term literally means "real people"; the slash and the apostrophe in the name denote "clicks," which are a distinctive sound in the San language.

In the semidesert conditions of the northern Kalahari, the Ju/'hoansi have drawn a livelihood from a harsh land using some twenty-eight tools for gathering, hunting, and preparing food. The most important implements include an all-purpose wooden digging stick, a large leather garment used for carrying things and also as a blanket, woven ropes, nets, a knife, a spear, a bow, and arrows tipped with a potent poison. The Ju/'hoansi have identified and named some 260 species of wild animals, of which the kudu, wildebeest, and gemsbok are the most commonly hunted, entirely by men. More than 100 species of wild plants, including various nuts, berries, roots, fruits, melons, and greens, were collected, largely by women.

What kind of life did they create for themselves with this modest technology? According to Richard Lee, it was a "happy combination of an adequate diet and a short workweek." He calculated that the Ju/'hoansi consumed 2,355 calories on average every day, about 30 percent from meat and 70 percent from vegetables, well balanced with sufficient protein, vitamins, and minerals—and, he concluded, they "[did] not have to work very hard" to achieve this standard of living. An average workweek involved about seventeen hours of labor in getting food and another twenty-five hours in housework and making and fixing tools, with the total work divided quite equally between men and women. This left plenty of leisure time for resting, visiting, talking, and conducting rituals and ceremonies. Still, it was an uncertain and perpetually anxious life, with fluctuating rainfall, periodic droughts, seasonal depletion of plants, and the unpredictable movement of animals.

What made the Ju/'hoansi way of life possible was a particular kind of society, one characterized by mobility, sharing, and equality. The basic unit of social organization was a band or camp of roughly ten to thirty people, who were connected by ties of exchange and kinship with similar camps across a wide area. The membership of a camp fluctuated over time as many people claimed membership in more than one band. Furthermore, the camps themselves, consisting of quickly built grass huts, were moved frequently, with the Ju/'hoansi seldom staying more than a few months in any one place. The flexibility of this arrangement allowed them to adjust rapidly to the changing seasonal patterns of their desert environment.

At one level, Ju/'hoansi society was extremely simple. No formal leaders, chiefs, headmen, priests, or craft specialists existed, and decisions were made by individual families and camps after much discussion. On another level, social relationships were extremely complex, and it took Richard Lee several years to penetrate them. In addition to common kinship relations of marriage and descent, there were "joking" and "avoidance" relationships that determined the degree of familiarity with which people engaged one another. A further element of complexity lay in a unique "naming" system, which created a deep bond among people with the same name, even though they were not biologically related. For example, a man could not marry any woman who bore the same name as his mother or sister.

At the heart of such a small-scale society of intense personal relationships were values of modesty, cooperation, and equality, which the Ju/'hoansi went to great lengths to inculcate and maintain. One technique, known as "insulting the meat," involved highly negative comments about the size or quality of an animal killed by a hunter and the expectation that a successful hunter would disparage his own kill. As one man put it:

When a young man kills much meat, he comes to think of himself as a chief or a big man, and he thinks of the rest of us as his servants or inferiors. We can't accept this. We refuse one who boasts, for someday his pride will make him kill someone. So we always speak of his meat as worthless. In this way we cool his heart and make him gentle.

Another practice tending toward equality was the principle that the owner of the arrow that killed an animal, not the successful hunter himself, had the right to distribute the meat from that animal. Because arrows were widely shared, and sometimes owned by women, this custom spread the prestige of meat distribution widely within the society and countered any possibility that the hunter might regard the meat as his private property.

Beyond the sharing of food within a camp was a system of unequal gift exchange among members of different camps. For example, I give you something today, and many months later, you may give me a gift that need not be equivalent in value. When Richard Lee appeared puzzled by the inequality of the exchange, he was told: "We don't trade with things; we trade with people." This system of exchange had more to do with establishing social relations than with accumulating goods. One famous and highly respected hunter named Toma "gave away everything that came into his hands. . . . [I]n exchange for his self-imposed poverty, he won the respect and following of all the people." It was an economic system that aimed at leveling wealth, not accumulating it, and that defined security in terms of possessing friends or people with obligations to oneself, rather than possessing goods.

Social equality extended also to relations between women and men. Richard Lee noted "relative equality between the sexes with no-one having the upper hand." Teenagers engaged quite freely in sex play, and the concept of female virginity was apparently unknown, as were rape, wife beating, and the sexual double standard. Although polygamy was permitted, most marriages were in fact monogamous because women strongly resisted sharing a husband with another wife. Frequent divorce among very young couples allowed women to leave unsatisfactory marriages easily. Lee found that longer-term marriages seemed to be generally fulfilling and stable. Both men and women expected a satisfying sexual relationship, and both occasionally took lovers, although discreetly.

But not all was sweetness and light among the Ju/'hoansi. Frequent arguments about the distribution of meat or the laziness or stinginess of particular people generated conflict, as did rivalries among men over women. Lee identified twenty-two murders that had occurred between 1920 and 1955 and several cases in which

the community came together to conduct an execution of particularly disruptive individuals. Lesser tensions were handled through talk; more serious disputes might result in separation, with some people leaving to join another camp or to start their own.

In confronting the world beyond material and social life, the Ju/'hoansi reflected beliefs and practices that were arguably tens of thousands of years old. Unlike later peoples with their many gods, goddesses, spirits, and powers, the San populated the spiritual universe in a quite limited way. A Creator God, Gao Na, gave rise to the earth, men, women, animals, waterholes, and all other things; but like the Greek gods, Gao Na was a capricious deity who often visited misfortune on humankind, simply because he chose to do so. A lesser god, Gauwa, was even more destructive, spreading disease, conflict, and death, but also on occasion providing assistance to beleaguered humans. The most serious threat to human welfare came from the ghosts of dead ancestors, the *gauwasi*, who were viewed as primarily malevolent. Asked why the ancestral spirits were so destructive, one woman healer replied:

Longing for the living is what drives the dead to make people sick....They are very very sad....They miss their people on earth. And so they come back to us. They hover near the villages and put sickness into people, saying "Come, come here to me."

The Ju/'hoansi had one powerful resource for counteracting these evil influences from the world of the gods and ancestors. It was n/um, a spiritual potency that lies in the stomach and becomes activated during "curing dances," powerful nightlong rituals held frequently, especially during the dry season when several camps converged on the remaining waterholes. Around a fire, an inner circle of women clapped and sang, while men danced in a circle behind them. Then someone went into a trance and, in that altered state of consciousness, sought to share his or her activated n/um with everyone in the camp, pulling the evil out of them. Doing so had the power to heal the sick, to bring harmony to the community, to affect the rainfall and the supply of animals, and to protect everyone from the evil designs of the ancestors.²³

Recent analysis suggests that the rock art of southern Africa represents the visions achieved by ancient trance dancers as they did battle with the supernatural world. (See chapter opening photo on p. 10.) If so, the Ju/'hoansi of the twentieth century were participating in the longest and most continuous religious tradition in world history.

The trance dance was in many ways a distinctive tradition. It did not seek communion with the supernatural; no gifts or sacrifices were offered to the gods or the ancestors, and few prayers were made for their assistance. Viewing the gods as the source of disease, conflict, and death, the Ju/'hoansi hurled at them words of reproach, abuse, and rejection, seeking to ward them off, to expel them from society. It was, as one scholar put it, a "war with God." The leaders of this war, the

trance dancers, were not possessed by any supernatural being but used the trance state to activate their own internal n/um. Nor were they a priestly elite. Men and women alike could become healers, although a fearful and extended process of spiritual preparation awaited them. Almost half of the men and one-third of the women whom Lee encountered had entered the trance state. It was a much-sought-after role, but it conveyed no permanent power or authority. Finally, Ju/'hoansi religious thinking located the source of evil and misfortune outside of the community in the activity of the gods and ancestors rather than within society in the form of sorcerers or witches. The curing dances brought the community together, united against the external and supernatural enemy.

The Chumash of Southern California

If the San Ju/'hoansi people provide a window into the life of at least one nomadic and long-established gathering and hunting society, the Chumash are more representative of those later post–Ice Age Paleolithic peoples who settled in permanent villages and constructed more complex societies. Together the San and the Chumash illustrate the immense variation that was possible within the limits of a gathering and hunting way of life.

Located in southern California in the vicinity of present-day Santa Barbara, the Chumash occupied a richer and more varied environment than did the San. Speaking a series of related dialects, they lived along the coast, in the immediate interior, and on a series of offshore islands. Thus they were able to draw on the resources of the sea as well as those of the land to support a much more densely settled population of perhaps 20,000 people when they first encountered the Spanish in the sixteenth century.

Although the area had been sparsely occupied for about 10,000 years, the history of its people comes into sharper focus only in the centuries of the Common Era. The first millennium C.E. witnessed a growing population, the overhunting and depletion of deer herds in the interior, likely food shortages, and consequently increasing levels of violence and warfare among rival groups. Evidence for this violence is found in the large number of skeletons with bashed-in skulls or arrow and

spear wounds. Then, in the several centuries after 1150 C.E., the Chumash, according to a noted scholar, "created an entirely new society." Whereas the history of the San is marked by long-term continuities with a distant past, the Chumash experienced an extraordinary transformation.

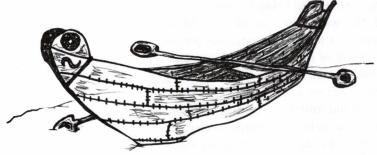
A major element of that transformation lay in a remarkable technological innovation—the creation of a planked canoe, or *tomol*—an oceangoing vessel some twenty to thirty feet long and with a cargo capacity of two tons. Called "the most technically sophisticated watercraft developed in the New World," the tomol came into general use around 1000 C.E. ²⁶ Building or owning one of these vessels brought immense prestige, wealth, and power, injecting a new element of inequality into Chumash society. The

Comparison

In what ways, and why, did Chumash culture differ from that of the San?

The Chumash of Southern California





A Chumash Tomol

A technologically sophisticated seagoing canoe, the tomol, shown here in a contemporary drawing, was constructed from redwood or pine planks sewn together and caulked with hard tar and pine pitch. In recent decades, Chumash descendants have built several tomols and paddled them from the California mainland to the Channel Islands, re-creating a voyage that their distant ancestors had made many times. These reenactments were part of an effort to preserve for future generations the culture and traditions of the ancient Chumash. (Gaviota Coast Conservancy/Redrawn by © Elizabeth Leahy)

boatbuilders organized themselves into an elite craft guild, the Brotherhood of the Tomol, which monopolized canoe production and held the tools, knowledge, and sacred medicine associated with these boats. The tomol stimulated a blossoming of trade along the coast and between the coast and the islands as plant food, animal products, tools, and

beads now moved regularly among Chumash communities. The boats also made possible deep-sea fishing, with swordfish, central to Chumash religious practice, being the most highly prized and prestigious catch.

In other ways as well, the material life of the Chumash was far more elaborate than that of the San. They lived in round, permanent, substantial houses, covered by grass or reeds, some of them fifty feet in diameter and able to hold up to seventy people. Every village had its own sweathouse, built partially underground and entered through an opening in the roof. Soapstone bowls, wooden plates, beautifully decorated reed baskets, and a variety of items made from bone or shell reflected a pattern of technological innovation far beyond that of the San.

A resource-rich environment, a growing and settled population, flourishing commerce, and technological innovation combined to produce something that scholars not long ago would have considered impossible—a market economy among a gathering and hunting people. Whereas the economic life of the San was regulated almost entirely by custom and tradition, that of the Chumash involved important elements of a market-based system: individuals acting out of a profit motive; the use of money, in the form of stringed beads; regulation of the supply of money to prevent inflation; specialized production of goods such as beads, stone tools, canoes, and baskets; prices attached to various items; payment for services provided by dancers, healers, and buriers; and private ownership of canoes, stores of food, and some tools. This is how an early Spanish observer described the Chumash in 1792:

All these Indians are fond of traffic and commerce. They trade frequently with those of the mountains, bringing them fish and beadwork which they exchange for seeds and shawls of foxskin and a kind of blanket.... When they trade for profit, beads circulate among them as if they were money, being strung on long threads, according to the greater or smaller wealth of each one.... These strings of beads... are used by the men to adorn their heads and for collars.... They all make a show of their wealth which they always wear in sight on their heads, whence it is taken for gambling and trafficking.²⁷

How different is all this from the life of the Ju/'hoansi! Permanently settled villages, ranging in size from several hundred to a thousand people, would have struck the San as unsustainably large compared to their own mobile camps of twenty-five

to fifty people. The specialized skills of the Chumash probably would have surprised the Ju/'hoansi, because all San people possessed pretty much the same set of skills. The San no doubt would have been appalled by the public display of wealth, the impulse toward private accumulation, and the inequalities of Chumash society. A bearskin cape, worn only by the elite of canoe owners and village chiefs, marked the beginnings of class distinctions, as did burials, which were far more elaborate for the wealthy and their children than for commoners. Members of the Brotherhood of the Tomol often were buried with parts of their canoes.

Perhaps most offensive to the egalitarian and independent Ju/'hoansi would have been the emergence of a permanent and hereditary political elite among the Chumash. High-ranking Chumash chiefs, who inherited their positions through the male line, exercised control over a number of communities, but each village also had its own chief, some of whom were women. These political leaders, all of whom were also canoe owners, led their people in war, presided over religious rituals, and regulated the flourishing trade that followed the invention of the tomol. They also named the dates for periodic feasts, during which donations and collections from the wealthy were used to feed the poor and to set aside something for a rainy day. This effort at redistributing wealth might have earned the approval of the Ju/'hoansi, who continually sought to level any social and economic distinctions among themselves.

Whatever the Ju/'hoansi might have thought, these transformations—technological, economic, social, and political—created a more unified and more peaceful life among the Chumash in the several centuries after 1150. Earlier patterns of violence apparently subsided as specialized crafts and enhanced trade evened out the distribution of food, making various Chumash communities dependent on one another. More formal political leadership enabled the peaceful resolution of disputes, which formerly had been resolved in battle. Frequent celebrations served to bring various Chumash villages together, while a society-wide organization of ritual experts provided yet another integrating mechanism. These transformations represent a remarkable achievement, especially because they introduced in a gathering and hunting society many social elements normally associated only with agricultural peoples. However, the coming of the Europeans, with their guns, diseases, and missionaries, largely destroyed Chumash society in the centuries following that epic encounter. The mobile San, in their remote location, were able to preserve their ways of life far longer than the more settled, and therefore vulnerable, Chumash, who were unable to avoid the powerful newcomers.

Reflections: The Uses of the Paleolithic

Even when it is about a past as distant as the Paleolithic era, the study of history is also about those who tell it in the present. We search the past, always, for our own purposes. For a long time, modern people were inclined to view their Paleolithic ancestors as primitive or superstitious, unable to exercise control over nature, and

ignorant of its workings. Such a view was, of course, a kind of self-congratulation, designed to highlight the "progress" of modern humankind. It was a way of saying, "Look how far we have come."

In more recent decades, growing numbers of people, disillusioned with modernity, have looked to the Paleolithic era for material with which to criticize, rather than celebrate, contemporary life. Feminists have found in gathering and hunting peoples a much more gender-equal society and religious thinking that featured the divine feminine, qualities that encouragingly suggested that patriarchy was neither inevitable nor eternal. Environmentalists have sometimes identified peoples in the distant past who were uniquely in tune with the natural environment rather than seeking to dominate it. Some nutritionists have advocated a "Paleolithic diet" of wild plants and animals as well suited to our physiology. Critics of modern materialism and competitive capitalism have been delighted to discover societies in which values of sharing and equality predominated over those of accumulation and hierarchy. Still others have asked, in light of the long Paleolithic era, whether the explosive population and economic growth of recent centuries should be considered normal or natural. Perhaps they should be regarded as extraordinary, possibly even pathological. Finally, research about the Paleolithic era has been extremely important in efforts by contemporary gathering and hunting peoples, or their descendants, to maintain or recover their older identities amid the conflicting currents of modern life. All of these uses of the Paleolithic have been a way of asking, "What have we lost in the mad rush to modernity, and how can we recover it?"

Both those who look with disdain on Paleolithic "backwardness" and those who praise, often quite romantically, its simplicity and equality seek to use these ancient people for their own purposes. In our efforts to puzzle out the past, all of us—historians and students of history very much included—stand somewhere. None of us can be entirely detached when we view the past, but this is not necessarily a matter for regret. What we may lose in objectivity, we gain in passionate involvement with the historical record and the many people who inhabit it. Despite its remoteness from us in time and manner of living, the Paleolithic era resonates still in the twenty-first century, reminding us of our kinship with these distant people and the significance of that kinship to finding our own way in a very different world.

Second Thoughts

What's the Significance?

To assess your mastery of the material in this chapter, visit the **Student Center** at bedfordstmartins.com/strayer.

Paleolithic rock art
Venus figurines
Dreamtime
Clovis culture
megafaunal extinction

Austronesian migrations
"the original affluent
society"
shamans
trance dance

Paleolithic settling down San culture "insulting the meat" Chumash culture Brotherhood of the Tomol

Big Picture Questions

- 1. What is the significance of the Paleolithic era in world history?
- 2. In what ways did various Paleolithic societies differ from one another, and how did they change over time?
- 3. Which statements in this chapter seem to be reliable and solidly based on facts, and which ones are more speculative and uncertain?
- 4. How might our attitudes toward the modern world influence our assessment of Paleolithic societies?

Next Steps: For Further Study

David Christian, *This Fleeting World: A Short History of Humanity* (2008). A lovely essay by a leading world historian, the first part of which provides a succinct survey of the Paleolithic era.

Brian M. Fagan, *People of the Earth: An Introduction to World Prehistory* (2006). A global account of early human history, written by a leading archeologist.

Clive Gamble, *Timewalkers: The Prehistory of Global Colonization* (2003). A beautifully written account of the initial human settlement of the earth.

Sally McBreatry and Alison S. Brooks, "The Revolution That Wasn't: A New Interpretation of the Origin of Modern Human Behavior," *Journal of Human Evolution* 39 (2000). A long scholarly article laying out the archeological evidence for the emergence of humankind in Africa.

Marjorie Shostak, *Nisa: The Life and Words of an !Kung Woman* (2000). A vivid first-person account of a San woman's life in a twentieth-century gathering and hunting society.

"Prehistoric Art," http://witcombe.sbc.edu/ARTHprehistoric.html#general. An art history Web site with a wealth of links to Paleolithic art around the world.

For Web sites and additional documents related to this chapter, see Make History at bedfordstmartins.com/strayer.