

PART ONE

Foundations



CHAPTER 1

The Human World

Some ninety thousand years ago, our ancestors—optimistically labeled *Homo sapiens*—began to migrate out of Africa. Their movement was incremental so it would hardly have dawned on them how momentous the consequences of their action were to be. But *Homo sapiens* were not the first to have set forth. *Homo erectus* had left Africa some 1.8 million years earlier and over the course of time had spread as far as China and England (Figure 1.1). Although these early hominoids are often portrayed as less advanced than *Homo sapiens*, it is now clear that they laid the foundations for later developments.¹ Tangible evidence is hard to come by, apart from one clear example, a unique type of hand axe that was to remain an essential and effective part of human life for hundreds of thousands of years.² First a proper stone—usually a river cobble of basalt or quartzite or flint—had to be chosen and then it had to be hit in a particular way with the help of another stone to flake off pieces. The stone had to be flipped and rotated with different types of strikes producing different edges. The final result was an oval or triangular object, pointed on one end and rounded at the base to conform to the shape of the palm where it was held. The symmetrical design of these axes makes them stand out from earlier stone tools; the symmetry also clearly reflects the quantum leap in the cognitive and linguistic capacities that make all of us human. Furthermore, tool making was no longer an informal process but became something of an industry, with some places—and obviously also craftsmen—dedicated solely to their production (Figure 1.2). People also worked in unison at kill sites, as evidenced at **Olorgesailie, Kenya**, where, along the shore of a large, now extinct isolated lake, thousands of stone tools have been found.

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The axes were mostly used for carving meat or breaking bones to access marrow.³ But experiments have also shown that they might have been thrown discus-style. With a range of about 30 meters, the point hurtles earthward with tremendous force. Such weapons would not have been good for moving targets, but against stationary ones, like animals standing close to each other while drinking at a lake's edge, they would have been ideal, which perhaps explains why axes like these seem so often to be found in riverbeds and along lake shores.⁴ In one site in England, near a watering hole, a hand axe was found still lodged in the skull of a mammoth. Despite the assumption that making weapons was the key factor in this evolutionary moment, it is not necessarily obvious that these were always weapons. Some are so well-crafted and made from unusually colored stones that they might have been used as a marker of ancestral status associated with ritual activity. This seems very much to be the case of a particularly well-made stone axe uncovered at Olduvai Gorge, Tanzania, at a site near the shores of a one-time lake (Figure 1.3). Dating to about 1.8 million years ago, it is 23 cm long and was fashioned from a shiny, gray-green volcanic rock. **Olduvai Gorge** produced another surprise, a circle of lava stones that were the remains of a hut or windbreaker consisting of branches anchored at the base by stones piled into heaps and spaced on the circumference about every .7 meters. This is the earliest evidence so far of a man-made structure.⁵ Scattered around the hut are the remnants of stone chipping and other activities.

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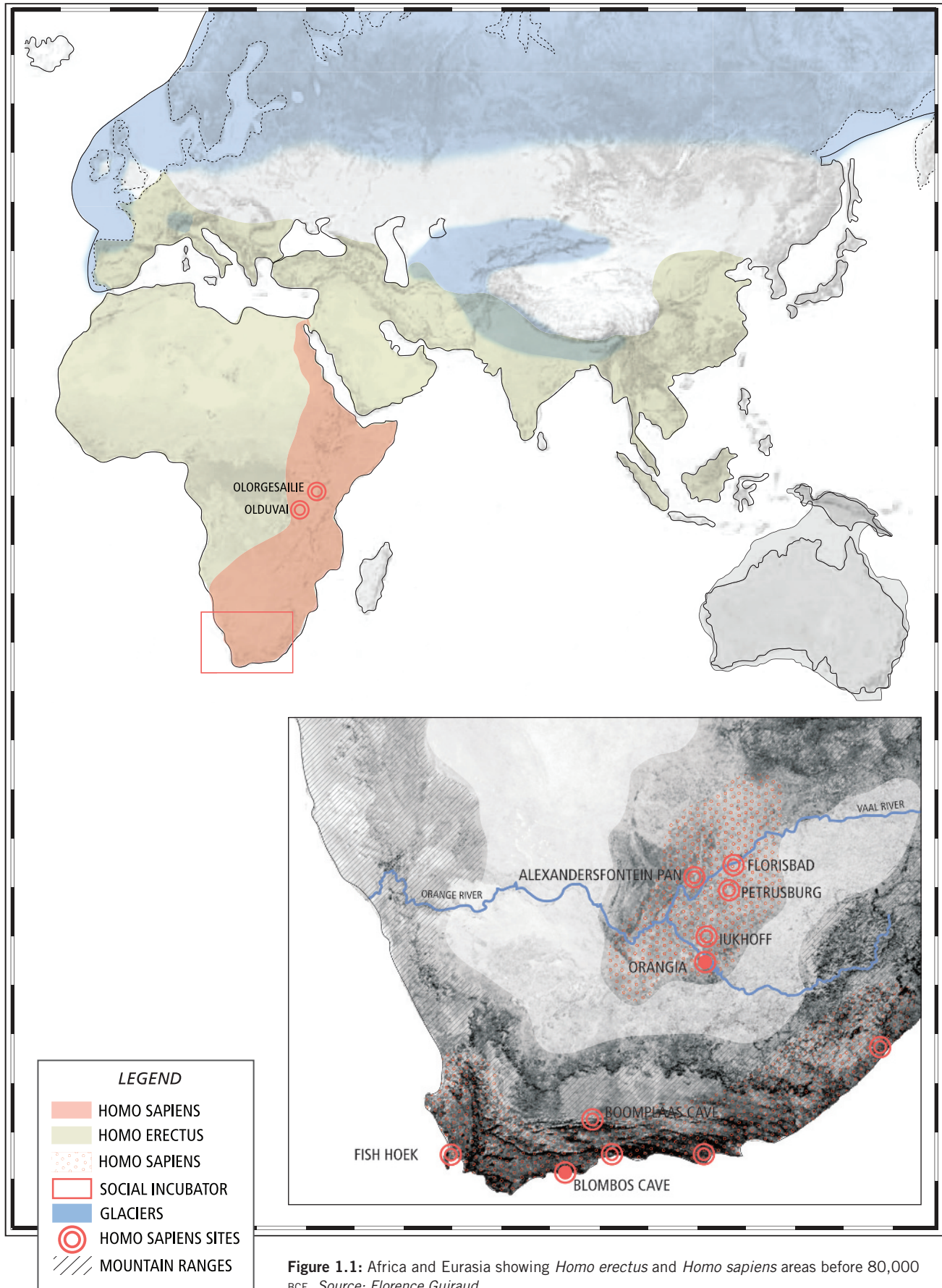


Figure 1.1: Africa and Eurasia showing *Homo erectus* and *Homo sapiens* areas before 80,000 BCE. Source: Florence Guiraud



The Olduvai Gorge settlement proves without a doubt that a social order and spatial differentiation had developed during the time of *Homo erectus*. What is also clear is that people could expand and replicate their culture across space and time and, indeed, in a variety of ecological zones. In India, where *Homo erectus* arrived around 700,000 BCE, they lived in the semi-arid regions of western Rajasthan, in the alluvial plains of Gujarat, even in the moist deciduous woodlands in central India. The **Baichbal and Hunsgi Valleys**, located in the Deccan region of India, were particularly rich in settlements. In the wet season, groups would have dispersed over the valley in search of plant foods, berries, and fruits, whereas in the dry season, they congregated in larger groups near the numerous spring-fed streams, and focused more on the hunt, leaving behind their tell-tale axes. The bones of wild boar, cattle, elephant, horse, and hippopotamus that archaeologists have found at these sites indicate that people hunted in both forests and open grasslands. The Acheulean axe made it to England by around 500,000 BCE if not earlier, with sites at Barnfield Pit and Boxgrove Quarry.⁶

While this colonization of the globe was taking place, a genetic mutation occurred back in Africa, giving rise to the *Homo sapiens*, who, though of smaller build, had a brain that allowed them to intensify and broaden the incipient social, technical, and territorial accomplishments of *Homo erectus*. Stone tools became more complex and differentiated. The heavy hand axe gave way to slender points that were attached to sticks to form spears, allowing hunters to attack more dangerous prey. By 130,000 BCE, homo sapiens were exchanging materials over large distances and creating a network of relations that by necessity must have been based on mutually advantageous social bonds.

The development of this distinctive culture took place in southern Africa in two regions, one in north central South Africa and the other to the south along the shore. The first was an area of savannah punctuated by lakes, for though the time period was colder than today, it was also wetter. **Alexandersfontein Pan** in South Africa was in its heyday a typical site. What is now a dried-out watering hole was a hundred thousand years ago a large lake, 9 kilometers across and 20 meters deep. The shores and the rivers feeding it were home to numerous camps where humans lived and thrived for thousands of years.⁷ Alexandersfontein Pan was hardly alone; it

▼ **Figure 1.2:** Acheulean hand axes, Olorgesailie, Kenya. Source: Emily Hoerner

▲ **Figure 1.3:** Hand axe, Olduvai Gorge, Tanzania. Source: The Trustees of the British Museum

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was, in fact, at the center of a large lake district, some 200 kilometers across, the sandy lake bed vestiges of which are still clearly imprinted in the landscape. Draining into the Orange River at its southern end, it would have been ideal for humans with its extensive array of grasslands and wetlands, with animal herds ranging in between. Rocky outcrops provided a plentiful supply of lithic material. A camp near Florisbad next to a spring was where groups met to hunt and butcher animals.⁸ At a camp known archaeologically as **Orangia I**, people made C-shaped wind shelters similar to those made by the Aboriginal Australians (Figure 1.4a, 1.4b). Orangia I was

28 45 59 S, 26 04 27 E

Figure 1.4a, b: Orangia I, South Africa: (a) plan, (b) site plan. *Source:* Andrew Ferentinis/Clavin Garth Sampson, *The Middle Stone Age Industries of the Orange River Scheme Area* (Bloemfontein: National Museum, 1968), 24–26



located on the bluff overlooking a river tributary to the Orange River. With a cliff behind it, the site was probably only accessed from the river itself, and was probably used during the dry season. The remnants of such camps dot a hundred-kilometer stretch of the Orange River, along its shores and lower bluffs, and even though not all the camps that have been found by archaeologists were used at the same time, the river with its protected canyons was clearly a magnet for human activity⁹ (Figure 1.5).

Equally important to the emergence of *Homo sapiens* culture was the thousand-mile stretch of shores and cliffs that overlook the Atlantic and the Indian Ocean around Africa's southern tip. The oceans would have been lower back then, allowing the cave dwellers to gaze out over a kilometer or so of salt marshes. At the caves at Pinnacle Point, Blombos, and at the mouth of Klasies River, people began to fish around 140,000 BCE, and around 70,000 BCE they began to use bone tools instead of stone tools to hunt dune mole rats and seals (Figure 1.6). The caves were not temporary shelters, but home bases used seasonally and perhaps even the whole year around. They were inhabited in this way for thousands of years at a stretch.

Figure 1.5: Orange River archaeological sites, South Africa. Source: Mark Jarzombek/Clavin Garth Sampson, *The Middle Stone Age Industries of the Orange River Scheme Area* (Bloemfontein: National Museum, 1968), 24–26.



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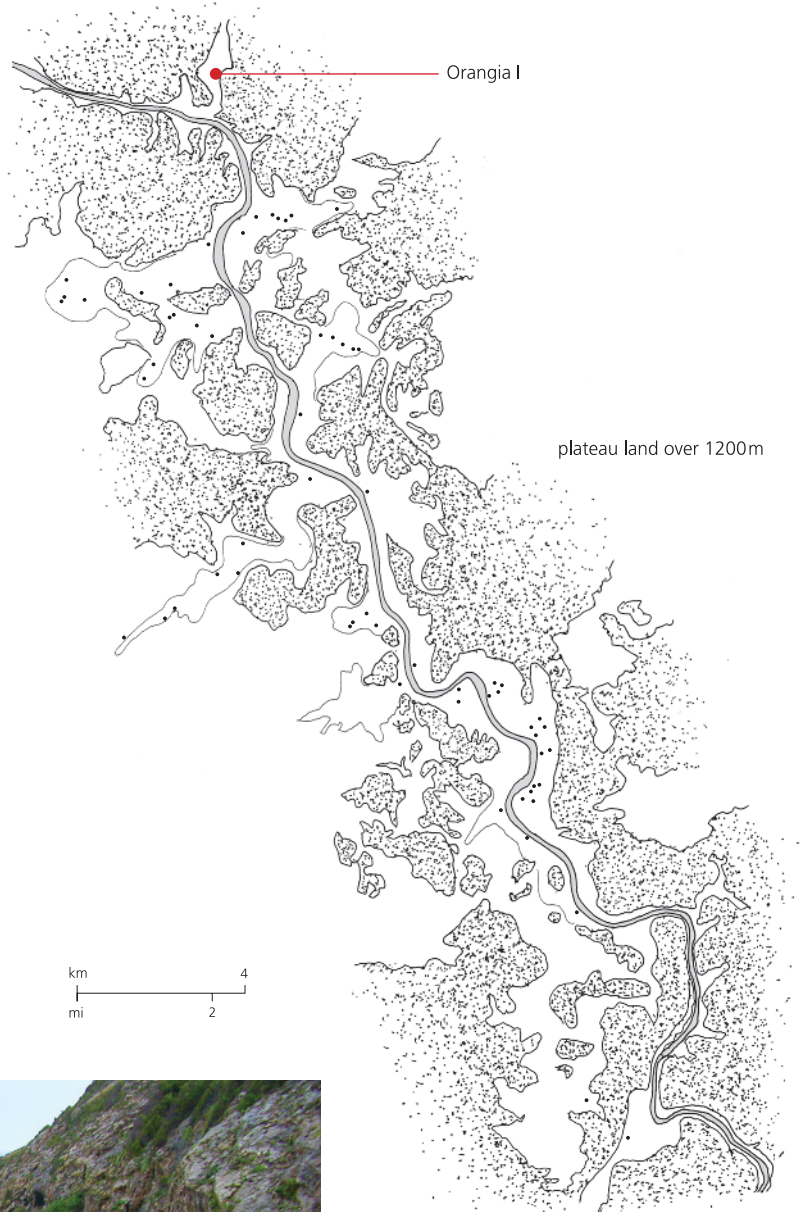


Figure 1.6: Blombos Cave, South Africa. Source: Chris Henshilwood

BLOMBOS CAVE

1 34 42 S, 36 26 48 E

Though Blombos Cave with its tools, fishhooks, scrapers, and hand axes gives us invaluable insight into the food acquisition of our early ancestors, what surprised archaeologists in particular was the discovery of a set of small mollusk shells that was part of a necklace, with each shell carefully drilled with a hole for the string¹⁰ (Figure 1.7). We have no way of knowing how the necklace was used, but it was not to adorn a pretty neck. For the Zulu today,



Figure 1.7: Necklace, Blombos Cave, South Africa. Source: Chris Henshilwood



beaded necklaces convey information about a person's marital status, economic level, and origin.¹¹ For the Paiwan, who live in Taiwan, necklaces are imbued with living spirits and are carefully passed down among the chieftains from generation to generation. The necklace serves as a sign of status, a marker of historical events, and the embodiment of powerful spirits. Implications of this sort must already have been present at Blombos Cave.

The ochre found in many of the South African sites is further proof of social complexity (Figure 1.8). Hundreds of small chunks of it were found in Blombos Cave. Some pieces were in the shape of crayons that were presumably used to paint their bodies or make images on the walls. Known scientifically as hematite, ochre is a reddish iron-containing rock that was used as a coloring substance made by grinding the stone into a powder that when mixed with fat or water formed a paste.¹² *Homo erectus* had already begun to work with ochre, thus securing it as a key, nonfunctional element in human life. Stone balls colored with ochre were recovered from Olorgesailie and date to around 340,000 years ago.¹³ At Kabwe (Broken Hill) in Zambia, archaeologists found ochre with skeletal remains that date back to between 200,000 and 125,000 BCE, indicating its early use in death ceremonies.

Ochre was the great universal of all First Societies. The Blackfeet of the American Plains referred to it as *nitsisaan* or “real paint” and profusely daubed it on their ceremonial garments. Its color was thought to represent the sun and the energy that permeates all things, making a person rubbed with it appear holy and powerful.¹⁴ Its redness and brilliance signaled supernatural potency overlapping with a range of cosmological concepts revolving around rain, fertility, hunting, and death.¹⁵ The nineteenth-century painter George Catlin painted the Sioux worshipping at a red boulder in the open grasslands of the Great Plains (Figure 1.9). Ceremonial uses of ochre still exist today, such as among the Maasai in Kenya during certain initiation rituals, by Amazon tribes and by Aboriginal people in Australia (Figure 1.10).

Figure 1.8: Ochre, needles, and artifacts found at Blombos Cave, South Africa. Source: Chris Henshilwood

14 27 44 S, 28 26 28 E



Figure 1.9: Sioux Worshipping at the Red Boulders, George Catlin, 1837–1839. Source: Smithsonian American Art Museum, Washington, DC/Art Resource, NY



Figure 1.10: A man applies yellow ochre to his body before a funeral, Tiwi Islands, Australia. Source: David Edwards/National Geographic Stock

The meaning attached to ochre can vary from place to place. But wherever the rock appears in the landscape as a red vein in a hillside, it could easily be interpreted as the earth's blood, and indeed its association with blood is still part of the mythology of many indigenous peoples who view it as having magical and healing properties relating to birth and life. Sites that have been mined in ancient times still exist, as in **Rustrell France** and **central Australia** (Figures 1.11 and 1.12). The !Kung, who live in the Kalhari Desert of Botswana and who are among the oldest of the surviving First Society people in the world, use the pigment in rituals dealing with a woman's first menstruation. A female initiate, on emergence from seclusion, would present the women of her kin group with lumps of ochre

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for decorating their faces and cloaks and also for adorning the young men to protect them when out hunting.¹⁶ Historically and cross-culturally in southern Africa, women played a major role in the quarrying of earth pigments as well as in their processing.¹⁷ The !Kung will speak of an impending ritual action by referring metaphorically to the sound of women pounding ochre.¹⁸ The Himba women in Namibia in southwest Africa still grind ochre by hand and rub it on their bodies head to toe, mixing it with butter and sweet-smelling plants (Figure 1.13).



Figure 1.11: Ochre cliffs, Rousillon, France. Source: © Doogsta (<http://creativecommons.org/licenses/by-sa/2.0/deed.en>)

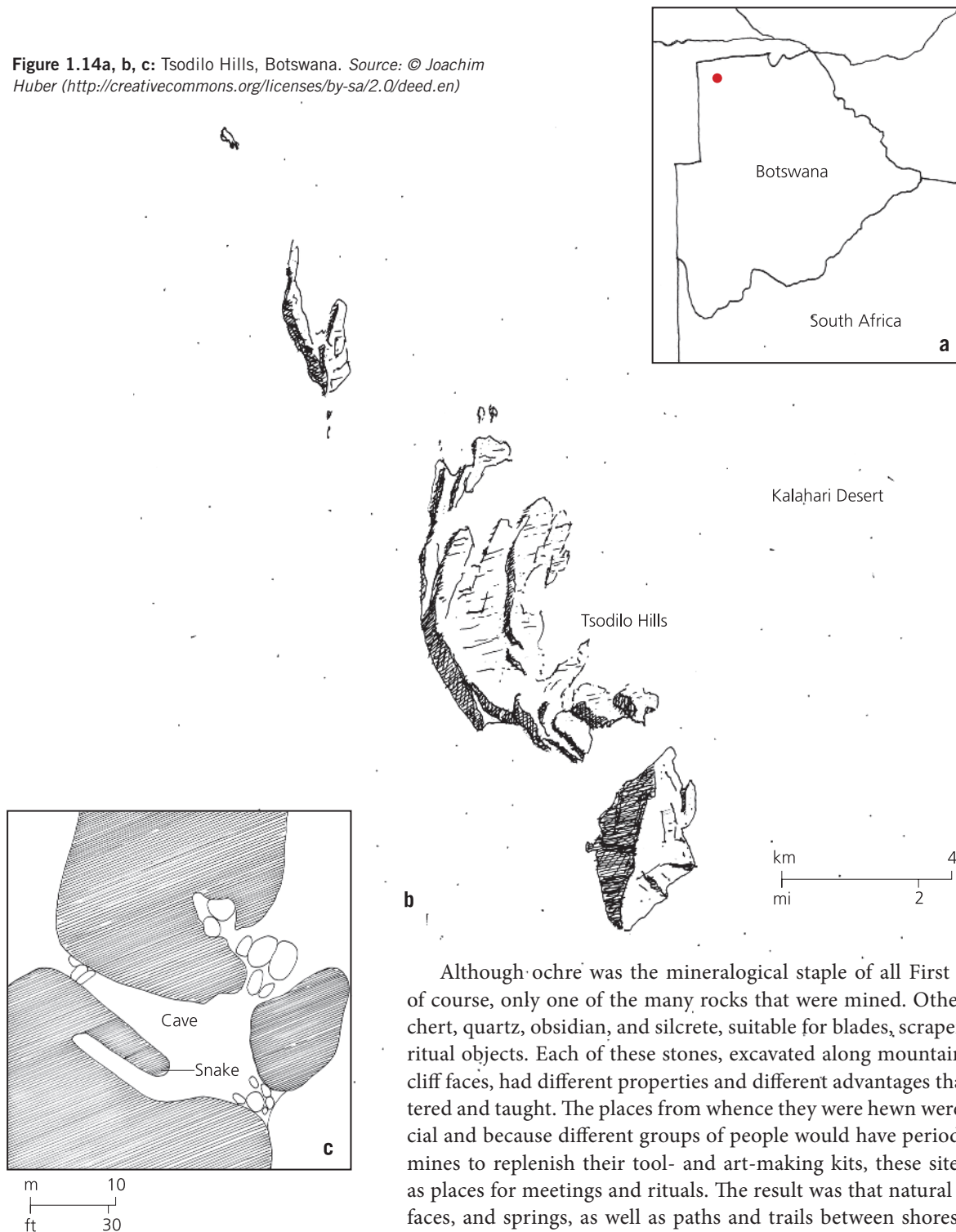


Figure 1.12: Ochre cliffs, Australia. Source: © Toby Hudson (<http://creativecommons.org/licenses/by-sa/3.0/deed.en>)



Figure 1.13: Himba woman grinding ochre, Namibia. Source: Bill Cain

Figure 1.14a, b, c: Tsodilo Hills, Botswana. Source: © Joachim Huber (<http://creativecommons.org/licenses/by-sa/2.0/deed.en>)



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Although ochre was the mineralogical staple of all First Societies, it was, of course, only one of the many rocks that were mined. Others included flint, chert, quartz, obsidian, and silcrete, suitable for blades, scrapers, choppers, and ritual objects. Each of these stones, excavated along mountain slopes or along cliff faces, had different properties and different advantages that had to be mastered and taught. The places from whence they were hewn were considered special and because different groups of people would have periodically visited the mines to replenish their tool- and art-making kits, these sites began to serve as places for meetings and rituals. The result was that natural formations, rock faces, and springs, as well as paths and trails between shores and mountains, came to be encoded with sacred significance. In South Africa, an ancient site in Swaziland, known as **Lion's Cave**, was mined from 43,000 BCE onward with tons of ore removed. **Another site**, this one in South Africa, which began to be mined around two thousand years ago by the Bantu herders who had entered the area, lasted until modern times, with an estimated 80,000 tons of ore having been removed. In 1814, an early researcher noted that the hill, now flattened and the site of a modern mining operation, "was a kind of Mecca to the nations around, who are constantly making pilgrimages to it, to obtain fresh supplies of the blue shining powder and red stone."¹⁹ Sites like this in Australia date back



Figure 1.15: Rhino Cave, Tsodilo Hills, Botswana.
Source: Sheila Dawn Coulson

to 40,000 BCE and in the Americas to 10,000 BCE, if not earlier. The prime ancient source for ochre on the Pacific Coast was at **Taltal, Chile**.²⁰ **Red Pipe-stone Rock** in Minnesota was sacred to the Native Americans and attracted people from far away who wanted to get a piece of sacred rock for the making of ritual pipes.

Rhino Cave, located in a rocky outcrop in the flat and formidable expanse of the Kalahari Desert, was perhaps one of these sites in ancient times. It rises quite dramatically from the otherwise flat landscape. Still sacred to the local !Kung, its cliff surfaces have a large concentration of rock art paintings on them (Figure 1.14). The !Kung still know this outcrop as the “Mountains of the Gods” and the “Rock that Whispers.” Their legend has it that mankind descended from the python, and the ancient, arid streambeds around the hills are said to have been created by the python as it circled the hills in its ceaseless search for water. And indeed, tucked in a corner of the outcrop is a V-shaped chamber with a seven-meter-long horizontally shaped rock that looks very much like the head of a snake²¹ (Figure 1.15). Since the floor of the cave was two meters below what it is today, the snake would have hovered overhead. A narrow ledge behind the snake would have been the perfect spot for a priest to hide and utter omens or songs. Beginning around 70,000 years ago,—ancient people made grooves on the snake to replicate scales. The cave is near a spring that functions to this very day. Also nearby is a site where one can find a rare form of ochre, known as specularite, which the local !Kung rub into their skin and hair to create a shimmer.²²

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The journey to these sites was itself an important part of ritual life probably from early on. It might have involved traversing the territory of others and negotiating the rite to use the mine, which was controlled by a local tribe. In Tasmania, procedure required that the elders first send a message stick to the locals informing them that they would like access to the mine. Though the stick—handed down through generations and with markings on it—does not convey any actual message (the real message is communicated verbally by the messenger), it was regarded as a token of good faith. Gifts followed the message stick back. The expedition would then be organized. Though the tracks followed by the ochre party were well known because they had been handed down for millennia, the journey was seen as dangerous, for the risks were indeed very real. Negotiations, though formulaic, were tricky, for slights could be perceived. And then there was the perceived danger from the spirit world, requiring a continual set of precautions and protections. Ochre was, therefore, more than just a coloring agent; its presence at Blombos Cave implies a larger tribal network.²³ And this means that whereas most discussions about the emergence of modern mankind emphasize language, symbolic production, and tool-making capacities, we should not underestimate ritual travel and the power that the resultant encounters, stories, and legends produce in shaping our cognitive world.

Blombos Cave had yet another clue that spoke of social complexity: a stone with clearly purposeful cross-hatch markings on its surface. Small stones or pebbles engraved with lines can be found in many ancient archaeological sites the world over and are often associated with hunting cultures. A stone recovered in Gault, Texas, and belonging to the Clovis hunting culture from about 11,000 BCE, had a similar checkerboard pattern and was found carefully paired with a spear point. Perhaps the stone provided its possessor protection of some sort, marked a ritual transition into adulthood, or served as part of an ancestor cult.

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The remarkable aspect of the thousands of such engraved bones and stones that one finds in ancient archaeological sites is that no two are alike, making it difficult to know how to interpret them (Figure 1.16a, 1.16b, and 1.16c). They range from the more figurative to those that seem to us to be purely abstract. How does one interpret these carefully made lines? Are they a type of calendar, an enumeration, or perhaps a divination mechanism? What links all these stones is that they are types of history and memory devices. First Societies would not have survived without the accumulated knowledge of multiple generations. Scholars today distinguish between “history” and “prehistory,” ascribing the latter to the age before the advent of writing. But this concept is misleading. It is safe to say that First Societies had a much more extensive understanding of their history than anyone of us today. Unless we put much effort into it, most of us can go back one or two generations at best. First Societies people had a much deeper historical awareness that includes not just the history of their tribe and clan, but of environmental events and changes in animal habitats. The Pima Indians in Arizona possessed a stick with notches and dots that represented important events to be remembered, such as a raid, a meteor shower, an earthquake, a snowstorm, or a flood. A message stick of the Seneca with a hole at one end for a string contains markings of days, calling chiefs to a particular ceremony at a certain time.

Hunting, Gathering, Taking

Symbolic expression, communal organization, memory consciousness, technological specialization, and landscape intelligence constituted the fundamentals of a cultural package that a hundred thousand years ago if not earlier was not only fully operative, but also fully transportable. People lived in kin-based groups, called bands, numbering from maybe ten to thirty individuals. Bands were egalitarian in nature; there were no chiefs or headmen. But not everyone was an equal. Women and men had different roles. Furthermore, elders carried a certain amount of authority. They might make key decisions or settle disputes, but they usually do not have the power to coerce. Food was shared within the group and, when resources were plen-

tiful, even with other bands. Among the Hadza in Tanzania, a large kill is quickly divided up, leaving even the hunter sometimes with very little.²⁴ Most tasks were also done in groups, whether it was hunting, mining, food collection, or the building of a shelter. Bands would move into the uplands in the summer or along the shores in winter, exploiting the different seasonal resources. Since no one person had a recognized authority over the rest, it was the bond of kin relationships that kept people united and that maintained peace and harmony in the community.

In almost all such societies, cooperation was highly valued and an essential part of myths and lore, as is clear from existent First Society people from the southern tip of Africa to the southern tip of the Americas. Since men might be out hunting and women preoccupied with various tasks, children spent a good deal of time with grandparents and other family elders, creating powerful strands of continuity over the generations. When stresses in a band were too great, or groups too large, people left the band and set up a new one. Different bands lived close to one another along rivers and shores; they met to fish, mine, exchange resources, socialize, and find mates. In places where resources were plentiful and predictable, band lineages would last for thousands of years and be identified with a particular landscape through stories and rituals.

Modern-day researchers call this social organization “hunter gathering,” but this is a recent phrase coined in the 1970s.²⁵ We must, therefore, ask ourselves if the term might not carry along with it, indirectly perhaps, certain notions that were influenced by then-current thinking patterns such as the United Nation’s War on Hunger. Firstly, it is wrong to identify these cultures solely with food acquisition. Just as we do not spend all our time in the supermarkets, most of the time spent by “hunter-gatherers” is likewise not in hunting and gathering, but in activities of social cohesion. Naturally, food collecting is an important activity, but the majority of the time spent by the !Kung, for example, involves other pursuits, such as resting in camp or visiting other camps. Women spend their time preparing food, doing embroidery, visiting other camps, or entertaining visitors from other camps. The men go on hunts, but their schedule is unpredictable and subject to magical control. During periods

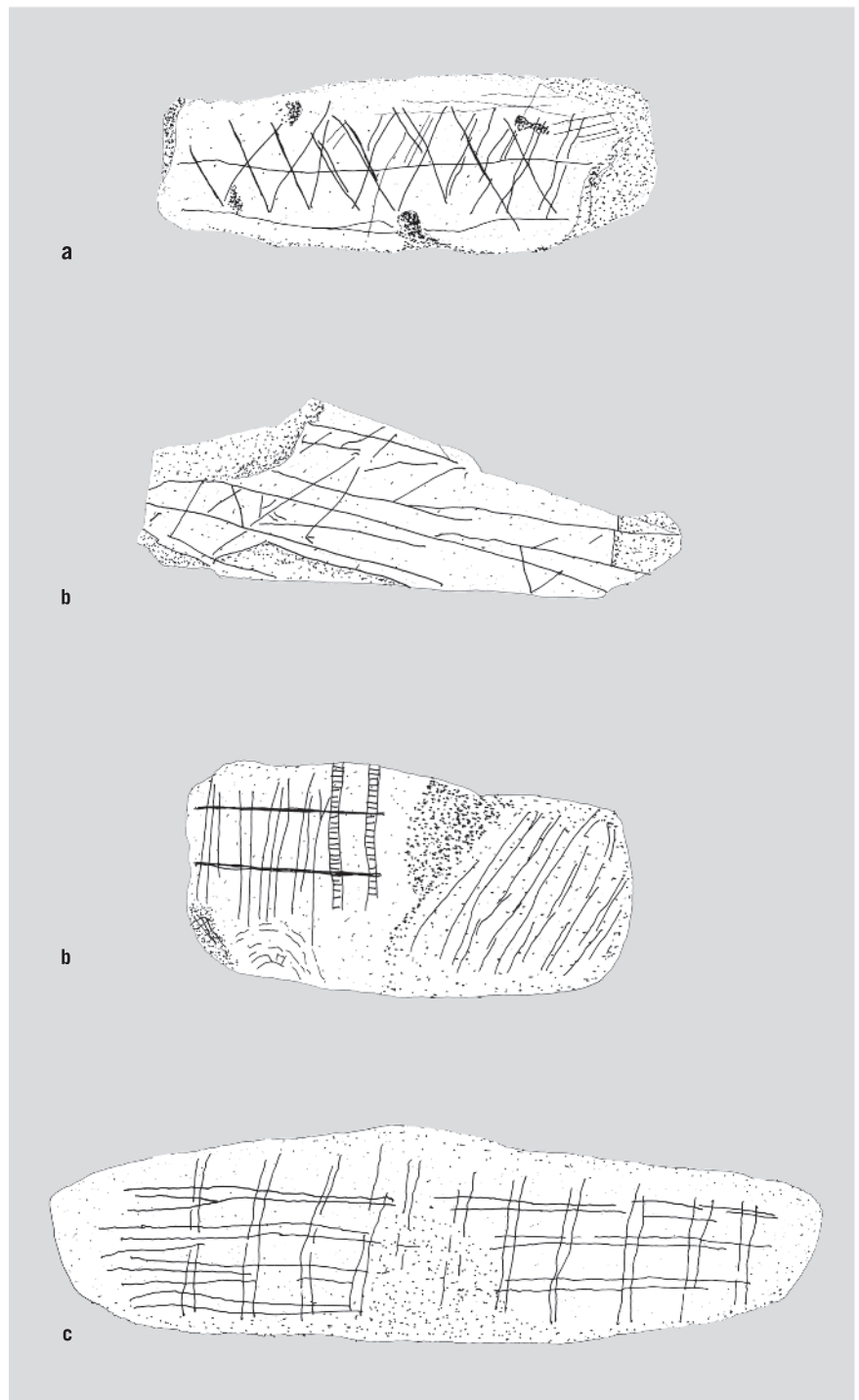


Figure 1.16a, b, c: Engraved stone comparisons: (a) Blombos Cave, ca. 80,000 BCE; (b) Eastern Siberia, ca. 14,000 BCE; (c) Gault, Texas, ca. 10,000 BCE. Source: Mark Jarzombek/Margarita Aleksandrovna Kiriya, *Early Art of the Northern Far East: The Stone Age*, translated by Richard L. Blank (Anchorage: United States Dept. of the Interior, 2007), 193–194

when there is no hunt, the men spend time visiting, entertaining, dancing, and preparing their bows and arrows. The life of the !Kung cannot be considered completely identical to those of ancient times, but at least it shows that a well-positioned camp close to water, nut-bearing trees, animal habitats, and other human settlements would have yielded an existence not dissimilar to that of the !Kung and certainly one that was more stable and orderly than was assumed even a few decades ago.

This was made clear when the anthropologist Richard Lee asked a !Kung man why he did not farm. He was told, “Why should I farm when there are so many mongongo nuts?”²⁶ The Aboriginal Australians put it in similar terms.

“You people go to all that trouble, working and planting seeds, but we don’t have to do that. All these things are there for us; the Ancestral Beings left them for us. In the end, you depend on the sun and the rain just the same as we do, but the difference is that we just have to go and collect the food when it is ripe. We don’t have all this other trouble.”²⁷

Nor is it accurate to assume that food gathering was some sort of aimless act (Figure 1.17). In marshy mountain valleys along the U.S.-Canada border, for example, an important food source was quamash. After being harvested in the autumn, once the flowers have withered, the bulbs can be roasted or boiled. It tastes something like baked sweet potato, but sweeter. When dried, the bulbs can be pounded into flour to make cakes. A valley in Montana is known by the Salish as *Qal’sa*, which means “It has quamash.” The broad valley, high in the mountains, maintained by the tribal people with careful application of periodic fire, was a veritable sea of the blue-blossomed plant and tribes would journey there from far away to share in the abundance²⁸ (Figure 1.18). In the forest of the eastern United States, people thinned and maintained forests of underbrush to create large swaths of oak and walnut trees, the nuts of which were a food staple in those parts. The first European settlers were impressed by these forests and compared them to parks.

Another plant that was common food to the Native Americans was *Chenopodium quinoa*, known as quinoa, also sometimes called pig weed. Considered sacred in ancient Inca and Aztec cultures, the plant still today grows wild on Bolivian slopes. The leaves and young shoots can be eaten as a leafy vegetable, either steamed in its entirety or cooked. More important, each plant produces tens of thousands of seeds that are highly nutritious. They have an amino

46 52 58 N, 113 35 14 W

Figure 1.17: A berry-picker at Clayoquot Sound, British Columbia, Canada. Photographed in 1915. Source: Image PN 4854, courtesy of Royal BC Museum, BC Archives

Figure 1.18: Quamash field, Montana, USA. Source: © yaquina (<http://creativecommons.org/licenses/by/2.0/>)



acid balance that is considered near the ideal for human consumption as well as being high in protein, vitamin A, and calcium. In all cases, the plants did not just grow wild, but were tended to expand their range.

The words “hunting and gathering” also imply a distinction between meat and plants that is not always reflected in native languages. Though the gathering of plant resources was generally considered women’s work and hunting the prerogative of the man, the activities were not necessarily conceptualized as distinct. Among the Yup’ik, who live on the western shores of Alaska, for example, the syllable *-ssur-* means obtaining anything taken from nature as food. It means literally “getting it.” So, for example, *nayirrsurluni* means “getting seal” and *ikiituggsurluni* means “getting celery.” In other words, there is no distinction between getting an animal and getting a plant. When the Yup’ik go hunting for birds, they use the prefix *quyurte-*, which means to “round up” or “make plural.” In other words, what we call hunting they would call “rounding up.” And since they do not technically “hunt,” they do not technically “kill.” The differences may seem small but are profound; for far from viewing their environment as an insentient supply of resources, the Yup’ik view it as responsive to their own careful action, attention, and need.²⁹

The Andaman Islanders, another ancient society that survives on the remote **Andaman Islands** in the Indian Ocean, have a term, *gobolagname*, which applies to anything that is given and taken, whether between individuals or between humans and the natural world. In other words, gathering and giving are analogous and complementary. Without *gobolagname*, the human body is subject to “drying up” or even death, as the result of the winds and the release of smells which attract the unwanted spirits. Without *gobolagname*, the spirits would arrive and transform a person into a spirit.³⁰ In other words, gathering is an important aspect of life, but so too is giving. The Bambuti in the Congo employ something similar. When the women leave camp in search for food, they will sing, asking the forest deity, who goes by various names such as *asobe* or *tore*, to give them the things they are looking for. When they find some fruit, *tore* will get a symbolic share to “take and eat.” After a hunt, a piece of the animal’s heart is similarly cast into the forest or placed in the fork of a tree as a gift back to forest spirit.³¹ So instead of “hunting and gathering,” one should use the phrase “gathering and giving.”

Even the word “hunting” can be misunderstood in the modern usage. The Yup’ik, for example, do not see a clear-cut distinction between humans and animals. Instead the two live in collaborative reciprocity where animals “give themselves” to the hunter in anticipation of the hunter’s respectful treatment of them. In fact, in their lore, animals originally possessed the ability to transform themselves into humanlike creatures. And as to the ancestors, they live in the spirit world with the animals and can thus help in the process of communicating with the animals. Hunting, therefore, almost always has to be conducted with ritual precautions.³²

Among most early First Societies, there was also no concept of land ownership. Once most of the usable wild plant resources were depleted from a given location the camp would be relocated to another spot. But the general idea that these people are nomadic and have no connection to land is wrong. The Batek and the !Kung have a keen sense of geography and place. Territorial boundaries between groups are scrupulously observed. Similarly, the Aboriginal people of Australia have strong cultural associations with specific territories. Within the bounds of their clan territory people will spend several months hunting, but once the hunting season is over they will move to a river or seacoast, engaging primarily in fishing. They classify the year into five seasons based on these activities and their associated territorial movements.³³ The Inupiat in northern Alaska define their land as *nunaqatigiich*, which means literally “people who are related to one another through their common possession of land.”³⁴

The concept of “hunting and gathering,” though sadly widely used in the scholarly literature, thus fails to do justice to the complexity and durability of these types of social organizations, whether ancient or contemporary, a complexity that was the foundation on which all early society in its numerous variations the world over was based.

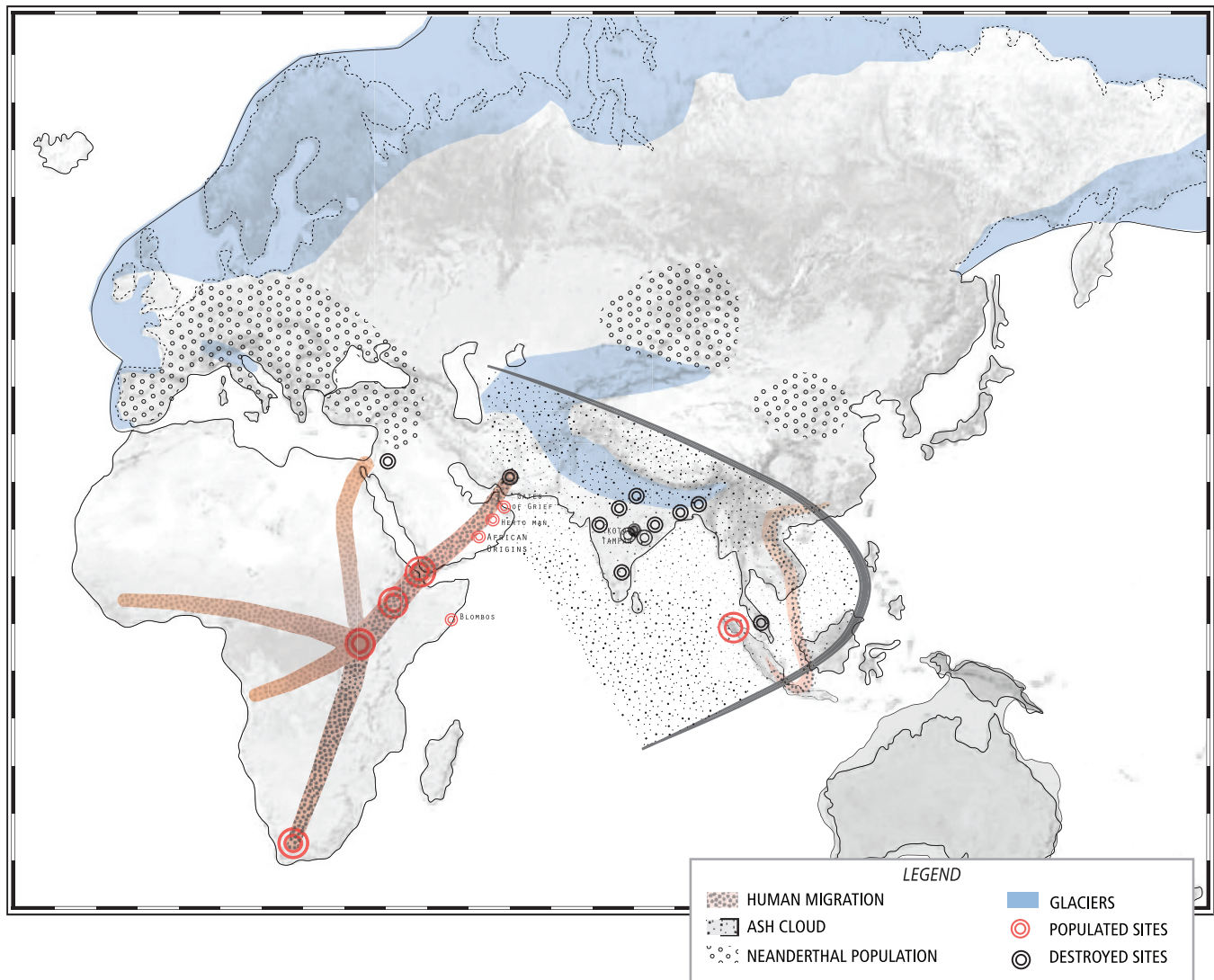
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OUT OF AFRICA

Following the path of the *Homo erectus*, humans worked their way into Arabia. Once again, it is important to remember that climactic conditions back then were much different than today. The sands of the Rub' Al Khali Desert in Saudi Arabia, which stretch over 700 kilometers east to west, were once the bottom of lakes and marshlands. Between the southern edge of that area and the ocean, there was a corridor in Yemen and Oman in which archaeologists have already discovered dozens of ancient settlements. From there, people made it into Iran where there were several extensive wetlands and around the coasts of India, and by 80,000 BCE had moved into Indonesia. But around 70,000 BCE, disaster struck; the **Toba Volcano** on the island of Sumatra erupted (Figure 1.19). It was one of Earth's largest cataclysms, laying down several meters of ash over India and parts of South Asia and producing a six-year global volcanic winter. The famous Mt. Vesuvius or even the eruption of Mount St. Helena would be pinpricks in comparison. The stratospheric layer of dust and debris that covered the planet left its traces even in Greenland. Unfortunately for *Homo sapiens* and the residual populations of *Homo erectus* in India, the geographical distribution of people at that time ensured almost maximum possible exposure to the effects of the explosion. The populations in India and Indonesia were wiped out. Even the people who lived in the Levant and West Asia seem to have vanished. A subsequent thousand-year ice age did not help. So devastating were these events that it has been estimated

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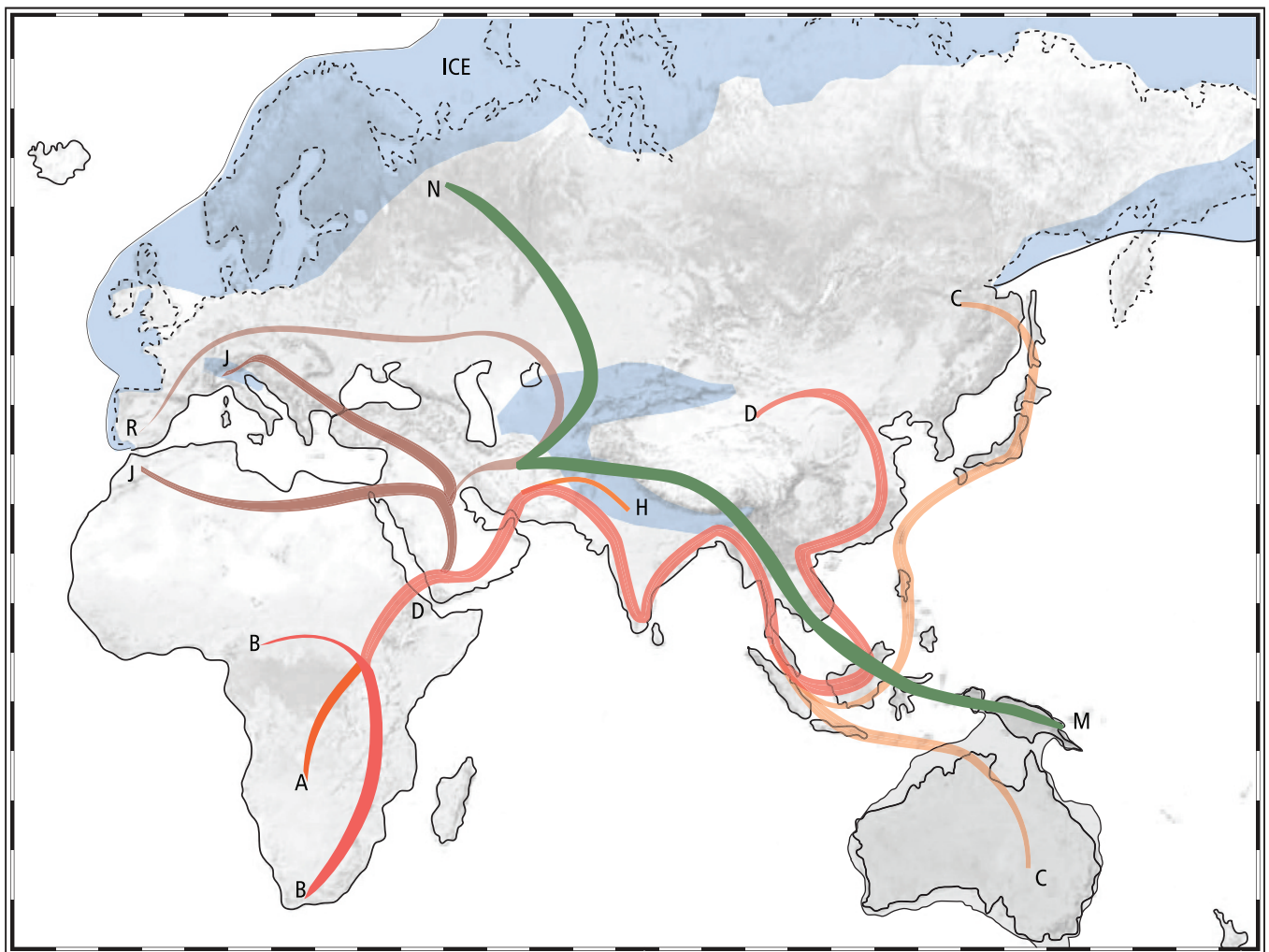
Figure 1.19: Mt. Toba eruption.
Source: Florence Guiraud



that the global population was reduced to as few as ten thousand people or fewer living in isolated pockets mostly in eastern and southern Africa—in other words, back where they started.³⁵

The process of leaving Africa began again and this time it would succeed. In fact, *Homo sapiens* would inherit the earth as the residual strands of *Homo erectus* died out one by one. This means that every one of us is a genetic relative of these first people in southern Africa. Geneticists know this because of haplogroup studies. A haplogroup is a type of genetic package, the oldest being Haplogroup A, which belongs to the !Kung who live in the Kalahari Desert in Botswana (Figure 1.20). They are, at any rate, its last remnants. By the time people had expanded again into east Africa, we see the emergence of Haplogroup C and because it was these people who then left Africa around 60,000 BCE, Haplogroup C became the common male ancestor of nearly all people living today who have non-African roots. Haplogroup C people were shore- and water-oriented and would eventually work their way to Australia and then around the Pacific to form the basis of some of the Native American genetic stock. Haplogroup D, which also formed in East Africa and is equally as old as Haplogroup C, is found today at high frequency among populations in the Japanese Archipelago and the Andaman Islands, though curiously not in India, perhaps because India and central Asia were already dominated by Haplogroup F people. This genetic strand developed around 50,000 BCE, not in Africa but probably in India and was the center of a dispersion cloud that radiated northward into Asia. Facilitating this movement was a dramatic warming of the climate during the period 55,000–45,000 BCE that allowed people to return to the Levant after an absence of 40,000 years. From

Figure 1.20: Africa and Eurasia: The major haplogroups. Source: Florence Guiraud



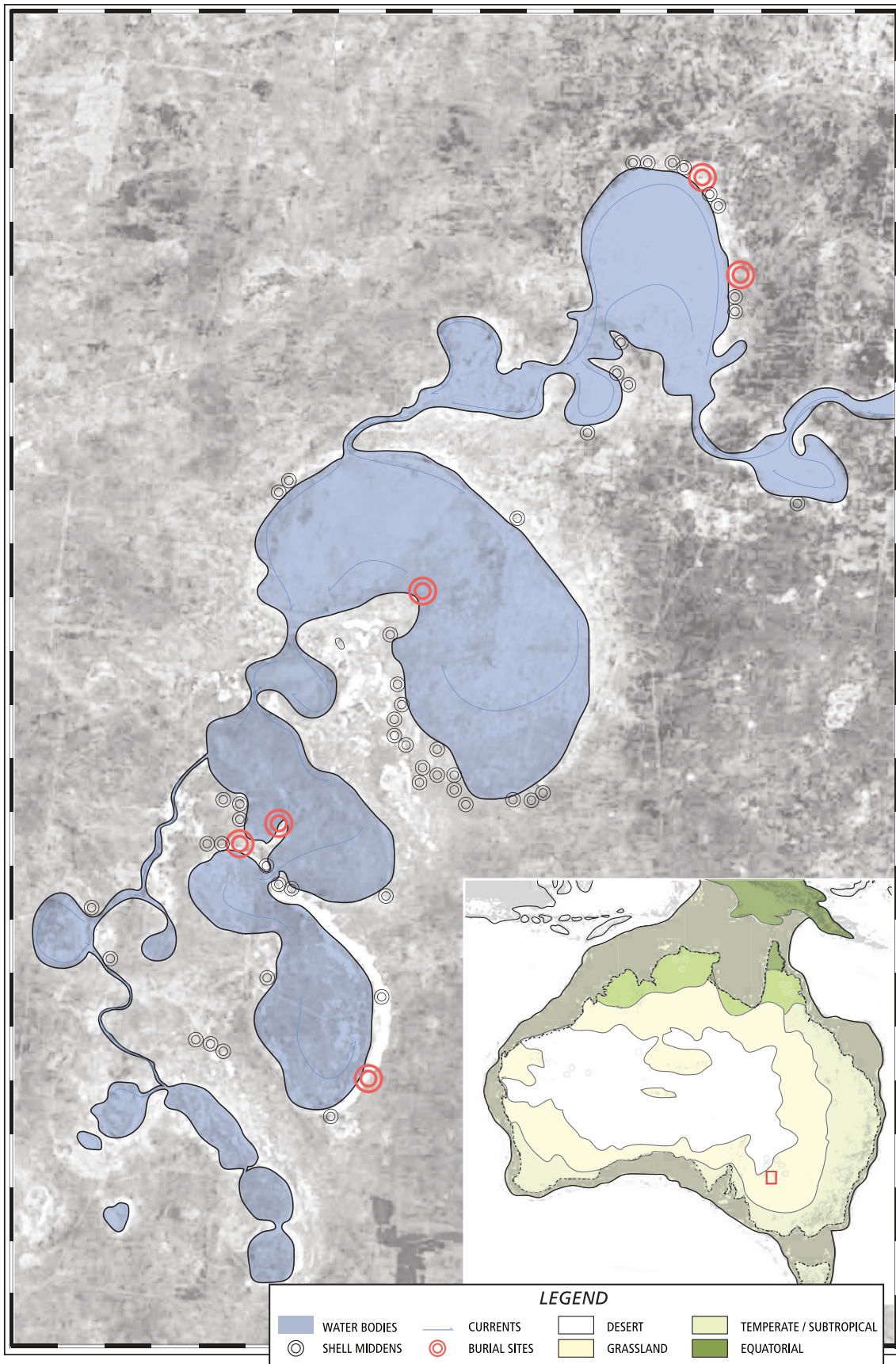


Figure 1.21: Willandra Lakes area. Source: Florence Guiraud

there, humans encountered a vast stretch of semi-arid, grass-covered plains stretching from eastern France to Korea that allowed movement throughout Asia, yielding new haplogroups such as K, I, J, O, and others. Humans were spreading so quickly and over such a diverse geographical range that no single natural disaster could now impede their progress.

Australia, which became home to Haplogroup C people around 42,000 BCE, or perhaps earlier, was the most enticing of human habitats at that time.³⁶ People there encountered astounding and unfamiliar animals: marsupial lions, two-meter-long goannas, short-faced kangaroos (procoptodon), and the rhinoceros-sized, though harmless, diprotodon. The latter two were herbivores and were thus tempting prey for the humans, who may indeed have contributed to their extinction.³⁷ Though the continent was relatively arid, it was cooler and moister than today. Rains brought a good deal of water to the eastern shores, water that was funneled by mountains into west-flowing rivers and streams, producing broad woodland belts and lower down large stretches of savanna. Glaciers in the mountains produced a constant stream of summer run-off.⁴⁹ The rivers fed dozens of lakes, now known as the Willandra Lakes (Figure 1.21).

These lakes, which reached their highest level some 35,000 years ago and which today are nothing but dried-out sand pits, were situated between low ridges just to the north of a vast marshy area. They teemed with fish and mussels that were caught with nets and apparently transported in baskets.³⁸ In fact, the heaps of discarded shells (called shell middens) are the clues indicating that humans once lived in what is today a forbidding desert.³⁹ A wide range of nut trees grew in the temperate forests along the mountain slopes to the east, including the majestic Bunya pine (*Araucaria bidwillii*) that is still considered a sacred tree by the indigenous people (Figure 1.22 and 1.23). It produces cones about the size of a football, each containing

33 21 20 S, 143 08 55 E



Figure 1.22: Bunya Pine forest, Australia. Source: Marie Read



Figure 1.23: A Bunya Pine cone, Australia. Source: Steve Swyane

from fifty to a hundred nuts. Highly nutritious and an excellent source of starch, they can be eaten raw or roasted and have a taste similar to chestnuts. All in all, this was not a place where humans eked out a minimal existence a few steps away from starvation. Food and water were plentiful. From the footprints of adults and children preserved in the once muddy shores that have since hardened into rock, we know that adults were tall, on average 180 centimeters (5 foot 11), no doubt due to the plentiful and varied food supply.⁴⁰

As one might expect, this also was a place of ceremony and ritual. A burial near one of the lakes contained the remains of a woman who had first been cremated, then her bones were smashed and the fragments placed in a pit in the center of a fire for renewed burning. The whole was then covered with sand. Another burial contained a man whose bones had been stained with red ochre. We even know some of the places where the ancient Australians mined their ochre, namely in the northern Flinders Ranges some 200 miles to the west where, for millennia, people extracted not only hematite (red), but also magnetite (brown to black), goethite (yellow), and lepidocrocite (yellow).

KOSTENKI AND AURIGNACIAN CULTURES

At the same time humans were entering Australia, they were also arriving in Europe. Why it took people so long to leave the Levant and enter Europe, which is so much closer to Africa than Australia, is a mystery, but perhaps it was due to the interference of the last remaining humanoid competitor, the formidable Neanderthal, the last descendants of the *Homo erectus* strain that had elsewhere either died out or were obliterated by the Toba eruption. They were taller and stronger than *Homo sapiens*, with reputation for being brutish. But given that they had existed in their own world for several hundred thousand years, they possessed well-honed survival skills. They used ochre, may have begun to eat plant foods and also began to use caves for protection as is evidenced in the **Grotte du Lazaret** near Nice, France.⁴¹ Nonetheless, the Neanderthal never seem to have produced what could be called a “home base,” which was typical of *Homo sapiens*.⁴² With a climate in Europe warmer than today, the open forest conditions led to relatively easy hunting of deer, bear, wolves, and horse. It seems that the valleys would have been kept open by the large herbivores, such as elephant and rhino, creating corridors for human movement, surrounded by woodlands on higher ground. Around 55,000 BCE, the weather began to fluctuate from extreme cold conditions to mild and back to cold in a matter of a few decades. These fluctuations caused the disappearance of the forests and the emergence of wide expanses of grasslands and open woodland stretching from France into Russia. The Neanderthal had difficulty hunting in the open landscape and by 28,000 BCE they had all but vanished.

Humans moved into the European world along two parallel but related vectors. One was westward around the Mediterranean, the other was around the northern shores of the Black Sea, then a vast inland lake. **Kostenki, Russia**, was a typical site for early humans, belonging to a community that, some 38,000 years ago, stretched along an east-oriented terrace overlooking the flood plain of the nearby Don River (Figure 1.24a, 1.24b). It was an excellent perch to observe the animals as they moved along the valley below. The site was more than just a lookout, but a base camp where a range of activities took place. It was used for thousands of years.

Among the several huts that dotted the terrace, there was a pair of 30-meter-long huts with rows of fireplaces in them. Separate living zones were created by means of hide partitions.⁴³ It is generally assumed that each family had a hearth. For the women, who remained while the men hunted, the common space allowed the sharing of work and the care and protection of children. Although multi-hearth linear buildings began to gradually disappear from the archaeological record in Europe and Siberia, they do not disappear elsewhere. The tradition is found in the Americas, for example. The principal house of the Nimi'ipuu (also known as Nez Perce), who once lived in the Idaho region, build 30-meter-long, mat-covered

43 41 26 N, 7 17 40 E

51 21 13 N, 39 06 29 E

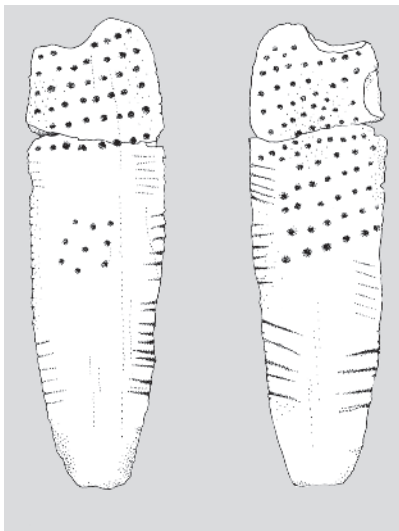


Figure 1.24a, b, c: Kostenki, Russia: (a) map; (b) map; (c) hut plans at site IV show two huts and row of hearths. Source: Timothy Cooke/G. P. Grigor'ev, *Current Anthropology* 8 (Oct. 1967): 346

► **Figure 1.25:** Nez Perce long-house, Nespelem, Washington, USA. Photograph circa 1900. Source: Northwest Museum of Arts & Culture/ Eastern Washington State Historical Society, L97-5.97



▼ **Figure 1.26:** Two faces of engraved Aurignacian bone plaque. Source: www.donsmaps.com/lioncamp.html



longhouses with hearths in the center of the structure. These houses were primarily used during the winter as well as for ceremonial purposes during the summer (Figure 1.25). The Dayak in Borneo also live in the longhouses and yet each family acts relatively independently of its neighbors. In this instance the primary reason for cohabitation is largely economic in that constructing one longhouse reduces the amount of material and time necessary for construction.⁴⁴ At Kostenki, one could venture to conclude that a similar arrangement was in operation. But it was not just economy at play here. Longhouses produced uniquely strong social bonds since they were probably built and lived in by a single clan.

Further to the east, in Europe, the newly appearing *Homo sapiens* formed part of what archaeologists call the Aurignacian Culture (38,000–24,000 BCE). The southern range of the Alps in northern Italy was a typical Aurignacian area as it offered a wide range of hunting resources. Ibex, alpine hare, lion, and hyena lived on the high plateau; deer and bears lived in the forests below; ducks, small animals, and fish could be found in the valleys. In line with the cultural package that left Africa, the Aurignacians used not only ochre, they made necklaces and also, as one would expect, maintained the engraved bone and pebble tradition. One engraved bone from southern France bears a series of enigmatic pits that seem to indicate phases of the moon⁴⁵ (Figure 1.26). These markings could also have been used to represent the seasonal sequence of activities. Another similar stone has rows of pits along with grooves and notches.⁴⁶

The presence of animal bones in the caves combined with the representation of animals on cave walls should not lead us to overlook that plant food was now an increasingly important source of nutrition. And in this respect humans were profoundly different from the Neanderthal, who were largely meat eaters and who as a result had to be highly mobile. The Aurignacians had the patience to await the ripening of plants, to anticipate the rotation of the seasons, and, above all, to experiment with the plants around them. This fundamentally changed migratory habits and social customs. The success of humans, in fact, was built around this diversification of their menu and the organizational specializations that it entailed.

Evidence comes from an Aurignacian cave in Greece—*Klisoura Cave*—that had hearths built not for warmth, but for the preparation of plant food derived

from goosefoot (chenopodium) and knotweed (polygonum), which were collected from the nearby hillsides.⁴⁷ Goosefoot, which grows in vast patches in many parts of the world, is similar to spinach and Swiss chard (Figure 1.27). It is high in protein, calcium, and iron, a good source of vitamin E and B, and contains an almost perfect balance of the amino acids needed for tissue development in humans. It can be eaten raw or roasted. Knotweed is equally nutritious. The young stems are edible in spring and have a flavor similar to rhubarb. Rushes, which grow in marshes, were also collected. They can be consumed after cooking and removing the skin, while the peeled stems and leaf bases can be eaten raw or cooked. A few late-spring stalks provide enough food for a delicious meal. The roots can also be harvested and are an excellent source of carbohydrates, starch, protein, and fat. The pollen of a marsh rush can be used to make a type of bread.

Plant gathering and food production was probably done by women, which points to another distinction with the Neanderthal. Their women, so it seems, were not particularly interested in plant exploitation and hunted side by side with the men. The development of the use of plants thus brought into existence a fundamental aspect of human society, medicine. The jelly-like substance on the leaves of the marsh rush, for example, was used as medicine on wounds by the Native Americans.⁴⁸ Whether this was known to the Aurignacians is not known, but there can be no doubt that plant medicine was from early on a major element in the early human social structure and was to alter self-understanding. Plant medicine requires expertise as well as a system of transmission and soon became a core element in the emerging spiritual relationship to life and death. It also enhanced gender differentiation, since plant medicine and its associated magic was almost always in the purview of women.



Figure 1.27: Goosefoot, Coalhouse Fort, United Kingdom. Source: © Tim Harrison (<http://creativecommons.org/licenses/by-sa/2.0/deed.en>)

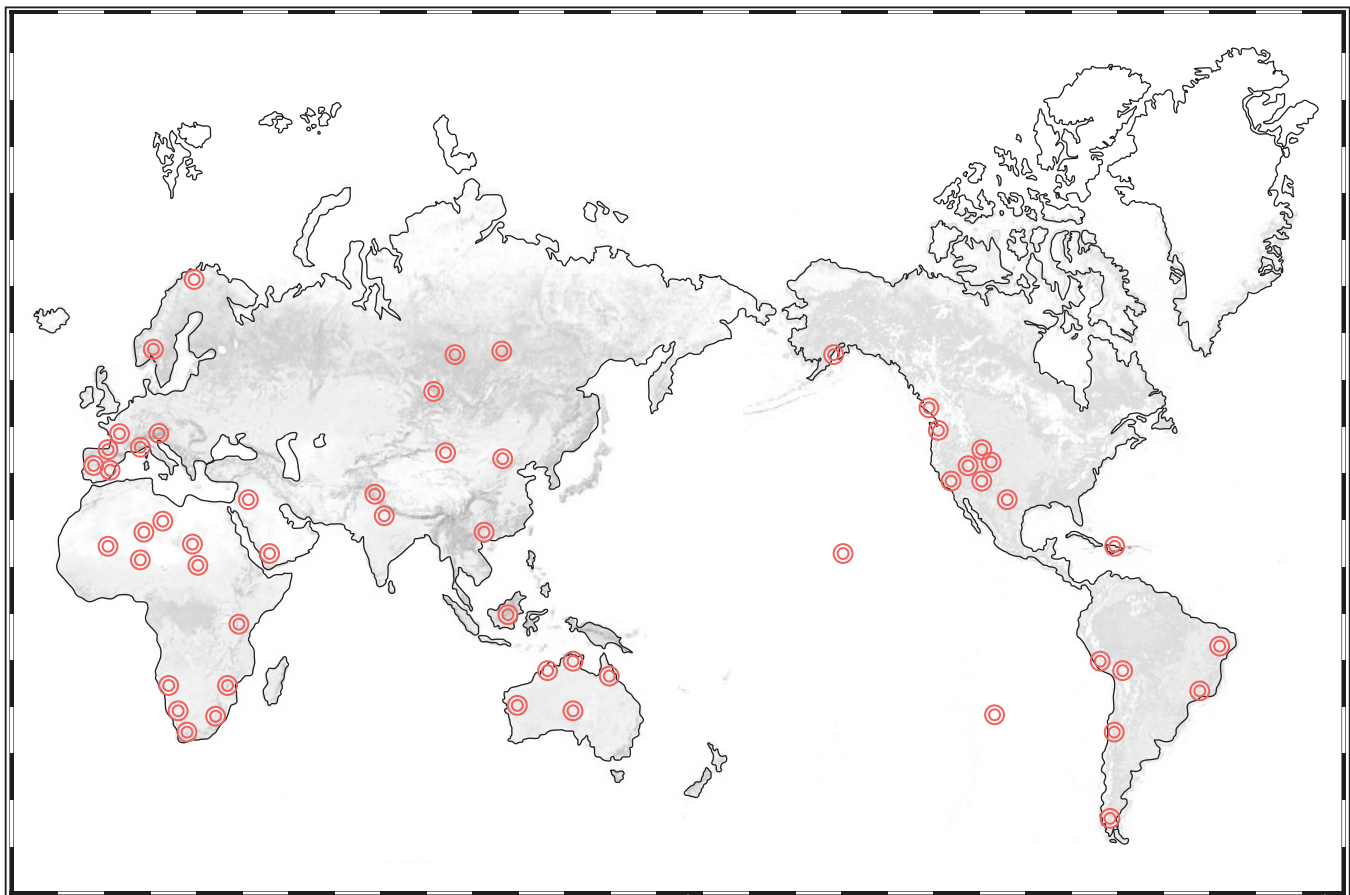
ROCK ART

The Neanderthal, as far as we know, did not have that all-consuming need that humans had to represent the world back to themselves. A testament to this difference is the art that humans produced and that has survived in many places around the globe in the form of drawings and carvings that were made on the walls of rock overhangs.⁴⁹ Rock art—sometimes called petroglyphs (from *petro*, meaning “rock,” and *glyph*, meaning “symbol”)—can be found from the Arctic Circle to the tip of South America, from southwestern France and the deserts of Africa to the Himalayas and China all the way to the deep canyons of the southwestern United States and the cliffs of Bolivia. If one counted them, they would be in the millions. The origins of rock art cannot be determined archaeologically, but since such art is found in Australia, India, and Aurignacian Europe, all dating to about 40,000 years ago, it must have left Africa with the *Homo sapiens* 90,000 years ago (Figure 1.28). This is born out by the discovery in India, of ochre drawings on a rock face at *Jwalapuram* that were made before the Toba explosion maybe around 75,000 BCE.

15 19 21 N, 78 07 57 E

Figure 1.28: Significant rock art sites around the world.
Source: Florence Guiraud

Rock art has to be seen in the context of body painting, which was itself an ancient universal practice. We today describe this practice as ornamentation, but for these ancient people, painting the body was a way in which a person became linked to the creative forces that shaped the world (Figure 1.29). Among the Andaman Islanders, for example, clay-based paints are perceived as having the quality of *kamakulehlekwe* (efficacy) in that they bind and confine smells to their source of emission. Red and yellow are particularly important because they make the body hot and induce “smell,” not literally but conceptually, thus making the human recognizable to the spirits who can perceive these “smells.” In this way, the spirits can locate their living relatives and thus enhance cohesion between generations. The word that the And-





man Islanders use to describe body paint means literally to remind or to remember.⁵⁰ In other words body paint is not just a visual cue, but conceptually and primarily part of an olfactory-based system of exchange between the world of the living and the world of the spirits. It is for this reason that ochre is often associated with burials.

But whereas body painting might last a day or two, rock art was designed to survive through the generations. And it probably should not be called “rock art” but rather perhaps “spirit art,” for its purpose was not so much to portray reality back to the human as it was to connect to the human world of world of animal and ancestral spirits. And yet, as this skill moved across the dimensions of space and time, not everyone lived near places suited for such expressions. How did it survive and develop? No one knows. Fortunately for us, many of the images are painted with mineral compounds that under the right conditions can withstand the test of time. Orange pigments are often made directly from ironstone. Ash-rich clays yielded white pigment, copper-oxides produced blue-green colors, and charcoal made black. Blood, animal fat, eggs, and urine could be used as bonding agents. Some paints were applied by fingers, some by brushes or by “crayons” of rock. Sometimes paint was blown from the mouth. Images were also scratched or pecked onto the surface. Erosion, the effects of exposure to wind and sun, and other factors have destroyed such a vast proportion that what we have left are only those in more isolated and protected environments. Even so, rock art gives at least a glimpse into ancient aesthetic practices. A dense area of rock art is located in an area near the Texas-Mexico border that includes the Lower Pecos River region, where a scrub desert is cut by narrow, deep canyons. In Seminole Canyon, for example, there are hundreds of images, some showing giant figures and animals, some mysteriously abstract in nature (Figures 1.30 and 1.31). Another dense accumulation is on the mountain cliffs and canyon walls of Baja California Sur, clearly another vast sacred site. Some of the murals, which depict large herds of animals, are on roofs of caves 10 meters high, meaning that extensive scaffolding had to have been built. Drawing a 3-meter-tall animal with the correct proportions on a cave ceiling would have required coordination with fellow artists from below.⁵¹

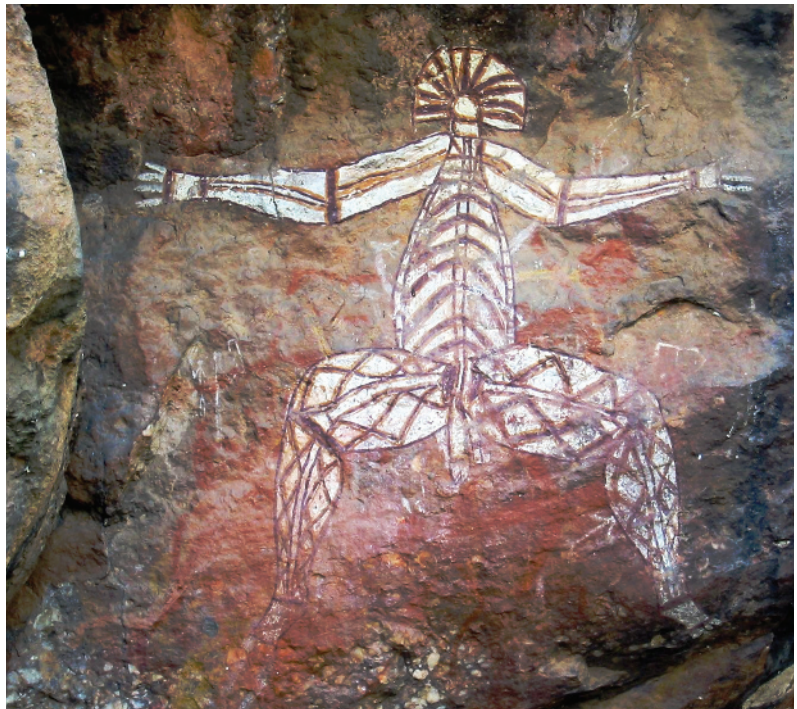
Figure 1.29: Karo tribesmen preparing for ritual, Ethiopia. Source: © HeyValera (<http://creativecommons.org/licenses/by-nd/2.0/deed.en>)

7 38 N 113 03 W

► **Figure 1.30:** Fate Bell Shelter, Seminole Canyon, Texas, USA. Source: Bob Cates

▼ **Figure 1.31:** Petroglyphs, Seminole Canyon, Texas, USA. Source: Bob Cates

▲ **Figure 1.32:** Petroglyphs, Anbangbang Rock Shelter, Australia. Source: © Thomas Schoch (<http://creativecommons.org/licenses/by-sa/3.0/deed.en>)



17 25 13 S, 124 57 32 E

22 56 01 N, 77 34 50 E

1 34 42 S, 36 26 48 E

Early examples of rock art in Australia at **Carpenter's Gap** and at **Arnhem Land** date to 40,000 years ago.⁵² One drawing seems to depict a genyornis, a giant flightless bird that became extinct around that time. Another one depicts a figure that looks like it had been x-rayed (Figure 1.32). In India, the largest collection of art—dating to perhaps 30,000 BCE—are at **Bhimbetka** with its approximately 500 caves (Figure 1.33). In those days, the caves were not surrounded by dense forest as they are today, but by grasslands and open forest, ideal for hunting bison, tigers, and rhinoceroses, animals that are painted in linear representations on the cave walls in green and dark red.⁵³

Atop a rock in the middle of the Sahara Desert is a 6.3-meter-high carved depiction of a male giraffe and a shorter female. The figures are chiseled out of the rock's gently sloping surface in bas-relief, capturing the swaying grace of the animal's gait. The lead giraffe has a leash

on its nose, implying perhaps some level of taming. Nor is this the only image; nearby are over eight hundred images of bovids, ostriches and antelopes, lions and rhinos. They were made maybe 10,000 years ago or earlier, at any rate before the great transformation of the Sahara in the fifth millennium into the desert that we see today (Figure 1.34). All of these sites served as regional centers for a long period of time—for many thousands of years—with successive generations adding to the range of images and thus to a particular site's increasing sanctity and mystique. At the Sahara site, figures were added until at least 2000 BCE. Some of the Bhimbetka images may have been painted as late as 1200 CE.



Figure 1.33: Petroglyph, Bhimbetka Rock Shelter, Madhya Pradesh, India. Source: © Raveesh Vyas (<http://creativecommons.org/licenses/by-sa/2.0/deed.en>)



Figure 1.34: Giraffe rock art, Niger. Source: Rudolph Atallah



Figure 1.35: Writing-on-Stone, Alberta, Canada.
Source: David Lloyd

These drawings give us a vivid impression of an active and dynamic world, suggesting the presence of seasonal and ceremonial coherencies. But we should not see this art as an attempt to represent real-life events. Rock art representations are not in that sense like modern photographs. An image of men shooting arrows may not be a hunting scene, but a demonstration of a person's fighting spirit. Animals may be the spirit of those who have embodied the form of an animal to take on its potency. Early rock art could also have been an attempt to bring the ancestors who embody animal spirits into visual range and associate them with particular places in the natural landscape, for it is not just the representations that one has to consider but their location as well. Many of the sites are associated with water, and almost all seem even today to evoke something special in the landscape, whether an unusual geological formation, a special orientation to the sun, or a feeling that one can get of being in an alien or subterranean zone.

49 5 55 N, 111 37 1 W

At **Writing-on-Stone** in Alberta, Canada, a 4-kilometer stretch of the Milk River, the combination of strangely shaped rocks, narrow canyons, and the looming presence of Sweetgrass Hills created a potent landscape where spirit power was concentrated by means of rock art on the cliff walls (Figure 1.35). For the Algonquian, who lived around the Great Lakes in Canada and the United States, the foot of cliffs, as well as caves and large cracks, were seen as constituting points where the celestial and the terrestrial intersect with the subterranean and underwater world of the universe. Certain rock formations served as homes for natural spirits, who often took the shape of small furry creatures; although not malevolent they could play tricks on humans. They could be helpful if properly approached. The Algonquian believe that these creatures made these drawings using their own blood. The custom of offering tobacco at rock-art sites is still practiced by certain Native American communities living in northwest Ontario.⁵⁴

It is safe to say that rock art demonstrates not just idle representations, but expressions of liminal reality. Were they made in the hope of a future hunting success, or did they serve as a type of scenographic backdrop to a dance or ritual? Were they markers of a sacred landscape, or did the rock face itself constitute a space of exchange between this world and the next? All of the above? We will never know.

ANIMISM

The belief structure of early human society is usually summarized by the term “animism,” which means that people did not yet conceive of deities in the modern sense, but saw nature and even themselves as a composite of thousands of overlaid and often competing life forces of different scales and potencies. The term “animism” derives from the Latin word “anima” and implies an indwelling life force that one could also conceive of as “soul.” It is of course a modern term coined in the nineteenth century. Even so, explaining animism is not easy since it is often seen simply as nature-worship. This could lead to a misleading oversimplification. Nature, as we perceive it, differs from society, and indeed it stands in sharp contrast to it, while in these ancient times it was a continuum in which a person was included, rather than to which he or she was opposed. But the range of intensities about this relationship can vary. The Hazda, who live in Tanzania, and the Haida in northwest Canada are on the extreme ends of this difference. The Hazda, like the !Kung, are quite informal in their relationship to death. A dead person is placed in his thatch hut, which is brought down on him and burnt. The Haida, by way of contrast, have mythologies filled with powerful animals, and in death the clan will host elaborate feasts. This seems to imply that early human society, as it moved eastward from Africa, became more complex and ritualistic. And yet in both the Hazda and the Haida, death is not a finality, but a transition into the world of spirits. The native people of Australia, for example, see themselves as part of a world full of interconnected forces that can transition into a rock or a large tree. They themselves are imbued with *kuranita* (life essences) that form a continuum of beneficent energies. At certain times, groups of hunters will assemble at specific markers in the landscape such as a “kangaroo stone,” for example, and by means of songs and rituals, or sometimes a ground drawing, conjure up the life essences of kangaroos so they can reenter the living sphere.⁵⁵ This is often achieved by inducing dreaming. Indeed, a dream abolishes the barriers between the past, the present, and the future so that time is experienced as a sort of simultaneity in a timeless space.

Geographical features such as certain mountains may be also endowed with a magical aura (Figures 1.36 and 1.37). Ancient Indian

Figure 1.36: Bodhi tree, Wat Kham Chanot, Thailand. Source: © Mattes (<http://creativecommons.org/licenses/by-sa/3.0/deed.en>)



Figure 1.37: A Khanty woman and her friend tying material around a sacred tree to protect her youngest son, Yamal, Western Siberia, Russia. Source: B & C Alexander/ArcticPhoto



texts from between 500 BCE and 400 CE speak about elaborate mountain top rituals and thus give evidence of the astonishing longevity of these devotional practices. The people of the Surasena Kingdom, for example, worshipped the Govardhana Mountain (located near the town of Vrindavan in India), circulating around the base of the hill whilst praying and singing.⁵⁶

Similarly, the Inca visualized that each mountain had its own indwelling spirit, or apu, the most important ones of which required offerings of sacrifices to the mountain spirit. Some rocks and caves also are credited as having their own apu. The best-known sacred mountain today is Mount Fuji, at the base of which is the sacred forest Aokigahara, or the Sea of Trees (Figure 1.38). The mossy ground is uneven, broken up by the numerous earthquakes. In some place the trees are so thick that it is not hard to find places completely surrounded by darkness. Mist often hangs over the slope. Folk tales and legends tell of demons and spirits that haunt the area. **Mount Misen** is another sacred mountain in Japan, sitting midway along a route often traversed by followers of Shugendo, who practice an ascetic lifestyle. The area often resounds even today with the blasts of trumpet shells energetically blown by those participating in ritual exercises.⁵⁷

Peak sanctuaries, and more specifically peaks together with caves, were at the heart of Minoan religious practices on Crete. Three caves were particularly important: the Dictaeon Cave on Mount Dicte near the village Psychro, the Idaean Cave on Mount Ida near Anogheia, and the **Cave of Eileithyia**, dedicated to the birth goddess. The Dictaeon Cave, cold and moist even in the heat of summer, with a pool of water surrounded by stalactites, was the site of rituals dating back to the earliest time of Cretan habitation. The Cave of Eileithyia is now a Christian site and is still visited by Cretan women. The cave most intimately connected with the Cretan creation myth is the **cave on Mount Ida**, where the earth mother Rhea gave birth to Zeus. Myth describes him as tended by nymphs and protected by youths against his father, the legendary Chronos. Zeus then fathered Minos, who became King of Knossos and of Crete (Figure 1.39). A proces-

35 28 12 N, 138 37 11 E

34 16 46 N, 132 19 10 E

35 19 25 N, 25 12 20 E

35 14 23 N, 25 08 39 E



Figure 1.38: Aokigahara, “Sea of Trees,” Yamanashi, Japan. Source: Takeshi Akamatsu

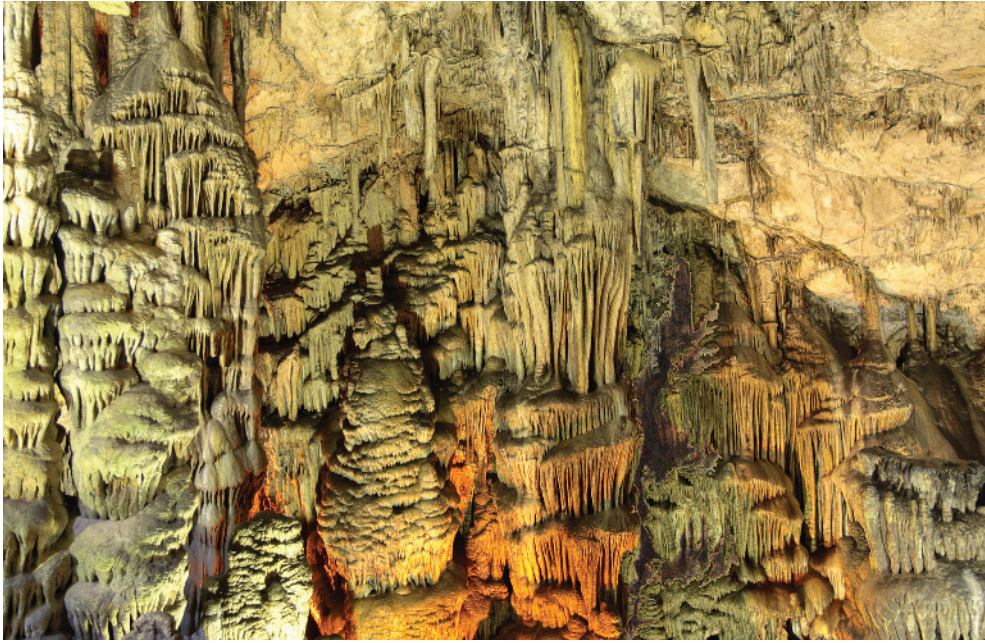


Figure 1.39: Psychro Cave, Crete. Source: © Jerzy Stzelecki (<http://creativecommons.org/licenses/by-sa/3.0/deed.en>)

sion led up to the peak of the mountain to a special sanctuary where offerings were “fed” into a cleft in the rocks. Still today an annual procession makes its way up to the top of the mountain for the feast of Afendis Christos—an instance where Christianity tried to nullify “heathen” cults by appropriating ancient rituals and customs.

THE SHAMAN

Although the First Societies saw nature as a living force, its energy could be focused and even possibly harnessed by specialists, known in the modern world as shamans. The word, which comes from the Tungusic people who live in Siberia, was introduced into scholarship during the eighteenth century when German explorers of Siberia brought the word to Europe. The original word, *samanil*, is thought to derive from the Evenkis word *sama-mi*, meaning “knowing,” which contrasts with nineteenth-century translations that use the term “witch doctors” or “medicine men.”⁵⁸ What the Shamans know is the way of the spirit world and how to extract potency from its multiple realities (Figure 1.40).

Although shamanism is used as a generic term to describe an ancient worldwide belief structure, each culture will have its own designation and its own variation on the role of the shaman. In practical terms, shamans serve as healers, as guides of the souls of the dead, and as the custodian of tribal lore. For the !Kung, since people do not actually die but their spirits go to live in a special place where they remain in a sort of continuum with the living, it is the job of the shaman to keep the interaction between the two realms alive and on an even keel. Shamans also play an important part in puberty rites and in induction ceremonies as well as in many aspects of a person’s life. They can outwit malignant spirits and persons and keep pestilence away. They are, however, not priests as there are no prescribed texts or ritual practices. Shamans can go on trips to recharge their energies. In east Asia, a trip to a mountain might be performed.⁵⁹ Shamans were often buried close to mountains or sometimes in cracks in the rocks. Although the shaman is an integral part of the clan’s or tribe’s identity, he or she is not necessarily the leader as such. The shaman is often seen as somewhat apart from the group existing in a connected but separated space of existence. Among the Avá-Chiripá in Paraguay, the shaman is traditionally known as *mbae-ira*, “the solitary one” or “the one set apart.”⁶⁰

Figure 1.40: Shaman performing ritual on Mount Salkantay, Peru.
Source: Christopher Mozzochi



Figure 1.41: Saliva, an Oglala Sioux priest, dressed for the Hu Kalowa Pi ceremony, South Dakota, USA. Photographed by Edward S. Curtis, 1907. Source: Edward Curtis Collection, Prints & Photographs Division, Library of Congress, LC-USZ62-136598



The shaman is knowledgeable, in particular, of the medicinal properties of plants. In Homer's *Odyssey*, Argeiphontes explains that Hermes "gave me the herb, drawing it from the ground, and showing me its *physis*," its "inner nature."⁶¹ In the context of American cultures, the term "medicine man" was used to describe these individuals who were venerated and respected.⁶² But by the word "medicine" we must understand a very broad definition to connote a mystery/learning that is beyond normal human understanding. The list of medicinal usages among American native cultures was extensive. Willow bark, for example, which contains the chemical salicin, related to the salicylic acid found in aspirin, was widely used as a pain reliever. The leaves of wormseed, though poisonous if eaten raw, contain an oily resin that was used to purify the ceremonial grounds for the Green Corn Festivals and from which a medicinal tea was made. And the list goes on⁶³ (Figure 1.41).

Curing ceremonies are, therefore, one of the central activities of the shaman. The ceremony's main purpose is to expel the disease-object that has been lodged in the body. There is no set procedure since a shaman will cure according to instructions received from his or her power, but the graver the illness, the longer the ceremony. In most cases, the shaman is brought to the residence of the sick person. It is rarely a private event. Relatives and even visitors will be sitting nearby. The shaman will sing and dance, but will also possibly interrupt the proceedings to inform the onlookers about where he is in the process. The purpose is to "maneuver" the sickness into a position where it can be easily extracted from the body.

How an individual becomes a shaman varies from society to society. In some societies, it is possible to become a shaman by having a particularly vivid or powerful vision or sensation in which it is claimed that spirits enter the body. In other societies, the position of shaman is inherited. Elsewhere, the future shaman is visited by powerful forces that make him or her ill for a period of time, during which voices teach him the skills of divination.⁶⁴ In yet other societies an apprenticeship is required under a practicing shaman. Among the Aboriginal Australians, the shamans have to prove their healing skill and in that sense can just as easily be considered professionals as magicians.⁶⁵ In societies that regularly use hallucinogenic drugs, almost any person can achieve the altered state of consciousness needed for the practice of shamanism. Among the Jivaro of the Ecuadorian Amazon, where hallucinogenics are used in ritual practices, about one in four men is a shaman.⁶⁶ In the Americas, tobacco came to play a central role in shamanistic rituals. In some places it was smoked or made into a juice. The shaman-priest of the Waro carries out the feeding of the gods by holding a long cigar vertically and pointing it in the direction of the sky. Smoke is also “offered” to sacred items.⁶⁷ Among North American tribes, the most common way of acquiring shamanistic power was by dreaming. A spirit, whether that of an animal, a place, the sun, or another natural object, visits the future medicine-man in his dreams and the connection thus established becomes the source and basis of the latter’s power. From the guardian spirit he receives the song and thus the knowledge that enables him not only to cause or remove ease, but also to endure what other men cannot.⁶⁸ Among the !Kung, almost every young man and even some women desire to become a shaman, but the training is difficult—particularly psychologically—as the initiates have to learn to master and control the art of the trance.⁶⁹ Among the Maasai, the ability “to see” is inherited by descendants of a particular clan.

Because of its complexity, the history of shamanism is clouded in uncertainty, but the fact that in one form or another it stretches from the tip of South Africa to the tip of South America implies that it predated the departure from Africa by the earliest humans. It is also apparent that as it moved with people eastward through Siberia, it became more intensely ritualized and specialized, with shamans using specific clothing, objects, and sound-making devices. In Siberia, the shaman’s dress features small mirrors and bells hanging from a belt or covering the chest and back that are meant to frighten evil spirits. A helmet might also be worn representing a powerful animal. In east Asia and the Americas, the most important part of the shaman’s paraphernalia was the drum and drumstick, with a rattle sometimes built into the drum’s handle (Figure 1.42). Its sound was intended to frighten the evil spirits away, to establish contact between man and the supernatural powers, or to secure a good outcome in an undertaking. The typical Mongolian drumstick will have a horse head at its top and a hoof at the bottom, enabling the shaman to journey to a specific place to battle the demons. This journey takes place in a state of ecstasy and is not without its perils.⁷⁰

Shiny objects often hold a special significance in shamanistic practice. The Native Americans, for example, saw spirituality not just in things that literally shine, but also in things that shine in a more conceptual way, such as celestial bodies, meteorological phenomena, the Milky Way, fire, water, metals, minerals, shells, ceramics, feathers, bones, and even blood. Despite the multiplicity of significances, there is a common notion about the inner sacredness of glistening surfaces, whether greenstones in Mesoamerica, gold in the Andes, copper and mica in North America and among the Olmec, polished wood and guanin (a copper-gold alloy) in the Caribbean, or rock crystals in Amazonia. Even perhaps the sweat from

Figure 1.42: Shaman on 10,000-foot mountaintop ceremony, Western Mongolia. Source: David Edwards/National Geographic Stock



a sweat bath places one in the presence of the spiritual. Light and shininess are particularly important to the shamanistic worldview, since it was seen as a portal into the unseen. For the Inuit, shine was a quality that enabled the shaman to see in the dark. Gold for the Incas, had this value. Jade and obsidian shared this property, thus their practically universal significance in many cultures.⁷¹ This explains the importance of small mirrors, usually of polished mica, or various types of stones in the shaman's tool kit.

PROTO-SHINTOISM

The most coherent survival of ancient animism known to us is Japanese Shintoism. The word “Shinto,” which can be translated as “the way of the gods,” was coined in the nineteenth century to identify it as a religion distinct from Buddhism. Until then Shintoism was so fundamental to Japanese life and culture that it had no name apart from the names for the various cultic procedures, ceremonies, and rituals. In its earliest formation we find no architectural expression at all. The famous Ise Shrine and all the hundreds of other temples that are such a large part of the Shinto culture of today all arose as a response of Shintoism's seventh-century CE encounter with Buddhism. Buddhism, which came to Japan from India via China and Korea, brought with it a highly developed architectural culture of temples and shrines that Shintoism in a sense adopted.

The story of pre-Buddhist Shintoism has, therefore, to be first told from the perspective of its prearchitectural phase when it was characterized solely by the worship of *kami*, which can be defined as the “spirits” of mountains, rivers, lightning, wind, waves, trees, and even rocks⁷² (Figure 1.43).



Figure 1.43: Himorogi of Amenoho-Hinomikoto on Mount Rokkou, Kobe Japan. Source: © OpenCage (<http://creativecommons.org/licenses/by-sa/2.5/deed.en>)



Figure 1.44: A typical Japanese kami shrine or honden, Japan. Source: © Tanaka Juuyoh (<http://creativecommons.org/licenses/by/2.0/>)



Their presence can be indicated by a *honden* which might be nothing more than a rope, but often is a small box-like structure with a roof made of stone or wood (Figure 1.44). Kami and humans exist in a shared continuum; they exist within the same world and share its interrelated complexities. Nonetheless, the kami, as innate supernatural forces residing in all things, are above the actions of man. Certain localities, such as the sacred grove, or *mori*, are viewed as particularly propitious for the meeting of humans with the spirit of kami and are therefore held to be sacred.⁷³ There are several such groves still existing in Japan, such as the 20-hectare wooded area, *Atsuta-ku*, in the city of Nagoya. On Okinawa, one finds the **Rikyu Shinto sanctuary**, known as *Seifa-utaki* (meaning “purified place of Utaki”), a sacred grove where ancient gods are believed to have descended and dwelled (Figure 1.45). This sanctuary, held to be particularly sacred, was until recently closed to ordinary people. It has, apart from its dense undergrowth, unusual rock formations, and cliff faces that drip sacred water.

Mountain kami locations are particularly sacred as they are considered the conduits to the supernatural. The more cone-like the mountain, the more significant its attributes, thus the particular importance of Mount Akagi and Mount Fuji. At the foot of Mount Akagi archaeologists found several stone replicas of swords, of round mirrors, and of mysterious jewels that were perhaps used to induce the kami to descend from its world and manifest itself in the world of the living. *Yama no kami*, “deity of the mountains (or woods),” is the owner and master of the hunting animals; it is he who grants or refuses the game to the hunter. Now and then, in Japanese myths, he appears in the shape of an animal, often as a white stag, a huge bear, or of a boar. When a hunter has killed a hundred stags or boars, he will erect a memorial stone to appease the kami.⁷⁴

Figure 1.45: Rikyu Shinto sanctuary, “Seifa-utaki,” Okinawa, Japan. Source: © Hideyuki Kamon (<http://creativecommons.org/licenses/by-sa/2.0/deed/en>)

35 07 31 N, 136 54 33 E

26 10 23 N, 127 49 36 E

Unlike modern, monotheistic religious practices, Shintoism does not require those respecting its premises to be believers or practitioners. There are no sacred writings, nor is there an organized theory of death. The spirits of the dead go to the mountains, above the sky, below the earth, or beyond the horizon. Living beings from this world may visit those from the other worlds in border areas such as cliffs, caves, and coastlines. The deceased generally do not become kami unless there are special circumstances associated with their death.

Contemporary kami rituals still survive in some places and this despite the decentralization of villages, the modernization of Japan's political structure, and extensive cultural contact with Buddhism and Christianity.⁷⁵ In a village in Okinawa one ritual is as follows:

Eight middle-aged and elderly women enter the *kami-ya* (village shrine). They sit on tatami mats on the floor and chat. Gradually, the conversation ceases. One of the women instructs a male assistant to light incense and place it on the altar. This woman, flanked on either side by her associates, turns toward the three rocks arranged on the altar and pours sake (rice wine) over the rocks. All of the women kneel, press their hands together, and quietly murmur prayers. The eight women then file outside, where a bus provided by the town hall drives them to the beginning of a trail that leads into the jungle. They begin their ascent, single file, the male assistant walking in front in order to clear away vines and look out for poisonous *habu* snakes. After fifteen minutes of steady climbing, they pause at a clearing. The male assistant walks on. The women take out five-piece white robes from the bags they have been carrying and quietly don the robes. They are now officially *kami-sama*, or guardian spirits, *-sama* being an honorary suffix added to names or titles. The eight *kami-sama* continue their trek into the increasingly dark jungle, finally reaching the sacred grove. There are two stone benches where they sit and weave crowns of leaves and vines to put on their heads. One of the *kami-sama* goes farther into the sacred grove, stopping at a small stone altar on which rest six conch shells. She squats in front of the shells, prays briefly, and “feeds” rice and sake into the opening of each shell. She then joins her fellow *kami-sama*, taking her place on the center seat. The male assistant pours sake for each *kami-sama*; they pray briefly and quietly. The eight *kami-sama* rise and begin their journey back to the bus. The bus driver takes them to the edge of the village, and the *kami-sama* walk to the village square, where they are met by clan members and the village headman, who bows and pours sake for each *kami-sama*. Clanswomen provide food and drink of the *kami-sama*. After a small meal the *kami-sama* rise, take off the white robes, and hang the crowns of leaves on special nails in the village square. The women then walk home and return to their normal activities.⁷⁶

DANCE CEREMONIALISM

Ritual dance is such a pervasive aspect of First Society life that it too must have left Africa some 60,000 years ago as an essential—and already by then well-defined—aspect of the human cultural package. In many cases, the dance is part of a larger ceremonial event. It is important to stress the concept of ceremonialism to draw emphasis away from the tendency to see dance as an autonomous event or as a form of entertainment. In Australia and the Americas in particular, ceremonies consist of a number of related events that may even involve different performance grounds belonging to different clans. A ceremony may attract, by invitation, participants from neighboring and even distant communities. Some ceremonies are seasonal, but others can be related to the death of an important figure, or to certain shamanistic requirements.

The Hazda have a sacred dance ceremony that takes place every night when there is no moon in the sky. In other words, it is done in complete darkness. Once it has been dark for a while, people begin to assemble in the open area in the camp. The men congregate in one



area and the women elsewhere. Only one man dances at a time, wearing a black cape and headdress of black and brown ostrich feathers, with tie bells on his ankles and holding a seed-filled gourd as a shaker. These objects are considered sacred. The man dances by stomping very hard on the ground, providing a slow, steady beat with the jangling of the bells and the shaking of the gourd. He sings in a call-and-shout style and sometimes whistles. He will dance a minute or two, then disappear to return to dance a bit longer. With each return, the women who answer his singing become more animated in their responses. Eventually they too will get up and dance around the man, whom they can only hear or whose shape they can vaguely intuit in the darkness. When the man finishes, he passes the ritual over to the next man and the same thing occurs again, until all the men have danced.⁷⁷ Night-time dances are typical and still practiced by the Karo in Ethiopia, for example (Figure 1.46).

In more complex First Societies, these types of dances often featured ritual acts of gift giving, which served to affirm the identity of the group and establish the link between the humans and the non-humans. And since songs are often considered to have been made by the spirit world, it was the duty of humans to transmit them as accurately as possible to the next generation. Ceremonies also served as venues for social interaction with distant communities. Though ceremonies have a particular script that does not mean that First Society people never wavered from tradition. From early contact with Native Americans in the United States and with First Society peoples in Australia it is clear that ceremonies could change over time. Some, for example, were adopted from surrounding cultures as the influence of those cultures spread.⁷⁸

Dances often feature elaborate sacred costumes and headgear, either worn or carried by the dancers. In Australia, the gear can represent rainbows, pelicans' bills, shields or *ba/angan* spirits of a deceased person, among other things. In the Americas they can represent birds, bison, and a whole range of animals. Some dances are intended to help make contact

Figure 1.46: Men and women of the Karo tribe gather for an evening dance, Dus, Omo Valley, Ethiopia. Source: Randy Olson/National Geographic Stock

4 43 50 N, 36 00 37 E



Figure 1.47: Night-time ceremony, Australia. Source: Luca De Giglio

with the spirit world through an altered state of consciousness brought on by the dance itself. In some places the dances were more athletic than others, but they were rarely short events. A dance can last through the entire night; some can be part of ceremonies that last for several days, and occasionally even weeks (Figure 1.47). Some mark seasonal transitions, others the transitions in the human life cycle. For the Zuni in the American Southwest, a dance ceremony includes speeches made by the chief that take six hours to deliver, and which he has to learn by heart.⁷⁹

In some places the difference between men and women singing and dancing is not sharply drawn. But in Arnhem Land in Australia, this is not the case. Men's dancing is athletic with high leaps, vigorous and strongly differentiated movements, and skillful imitation of bird and animal behavior. Women's dancing is more restricted to standardized postures and hand and foot movements. In north-central Arnhem Land one finds circle dancing and fluid rhythmic movement, similar to the stomp dance in the Americas where dancers, male and female, move counterclockwise around a sacred fire. In Australia, the posture is often a semi-crouching position with knees apart and trunk forward and arms flexed.

Dances are usually performed on specially prepared ground, either in the area of the camp or nearby, depending on the context of the occasion (Figures 1.48 and 1.49). In Australia, a bough-shade is usually erected on the side of the performance ground. In this shade, the objects to be used are prepared and the dancers are decorated. These preparations, which can be quite time consuming, are integral to the event and are accompanied by songs summoning the spirits to ensure the efficacy of the event. Similar preparations are to be found among the Native Americans. In most cases, in fact, the boundary between preparation and the actual dance are imperceptible so that the whole event is a gradual building up to a climax. Endings, however, are usually abrupt, signaled by the removal of the dancers' head-dresses and decorations.



Figure 1.48: Ankle rattles made of shells at a tribal dance in the Kalahari Desert, Botswana. Source: © Ben Lai (<http://creativecommons.org/licenses/by-sa/3.0/deed.en>)

Figure 1.49: Tribal dance in Borneo, Malaysia. Source: © Aruna (<http://creativecommons.org/licenses/by-sa/2.5/>)





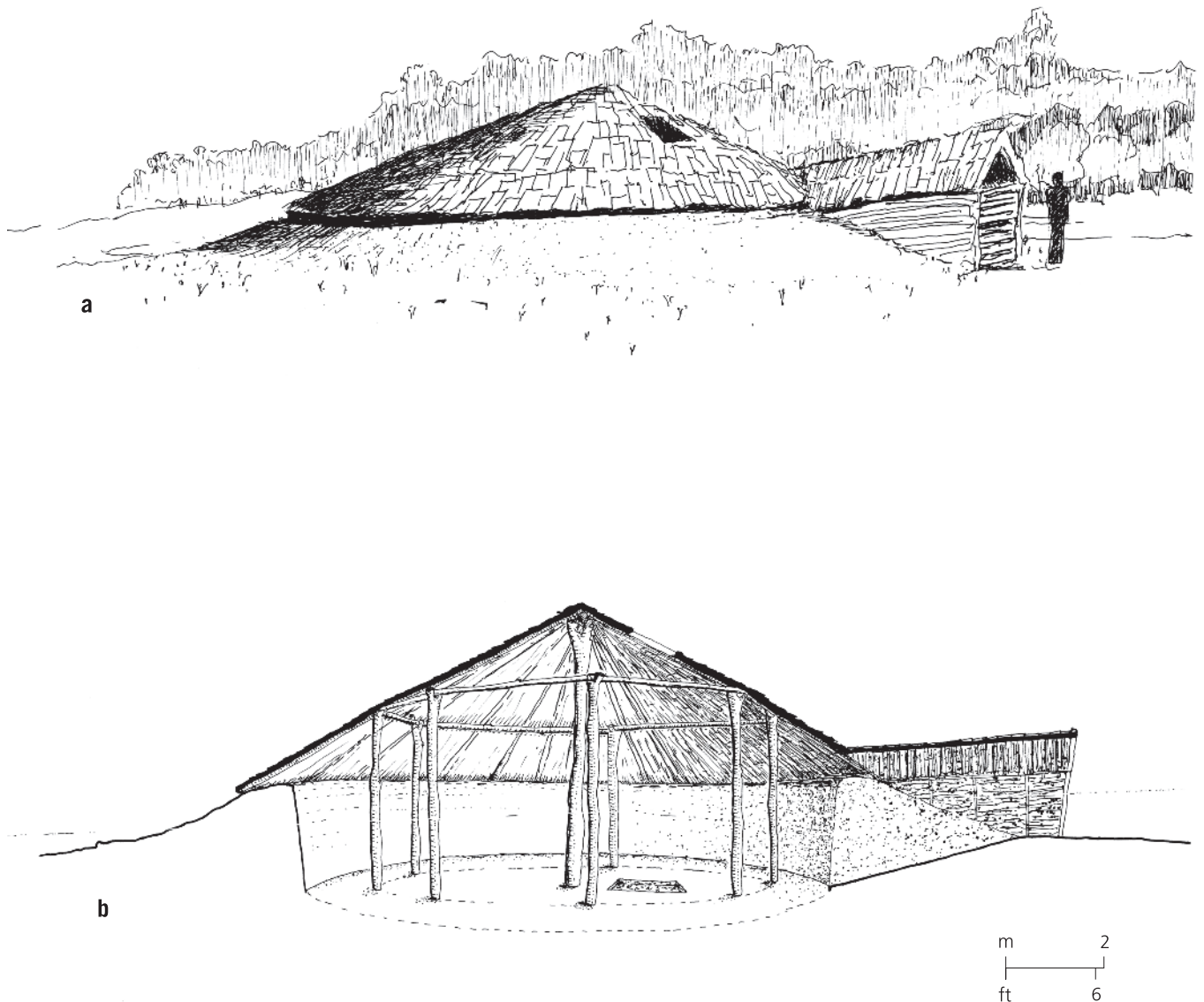
Figure 1.50: Yupik Eskimo women at a drum dance, Provideniya, Siberia, Russia. Source: B & C Alexander/ArcticPhoto

In places where it is cold, these events are held indoors (Figure 1.50). Such dances will have more restricted movements and are sometimes done in a seated position. The Inuits, along the Arctic Circle, constructed a special structure, known as *kashim*, for their ceremonial dances, shamanistic healings, yearly meets, and initiation rites. Rectangular in Alaska, and more circular in eastern areas, they were partially dug into the ground and had a roof of logs and earth supported by timber posts. Ten or more meters across, they could hold at least a hundred people. Larger villages might have had more than one. Some had elaborate venting for the fire in which a channel was dug from just outside the entrance under the floor to the fire pit. This prototype can be found in Siberia all the way to Peru. To enter the *kashim*, a person had to crawl on all fours through the low entry, which, apart from trapping the warm air inside, served as a reminder of the animal-human transformation. The smoke hole represented the upper world, the fire pit the lower world, and the ceremonial house the human world. The ability of the spirits to “enter” and “exit” from both fire pit and smoke hole made this interaction explicit.

The Washoe, who lived in the mountains around Lake Tahoe in California, also built special Dance Houses. First an area 10 meters in diameter and about a meter deep was excavated; above this a 3.5-meters-high, conically shaped structure of poles covered by earth and tulle mats was created (Figure 1.51a and 1.51b). The fireplace was at the center and the entrance faced to the east. They were built primarily to assist a person transitioning into a shaman or for ceremonies to expel evil spirits.⁸⁰ The central post of the structure received at its apex the accumulated tips of the roof poles. Between the center post and the outer walls was a ring of seven posts. The structure carried a host of short poles on which is piled earth,

tule, and brush. The entranceway sloped down from the outside and was about 1.2 meters wide. The rectangular smoke hole was over the fireplace and between the entrance and the center pole. The floor was covered with fresh green willow boughs and leaves. This design, known as a pit house or earth lodge, was widespread and can be found from Siberia into Peru, with numerous local variants, as we shall discuss later. In the case of a sacred dance, the dark outer circle was occupied by the onlookers, who sat or reclined with their feet toward the center. The performers assembled near the entrance and when ready ran through the entrance and grouped themselves on the western side of the house, beating time by striking the ground vigorously with the feet and singing or blowing low musical strains on whistles made of goose or eagle bones. At intervals, the chief climbed the roof and sang a chant. These ceremonies could last up to four days.⁸¹

Figure 1.51a, b: Typical Pawnee dance house, Nebraska, USA: (a) view, (b) section.
 Source: Mark Jarzombek & Timothy Cooke/C. Hart Merriam, *Studies of California Indians* (Berkeley: University of California Press, 1955), 13.



Even in warm climates a special Dance House may be erected. The Avá Chiripá, who live in the rainforests of Paraguay, for example, have a ceremony called ñemboé kaagüy, or the Prayer of the Forest. The Dance House, situated in the center of the village, is about 6 by 4 meters, larger than the ordinary house, and has one side that is open and facing east. In front of this space, a large trough made of sacred cedar is placed that holds the ceremonial drink. The trough is in the shape of a canoe. In front of it there are three cedar posts, about 1.2 meters high. The two outer ones hold candles. Feathers and an arrow ornament the central post. The ceremony lasts for four days, with ritual dances taking place in front of the trough and the posts. As the days go on, more and more people from the surrounding areas show up to participate. The ceremony ends with the drink being imbibed first by the shaman and then by the rest of the people, who all dance in circles and crisscrossing groups of men and women. The date for the ceremony is determined by the dream of the highest-ranking shaman responsible for the ritual, but usually takes place as a ritual inauguration of the first fruit and harvest.⁸²

Perhaps of all the activities that came out of Africa, dance, despite the fact that it leaves only the most intangible of traces, was the most important. Its capacity to bond humans both to one another and to the cosmos—while at the same time linking them across the differences of space, time, and even language—is enormous. Dancing was the glue that held everything together.

An anthropologist studying the Mbuti in the Congo rainforest was once taken on expedition to collect honey. One evening, when everyone was back in the camp, he noticed a man dancing by himself. The anthropologist asked him why he was dancing alone. “He stopped, turned slowly around and looked at me as though I was the biggest fool he had ever seen; and he was plainly surprised by my stupidity. ‘But I’m *not* dancing alone,’ he said. ‘I am dancing with the forest, dancing with the moon.’”⁸³

ENDNOTES

1. Scholarly literature uses a complex series of terms to designate the development of different cultures through time. In Africa: Early Stone Age (2.5 million to 200,000 BP); Middle Stone Age (200,000 to 20,000 BP); and Later Stone Age (20,000 BP to Present). In Europe: Lower Paleolithic (750,000 to 220,000 BP); Middle Paleolithic (220,000 to 45,000 BP); and Upper Paleolithic (45,000 to 10,000 BP). In India: Paleolithic (500,000 to 30,000 BP); Mesolithic (30,000 to 5000 BP); and Neolithic (8000 to 1500 BP). Because of these variants and the different time slots associated with them, I have decided to not use these terms in the book, in the hope that these terminological issues can be addressed in other contexts.
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