

3

A Day in the Life of Adam and Eve

TO UNDERSTAND OUR NATURE, HISTORY and psychology, we must get inside the heads of our hunter-gatherer ancestors. For nearly the entire history of our species, Sapiens lived as foragers. The past 200 years, during which ever increasing numbers of Sapiens have obtained their daily bread as urban labourers and office workers, and the preceding 10,000 years, during which most Sapiens lived as farmers and herders, are the blink of an eye compared to the tens of thousands of years during which our ancestors hunted and gathered.

The flourishing field of evolutionary psychology argues that many of our present-day social and psychological characteristics were shaped during this long pre-agricultural era. Even today, scholars in this field claim, our brains and minds are adapted to a life of hunting and gathering. Our eating habits, our conflicts and our sexuality are all the result of the way our hunter-gatherer minds interact with our current post-industrial environment, with its mega-cities, aeroplanes, telephones and computers. This environment gives us more material resources and longer lives than those enjoyed by any previous generation, but it often makes us feel alienated, depressed and pressured. To understand why, evolutionary psychologists argue, we need to delve into the hunter-gatherer world that shaped us, the world that we subconsciously still inhabit.

Why, for example, do people gorge on high-calorie food that is doing little good to their bodies? Today's affluent societies are in the throes of a plague of obesity, which is rapidly spreading to developing countries. It's a puzzle why we binge on the sweetest and greasiest

food we can find, until we consider the eating habits of our forager forebears. In the savannahs and forests they inhabited, high-calorie sweets were extremely rare and food in general was in short supply. A typical forager 30,000 years ago had access to only one type of sweet food – ripe fruit. If a Stone Age woman came across a tree groaning with figs, the most sensible thing to do was to eat as many of them as she could on the spot, before the local baboon band picked the tree bare. The instinct to gorge on high-calorie food was hard-wired into our genes. Today we may be living in high-rise apartments with over-stuffed refrigerators, but our DNA still thinks we are in the savannah. That's what makes some of us spoon down an entire tub of Ben & Jerry's when we find one in the freezer and wash it down with a jumbo Coke.

This 'gorging gene' theory is widely accepted. Other theories are far more contentious. For example, some evolutionary psychologists argue that ancient foraging bands were not composed of nuclear families centred on monogamous couples. Rather, foragers lived in communes devoid of private property, monogamous relationships and even fatherhood. In such a band, a woman could have sex and form intimate bonds with several men (and women) simultaneously, and all of the band's adults cooperated in parenting its children. Since no man knew definitively which of the children were his, men showed equal concern for all youngsters.

Such a social structure is not an Aquarian utopia. It's well documented among animals, notably our closest relatives, the chimpanzees and bonobos. There are even a number of present-day human cultures in which collective fatherhood is practised, as for example among the Barí Indians. According to the beliefs of such societies, a child is not born from the sperm of a single man, but from the accumulation of sperm in a woman's womb. A good mother will make a point of having sex with several different men, especially when she is pregnant, so that her child will enjoy the qualities (and paternal care) not merely of the best hunter, but also of the best storyteller, the strongest warrior and the most considerate lover. If this sounds silly, bear in mind that before the development of modern embryological studies, people had no solid evidence that babies are always sired by a single father rather than by many.

The proponents of this ‘ancient commune’ theory argue that the frequent infidelities that characterise modern marriages, and the high rates of divorce, not to mention the cornucopia of psychological complexes from which both children and adults suffer, all result from forcing humans to live in nuclear families and monogamous relationships that are incompatible with our biological software.¹

Many scholars vehemently reject this theory, insisting that both monogamy and the forming of nuclear families are core human behaviours. Though ancient hunter-gatherer societies tended to be more communal and egalitarian than modern societies, these researchers argue, they were nevertheless comprised of separate cells, each containing a jealous couple and the children they held in common. This is why today monogamous relationships and nuclear families are the norm in the vast majority of cultures, why men and women tend to be very possessive of their partners and children, and why even in modern states such as North Korea and Syria political authority passes from father to son.

In order to resolve this controversy and understand our sexuality, society and politics, we need to learn something about the living conditions of our ancestors, to examine how Sapiens lived between the Cognitive Revolution of 70,000 years ago, and the start of the Agricultural Revolution about 12,000 years ago.

Unfortunately, there are few certainties regarding the lives of our forager ancestors. The debate between the ‘ancient commune’ and ‘eternal monogamy’ schools is based on flimsy evidence. We obviously have no written records from the age of foragers, and the archaeological evidence consists mainly of fossilised bones and stone tools. Artefacts made of more perishable materials – such as wood, bamboo or leather – survive only under unique conditions. The common impression that pre-agricultural humans lived in an age of stone is a misconception based on this archaeological bias. The Stone Age should more accurately be called the Wood Age, because most of the tools used by ancient hunter-gatherers were made of wood.

Any reconstruction of the lives of ancient hunter-gatherers from the surviving artefacts is extremely problematic. One of the most glaring differences between the ancient foragers and their agricultural

and industrial descendants is that foragers had very few artefacts to begin with, and these played a comparatively modest role in their lives. Over the course of his or her life, a typical member of a modern affluent society will own several million artefacts – from cars and houses to disposable nappies and milk cartons. There's hardly an activity, a belief, or even an emotion that is not mediated by objects of our own devising. Our eating habits are mediated by a mind-boggling collection of such items, from spoons and glasses to genetic engineering labs and gigantic ocean-going ships. In play, we use a plethora of toys, from plastic cards to 100,000-seater stadiums. Our romantic and sexual relations are accoutred by rings, beds, nice clothes, sexy underwear, condoms, fashionable restaurants, cheap motels, airport lounges, wedding halls and catering companies. Religions bring the sacred into our lives with Gothic churches, Muslim mosques, Hindu ashrams, Torah scrolls, Tibetan prayer wheels, priestly cassocks, candles, incense, Christmas trees, matzah balls, tombstones and icons.

We hardly notice how ubiquitous our stuff is until we have to move it to a new house. Foragers moved house every month, every week, and sometimes even every day, toting whatever they had on their backs. There were no moving companies, wagons, or even pack animals to share the burden. They consequently had to make do with only the most essential possessions. It's reasonable to presume, then, that the greater part of their mental, religious and emotional lives was conducted without the help of artefacts. An archaeologist working 100,000 years from now could piece together a reasonable picture of Muslim belief and practice from the myriad objects he unearthed in a ruined mosque. But we are largely at a loss in trying to comprehend the beliefs and rituals of ancient hunter-gatherers. It's much the same dilemma that a future historian would face if he had to depict the social world of twenty-first-century teenagers solely on the basis of their surviving snail mail – since no records will remain of their phone conversations, emails, blogs and text messages.

A reliance on artefacts will thus bias an account of ancient hunter-gatherer life. One way to remedy this is to look at modern forager societies. These can be studied directly, by anthropological observation.

But there are good reasons to be very careful in extrapolating from modern forager societies to ancient ones.

Firstly, all forager societies that have survived into the modern era have been influenced by neighbouring agricultural and industrial societies. Consequently, it's risky to assume that what is true of them was also true tens of thousands of years ago.

Secondly, modern forager societies have survived mainly in areas with difficult climatic conditions and inhospitable terrain, ill-suited for agriculture. Societies that have adapted to the extreme conditions of places such as the Kalahari Desert in southern Africa may well provide a very misleading model for understanding ancient societies in fertile areas such as the Yangtze River Valley. In particular, population density in an area like the Kalahari Desert is far lower than it was around the ancient Yangtze, and this has far-reaching implications for key questions about the size and structure of human bands and the relations between them.

Thirdly, the most notable characteristic of hunter-gatherer societies is how different they are one from the other. They differ not only from one part of the world to another but even in the same region. One good example is the huge variety the first European settlers found among the Aborigine peoples of Australia. Just before the British conquest, between 300,000 and 700,000 hunter-gatherers lived on the continent in 200–600 tribes, each of which was further divided into several bands.² Each tribe had its own language, religion, norms and customs. Living around what is now Adelaide in southern Australia were several patrilineal clans that reckoned descent from the father's side. These clans bonded together into tribes on a strictly territorial basis. In contrast, some tribes in northern Australia gave more importance to a person's maternal ancestry, and a person's tribal identity depended on his or her totem rather than his territory.

It stands to reason that the ethnic and cultural variety among ancient hunter-gatherers was equally impressive, and that the 5 million to 8 million foragers who populated the world on the eve of the Agricultural Revolution were divided into thousands of separate tribes with thousands of different languages and cultures.³ This, after all, was one of the main legacies of the Cognitive Revolution. Thanks

to the appearance of fiction, even people with the same genetic make-up who lived under similar ecological conditions were able to create very different imagined realities, which manifested themselves in different norms and values.

For example, there's every reason to believe that a forager band that lived 30,000 years ago on the spot where Oxford University now stands would have spoken a different language from one living where Cambridge is now situated. One band might have been belligerent and the other peaceful. Perhaps the Cambridge band was communal while the one at Oxford was based on nuclear families. The Cantabrigians might have spent long hours carving wooden statues of their guardian spirits, whereas the Oxonians may have worshipped through dance. The former perhaps believed in reincarnation, while the latter thought this was nonsense. In one society, homosexual relationships might have been accepted, while in the other they were taboo.

In other words, while anthropological observations of modern foragers can help us understand some of the possibilities available to ancient foragers, the ancient horizon of possibilities was much broader, and most of it is hidden from our view.* The heated debates about *Homo sapiens*' 'natural way of life' miss the main point. Ever since the Cognitive Revolution, there hasn't been a single natural way of life for Sapiens. There are only cultural choices, from among a bewildering palette of possibilities.

The Original Affluent Society

What generalisations can we make about life in the pre-agricultural world nevertheless? It seems safe to say that the vast majority of people lived in small bands numbering several dozen or at most several hundred individuals, and that all these individuals were humans. It is important to note this last point, because it is far from obvious. Most members of agricultural and industrial societies are domesticated

* A 'horizon of possibilities' means the entire spectrum of beliefs, practices and experiences that are open before a particular society, given its ecological, technological and cultural limitations. Each society and each individual usually explore only a tiny fraction of their horizon of possibilities.

animals. They are not equal to their masters, of course, but they are members all the same. Today, the society called New Zealand is composed of 4.5 million Sapiens and 50 million sheep.

There was just one exception to this general rule: the dog. The dog was the first animal domesticated by *Homo sapiens*, and this occurred *before* the Agricultural Revolution. Experts disagree about the exact date, but we have incontrovertible evidence of domesticated dogs from about 15,000 years ago. They may have joined the human pack thousands of years earlier.

Dogs were used for hunting and fighting, and as an alarm system against wild beasts and human intruders. With the passing of generations, the two species co-evolved to communicate well with each other. Dogs that were most attentive to the needs and feelings of their human companions got extra care and food, and were more likely to survive. Simultaneously, dogs learned to manipulate people for their own needs. A 15,000-year bond has yielded a much deeper understanding and affection between humans and dogs than between humans and any other animal.⁴ In some cases dead dogs were even buried ceremoniously, much like humans.

Members of a band knew each other very intimately, and were surrounded throughout their lives by friends and relatives. Loneliness and privacy were rare. Neighbouring bands probably competed for resources and even fought one another, but they also had friendly contacts. They exchanged members, hunted together, traded rare luxuries, celebrated religious festivals and joined forces against foreigners. Such cooperation was one of the important trademarks of *Homo sapiens*, and gave it a crucial edge over other human species. Sometimes relations with neighbouring bands were tight enough that together they constituted a single tribe, sharing a common language, common myths, and common norms and values.

Yet we should not overestimate the intensity of such external relations. Even if in times of crisis the tribe acted as one, and even if the tribe periodically gathered to hunt, fight or feast together, most people still spent most of their time in a small band. Trade was mostly limited to prestige items such as shells, amber and pigments. There is no evidence that people traded staple goods like



7. First pet? A 12,000-year-old tomb found in northern Israel. It contains the skeleton of a fifty-year-old woman next to that of a puppy (bottom left corner). The puppy was buried close to the woman's head. Her left hand is resting on the dog in a way that might indicate an emotional connection. There are, of course, other possible explanations. Perhaps, for example, the puppy was a gift to the gatekeeper of the next world.

fruits and meat, or that the existence of one band depended on the importing of goods from another. Sociopolitical relations, too, tended to be sporadic. The tribe did not serve as a permanent political framework, and even if it had seasonal meeting places, there were no permanent towns or institutions. The average person might live many months without seeing or hearing a human from outside of her own band, and she encountered throughout her life no more than a few thousand humans. The Sapiens population was thinly spread over vast territories. Before the Agricultural Revolution, the human population of the entire planet was smaller than that of today's Cairo.

Most Sapiens bands lived on the road, roaming from place to place in search of food. Their movements were influenced by the changing seasons, the annual migrations of animals and the growth cycles of plants. They usually travelled back and forth across the same home territory, an area of between several dozen and many hundreds of square miles.

Occasionally, bands wandered outside their turf and explored new lands, whether due to natural calamities, violent conflicts, demographic pressures or the initiative of a charismatic leader. These wanderings were the engine of human worldwide expansion. If a forager band split once every forty years and its splinter group migrated to a new territory sixty miles to the east, the distance from East Africa to China would have been covered in about 10,000 years.

In some exceptional cases, when food sources were particularly rich, bands settled down in seasonal and even permanent camps. Techniques for drying, smoking and freezing food also made it possible to stay put for longer periods. Most importantly, alongside seas and rivers rich in seafood and waterfowl, humans set up permanent fishing villages – the first permanent settlements in history, long predating the Agricultural Revolution. Fishing villages might have appeared on the coasts of Indonesian islands as early as 45,000 years ago. These may have been the base from which *Homo sapiens* launched its first transoceanic enterprise: the invasion of Australia.

In most habitats, Sapiens bands fed themselves in an elastic and opportunistic fashion. They scrounged for termites, picked berries, dug for roots, stalked rabbits and hunted bison and mammoth. Notwithstanding the popular image of ‘man the hunter’, gathering was Sapiens’ main activity, and it provided most of their calories, as well as raw materials such as flint, wood and bamboo.

Sapiens did not forage only for food and materials. They foraged for knowledge as well. To survive, they needed a detailed mental map of their territory. To maximise the efficiency of their daily search for food, they required information about the growth patterns of each plant and the habits of each animal. They needed to know which foods were nourishing, which made you sick, and how to use others as cures. They needed to know the progress of the seasons and what warning signs preceded a thunderstorm or a dry spell. They studied every stream, every walnut tree, every bear cave, and every flint-stone deposit in their vicinity. Each individual had to understand how to make a stone knife, how to mend a torn cloak, how to lay a rabbit trap, and how to face avalanches, snakebites or hungry lions. Mastery of each of these many skills required years of apprenticeship and practice.

The average ancient forager could turn a flint stone into a spear point within minutes. When we try to imitate this feat, we usually fail miserably. Most of us lack expert knowledge of the flaking properties of flint and basalt and the fine motor skills needed to work them precisely.

In other words, the average forager had wider, deeper and more varied knowledge of her immediate surroundings than most of her modern descendants. Today, most people in industrial societies don't need to know much about the natural world in order to survive. What do you really need to know in order to get by as a computer engineer, an insurance agent, a history teacher or a factory worker? You need to know a lot about your own tiny field of expertise, but for the vast majority of life's necessities you rely blindly on the help of other experts, whose own knowledge is also limited to a tiny field of expertise. The human collective knows far more today than did the ancient bands. But at the individual level, ancient foragers were the most knowledgeable and skilful people in history.

There is some evidence that the size of the average Sapiens brain has actually *decreased* since the age of foraging.⁵ Survival in that era required superb mental abilities from everyone. When agriculture and industry came along people could increasingly rely on the skills of others for survival, and new 'niches for imbeciles' were opened up. You could survive and pass your unremarkable genes to the next generation by working as a water carrier or an assembly-line worker.

Foragers mastered not only the surrounding world of animals, plants and objects, but also the internal world of their own bodies and senses. They listened to the slightest movement in the grass to learn whether a snake might be lurking there. They carefully observed the foliage of trees in order to discover fruits, beehives and bird nests. They moved with a minimum of effort and noise, and knew how to sit, walk and run in the most agile and efficient manner. Varied and constant use of their bodies made them as fit as marathon runners. They had physical dexterity that people today are unable to achieve even after years of practising yoga or t'ai chi.

The hunter-gatherer way of life differed significantly from region to region and from season to season, but on the whole foragers seem to have enjoyed a more comfortable and rewarding lifestyle than most

of the peasants, shepherds, labourers and office clerks who followed in their footsteps.

While people in today's affluent societies work an average of forty to forty-five hours a week, and people in the developing world work sixty and even eighty hours a week, hunter-gatherers living today in the most inhospitable of habitats – such as the Kalahari Desert – work on average for just thirty-five to forty-five hours a week. They hunt only one day out of three, and gathering takes up just three to six hours daily. In normal times, this is enough to feed the band. It may well be that ancient hunter-gatherers living in zones more fertile than the Kalahari spent even less time obtaining food and raw materials. On top of that, foragers enjoyed a lighter load of household chores. They had no dishes to wash, no carpets to vacuum, no floors to polish, no nappies to change and no bills to pay.

The forager economy provided most people with more interesting lives than agriculture or industry do. Today, a Chinese factory hand leaves home around seven in the morning, makes her way through polluted streets to a sweatshop, and there operates the same machine, in the same way, day in, day out, for ten long and mind-numbing hours, returning home around seven in the evening in order to wash dishes and do the laundry. Thirty thousand years ago, a Chinese forager might leave camp with her companions at, say, eight in the morning. They'd roam the nearby forests and meadows, gathering mushrooms, digging up edible roots, catching frogs and occasionally running away from tigers. By early afternoon, they were back at the camp to make lunch. That left them plenty of time to gossip, tell stories, play with the children and just hang out. Of course the tigers sometimes caught them, or a snake bit them, but on the other hand they didn't have to deal with automobile accidents and industrial pollution.

In most places and at most times, foraging provided ideal nutrition. That is hardly surprising – this had been the human diet for hundreds of thousands of years, and the human body was well adapted to it. Evidence from fossilised skeletons indicates that ancient foragers were less likely to suffer from starvation or malnutrition, and were generally taller and healthier than their peasant descendants. Average life expectancy was apparently just thirty to

forty years, but this was due largely to the high incidence of child mortality. Children who made it through the perilous first years had a good chance of reaching the age of sixty, and some even made it to their eighties. Among modern foragers, forty-five-year-old women can expect to live another twenty years, and about 5–8 per cent of the population is over sixty.⁶

The foragers' secret of success, which protected them from starvation and malnutrition, was their varied diet. Farmers tend to eat a very limited and unbalanced diet. Especially in premodern times, most of the calories feeding an agricultural population came from a single crop – such as wheat, potatoes or rice – that lacks some of the vitamins, minerals and other nutritional materials humans need. The typical peasant in traditional China ate rice for breakfast, rice for lunch, and rice for dinner. If she were lucky, she could expect to eat the same on the following day. By contrast, ancient foragers regularly ate dozens of different foodstuffs. The peasant's ancient ancestor, the forager, may have eaten berries and mushrooms for breakfast; fruits, snails and turtle for lunch; and rabbit steak with wild onions for dinner. Tomorrow's menu might have been completely different. This variety ensured that the ancient foragers received all the necessary nutrients.

Furthermore, by not being dependent on any single kind of food, they were less liable to suffer when one particular food source failed. Agricultural societies are ravaged by famine when drought, fire or earthquake devastates the annual rice or potato crop. Forager societies were hardly immune to natural disasters, and suffered from periods of want and hunger, but they were usually able to deal with such calamities more easily. If they lost some of their staple foodstuffs, they could gather or hunt other species, or move to a less affected area.

Ancient foragers also suffered less from infectious diseases. Most of the infectious diseases that have plagued agricultural and industrial societies (such as smallpox, measles and tuberculosis) originated in domesticated animals and were transferred to humans only after the Agricultural Revolution. Ancient foragers, who had domesticated only dogs, were free of these scourges. Moreover, most people in agricultural and industrial societies lived in dense, unhygienic

permanent settlements – ideal hotbeds for disease. Foragers roamed the land in small bands that could not sustain epidemics.

The wholesome and varied diet, the relatively short working week, and the rarity of infectious diseases have led many experts to define pre-agricultural forager societies as ‘the original affluent societies’. It would be a mistake, however, to idealise the lives of these ancients. Though they lived better lives than most people in agricultural and industrial societies, their world could still be harsh and unforgiving. Periods of want and hardship were not uncommon, child mortality was high, and an accident which would be minor today could easily become a death sentence. Most people probably enjoyed the close intimacy of the roaming band, but those unfortunates who incurred the hostility or mockery of their fellow band members probably suffered terribly. Modern foragers occasionally abandon and even kill old or disabled people who cannot keep up with the band. Unwanted babies and children may be slain, and there are even cases of religiously inspired human sacrifice.

The Aché people, hunter-gatherers who lived in the jungles of Paraguay until the 1960s, offer a glimpse into the darker side of foraging. When a valued band member died, the Aché customarily killed a little girl and buried the two together. Anthropologists who interviewed the Aché recorded a case in which a band abandoned a middle-aged man who fell sick and was unable to keep up with the others. He was left under a tree. Vultures perched above him, expecting a hearty meal. But the man recuperated, and, walking briskly, he managed to rejoin the band. His body was covered with the birds’ faeces, so he was henceforth nicknamed ‘Vulture Droppings’.

When an old Aché woman became a burden to the rest of the band, one of the younger men would sneak behind her and kill her with an axe-blow to the head. An Aché man told the inquisitive anthropologists stories of his prime years in the jungle. ‘I customarily killed old women. I used to kill my aunts . . . The women were afraid of me . . . Now, here with the whites, I have become weak.’ Babies born without hair, who were considered underdeveloped, were killed immediately. One woman recalled that her first baby girl was killed because the men in the band did not want another girl.

On another occasion a man killed a small boy because he was ‘in a bad mood and the child was crying’. Another child was buried alive because ‘it was funny-looking and the other children laughed at it’.⁷

We should be careful, though, not to judge the Aché too quickly. Anthropologists who lived with them for years report that violence between adults was very rare. Both women and men were free to change partners at will. They smiled and laughed constantly, had no leadership hierarchy, and generally shunned domineering people. They were extremely generous with their few possessions, and were not obsessed with success or wealth. The things they valued most in life were good social interactions and high-quality friendships.⁸ They viewed the killing of children, sick people and the elderly as many people today view abortion and euthanasia. It should also be noted that the Aché were hunted and killed without mercy by Paraguayan farmers. The need to evade their enemies probably caused the Aché to adopt an exceptionally harsh attitude towards anyone who might become a liability to the band.

The truth is that Aché society, like every human society, was very complex. We should beware of demonising or idealising it on the basis of a superficial acquaintance. The Aché were neither angels nor fiends – they were humans. So, too, were the ancient hunter-gatherers.

Talking Ghosts

What can we say about the spiritual and mental life of the ancient hunter-gatherers? The basics of the forager economy can be reconstructed with some confidence based on quantifiable and objective factors. For example, we can calculate how many calories per day a person needed in order to survive, how many calories were obtained from a pound of walnuts, and how many walnuts could be gathered from a square mile of forest. With this data, we can make an educated guess about the relative importance of walnuts in their diet.

But did they consider walnuts a delicacy or a humdrum staple? Did they believe that walnut trees were inhabited by spirits? Did they find walnut leaves pretty? If a forager boy wanted to take a forager girl to a romantic spot, did the shade of a walnut tree suffice?

The world of thought, belief and feeling is by definition far more difficult to decipher.

Most scholars agree that animistic beliefs were common among ancient foragers. Animism (from '*anima*', 'soul' or 'spirit' in Latin) is the belief that almost every place, every animal, every plant and every natural phenomenon has awareness and feelings, and can communicate directly with humans. Thus, animists may believe that the big rock at the top of the hill has desires and needs. The rock might be angry about something that people did and rejoice over some other action. The rock might admonish people or ask for favours. Humans, for their part, can address the rock, to mollify or threaten it. Not only the rock, but also the oak tree at the bottom of the hill is an animated being, and so is the stream flowing below the hill, the spring in the forest clearing, the bushes growing around it, the path to the clearing, and the field mice, wolves and crows that drink there. In the animist world, objects and living things are not the only animated beings. There are also immaterial entities – the spirits of the dead, and friendly and malevolent beings, the kind that we today call demons, fairies and angels.

Animists believe that there is no barrier between humans and other beings. They can all communicate directly through speech, song, dance and ceremony. A hunter may address a herd of deer and ask that one of them sacrifice itself. If the hunt succeeds, the hunter may ask the dead animal to forgive him. When someone falls sick, a shaman can contact the spirit that caused the sickness and try to pacify it or scare it away. If need be, the shaman may ask for help from other spirits. What characterises all these acts of communication is that the entities being addressed are local beings. They are not universal gods, but rather a particular deer, a particular tree, a particular stream, a particular ghost.

Just as there is no barrier between humans and other beings, neither is there a strict hierarchy. Non-human entities do not exist merely to provide for the needs of man. Nor are they all-powerful gods who run the world as they wish. The world does not revolve around humans or around any other particular group of beings.

Animism is not a specific religion. It is a generic name for thousands of very different religions, cults and beliefs. What makes all of

them 'animist' is this common approach to the world and to man's place in it. Saying that ancient foragers were probably animists is like saying that premodern agriculturists were mostly theists. Theism (from '*theos*', 'god' in Greek) is the view that the universal order is based on a hierarchical relationship between humans and a small group of ethereal entities called gods. It is certainly true to say that premodern agriculturists tended to be theists, but it does not teach us much about the particulars. The generic rubric 'theists' covers Jewish rabbis from eighteenth-century Poland, witch-burning Puritans from seventeenth-century Massachusetts, Aztec priests from fifteenth-century Mexico, Sufi mystics from twelfth-century Iran, tenth-century Viking warriors, second-century Roman legionnaires, and first-century Chinese bureaucrats. Each of these viewed the others' beliefs and practices as weird and heretical. The differences between the beliefs and practices of groups of 'animistic' foragers were probably just as big. Their religious experience may have been turbulent and filled with controversies, reforms and revolutions.

But these cautious generalisations are about as far as we can go. Any attempt to describe the specifics of archaic spirituality is highly speculative, as there is next to no evidence to go by and the little evidence we have – a handful of artefacts and cave paintings – can be interpreted in myriad ways. The theories of scholars who claim to know what the foragers felt shed much more light on the prejudices of their authors than on Stone Age religions.

Instead of erecting mountains of theory over a molehill of tomb relics, cave paintings and bone statuettes, it is better to be frank and admit that we have only the haziest notions about the religions of ancient foragers. We assume that they were animists, but that's not very informative. We don't know which spirits they prayed to, which festivals they celebrated, or which taboos they observed. Most importantly, we don't know what stories they told. It's one of the biggest holes in our understanding of human history.

The sociopolitical world of the foragers is another area about which we know next to nothing. As explained above, scholars cannot even agree on the basics, such as the existence of private property, nuclear families and monogamous relationships. It's likely that different



8. A painting from Lascaux Cave, c.15,000–20,000 years ago. What exactly do we see, and what is the painting's meaning? Some argue that we see a man with the head of a bird and an erect penis, being killed by a bison. Beneath the man is another bird which might symbolise the soul, released from the body at the moment of death. If so, the picture depicts not a prosaic hunting accident, but rather the passage from this world to the next. But we have no way of knowing whether any of these speculations are true. It's a Rorschach test that reveals much about the preconceptions of modern scholars, and little about the beliefs of ancient foragers.

bands had different structures. Some may have been as hierarchical, tense and violent as the nastiest chimpanzee group, while others were as laid-back, peaceful and lascivious as a bunch of bonobos.

In Sungir, Russia, archaeologists discovered in 1955 a 30,000-year-old burial site belonging to a mammoth-hunting culture. In one grave they found the skeleton of a fifty-year-old man, covered with strings of mammoth ivory beads, containing about 3,000 beads in



9. Hunter-gatherers made these handprints about 9,000 years ago in the 'Hands Cave', in Argentina. It looks as if these long-dead hands are reaching towards us from within the rock. This is one of the most moving relics of the ancient forager world – but nobody knows what it means.

total. On the dead man's head was a hat decorated with fox teeth, and on his wrists twenty-five ivory bracelets. Other graves from the same site contained far fewer goods. Scholars deduced that the Sungir mammoth-hunters lived in a hierarchical society, and that the dead man was perhaps the leader of a band or of an entire tribe comprising several bands. It is unlikely that a few dozen members of a single band could have produced so many grave goods by themselves.

Archaeologists then discovered an even more interesting tomb. It contained two skeletons, buried head to head. One belonged to a boy aged about twelve or thirteen, and the other to a girl of about nine or ten. The boy was covered with 5,000 ivory beads. He wore a

fox-tooth hat and a belt with 250 fox teeth (at least sixty foxes had to have their teeth pulled to get that many). The girl was adorned with 5,250 ivory beads. Both children were surrounded by statuettes and various ivory objects. A skilled craftsman (or craftswoman) probably needed about forty-five minutes to prepare a single ivory bead. In other words, fashioning the 10,000 ivory beads that covered the two children, not to mention the other objects, required some 7,500 hours of delicate work, well over three years of labour by an experienced artisan!

It is highly unlikely that at such a young age the Sungir children had proved themselves as leaders or mammoth-hunters. Only cultural beliefs can explain why they received such an extravagant burial. One theory is that they owed their rank to their parents. Perhaps they were the children of the leader, in a culture that believed in either family charisma or strict rules of succession. According to a second theory, the children had been identified at birth as the incarnations of some long-dead spirits. A third theory argues that the children's burial reflects the way they died rather than their status in life. They were ritually sacrificed – perhaps as part of the burial rites of the leader – and then entombed with pomp and circumstance.⁹

Whatever the correct answer, the Sungir children are among the best pieces of evidence that 30,000 years ago Sapiens could invent sociopolitical codes that went far beyond the dictates of our DNA and the behaviour patterns of other human and animal species.

Peace or War?

Finally, there's the thorny question of the role of war in forager societies. Some scholars imagine ancient hunter-gatherer societies as peaceful paradises, and argue that war and violence began only with the Agricultural Revolution, when people started to accumulate private property. Other scholars maintain that the world of the ancient foragers was exceptionally cruel and violent. Both schools of thought are castles in the air, connected to the ground by the thin strings of meagre archaeological remains and anthropological observations of present-day foragers.

The anthropological evidence is intriguing but very problematic. Foragers today live mainly in isolated and inhospitable areas such as the Arctic or the Kalahari, where population density is very low and opportunities to fight other people are limited. Moreover, in recent generations, foragers have been increasingly subject to the authority of modern states, which prevent the eruption of large-scale conflicts. European scholars have had only two opportunities to observe large and relatively dense populations of independent foragers: in north-western North America in the nineteenth century, and in northern Australia during the nineteenth and early twentieth centuries. Both Amerindian and Aboriginal Australian cultures witnessed frequent armed conflicts. It is debatable, however, whether this represents a 'timeless' condition or the impact of European imperialism.

The archaeological findings are both scarce and opaque. What telltale clues might remain of any war that took place tens of thousands of years ago? There were no fortifications and walls back then, no artillery shells or even swords and shields. An ancient spear point might have been used in war, but it could have been used in a hunt as well. Fossilised human bones are no less hard to interpret. A fracture might indicate a war wound or an accident. Nor is the absence of fractures and cuts on an ancient skeleton conclusive proof that the person to whom the skeleton belonged did not die a violent death. Death can be caused by trauma to soft tissues that leaves no marks on bone. Even more importantly, during pre-industrial warfare more than 90 per cent of war dead were killed by starvation, cold and disease rather than by weapons. Imagine that 30,000 years ago one tribe defeated its neighbour and expelled it from coveted foraging grounds. In the decisive battle, ten members of the defeated tribe were killed. In the following year, another hundred members of the losing tribe died from starvation, cold and disease. Archaeologists who come across these 110 skeletons may too easily conclude that most fell victim to some natural disaster. How would we be able to tell that they were all victims of a merciless war?

Duly warned, we can now turn to the archaeological findings. In Portugal, a survey was made of 400 skeletons from the period immediately predating the Agricultural Revolution. Only two skeletons showed clear marks of violence. A similar survey of 400 skeletons

from the same period in Israel discovered a single crack in a single skull that could be attributed to human violence. A third survey of 400 skeletons from various pre-agricultural sites in the Danube Valley found evidence of violence on eighteen skeletons. Eighteen out of 400 may not sound like a lot, but it's actually a very high percentage. If all eighteen indeed died violently, it means that about 4.5 per cent of deaths in the ancient Danube Valley were caused by human violence. Today, the global average is only 1.5 per cent, taking war and crime together. During the twentieth century, only 5 per cent of human deaths resulted from human violence – and this in a century that saw the bloodiest wars and most massive genocides in history. If this revelation is typical, the ancient Danube Valley was as violent as the twentieth century.*

The depressing findings from the Danube Valley are supported by a string of equally depressing findings from other areas. At Jabl Sahaba in Sudan, a 12,000-year-old cemetery containing fifty-nine skeletons was discovered. Arrowheads and spear points were found embedded in or lying near the bones of twenty-four skeletons, 40 per cent of the find. The skeleton of one woman revealed twelve injuries. In Ofnet Cave in Bavaria, archaeologists discovered the remains of thirty-eight foragers, mainly women and children, who had been thrown into two burial pits. Half the skeletons, including those of children and babies, bore clear signs of damage by human weapons such as clubs and knives. The few skeletons belonging to mature males bore the worst marks of violence. In all probability, an entire forager band was massacred at Ofnet.

Which better represents the world of the ancient foragers: the peaceful skeletons from Israel and Portugal, or the abattoirs of Jabl Sahaba and Ofnet? The answer is neither. Just as foragers exhibited a wide array of religions and social structures, so, too, did they probably demonstrate a variety of violence rates. While some areas and some periods of time may have enjoyed peace and tranquillity, others were riven by ferocious conflicts.¹⁰

* It might be argued that not all eighteen ancient Danubians actually died from the violence whose marks can be seen on their remains. Some were only injured. However, this is probably counterbalanced by deaths from trauma to soft tissues and from the invisible deprivations that accompany war.

The Curtain of Silence

If the larger picture of ancient forager life is hard to reconstruct, particular events are largely irretrievable. When a Sapiens band first entered a valley inhabited by Neanderthals, the following years might have witnessed a breathtaking historical drama. Unfortunately, nothing would have survived from such an encounter except, at best, a few fossilised bones and a handful of stone tools that remain mute under the most intense scholarly inquisitions. We may extract from them information about human anatomy, human technology, human diet, and perhaps even human social structure. But they reveal nothing about the political alliance forged between neighbouring Sapiens bands, about the spirits of the dead that blessed this alliance, or about the ivory beads secretly given to the local witch doctor in order to secure the blessing of the spirits.

This curtain of silence shrouds tens of thousands of years of history. These long millennia may well have witnessed wars and revolutions, ecstatic religious movements, profound philosophical theories, incomparable artistic masterpieces. The foragers may have had their all-conquering Napoleons, who ruled empires half the size of Luxembourg; gifted Beethovens who lacked symphony orchestras but brought people to tears with the sound of their bamboo flutes; and charismatic prophets who revealed the words of a local oak tree rather than those of a universal creator god. But these are all mere guesses. The curtain of silence is so thick that we cannot even be sure such things occurred – let alone describe them in detail.

Scholars tend to ask only those questions that they can reasonably expect to answer. Without the discovery of as yet unavailable research tools, we will probably never know what the ancient foragers believed or what political dramas they experienced. Yet it is vital to ask questions for which no answers are available, otherwise we might be tempted to dismiss 60,000 of 70,000 years of human history with the excuse that ‘the people who lived back then did nothing of importance’.

The truth is that they did a lot of important things. In particular, they shaped the world around us to a much larger degree than most

people realise. Trekkers visiting the Siberian tundra, the deserts of central Australia and the Amazonian rainforest believe that they have entered pristine landscapes, virtually untouched by human hands. But that's an illusion. The foragers were there before us and they brought about dramatic changes even in the densest jungles and the most desolate wildernesses. The next chapter explains how the foragers completely reshaped the ecology of our planet long before the first agricultural village was built. The wandering bands of storytelling Sapiens were the most important and most destructive force the animal kingdom had ever produced.