

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.

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 kilometres.

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 a hundred kilometres 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 kilogram of walnuts, and how many walnuts could be gathered from a square kilometre of forest. With this data, we can make