

# PALEOLITHIC SOCIETY

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(PGS. 10 – 15)

By far the longest portion of the human experience on earth is the period historians and archaeologists call the paleolithic era, the “old stone age.” The principal characteristic of the paleolithic era was that human beings foraged for their food: they scavenged meat killed by predators or hunted wild animals or gathered edible products of naturally growing plants. The paleolithic era extended from the evolution of the first hominids until about twelve thousand years ago, when groups of *Homo sapiens* in several parts of the world began to rely on cultivated crops to feed themselves.

## Economy and Society of Hunting and Gathering Peoples

In the absence of written records, scholars have drawn inferences about paleolithic economy and society from other kinds of evidence. Archaeologists have excavated many sites that open windows on paleolithic life, and anthropologists have carefully studied hunting and gathering societies in the contemporary world. In the Amazon basin of South America, the tropical forests of Africa and Southeast Asia, the deserts of Africa and Australia, and a few other regions as well, small communities of hunters and gatherers follow the ways of our common paleolithic ancestors. Although contemporary hunting and gathering communities reflect the influence of the modern world – they are by no means exact replicas of paleolithic societies – they throw important light on the economic and social dynamics that shaped the experiences of prehistoric foragers. In combination, then, the studies of both archaeologists and anthropologists help to illustrate how the hunting and gathering economy decisively influenced all dimensions of the human experience during the paleolithic era.

**Relative Social Equality** A hunting and gathering economy virtually prevents individuals from accumulating private property and basing social distinctions on wealth. To survive, most hunters and gatherers must follow the animals that they stalk, and they must move with the seasons in search of edible plant life. Given their mobility, it is easy to see that, for them, the notion of private, landed property has no meaning at all. Individuals possess only a few small items such as weapons and tools that they can carry easily as they move. In the absence of accumulated wealth, hunters and gatherers of Paleolithic times, like their contemporary descendants, probably, lived a relatively egalitarian existence. Social distinctions no doubt arose, and some individuals became influential because of their age, strength, courage, intelligence, fertility, force of personality, or some other trait. But personal or family wealth could not have served as a basis for permanent social differences.

**Relative Gender Equality** Some scholars believe that this relative social equality in paleolithic times extended even further, to relations between sexes. All members of a paleolithic group made important contributions to the survival of the community. Men traveled on sometimes distant hunting expeditions in search of large animals while women and children gathered edible plants, roots, nuts, and fruits from the area near the group’s camp. Anthropologists calculate that in modern hunting and gathering societies, women contribute more calories to the community’s diet than do the men. As a source of protein, meat represents a crucial supplement to the diet. Because of the thorough interdependence of the sexes from the viewpoint of food production, paleolithic society probably did not encourage the domination of one sex by the other – certainly no to the extent that became common later.

A hunting and gathering economy has implications not only for social and sexual relations but also for community size and organization. The foraging lifestyle of hunters and gatherers dictates that they mostly live in small bands, which today include about thirty - fifty members. Larger groups could not move efficiently or find or find enough food to survive over a long period. During times of drought or famine, even small bands have trouble providing for themselves. Individual bands certainly have relationships with neighbors – agreements concerning the territories that the groups exploit, for example, or arrangements to take marriage partners from each other’s groups – but the immediate community is the focus of social life.

The survival of hunting and gathering bands depends on a sophisticated understanding of their natural environment. In contemporary studies, anthropologists have found that hunting and gathering peoples do not wander aimlessly about hoping to find a bit of food. Instead, they exploit the environment systematically and efficiently by timing their movements to coincide with the seasonal migrations of the animals they hunt and the life cycles of the plant species.

**Big-Game Hunting** Archaeological remains show that early peoples also went about hunting and gathering in a purposeful and intelligent manner. Although almost anyone could take a small, young, or wounded animal, the hunting of big game posed special challenges. Large animals such as elephant, mastodon, rhinoceros, bison, and wild cattle were not only strong and fast but also well equipped to defend themselves and even attack their human hunters. *Homo sapiens* fashioned special tools, such as sharp knives, spears, and bows and arrows, and devised special tactics for hunting these animals. Paleolithic hunting was a complicated venture. It clearly demonstrated the capacity of early human communities to pool their uniquely human traits – high intelligence, ability to make complicated plans, and sophisticated language and communications skills – to exploit the environment.

**Paleolithic Settlements** In regions where food resources were especially rich, a few peoples in late paleolithic times abandoned the nomadic lifestyle and established permanent settlements. The most prominent paleolithic settlements were those of Natufian society in the eastern Mediterranean (modern day Israel and Lebanon), Jomon society in central Japan, and Chinook society in the Pacific northwest region of North America (including the modern states of Oregon and Washington and the Canadian province of British Columbia). Paleolithic settlements had permanent dwellings, sometimes in the form of longhouses that accommodated several hundred people, but often in the form of smaller structures for individual families. Many settlements had populations of a thousand or more individuals. As archaeological excavations continue, it is becoming clear that paleolithic peoples organized complex societies with specialized rulers and craftsmen in many regions where they found abundant food resources.

## Paleolithic Culture

**The Creativity of *Homo sapiens*** Many scholars argue that *Homo sapiens* owed much of the species' intellectual prowess to the ability to construct powerful and flexible languages for the communication of complex ideas. With the development of languages, human beings were able both to accumulate knowledge and to transmit it precisely and efficiently to new generations. Thus it was not necessary for every individual human being to learn from trial and error or from direct personal experience about the nature of the local environment or the best techniques for making advanced tools. Rather, it was possible for human groups to pass large and complex bodies of information along to their offspring, who then

were able to make immediate use of it and furthermore were in a good position to build on inherited information by devising increasingly effective ways of satisfying human needs and desires.

**Venus Figurines** The most visually impressive creations of early *Homo sapiens* are the Venus figurines and cave paintings found at many sites of early human habitation. Archaeologists use the term *Venus figurines* – named after the Roman goddess of love – to refer to small sculptures of women, usually depicted with exaggerated sexual features. Most scholars believe that the figures reflect a deep interest in fertility. The prominent sexual features of the Venus figurines suggest that the sculptors' principal interests were fecundity and the generation of new life – matters of immediate concern to paleolithic societies. Some interpreters speculate that the figures had a place in ritual observances intended to increase fertility.

**Cave Paintings** Paintings in caves frequently by early human are the most dramatic examples of prehistoric art. The known examples of cave art date from about thirty four thousand to twelve thousand years ago, and most of them are in caves in southern France and northern Spain. In that region alone, archaeologists have discovered more than one hundred caves bearing prehistoric paintings. The best-known are Lascaux in France and Altamira in Spain. There, prehistoric peoples left depictions of remarkable sensitivity and power. Most of the subjects were animals, especially large game such as mammoth, bison, and reindeer, although a few human figures also appear.

As in the case of the Venus figurines, the explanation for the cave paintings involves a certain amount of educated guesswork. It is conceivable that early artists sometimes worked for purely aesthetic reasons – to beautify their living quarters. But many examples of cave art occur in places that are almost inaccessible to human beings – deep within remote chambers, for example, or at the end of long and constricted passages. Paintings in such remote locations presumably had some other purpose. Most analysts believe that the prominence of game animals in the paintings reflects the artists' interest in successful hunting expeditions. Whatever the explanation for prehistoric art, the production of the works themselves represented conscious and purposeful activity of a higher order.

# THE NEOLITHIC ERA AND THE TRANSITION TO AGRICULTURE

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## The Origins of Agriculture

**Neolithic Era** The term *neolithic era* means “new stone age,” as opposed to the old stone age of paleolithic times. Archaeologists first used the term *neolithic* because of refinements in tool-making techniques: they found polished stone tools in neolithic sites, rather than the chipped implements characteristic of the paleolithic sites. Gradually however, archaeologists became aware that something more fundamental than tool production distinguished the neolithic era from the paleolithic era. Polished tools occurred in areas where people relied on cultivation, rather than foraging, for their subsistence. Today the term *neolithic era* refers to the early stages of agricultural society, from about twelve thousand to six thousand years ago.

**Global Climate Change** Agriculture was almost impossible and indeed inconceivable until about fifteen thousand years ago. During the ice ages, the earth was much colder and drier than it is today, and furthermore, it experienced wild fluctuations of temperature and rainfall. After the ice ages, the earth entered into an era of general warming, increased rainfall, and more stable climate conditions. Neolithic peoples soon took advantage of those conditions by encouraging the growth of edible plants and bringing wild animals into dependence upon human keepers.

**Gender Relations and Agriculture** Many scholars believe that women most likely began systematic care of plants. Hoping for large and more reliable supplies of food, women in neolithic societies probably began to nurture plants instead of simply collecting available foods in the wild. Meanwhile, instead of just stalking game with the intention of killing it for meat, neolithic men began to capture animals and domesticate them providing for their needs and supervising their breeding. Over a period of decades and centuries, those practices gradually led to the formation of agricultural economies.

## Independent Inventions of Agriculture

Agriculture – including both the cultivation of crops and the domestication of animals – emerged independently in several different parts of the world. The earliest evidence of agricultural activity discovered so far dates to the era after 9000 B.C.E., when peoples of southwest Asia (modern day Iraq, Syria and Turkey) cultivated wheat and barley while domesticating sheep, goats, pigs, and cattle.

**The Early Spread of Agriculture** Once established, agriculture spread rapidly, partly because of the methods of early cultivators. One of the earliest techniques, known as slash and burn cultivation, involved frequent movement on the part of the farmers. To prepare a field for cultivation, a community would slash the bark on a stand of trees in a forest and later burn the dead trees to the ground. The resulting weed-free patch was extremely fertile and produced abundant harvests. After a few years, however, weeds invaded the field, and the soil lost its original fertility. The community then moved to another forest region and repeated the procedure. Migrations of slash and burn cultivators helped spread agriculture throughout both eastern and western hemispheres. While agriculture radiated out from its various hearths, food originally cultivated in only one region also spread widely, as merchants, migrants, or other travelers carrier knowledge of those foods to agricultural lands that previously had relied on different crops.

Agriculture involved long hours of hard physical labor – clearing land, preparing fields, planting seeds, pulling weeds, and harvesting crops. Indeed, agriculture probably required more work than paleolithic foraging: anthropologists calculate that modern hunting and gathering peoples spend about four hours per day in providing themselves food and other necessities, devoting the remainder of their time to rest, leisure, and social activities. Yet agriculture had its own appeal in that it made possible the production of abundant food supplies. Thus agriculture spread widely, eventually influencing the lives and experiences of almost all human beings.

## Early Agricultural Society

In the wake of agriculture came a series of social and cultural changes that transformed human history. Perhaps the most important change associated with early agriculture was a population explosion. Spread thinly across the earth in paleolithic times, the human species multiplied prodigiously after agriculture increased the supply of food. Historians estimate that before agriculture, about 10,000 B.C.E., the earth’s human population was four million. By 5000 B.C.E.,

when agriculture had appeared in a few regions, human population had risen to five million. Estimates for later dates demonstrate eloquently the speed which, thanks to agriculture, human numbers increased:

Year	Human Population
3000 B.C.E.	14 million
2000 B.C.E.	27 million
1000 B.C.E.	50 million
500 B.C.E.	100 million

**Emergence of Villages and Towns** Their agricultural economy and the rapidly increasing numbers encouraged neolithic peoples to adopt new forms of social organization. Because they devoted their time to cultivation rather than foraging, neolithic peoples did not continue the migratory life of their paleolithic predecessors but rather, settled near their fields and permanent villages.

**Specialization of Labor** The concentration of large numbers of people in villages also encouraged specialization of labor. Most people in Neolithic villages cultivated crops or kept animals. Many also continued to hunt and forage for wild plants. But a surplus of food enabled some individuals to concentrate their time and talents on enterprises that had nothing to do with the production of food. The rapid development of specialized labor is apparent from excavations carried out at one of the best known Neolithic settlements, Çatal Hüyük. Located in south-central Anatolia (modern-day Turkey), Çatal Hüyük was occupied continuously from 7250 to 5400 B.C.E., when residents abandoned the site. Originally a small and undistinguished Neolithic village, Çatal Hüyük grew into a bustling town, accommodating about five thousand inhabitants.

**Pottery** The earliest of the three craft industries to emerge was pottery. Paleolithic hunters and gatherers had no use for pots. A food-producing society, however, needs containers to store surplus foods. By about 7000 B.C.E., Neolithic villagers in several parts of the world had discovered processes that transformed malleable clay into fire-hardened waterproof capable of storing dry or liquid products. Soon thereafter, Neolithic craftsmen discovered that they could etch designs into their clay that fire would harden into permanent decorations and furthermore that they could color their products with glazes.

**Metalworking** Metallurgy soon joined pottery as a Neolithic industry. The earliest metal that humans worked with systematically was copper. In many regions of the world, copper occurs naturally in relatively pure and easily malleable form. By 5000 B.C.E., they had raised temperatures in their furnaces high enough to melt copper and pour it into molds. With the technology of smelting and casting copper, Neolithic communities were able to make not only jewelry and decorative items but also tools such as knives, axes, hoes, and weapons. Moreover, copper metallurgy served as a technological foundation on which later Neolithic craftsmen developed expertise in the working of gold, bronze, iron, and other metals.

**Textile Production** Because natural fibers decay more easily than pottery or copper, the dating of textile production is not certain, but fragments of textiles survive from as early as 6000 B.C.E. As soon as they began to raise crops and keep animals, Neolithic peoples experimented with techniques of selective breeding. The invention of textiles was probably the work of women, who were able to spin thread and weave fabrics at home while nursing and watching over small children. Textile production quickly became one of the most important enterprises in agricultural society.

**Social Distinctions and Social Inequality** The concentration of people into permanent settlements and the increasing specialization of labor provided the first opportunity for individuals to accumulate wealth. Individuals could trade surplus food or manufactured products for gems, jewelry, and other valuable items. The institutionalization of privately owned landed property enhanced the significance of accumulated wealth in any agricultural society, ownership of land carried enormous economic power. When especially successful individuals managed to consolidate wealth in their families' hands and kept it there for several generations, clearly defined social classes emerged.

## Neolithic Culture

Quite apart from its social effects, agriculture left its mark on the cultural dimension of the human experience. Because their lives and communities depended on the successful cultivation of crops, neolithic farmers closely observed the natural world around them and noted the conditions that favored successful harvests. In other words, they developed a kind of early applied science. From experience accumulated over the generations, they acquired an impressive working knowledge of the earth and its rhythms. Agricultural peoples had to learn when changes of season would take place: survival depended on the ability to predict when they could reasonably expect sunshine, rain, warmth, and freezing temperatures. They learned to associate the seasons with the different positions of the sun, moon, and stars. As a result, they accumulated a store of knowledge concerning relationships between the heavens and the earth, and

they made the first steps toward the elaboration of a calendar, which would enable them to predict with tolerable accuracy the kind of weather they could expect at various times of year.

**Religious Values** The workings of the natural world also influenced Neolithic religion. Paleolithic communities had already honored, and perhaps even worshiped, Venus figurines in hopes of ensuring fertility. Neolithic religion reflected the same interest in fertility, but it celebrated particularly the rhythms that governed agricultural society – birth, growth, death, and regenerated life. Archaeologists have unearthed thousands of Neolithic representations of gods and goddesses in the form of clay figurines, drawings on pots and vases, decorations on tools, and ritual objects. The Neolithic gods included not only the life-bearing, Venus-type figures of paleolithic times but also deities associated with the cycle of life, death, and regeneration. Thus Neolithic religious thought clearly reflected the natural world of early agricultural society.

## The Origins of Urban Life

Within four thousand years of its introduction, agriculture had dramatically transformed the face of earth. Human beings multiplied prodigiously, congregated in densely populated quarters, placed the surrounding lands under cultivation, and domesticated several species of animals. Besides altering the physical appearance of earth, agriculture transformed the lives of human beings. Even a modest Neolithic village dwarfed a paleolithic band of a few dozen hunters and gathers. In larger villages and towns, such as Jericho and Çatal Hüyük, with their populations of several thousand people, their specialized labor, and their craft industries, social relationships became more complex than would have been conceivable during paleolithic times. Gradually, dense populations, specialized labor, and complex social relations gave rise to an altogether new form of social organization – the city.

**Emergence of Cities** Like the transition from foraging to agricultural society, the development of cities and complex societies organized around urban centers was a gradual process rather than a well-defined event. Because of favorable location, some neolithic villages and towns attracted more people and grew larger than others. Over time, some of those settlements evolved into cities. What distinguished early cities from their predecessors, the neolithic villages and towns?

Even in their early days, cities differed from neolithic villages and towns in two principal ways. In the first, cities were larger and more complex than neolithic villages and towns. With progressively larger populations, cities fostered more intense specialization than any of their predecessors among the neolithic villages and towns. Thus it was in cities that large classes of professionals emerged – individuals who devoted all their time to efforts other than the production of food.

In the second, whereas neolithic villages and towns served as the needs of their inhabitants and immediate neighbors, cities decisively influenced the political, economic, and cultural life of large regions. Cities established marketplaces that attracted buyers and sellers from distant parts. Brisk trade, conducted over increasingly longer distances, promoted economic integration on a much larger scale than was possible in neolithic times. To ensure adequate food supplies for their large populations, cities also extended their claims to authority over their hinterlands, thus becoming centers of political and military control as well as economic influence. In time, too, the building of temples and schools in neighboring regions enabled the cities to extend their cultural traditions and values to surrounding areas. The earliest known cities grew out of agricultural villages and towns in the valleys of the Tigris and Euphrates rivers in modern-day Iraq.

## In Perspective

In many ways the world of prehistoric human beings seems remote and even alien. Yet the evolution of the human species and the development of human society during the paleolithic eras have profoundly influenced the lives of all of the world's peoples during the past six millennia. Paleolithic peoples enjoyed levels of intelligence that far exceeded those of other animals, and they invented tools and languages that enabled them to flourish in all regions of the world. Indeed, they thrived so well that they threatened their sources of food. Their neolithic descendents began to cultivate food to sustain their communities, and the agricultural societies that they built transformed the world. Human population rose dramatically, and human groups congregated in villages, towns, and eventually cities. There they engaged in specialized labor and launched industries that produced pottery, metal goods, and textiles as well as tools and decorative items. Thus intelligence, language, reflective thought, agriculture, urban settlements, and craft industries all figure in the legacy that prehistoric human beings left for their descendents.