

STATION 1

Aspects of Life During the Neolithic Period

Food Supply

One of the most important changes from the Paleolithic to the Neolithic period was the way in which people obtained food. For thousands of years, Paleolithic hunter-gatherers had to search for enough food to eat. But hunting animals and gathering plants did not provide a reliable food supply. The animals and plants became *scarce* (rare) when the people stayed in one area for too long. Women and girls, who did most of the plant gathering, gradually learned that they could produce their own food by planting seeds. Over time, these first farmers *cultivated*, or grew, the seeds that would produce the most grain. By 4000 B.C.E., farmers were growing corn in Mexico, rice in China, and wheat and barley in Israel. In addition, Neolithic farmers found important uses for animals. They tamed, or *domesticated*, calm and healthy sheep, dogs, goats, and cattle. People used the animals to help carry heavy burdens over long distances, and they bred the large ones as sources of many kinds of food. For example, goats and cattle provided farmers with milk, and in the winter they could be killed to supply people with extra food. Together, the cultivation of plants and the domestication of animals is known as *agriculture*. The development of agriculture provided Neolithic people with a more reliable food supply. Therefore, people did not have to constantly wander in search of food, but could settle down to live in one area.

Occupations

During the Paleolithic period, people's main occupation was probably finding enough food to survive. During the Neolithic period, however, the increase in a reliable food supply freed people to refine special skills. These skills included sewing, building, and toolmaking. For example, in the wealthy town of Çatal Höyük in modern-day Turkey, people developed a way to spin and weave. They wove natural fibers such as wool and linen into comfortable cloth. Other people mined flint rocks and *obsidian*, a black volcanic glass, from the mountains. Stoneworkers used these two hard rocks to create very sharp tools and fashion shiny jewelry and mirrors. Neolithic house builders began to pay special attention to homes' artistic and religious purposes. For example, a builder might smooth the house walls over with plaster and decorate them with colorful dyes. Builders also constructed special rooms called *shrines* to honor Gods and Goddesses. Daily life during the Neolithic period changed greatly because people occupied their time with many different activities in addition to obtaining food.

This is the story of a revolution. It's not as well-known as the French Revolution, or the Industrial Revolution, or the Information Revolution. Neither did it take place quite so quickly. No records were kept, so there is still much we do not know about it. Even so, it stands alone as the greatest revolution in the history of mankind. Were it not for the Neolithic¹ Revolution, society as we know it today would be vastly different, and none of these other revolutions mentioned would have ever taken place.

Hunter-gatherer Life

For most of our time on Earth², we humans lived as hunter-gatherers. Every day, groups of people would trap and kill wild animals, while others collected and prepared wild plants, nuts, fungi, and berries. If they were lucky and food was abundant, they were able to provide enough food for themselves and their children. If they were unlucky, they starved and died. In order to stay close to their food sources, hunter-gatherers needed to be mobile. They set up temporary camps, lived there for a while, and moved on when the food supply began to dwindle. For mobility, tribal units were small – just a few families, all of whom worked hard to keep themselves and their children alive. Because of the vagaries of weather, animal migrations, and the long seasons³, starvation was always just one step away. People had precious little time to do anything other than find food, warmth, and shelter for themselves and their families⁴.

The Dawn of the Neolithic Age

Fourteen thousand years ago, at the end of the last Ice Age, a new lifestyle, known to archaeologists as the *Natufian* culture, began to emerge in the Middle East. The Ice Age was coming to an end and temperatures were warming very quickly. Food became available in relative abundance for the first time in thousands of years. Instead of having to travel long distances to find food, some groups were able to live in the same place all year round. People started to build permanent dwellings. By 10,000 BC, the end of the **Younger Dryas** period, they were discovering that **certain animals**, such as goats, sheep, **cattle** and pigs, had temperaments and dispositions that made them easy to manage within close proximity to their dwellings. They selected and cultivated certain grasses, such as oats, wheat and barley, which provided nourishment to larger groups of people. These plants became common anywhere there was human settlement, eclipsing all other plant-food sources. They discovered how to store and preserve food over the harsh winter months. Thus, farming began and a new age, the Neolithic Age, was ushered in.

The Effects of the Neolithic Revolution

The move from a hunter-gatherer lifestyle to a sedentary farming lifestyle did not take place overnight. Neither was it unique to the Middle East: Latin America and China experienced totally independent Neolithic Revolutions at later periods in time. In fact, it can be argued that in the beginning, it was in many ways an *inferior* lifestyle to hunter-gathering, since settled people were easier targets for attack, their nutrition undoubtedly suffered due to lack of a balanced diet, and they were more likely to suffer diseases. However, by 7000 BC, it was the dominant occupation in the Middle East, and it was already taking hold in Southern Europe and Northern Africa. For those people affected, the change that had taken place was enormous. The changes were so profound they live on with us today.

STATION 3

Population/Settlement

Neolithic settlements were much larger and more permanent than Paleolithic settlements. During the Paleolithic period, people traveled in bands of 20 to 60 people and lived in temporary settlements as they searched for food. During the Neolithic period, however, many people could live in one place for a long time because farming provided a reliable source of food. Some settlements grew to be as large as thousands of people. The growth in population enabled people to share work responsibilities within their settlements. Working together greatly improved food production and living conditions. For example, Neolithic people shared the work of cultivating crops and building permanent houses and storage huts. Toolmakers often sat around a fire and worked together in “factories” making stone axes and knife blades. In the town of Çatal Höyük, farmers cultivated more than 14 different kinds of food plants for the city’s population of about 8,000. Other people built new homes, decorated shrines (places of worship), and made tools. People’s settled lifestyles also encouraged them to bury their dead in special places. For example, in Çatal Höyük, they buried their dead underneath the floors of their houses. As Neolithic settlements grew, people’s lives became more rich and varied.

Resources

During the Paleolithic period, people used only the resources that they had in their immediate area, such as water and plants. They rarely traded with other groups of people. By contrast, during the Neolithic period, trade among settlements in the Near East and around the Mediterranean Sea grew dramatically. Trade arose when people began to seek resources that did not exist in their immediate area. As their technology grew more sophisticated, people wanted additional resources to improve the strength and beauty of their buildings, crafts, and tools. One of the materials Neolithic traders most desired was the black volcanic glass called *obsidian*, which could be found mostly in Anatolia, or modern-day Turkey. Traders all around the Mediterranean Sea sought obsidian because it could be used to make excellent knife blades and mirrors. People also traded for goods that could be used to enhance their appearance. For example, women used a red ore (mixture of rock and metal) called *hematite* as makeup. They rubbed the hematite on their cheeks and lips to give them a reddish glow. Men and women also strung seashells together to make bracelets and necklaces. To obtain desired resources, people often traveled hundreds of miles across mountains by foot, across deserts on donkeys, and across the sea on ships.

STATION 4

Was Farming a Good Idea?

About 10,000 years ago, farming put humans on the road to the complex societies that dominate modern life.

Most history books present the coming of farming as perhaps the single most positive event in human history. After all, are not we better off today than hunter-gatherers were, thanks to our clever farming ancestors? We do not have to hunt woolly mammoths for meat, forage for roots, chew hides to soften them for clothing, or build our houses from hides, bone, and sinew (ligaments and tendons). Our diets are rich in quantity and variety. Many of us have an abundance of material goods and, in many places, life expectancies have soared. Surely, our lives today are a great improvement over the lives of hunter-gatherers.

As farming provided humans with much greater quantities of food than hunting and gathering could, populations grew. Storage of surpluses made it unnecessary for every woman and man to farm for themselves and their family. Job specialization became possible, with different people specializing in different tasks. Increases in population resulted in increases in social and technical complexity, which in turn led to the first cities, governments, writing systems, law codes, and monumental buildings.

As for hunter-gatherers, clearly they had been outclassed. Or had they? In trying to understand what hunting and gathering was like, anthropologists today study the few societies of that type that remain in various parts of the world. What they have found is that hunter-gatherers are not necessarily worse off than farmers. In fact, many of them have plenty of leisure time, get a good night's sleep, and do not work nearly as hard as people in farming societies, or, for that matter, in big American corporations. For example, in the United States today a full-time work week is from 35 to 40 hours.

For hunter-gatherers, however, 12 to 15 hours a week was likely enough on average to supply their food needs. In addition, their diets were considerably more varied and healthier than the diets of settled peoples, who generally relied on high carbohydrate diets of rice, wheat, or potatoes. Hunter-gatherers had a wide array of plants and animals to choose from, so when one species was not available, often many others were.

For farmers, who increasingly relied on a single crop, an attack by locusts or a drastic change in weather could result in famine. Also, while hunter-gatherers moved seasonally from camp to camp following animal herds and leaving their trash and germs behind, farmers remained in one place. Not only did they accumulate garbage, but they also shared housing and diseases with their domesticated animals. A densely populated farming community provided the perfect site for a new phenomenon, the disease epidemic.

As for social relations between men and women, hunter-gatherer women had only a few pregnancies, and children were spaced out by about four years. That was because of four years-old a child could walk on its own as the band moved from place to place. In farming communities where women stayed put, pregnancies usually came closer together so that family size increased. Recovering from a greater number of pregnancies and caring for the needs of a larger family, women became tied to the home in ways that hunter-gatherer women were not.

There is no question that the development of settled farming societies set us humans on a path that brought us to the highly advanced and technologically sophisticated ways of life we enjoy today. Yet, as we look back in history to the time when the hunter-gatherer way of life was common all around the globe, we may feel a bit reflective about a lost way of life.

Station 5

Neolithic Revolution: Changing the Human Way of Life by Tom Standage

Why humans switched from hunting and gathering to farming is one of the oldest, most difficult and important questions in human history. It is mysterious because the switch to farming made people worse off, nutritionally, and in many other ways. One anthropologist has described the adaptation of farming as 'the worst mistake in the history of the human race.' Compared with farming, being a hunter-gatherer was much more fun. Today, the Kung Bushmen of the Kalahari Desert (in Africa) spend twelve to nineteen hours a week collecting food. In effect, hunter-gatherers work two days a week and have five-day weekends. Gathering food takes far less time than would be required to produce the same quantity of food by farming. In other words, farming is much more work. Hunter-gatherers seemed to have much healthier than early farmers, according to the archaeological evidence. Hunter-gatherers were taller and had better dental health, as shown by their skeletal remains. Studies of bones also indicate that farmers suffered from more diseases due to malnutrition than hunter-gatherers like rickets and scurvy.

Given all these drawbacks, why did people take up farming? The short answer is that they did not realize what was happening before it was too late. It was a gradual, slow change, despite being very rapid in the grand scheme of human history. Hunter-gatherers planted seeds on occasion, so they did not completely rely on hunting and gathering. The climate became warmer, wetter, and more stable, which was necessary for agriculture. Hunter-gatherers in some parts of the world became less mobile and spent most of the year in one camp, or even took up permanent residence, according to archeological evidence.

By planting and storing grains, farmers could ensure food was available. As people became more sedentary, population increased, and this would have placed more demands on the food supply, encouraging more planting. In the New Stone Age, people around the world began to switch slowly to farming, and at some point, a line was crossed, and people began to be dependent on farming.

What positive and negative aspects of the Paleolithic and Neolithic eras are described in this article? Record on your t-chart.

STATION 6

Shelter

The types of shelter in which people lived changed from the Paleolithic to the Neolithic period. In the Paleolithic period, people may have lived in tents or met under rock shelters to share food and ideas. These shelters were often temporary because people had to move frequently to follow the wild animals they hunted for food. As people began to settle down and farm during the Neolithic period, they built more permanent settlements in which they could live and work. People built long-lasting houses from mud bricks, sometimes adding stones and branches to strengthen the roofs and walls. Neolithic houses were either round or rectangular in shape and contained one or more rooms. In Çatal Höyük, people entered the houses by climbing down a wooden ladder that was attached to the roof. Many houses had ovens and basins built right into the floor for storing food. For additional comfort, people took their waste outside the house and disposed of it in a courtyard. These changes in shelter during the Neolithic period provided people with a more comfortable and stable lifestyle.

Technology

Tools and clothing changed a great deal from the Paleolithic to the Neolithic period. During the Paleolithic period, hunter-gatherers used stone “choppers” to chop wood and cut meat. In the Neolithic period, toolmakers improved their stone tools by chipping away at large pieces of flint to create sharp axes. They also used obsidian to make excellent knife blades. People discovered that metal was easier to work with than stone because it was harder to break and could be melted, molded, and reshaped. Metalworkers began using metals such as gold and copper to make jewelry and tools. People also gradually replaced the rough animal skins they probably wore in the Paleolithic period with more lightweight wool, cotton, and silk clothing. They began to use clay pottery for cooking and keeping food instead of animal skins and grass baskets. Clay pottery lasted longer because it could withstand high temperatures. Some archeologists think that clay pottery was invented by accident when a cook used clay to smooth the inside of a basket, baked it over a fire, and then found only the clay bowl left when the basket burned away. All of these changes in technology during the Neolithic period improved the quality and comfort of people’s daily lives.