

In the following selection, Robert J. Braidwood, an archaeologist and anthropologist, analyzes the agricultural revolution, its spread, and its significance.

Consider: *The origins or causes of the agricultural revolution; Braidwood's rejection of environmental determinism and his acceptance of cultural differentiation and specialization; connections between agriculture and the beginnings of cities.*

The Agricultural Revolution

Robert J. Braidwood

Human beings populated parts of the earth for thousands of years before the first civilizations arose 5,000 or 6,000 years ago. The causes for this relatively rapid transformation in the condition of human beings have been interpreted in a variety of ways. However, most historians and anthropologists point to the agricultural revolution of the Neolithic Age, in which—through the domestication of plants and animals—human beings became food producers rather than hunters and food gatherers, as the central development in this transformation to civilization.

SOURCE: Robert J. Braidwood, "The Agricultural Revolution," in C. C. Lamberg-Karlovsky, ed., *Hunter Farmers, and Civilizations: Old World Archaeology*. Copyright © 1979 by W. H. Freeman and Company. Reprinted with permission.

Tool-making was initiated by pre-*sapiens* man. The first comparable achievement of our species was the agricultural revolution. No doubt a small human population could have persisted on the sustenance secured by the hunting and food-gathering technology that had been handed down and slowly improved upon over the 500 to 1,000 millennia of prehuman and pre-*sapiens* experience. With the domestication of plants and animals, however, vast new dimensions for cultural evolution suddenly became possible. The achievement of an effective food-producing technology may not have predetermined subsequent developments, but they followed swiftly: the first urban societies in a few thousand years and contemporary industrial civilization in less than 10,000 years.

The first successful experiment in food production took place in southwestern Asia, on the hilly flanks of the "fertile crescent." Later experiments in agriculture occurred (possibly independently) in China and (certainly independently) in the New World. The multiple occurrence of the agricultural revolution suggests that it was a highly probable outcome of the prior cultural evolution of mankind and a peculiar combination of environmental circumstances. It is in the record of culture, therefore, that the origin of agriculture must be sought.

Not long ago the proponents of environmental determinism argued that the agricultural revolution was a response to the great changes in climate which accompanied the retreat of the last glaciation about 10,000 years ago. However, the climate had altered in equally dramatic fashion on other occasions in the past 75,000 years, and the potentially domesticable plants and animals were surely available to the bands of food-gatherers who lived in southwestern Asia and similar habitats in various parts of the globe. Moreover, recent studies have revealed that the climate did not change radically where farming began in the hills that flank the fertile crescent. Environmental determinists have also argued from the "theory of propinquity" that the isolation of men along with appropriate plants and animals in desert oases started the process of domestication.

In my opinion there is no need to complicate the story with extraneous "causes." The food-producing revolution seems to have occurred as the culmination of the ever increasing cultural differentiation and specialization of human communities. Around 8000 B.C. the inhabitants of the hills around the fertile crescent had come to know their habitat so well that they were beginning to domesticate the plants and animals they had been collecting and hunting. At slightly later times human cultures reached the corresponding level in Central America and perhaps in the Andes, in southeastern Asia and in China. From these "nuclear" zones cultural diffusion spread the new way of life to the rest of the world.

As the agricultural revolution began to spread, the trend toward ever increasing specialization of the intensified food-collecting way of life began to reverse itself. The new techniques were capable of wide application, given suitable adaptation, in diverse environments. Archaeological remains at Hassuna, a site near the Tigris River somewhat later than Jarmo, show that the people were exchanging ideas on the manufacture of pottery and of flint and obsidian projectile points with people in the region of the Amou

in Syro-Cilicia. The basic elements of the foodproducing complex—wheat, barley, sheep, goats and probably cattle—in this period moved west beyond the bounds of their native habitat to occupy the whole eastern end of the Mediterranean. They also traveled as far east as Anau, east of the Caspian Sea. Localized cultural differences still existed, but people were adopting and adapting more and more cultural traits from other areas. Eventually the new way of life traveled to the Aegean and beyond into Europe, moving slowly up such great river valley systems as the Dnieper, the Danube and the Rhone, as well as along the coasts. The intensified food-gatherers of Europe accepted the new way of life, but, as V. Gordon Childe has pointed out, they “were not slavish imitators: they adapted the gifts from the East . . . into a new and organic whole capable of developing on its own original lines.” Among other things, the Europeans appear to have domesticated rye and oats that were first imported to the European continent as weed plants contaminating the seed of wheat and barley. In the comparable diffusion of agriculture from Central America, some of the peoples to the north appear to have rejected the new ways, at least temporarily.

By about 5000 B.C. the village-farming way of life seems to have been fingering down the valleys toward the alluvial bottom lands of the Tigris and Euphrates. Robert M. Adams believes that there may have been people living in the lowlands who were expert in collecting food from the rivers. They would have taken up the idea of farming from people who came down from the higher areas. In the bottom lands a very different climate, seasonal flooding of the land and small-scale irrigation led agriculture through a significant new technological transformation. By about 4000 B.C. the people of southern Mesopotamia had achieved such increases in productivity that their farms were beginning to support an urban civilization. The ancient site at Ubaid is typical of this period.

Thus in 3,000 or 4,000 years the life of man had changed more radically than in all of the preceding 250,000 years. Before the agricultural revolution most men must have spent their waking moments seeking their next meal, except when they could gorge following a great kill. As man learned to produce food, instead of gathering, hunting, or collecting it, and to store it in the grain bin and on the hoof, he was compelled as well as enabled to settle in larger communities. With human energy released for a whole spectrum of new activities, there came the development of specialized nonagricultural crafts. It is no accident that such innovations as the discovery of the basic mechanical principles, weaving, the plow, the wheel and metallurgy soon appeared.

The Process of Civilization

William H. McNeill

Historians have long been interested in how civilizations first arose and developed. Central to this question is how early civilizations influenced each other. In the following excerpt from an article, “A Short History of Humanity” (2000), noted historian William H. McNeill stresses the importance of networks of communication—especially by sea—in the process of civilization.

Consider: How McNeill defines “civilization”; why communication and transportation were so important in the process of civilization.

Civilizations brought strangers together and separated classes of people living side by side into distinct semiautonomous groupings. Priests and rulers, warriors and artisans, merchants and travelers, masters and servants lived very differently from one another, yet all depended on exchanges of goods and services, regulated by customary rules on the one hand and, on the other, by demographic and material limits on supply and demand.

As compared to primary communities, urban-based civilizations were (and still are) tumultuous and unstable social structures, but they were also more powerful, coordinating the actions of larger numbers of persons partly by obedience to deliberate commands, and partly by negotiated, more or less voluntary, exchanges of goods and services. Larger numbers working together, whether willingly or unwillingly, deliberately or inadvertently, had the same effect that cooperation within larger bands of more or less undifferentiated individuals had had at the beginning of human history. In other words, civilized forms of society exerted power over the natural environs and over much larger human numbers than more homogeneous societies were able to do. Ever since the first civilizations arose, civilized social complexity therefore tended to spread, until in our own time almost all humankind is caught up in a single global system, exchanging messages furiously fast and upsetting traditional ways of life almost everywhere. . . .

An appropriately imaginative historian can hope to discern major landmarks in the civilizing process by focusing on breakthroughs in communication and transport that altered the range and flow of messages among human populations, and thereby accelerated the propagation of novelties far and wide that met human wishes or wants better than before. . . .

When people first learned to use paddles and sails to propel rafts and boats, possibilities for long-range encounters opened up along the coasts of easily navigable seas. Almost certainly parts of Southeast Asia (and especially the offshore islands of Indonesia) were the principal sites of this breakthrough. A vague horizon for seafaring is established by the fact that people who reached Australia some 40,000 years ago (and perhaps even earlier than that) must have used some sort of flotation device to get there. But wooden rafts and ships seldom leave archaeological traces; and since melting glaciers subsequently raised sea levels substantially, early coastal settlements in Southeast Asia and everywhere else have been inundated.

Still, it seems clear that at an early time sailing vessels began to exploit the reversible monsoon winds to sail to and fro in Southeast Asia and along the shores of the Indian Ocean. Such seafaring was well developed by the time Sumerian records offer a glimpse of the sea network that connected the land of Sumer at the head of the Persian Gulf with Indus and Egyptian societies—and with a wider world of seagoing peoples beyond.

Sumerian cities, in fact, arose where this sea network connected up with a newer network of caravan portage. Donkeys, the first important caravan animal, were domesticated about seven thousand years ago; but since caravan management was almost as complicated as seafaring it presumably took a while for overland portage to become significant. But when local peoples learned that letting caravans pass for a negotiated protection fee assured a better supply of exotic and desirable items than plundering

populations more insistently than before. And it is surely not an accident that it was in Sumer, where an already ancient seagoing network intermeshed with a newly accessible hinterland, that the first cities arose between 4000 and 3000 BCE. Goods and ideas moved along these communications networks and, where they converged, the Sumerians were in an optimal position to pick and choose, elaborating and improving upon skills and knowledge coming from far and near.

Sumerian achievements, such as writing, metallurgy, wheeled vehicles, and an impressive religion, spread outward along the same networks. For example, on distant northern steppes Indo-European herdsmen accepted the Sumerian pantheon of seven high gods—sky, earth, thunderstorm, sun, moon, fresh water, and salt water. And, with subsequent adjustments, their Aryan, Greek, Latin, Celtic, German, and Slavic descendants carried this pagan pantheon with them into India and across Europe.

Similarly, wheeled vehicles, in the form of two-wheeled chariots, reached China by 1400 BCE and helped to consolidate the power of the Shang dynasty. But of all Sumerian innovations, their resort to writing was perhaps the most significant since it added a new dimension to information storage and retrieval. Being more capacious, enduring, and reliable than human memory, written records allowed priests and rulers to collect and disburse indefinitely large quantities of material goods according to deliberate rules. As a result, government became more powerful; commands became more enforceable, even at a distance; and coordinated effort among thousands and eventually millions of persons became routine.

Freedom in the Ancient World: Civilization in Sumer

Herbert J. Muller

Historians generally see the development of cities as a sign of transformation into a civilized state and indeed an essential component of being civilized. Some of the earliest cities were formed by the Sumerians in the valley of the Tigris and Euphrates rivers, where settlers had already developed irrigation systems. In the following selection Herbert J. Muller analyzes the social and political significance of cities and irrigation systems for the Sumerians, and focuses on the problems that civilization brought.

Consider: Why cities and irrigation systems require new systems of legal and political control, why Muller believes that the increased wealth and opportunity created by civilization was not an unmitigated benefit to the Sumerians.

We must now consider the problems that came with civilization—problems due not so much to the sinful nature of man as to the nature of the city. “Friendship lasts a day” ran a Sumerian proverb; “kinship endures forever.” The heterogeneous city was no longer held together by the bonds of kinship. Even the family was unstable. “For his pleasure: marriage,” ran another proverb; “on his thinking it over: divorce.” Hence the Sumerians could no longer depend on the informal controls of custom or common understanding

that had sufficed to maintain order in the village. They had to supplement custom by political controls, a system of laws, backed by both force and moral persuasion. In this sense the city created the problem of evil. Here, not in Eden, occurred the Fall.

More specifically, the rise of civilization forced the social question that is still with us. By their great drainage and irrigation system the Sumerians were able to produce an increasing surplus of material wealth. The question is: Who was to possess and enjoy this wealth? The answer in Sumer was to be the invariable one: Chiefly a privileged few. The god who in theory owned it all in fact required the services of priestly bailiffs, and before long these were doing more than their share in assisting him to enjoy it, at the expense of the many menials beneath them. Class divisions grew more pronounced in the divine household, as in the city at large. The skilled artisans of Sumer, whose work in metals and gems has hardly ever been surpassed, became a proletariat, unable to afford their own products. . . . And outside its walls the city created still another type of man—the peasant. The villager had been preliterate, on a cultural par with his fellows; the peasant was illiterate, aware of the writing he did not know, aware of his dependence on the powers of the city, and liable to exploitation by them. Altogether, the urban revolution produced the anomaly that would become more glaring with the Industrial Revolution. As the collective wealth increased, many men were worse off, and many more felt worse off, than the neolithic villager had been.

Similarly the great irrigation system posed a political problem: Who would control the organization it required, exercise the power it gave? The answer was the same—a privileged few. As the temple estate grew into a city, the priesthood needed more secular help, especially in time of war. Sumerian legend retained memories of some sort of democratic assembly in the early cities, but it emphasized that after the Flood “kingship descended from heaven.” The gods had sent kings to maintain order and to assure the proper service of them upon which the city’s welfare depended. This was not a pure heavenly boon, judging by the Sumerian myth of a Golden Age before the Flood: an Eden of peace and plenty in which there was no snake, scorpion, hyena, lion, wild dog, wolf—“There was no fear, no terror. Man had no rival.” At any rate, the divinely appointed king ruled as an absolute monarch, and might be a terror. With him descended a plague of locusts—the tax collectors. Again civilization meant an anomaly: as the collective achieved much more effective freedom, many individuals enjoyed less freedom than prehistoric villagers had.

Women of Egypt and the Ancient Near East

Barbara S. Lesko

In the early Egyptian and Mesopotamian civilizations, women had greater access to valued political, religious, and economic positions than in civilizations that followed. What explains the changes that would make societies in the Near East more dominated by men and more oppressive

SOURCE: Barbara S. Lesko, “Women of Egypt and the Ancient Near East,” in Renate Bridenthal, Claudia Koonz, and Susan Stuard, *Becoming Visible: Women in European History*, 2d ed. (Boston: Houghton Mifflin

to women? Barbara S. Lesko, an Egyptologist, addresses this question in the following excerpt. Here her focus is on the centuries toward the end of the third millennium and the beginning of the second millennium.

Consider: *What three factors explain the decline of women’s status and freedoms: how Egypt and early Sumer differed from later societies such as Assyria; other possible explanations for the decline of women’s status and freedoms.*

What was the real cause of the rise of patriarchy, which became increasingly oppressive to women in the Near East after Sumerian civilization waned? Several reasons suggest themselves. The first is militarism. In an early agrarian society like Egypt where internal disputes were effectively handled by the strong, centralized government, where wars usually took place beyond the borders, where no standing army existed during the first 1500 years of recorded history, and where invasion seldom affected the country, women continually shared the burdens, full rights, and obligations of citizens. However, in the newer societies, founded by the sons of ever-vigilant and suspicious desert nomads, where warfare between cities was frequent and invasion by outside hostile forces familiar, militarism developed, excluding women and rendering them dependent. Second, where commercialism held sway at the same time—as in Assyria—the worst examples of patriarchy were found. Commerce based on private initiative first appears on a well-developed scale in the Old Babylonian period where the first concerted effort by men to control women for financial gain is also documented. This is seen not only in the laws of Hammurabi but in institutions like that of the cloistered *Naditu* women. Coupled with virulent militarism, as in Assyria, the rise of commercialism had a devastating effect on women’s rights. In Egypt large scale commerce long remained a virtual monopoly of the state, so its impact on society remained less significant.

We might further point out that, even during the somewhat militaristic Egyptian empire of the New Kingdom, women’s status and freedoms did not diminish significantly. This introduces a third factor: confidence. A supremely confident nation can afford tolerance. Egypt had confidence in its gods, in the eternity of life, and in the bounty of its land. Sumer, in its early formative years, shared these advantages too. Not so the subsequent societies. It is the threatened male and the threatened society—like Assyria, surrounded on three sides by deadly enemies, and weak, impoverished Israel—which created such a restricted role for their women.

Chapter Questions

1. What characteristics of the societies discussed in this chapter fit with what we usually consider as “civilized”?
2. How would you explain the rise of these civilizations and their similarities?
3. Evaluate the relative importance of geographic, economic, and other factors in the differing natures of these early civilizations.
4. Drawing from both primary and secondary documents, describe some of the most likely of ancient peoples’ assumptions and attitudes about the world, about their societies, and about women. How might some of these assumptions and attitudes differ in the various societies of the area?