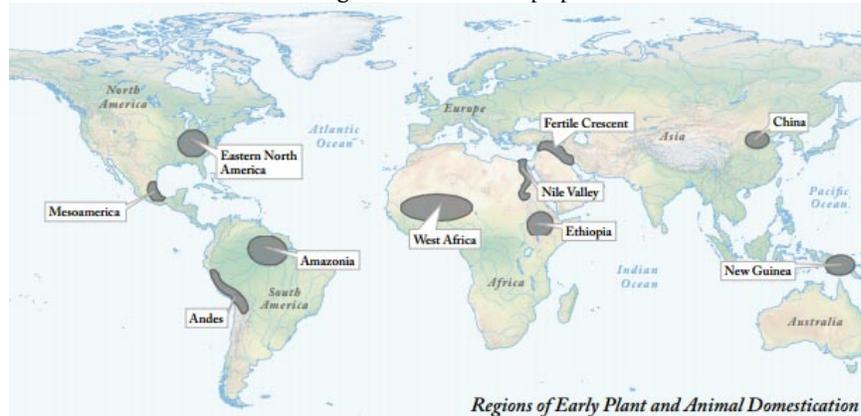


Unit 2-Expanding Networks of Exchange and Encounters, 1200 BCE-500 CE

Overview

Previous to the period between 1200 BCE and 500 CE, humans in several parts of the world began to produce food, adopt new forms of social organization, and interact more intensively with one another over longer distances than in any earlier times. During the period that followed, those patterns continued, though at a faster pace. World population continued to increase in the first millennium BCE, though it leveled off in the early centuries CE. More cities appeared. States, which first emerged in the previous period, as a way of organizing large populations under a single governing authority, now appeared in new forms that were bigger, more complex, and more efficient at collecting taxes from the population.



Interregional systems of communication allowed goods, technologies, and ideas to move, sometimes thousands of miles. Interlocking networks of roads, trails, and sea lanes connected almost all parts of Afroeurasia and, in the Americas, extensive areas of Mesoamerica and the Andean mountain spine of South America. Among the ideas transmitted along these routes were new belief systems, which invited peoples of differing languages and cultural traditions to share common standards of morality and trust.

Humans and the Environment-

We might argue that compared to today, when humans are expending huge amounts of energy to shape the physical and natural earth to their own purposes, this period was not a period of drastic environmental change. That, however, is a relative matter. If we compare that era to the three earlier ones, it is clear that humans were extracting energy from nature and from the earth's outer crust at an accelerating pace.

In the previous period, we introduced the concepts of extensification and intensification. In this period, intensification involved human groups introducing both farming and pastoral nomadism in parts of the world where only foragers, if any humans at all, had previously lived. With the establishment of farming or herding in those regions, the size, density, and complexity of social groups grew significantly. Those places included southern Africa, the grassy steppes of northeastern Eurasia, the Yangzi River valley in China, parts of Oceania (the Pacific Islands), Mesoamerica, and Andean South America.

1. Technology-New tools and techniques that made those developments possible included improved hybrids of food crops and in Afroeurasia more extensive exploitation of horses and camels as work animals. Perhaps the single most important invention of the era was the technology of iron production. Beginning late in the second millennium BCE, people in both Southwest Asia and East Africa, independently of each other, acquired the knowledge of how to smelt iron and work it into useful objects. This technology rapidly spread across most of Afroeurasia.

Consequently, farmers wielding iron axes, hoes, spades, and plows opened millions of acres of virgin land. City artisans used iron hammers, chisels, and saws to erect great buildings of wood and stone. And monarchs increasingly armed soldiers with iron weapons and armor. In other respects, we cannot really argue that this was a time of great technological change in the world as a whole. Many of the most fundamental inventions, such as the wheel, the technology of pottery-making, or the horse harness, had already appeared. And basic inventions did not necessarily spread worldwide. Iron metallurgy, for example, did not reach the Americas, Australia, or Oceania in this period.

2. Population Growth-One fundamental development closely linked to the expansion of agriculture was population growth. Between 1000 BCE and 1 CE, world population appears to have risen from about 120,000,000 to 250,000,000. The rate of growth also went up. Between 3000 and 1000 BCE, it took about 1,600 years for world populations to double. Between 1000 BCE and 1 CE the doubling time was less than 1,000 years.

One cause of human biological success in the first millennium BCE may have been that in regions where people regularly interacted with one another, they slowly built up shared immunities to infectious diseases. This would especially have happened in densely populated regions like Southwest Asia, northern India, or northern China. Stronger natural immunities reduced mortality from recurring epidemics, permitting populations to grow at a faster rate. However, if some new infectious malady entered a region from afar, a severe epidemic might break out and populations take a plunge.

3. Environmental Impact: The Fate of Forests-As populations grew, so did their impact on the environment. Though the pace of deforestation may have been minor compared to the twentieth century, it appears to have greatly accelerated compared to earlier times. Clearing forest cover for fuels, farming, or grazing meant that more people could live on a given area of land. Over the long run, however, forest cutting produced soil erosion, chronic shortages of wood fuel, periodic famines, and extinction of some local animal and plant species. Deforestation and the burning of trees, as well as wet rice farming, may even have begun to alter global climate.

We have sound archaeological evidence farmers cut or burned forests on a substantial scale in the Mediterranean basin, western Europe, East Africa, the Ganges River valley, China, and other regions. In Mesoamerica and the Andes Mountains, societies had neither iron tools nor large work animals until much later in history. In both those regions, however, land clearing proceeded steadily because those societies learned to deploy human muscle power on a large scale and very efficiently.

Humans and Other Humans

The doubling of world numbers, coupled with increasing density of farming populations, meant that in many places humans had no other choice but to experiment with new ways of organizing their social, economic, and cultural relations. For one thing, many more humans lived in cities at the end of this era than at the beginning.

This does not mean that anything close to a majority of people inhabited cities or that urban growth was steady and uninterrupted. Urban populations rose and fell. In fact, cities appeared and disappeared, in connection with regional or local changes in agricultural production, long-distance trade, infectious disease environments, political conditions, and other factors. The table below tells us something about the general patterns of global urbanization between 1200 BCE and 500 CE.

Year	Number of largest cities	Size of largest cities	Total population of largest cities
BCE 12000	16	24,000-50,000	499,000
BCE 650	20	30,000-120,000	894,000
BCE 430	51	30,000-200,000	2,877,000
CE 100	75	30,000-450,000	5,181,000
CE 500	47	40,000-400,000	3,892,000

We can see in the above chart that urbanization rose steadily up to the second century CE, then declined in the following 400 years. We can definitely link the upswing to the appearance of several large states and empires, all of which accumulated sizable agricultural, mineral, and commercial wealth. The downswing after the second century CE may be partly connected to pandemic disease outbreaks, the decline of large empires, and extended economic recessions in the major agrarian regions.

1. The Multiplying of Cities-In Afroeurasia, cities grew and multiplied partly because they developed increasingly strong commercial ties with one another, sometimes across long distances. About 100 CE, the

world's two biggest cities were almost certainly Rome, with a population nearing one million, and Luoyang in China's Han empire. The urban downswing that occurred from the third century CE was certainly related to the decline of the Han and Roman empires.

Most cities were multifunctional, serving as centers of government, religion, trade, manufacturing, education, and artistic display. In some cities, such as Rome or Alexandria (in Egypt), all these functions operated simultaneously. Other cities had more specialized purposes, for example, towns of the Mediterranean coast or Inner Eurasia, which functioned chiefly to transship goods along routes of trade.

Archaeologists studying the ancient Americas in recent decades have pushed evidence urbanization further and further back in time. Along a thirty-mile stretch of the Peruvian coast known as Norte Chico, researchers have surveyed as many as thirty small cities, some of them founded no later than about 3200 BCE. The oldest of these centers predates the appearance of cities anywhere in the world except Sumer in Mesopotamia. The contours of a complex society governed by an aristocratic minority comes into clearer view at the ruins of Chavín de Huántar, a center for ritual practice and pilgrimage whose construction began around 800 BCE in the Andean highlands of northern Peru. The earliest city we know of in Mesoamerica emerged about 1350 BCE in the tropical lowlands that border the Gulf of Mexico. This center, known by its ruins as San Lorenzo, featured an artificial central platform 150 feet high and two-thirds of a mile on each side. This city and others that followed in the region developed in association with the early Olmec (Olmeca) society. These centers may have been the earliest places in the Americas where an aristocratic minority exercised some type of permanent authority over the common population of farmers, artisans, and hunters. By 600 CE, the city of Teotihuacán in the Valley of Mexico (the region of modern Mexico City) may have had a population of more than 150,000, making it one of the top ten largest cities in the world at that time.

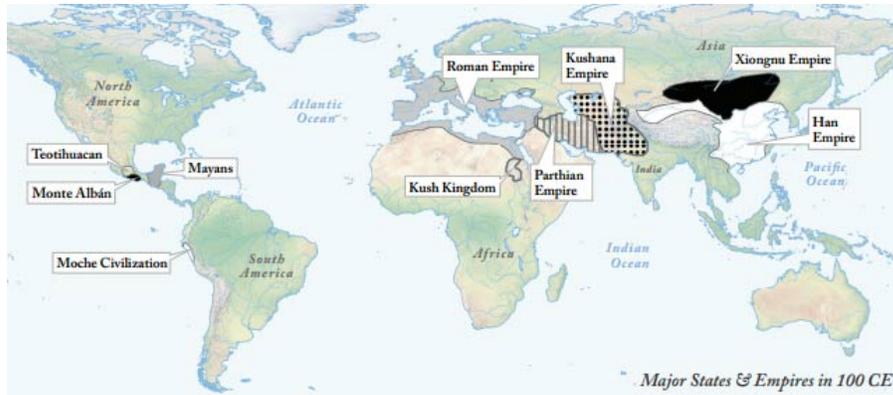
2. **Giant Empires**-States of unprecedented size arose partly because of new technologies that permitted rulers to extend their systems of central command farther and farther away from their capitals. One of these advances was the perfecting of horse riding. All across Afroeurasia, armed cavalry, which could operate on almost any terrain, replaced chariots as an instrument of military conquest and control. Soldiers, as well as state messengers and envoys, could transmit political orders and vital news by horseback faster than any other way.

Other innovations that contributed to imperial growth were advanced road construction (the Persians and Romans), canal building (the Chinese), and the emergence of the dromedary camel as the principal transport animal in arid lands from Africa to northwest India.

Below is a table of the three biggest empires of the 1000 BCE to 500 CE period. Their land area is compared to that of the continental United States.

State	Approximate Year	Approximate size in square miles
Han Empire	50 BCE	2,509,000
Achaemenid Persian Empire	500 BCE	2,123,000
Roman Empire	100 CE	1,698,400
Continental United States	Present	3,021,296

These ancient states were empires not only because they were big but also because a single government, and an elite class of particular origin (Han Chinese, Indo-Iranian-speaking Persians, Latin-speaking Romans), ruled over peoples of diverse linguistic, ethnic, and religious identities. The majority of the world's people probably did not live within the frontiers of empires. Some lived in city-states, which were relatively small sovereign territories centered on a single city. Greek and Phoenician city-states of the Mediterranean are obvious examples. Many other people lived under no state authority but in societies organized in kinship groups.



Nevertheless, a sweeping view of Afroeurasia at about 100 CE reveals a nearly continuous chain of states, most of them gigantic, extending from the Atlantic to the Pacific. All these states enjoyed extended periods of political order and economic

prosperity, and those conditions in turn stimulated long-distance exchanges of products and ideas, not just within states but between one another.

Between about 300 BCE and 300 CE, merchants, shippers, camel drivers, and sea captains extended and strengthened trade routes across Inner Eurasia on the silk roads, the basins of the Mediterranean and Black seas, and the Indian Ocean. And the last centuries of the era also saw the beginnings of camel caravan trade across the Sahara, linking peoples of tropical Africa to the Mediterranean rim.

3. The Shape of Societies- The vast majority of the world's population were farmers, herders, or foragers. They subsisted on their own production, and they lived short lives compared to today. However, more and bigger cities, plus the rise of states that concentrated immense amounts of wealth, led to sharper distinctions of social class between elite minorities that held wealth, power, and privilege, and everyone else. In urban societies there might have also been a sizeable class of merchants, artisans, scholars, and other people with special skills who accumulated substantial wealth, though not necessarily much political power or privilege. At the bottom of the social scale were slaves. There is no doubt that this era witnessed a huge expansion of slavery and organized slave trade in many parts of the world, notably the Mediterranean basin. For example, the slave population in the central part of the Roman empire at the end of the first century BCE may have been as much as 40 percent of the total population.

In all the urbanized societies, adult males dominated political and social life, as far as we know. One would have to visit forager, pastoral, or small-scale farming societies to find reasonably egalitarian relations between women and men in daily life. In the big states and empires, women at the very top of the social ladder appear to have enjoyed, relatively speaking, the greatest freedom to come and go, accumulate property, and influence political affairs.

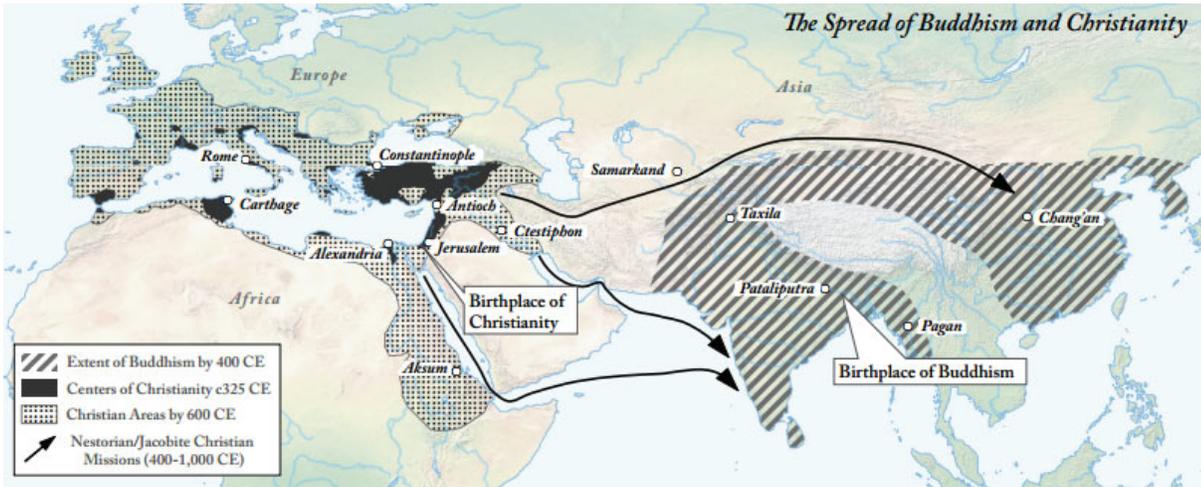
Humans and Ideas

The system of writing that emerged in Afroeurasia during the previous period, greatly enhanced the speed and range of collective learning among humans. Those writing systems, however, were logographic. That is, they employed signs, or characters, that represented meanings. Therefore, they required thousands of separate signs (written characters), each having a specific meaning. This kind of writing system had the advantage of allowing people to express meanings in very precise, subtle ways.

The new development during this period, however, was the appearance of the earliest alphabetic writing systems. The signs used in them represented, for the most part, sounds of speech, not meanings. Meanings may be expressed in millions of ways, but the number of sounds humans can make with their lips and tongues is drastically limited. Alphabetic systems, therefore, relied on a small number of signs (for example, 26 in the English alphabet, 28 in the Arabic one). Nevertheless, these signs could be arranged in countless ways to represent the nuances of human thought.

The earliest alphabetic system that we know of appeared in Southwest Asia near the end of the second millennium BCE. In the following centuries variations of that system spread from the Mediterranean basin to India. People could master alphabetic systems faster and easier than logographic ones. Therefore literacy spread rapidly, though especially among scholars, priests, officials, and merchants, not ordinary farmers

and workers. Nor did alphabetic systems completely replace logographic ones. The Chinese character-based system is the leading case of modern logographic writing.



1. Big Religions- Another development during this period and one related to the spread of writing, was the appearance of several belief systems that embraced people of differing languages and cultural traditions, what we often call "world religions." The great majority of people in that era practiced local religions, that is, systems that centered on local gods and goddesses, sacred places in nature, astrology, magic, and pronouncements of shamans— individuals who mediated between the natural and supernatural worlds. In large states and empires, religious life tended to be diverse, though rulers could seldom resist encouraging their subjects to think of them as individuals with supernatural powers or even as divine beings. For example, when the Roman state made the transition from a republic to a sprawling autocratic empire, its leaders were transformed from ordinary mortals into gods.

Since people do not appear to have lacked for religious life on a local scale from very early times, why did several large-scale belief systems emerge during this time in history? In fact, why did all the major world religions appear in that era, with the exception of Islam? One possibility is that by about the middle of the first millennium BCE, Afroeurasia reached a level of population and an intensity of commercial and cultural interchange that required larger systems of morality and shared belief. The new religious systems provided foundations of cultural communication, moral expectation, and personal trust among people who were meeting, sharing ideas, and doing business with one another far beyond their local neighborhoods. The new belief systems, however, were by no means all the same. Each one offered distinctive answers to persistent questions about the human condition and different ways of approaching worship, ritual, and communal life. The table below provides some basic information about new religions that appeared.

Belief System	Time of Appearance	Homeland
Buddhism	5 th century BCE	Northern India
Christianity	1 st century CE	Southwest Asia (ME)
Confucianism	5 th century BCE	Northern China
Daoism	5 th century BCE	Northern China
Hinduism	Early 1 st millennium BCE	Northern India
Judaism	Early 1 st millennium BCE	Southwest Asia (ME)

Buddhism, Christianity, Hinduism, Judaism, and Daoism all offered paths to self-transformation and to eternal salvation in one form or another. Christianity and Judaism were the most firmly monotheistic, proclaiming one omnipotent and omniscient god. Hinduism made room for numerous, powerful gods and goddesses. Buddhism and Daoism also accepted the existence of multiple divine beings in various forms and incarnations. Like Christianity and Judaism, however, Buddhism, Daoism, and Hinduism envisioned a unitary, all-encompassing cosmic reality.

Buddhism and Christianity emphasized their universalism and appeal to all humans, and both spread widely across ethnic and linguistic frontiers. Judaism remained closely identified with the Hebrew people and their descendants, though by the end of this period, a diaspora of Jewish communities extended nearly across Afroeurasia. All six systems taught that human relations should be guided by kindness, selflessness, and decency. Confucianism, which some scholars characterize as an ethical system rather than a religion, particularly emphasized public moral behavior, good government, and social responsibility.

These six systems may of course be compared and contrasted in numerous other ways. In terms of general beliefs and practices, none can be set rigidly apart from all the others. Also, within each tradition, significant variations developed depending on local cultural tendencies and social environments. For example, in the Christian tradition, several different "churches," each with distinctive beliefs and practices, emerged during the first or early second millennium CE. These included the Eastern (Greek) Orthodox, Roman Catholic, Arian, Nestorian, and Ethiopian churches. In Afroeurasia the only major belief system that did not appear during this time, was Islam, which came on the scene in the seventh century CE.

4. *Philosophy*-All these belief systems had philosophical aspects in the sense that they encouraged investigations into the structure and meaning of the physical and natural universe. None of them was incompatible with types of inquiry and speculation that we associate with the beginnings of science. In the Aegean Sea region, for example, Greek-speaking scholars, whose religion in the first millennium BCE embraced a large household of deities, developed a method of scientific and moral questioning known as natural philosophy. According to Hellenism, the system of thought and creativity based on Greek language and culture, human reason could be applied to developing general theories to explain natural, cosmic, and psychological phenomena. These thinkers saw no contradiction between efforts to detect universal patterns in nature and their conviction that the gods fundamentally ruled it.