"Forget compass readings, camel caravans, and disorienting, potentially deadly Jeep journeys through the world's most fabled and forbidding desert. Soon it will be possible to take a leisurely drive along a paved two-lane highway from the spot where Europe kisses the tip of this continent into the heart of sub-Saharan Africa. That's the idea, anyway." So wrote a journalist for the New York Times in late 2003, describing international plans for a modern highway across the Sahara, linking Europe and North Africa with the vast interior of West Africa. Such a road, its advocates hoped, would not only promote tourism, trade, and economic growth but also provide an alternative route for West African Muslims making the pilgrimage to Mecca. At the same time, in early 2004, some twenty-three nations signed an agreement to build a network of highways all across Asia, ultimately linking Tokyo with Istanbul and enabling a number of landlocked countries of Central Asia to participate more fully in the world economy.

These two ambitious projects of the early twenty-first century were part of the accumulating infrastructure of contemporary globalization. But they also evoked much older patterns of global commerce, the famous Silk Road network across Eurasia and the trans-Saharan trade routes, both of which flourished in the postclassical era. Here is a reminder, from the viewpoint of world history, that exchange among distant peoples is not altogether new and that the roots of economic globalization lie deep in the past.

The exchange of goods among communities occupying different ecological zones has long been a prominent feature of human history.
Coastlands and highlands, steppes and farmlands, islands and mainlands, valleys and mountains, deserts and forests—each generates different products desired by others. Furthermore, some societies have been able to monopolize, at least temporarily, the production of particular products, such as silk in China or certain spices in Southeast Asia, that others have found valuable. This uneven distribution of goods and resources, whether natural or resulting from human activity, has long motivated exchange, not only within particular civilizations or regions but among them as well. In the world of 500–1500, long-distance trade became more important than ever before in linking and shaping distant societies and peoples. For the most part, it was indirect, a chain of separate transactions in which goods traveled farther than individual merchants. Nonetheless, a network of exchange and communication extending all across the Afro-Eurasian world, and separately in parts of the Americas as well, slowly came into being.

In what ways was trade significant? How did it generate change within the societies that it connected? Economically speaking, it often altered consumption, enabling West Africans, for example, to import scarce salt, necessary for human diets and useful for seasoning and preserving food, from distant mines in the Sahara in exchange for the gold of their region. Trade also affected the day-to-day working lives of many people, encouraging them to specialize in producing particular products for sale in distant markets rather than for use in their own communities. Trade, in short, diminished the economic self-sufficiency of local societies.

Trade shaped the structure of those societies as well. Traders often became a distinct social group, viewed with suspicion by others because of their impulse to accumulate wealth without actually producing anything themselves. In some societies, trade became a means of social mobility, as Chinese merchants, for example were able to purchase landed estates and establish themselves within the gentry class. Long-distance trade also enabled elite groups in society to distinguish themselves from commoners by acquiring prestigious goods from a distance—silk, tortoiseshells, rhinoceros horn, or particular feathers, for example. The association with faraway or powerful societies, signaled by the possession of their luxury goods, often conveyed status in communities more remote from major civilizations.

Political life also was sometimes transformed by trade. The wealth available from controlling and taxing trade motivated the creation of states in various parts of the world and sustained those states once they had been constructed. Furthermore, commerce posed a set of problems to governments everywhere. Should trade be left in private hands, as in the Aztec Empire, or should it be controlled by the state, as in the Inca Empire? How should state authorities deal with men of commerce who were both economically useful and potentially disruptive?

Moreover, the saddlebags of camel caravans or the cargo holds of merchant vessels carried more than goods. Trade became the vehicle for the spread of religious ideas, technological innovations, disease-bearing germs, and plants and animals to regions far from their places of origin. In just this fashion, Buddhism made its way...
from India to Central and East Asia, and Islam crossed the Sahara into West Africa. So did the pathogens that devastated much of Eurasia during the Black Death. These immense cultural and biological transformations were among the most significant outcomes of the increasingly dense network of long-distance commerce during the era of third-wave civilizations.

Silk Roads: Exchange across Eurasia

The Eurasian landmass has long been home to the majority of humankind as well as to the world's most productive agriculture, largest civilizations, and greatest concentration of pastoral peoples. Beyond its many separate societies and cultures, Eurasia also gave rise to one of the world's most extensive and sustained networks of exchange among its diverse peoples. Known to scholars as the Silk Roads, a reference to its most famous product, these land-based trade routes linked pastoral and agricultural peoples as well as the large civilizations on the continent's outer rim (see Map 8.1). None of its numerous participants knew the full extent of this network's reach, for it was largely a "relay trade" in which goods were passed down the line, changing hands many times before reaching their final destination. Nonetheless, the Silk Roads provide a certain unity and coherence to Eurasian history alongside the distinct stories of its separate civilizations and peoples (see Map 8.1).
The Growth of the Silk Roads

The beginnings of the Silk Roads lay in both geography and history. As a geographic unit, Eurasia is often divided into inner and outer zones that represent quite different environments. Outer Eurasia consists of relatively warm, well-watered areas, suitable for agriculture, which provided the setting for the great civilizations of China, India, the Middle East, and the Mediterranean. Inner Eurasia, the lands of eastern Russia and Central Asia, lies farther north and has a harsher and drier climate, much of it not conducive to agriculture. Long inhabited by pastoral peoples herding their animals from horseback, the people of this region had for centuries traded with and raided their agricultural neighbors to the south. Products of the forest and of semi-arid northern grasslands known as the steppes—such as hides, furs, livestock, wool, and amber—were exchanged for the agricultural products and manufactured goods of adjacent civilizations. The movement of pastoral peoples for thousands of years also served to diffuse Indo-European languages, bronze metallurgy, horse-based technologies, and more all across Eurasia.

The construction of the classical civilizations and their imperial states during the last five centuries B.C.E. added another element to these earlier Eurasian connections. From the south, the Persian Empire invaded the territory of pastoral peoples in present-day Turkmenistan and Uzbekistan. From the west, Alexander the Great’s empire stretched well into Central Asia. From the east, China’s Han dynasty extended its authority westward, seeking to control the nomadic Xiongnu and to gain access to the powerful “heavenly horses” that were so important to Chinese military forces. By the early centuries of the Common Era, indirect trading connections, often brokered by pastoral peoples, linked the classical civilizations in a network of transcontinental exchange.

Silk Road trading networks prospered most when large and powerful states provided security for merchants and travelers. Such conditions prevailed during the classical era when the Roman and Chinese empires anchored long-distance commerce at the western and eastern ends of Eurasia. Silk Road trade flourished again during the seventh and eighth centuries C.E. as the Byzantine Empire, the Muslim Abbasid dynasty, and Tang dynasty China created an almost continuous belt of strong states across Eurasia. In the thirteenth and fourteenth centuries, the Mongol Empire briefly encompassed almost the entire route of the Silk Roads in a single state, giving a renewed vitality to long-distance trade.

Goods in Transit

During such times especially, a vast array of goods (detailed in the following Snapshot) made their way across the Silk Roads, often carried in large camel caravans that traversed the harsh and dangerous steppes, deserts, and oases of Central Asia. In high demand and hard to find, most of these goods were luxury products, destined for an elite and wealthy market, rather than staple goods, for only readily move...
Economic Exchange along the Silk Roads

<table>
<thead>
<tr>
<th>Region</th>
<th>Products Contributed to Silk Road Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>silk, bamboo, mirrors, gunpowder, paper, rhubarb, ginger, lacquerware, chrysanthemums</td>
</tr>
<tr>
<td>Forest lands of Siberia and grasslands of Central Asia</td>
<td>furs, walrus tusks, amber, livestock, horses, falcons, hides, copper vessels, tents, saddles, slaves</td>
</tr>
<tr>
<td>India</td>
<td>cotton, herbal medicine, precious stones, spices</td>
</tr>
<tr>
<td>Middle East</td>
<td>dates, nuts, almonds, dried fruit, dyes, lapis lazuli, swords</td>
</tr>
<tr>
<td>Mediterranean basin</td>
<td>gold coins, glassware, glazes, grapevines, jewelry, artworks, perfume, wool and linen textiles, olive oil</td>
</tr>
</tbody>
</table>

commodities of great value could compensate for the high costs of transportation across such long and forbidding distances.

Of all these luxury goods, it was silk that came to symbolize this Eurasian exchange system. When China held a monopoly on silk-producing technology, this precious fabric moved generally from east to west. The demand for silk as well as cotton textiles from India was so great in the Roman Empire that various Roman writers were appalled at the drain of resources that it represented. They also were outraged at the moral impact of wearing revealing silk garments. “I can see clothes of silk,” lamented Seneca the Younger in the first century C.E., “if materials that do not hide the body, nor even one’s decency, can be called clothes... Wretched flocks of maids labour so that the adulteress may be visible through her thin dress, so that her husband has no more acquaintance than any outsider or foreigner with his wife’s body.” By the sixth century C.E., however, the knowledge and technology for producing raw silk had spread beyond China. An old Chinese story attributes it to a Chinese princess who smuggled out silkworms in her turban when she was married off to a Central Asian ruler. In a European version of the tale, Christian monks living in China did the deed by hiding some silkworms in a bamboo cane, an act of industrial espionage that allowed an independent silk-producing and silk-weaving industry to take hold in the Byzantine Empire. However it happened, Koreans, Japanese, Indians, and Persians likewise learned how to produce this precious fabric.

As the supply of silk increased, its many varieties circulated even more extensively across Eurasian trade routes. In Central Asia, silk was used as currency and as a means of accumulating wealth. In both China and the Byzantine Empire, silk became a symbol of high status, and governments passed laws that restricted silk clothing to members of the elite. Furthermore, silk became associated with the sacred in the expanding world religions of Buddhism and Christianity. Chinese Buddhist pilgrims who made their way to India seeking religious texts and relics took with them large quantities of silk as gifts to the monasteries they visited.

**Significance**

What made silk such a highly desired commodity across Eurasia?
Buddhist monks in China received purple silk robes from Tang dynasty emperors as a sign of high honor. In the world of Christendom, silk wall hangings, altar covers, and vestments became highly prestigious signs of devotion and piety. Because no independent silk industry developed in Western Europe until the twelfth century C.E., a considerable market developed for silks imported from the Islamic world. Ironically, the splendor of Christian churches depended in part on Islamic trading networks and on silks manufactured in the Muslim world. Some of those silks were even inscribed with passages in Arabic from the Quran, unbeknownst to their European buyers.

Compared to contemporary global commerce, the volume of trade on the Silk Roads was small, and its focus on luxury goods limited its direct impact on most people. Nonetheless, it had important economic and social consequences. Peasants in the Yangzi River delta of southern China sometimes gave up the cultivation of food crops, choosing to focus instead on producing silk, paper, porcelain, lacquerware, or iron tools, much of which was destined for the markets of the Silk Roads. In this way, the impact of long-distance trade trickled down to affect the lives of ordinary farmers. Furthermore, favorably placed individuals could benefit immensely from long-distance trade. The twelfth-century Persian merchant Ramišt made a personal fortune from his long-distance trading business and with his profits purchased an enormously expensive silk covering for the Kaaba, the central shrine of Islam in Mecca.

### Cultures in Transit

More important even than the economic impact of the Silk Roads was their role as a conduit of culture. Buddhism in particular, a cultural product of Indian civilization, spread widely throughout Central and East Asia, owing much to the activities of merchants along the Silk Roads. From its beginnings in India during the sixth century B.C.E., Buddhism had appealed to merchants, who preferred its universal message to that of a Brahmin-dominated Hinduism that privileged the higher castes. Indian traders and Buddhist monks, sometimes supported by rulers such as Ashoka, brought the new religion to the trans-Eurasian trade routes. To the west, Persian Zoroastrianism largely blocked the spread of Buddhism, but in the oasis cities of Central Asia, such as Merv, Samarkand, Khotan, and Dunhuang, Buddhism quickly took hold. By the first century B.C.E., many of the inhabitants of these towns had converted to Buddhism, and foreign merchant communities soon introduced it to northern China as well.

Conversion to Buddhism in the oasis cities was a voluntary process, without the pressure of conquest or foreign rule. Dependent on long-distance trade, the inhabitants and rulers of those sophisticated and prosperous cities found in Buddhism a link to the larger, wealthy, and prestigious civilization of India. Well-to-do Buddhist merchants could earn religious merit by building monasteries and supporting monks. The monasteries in turn provided convenient and culturally familiar places
of rest and resupply for merchants making the long and arduous trek across Central Asia. Many of these cities became cosmopolitan centers of learning and commerce. Scholars have found thousands of Buddhist texts in the city of Dunhuang, where several branches of the Silk Roads joined to enter western China, together with hundreds of cave temples, lavishly decorated with murals and statues.

Outside of the oasis communities, Buddhism progressed only slowly among pastoral peoples of Central Asia. The absence of a written language was an obstacle to the penetration of a highly literate religion, and their nomadic ways made the founding of monasteries, so important to Buddhism, quite difficult. But as pastoralists became involved in long-distance trade or came to rule settled agricultural peoples, Buddhism seemed more attractive. The nomadic Jie people, who controlled much of northern China after the collapse of the Han dynasty, are a case in point. Their ruler in the early fourth century C.E., Shi Le, became acquainted with a Buddhist monk called Fotudeng, who had traveled widely on the Silk Roads. The monk’s reputation as a miracle worker, a rainmaker, and a fortune-teller and his skills as a military strategist cemented a personal relationship with Shi Le and led to the conversions of thousands and the construction of hundreds of Buddhist temples. In China itself, Buddhism remained for many centuries a religion of foreign merchants or foreign rulers. Only slowly did it become popular among the Chinese themselves, a process examined more closely in Chapter 9.

As Buddhism spread across the Silk Roads from India to Central Asia, China, and beyond, it also changed. The original faith had shunned the material world, but Buddhist monasteries in the rich oasis towns of the Silk Roads found themselves very much involved in secular affairs. Some of them became quite wealthy, receiving gifts from well-to-do merchants, artisans, and local rulers. The begging bowls of the monks became a symbol rather than a daily activity. Sculptures and murals in the monasteries depicted musicians and acrobats, women applying makeup, and even drinking parties. Doctrines changed as well. It was the more devotional Mahayana form of Buddhism (see Chapter 5)—featuring the Buddha as a deity, numerous bodhisattvas, an emphasis on compassion, and the possibility of earning merit—that flourished on the Silk Roads, rather than the more austere psychological teachings of the original Buddha. Moreover, Buddhism picked up elements of other cultures...
while in transit on the Silk Roads. In the area northwest of India that had been influenced by the invasions of Alexander the Great, statues of the Buddha reveal distinctly Greek influences. The Greco-Roman mythological figure of Herakles, the son of Zeus and associated with great strength, courage, masculinity, and sexual prowess, was used to represent Vajrapani, one of the divine protectors of the Buddha. In a similar way, the gods of many peoples along the Silk Roads were incorporated into Buddhist practice as bodhisattvas.

Disease in Transit

Beyond goods and cultures, diseases too traveled the trade routes of Eurasia, and with devastating consequences. Each of the major population centers of the Afro-Eurasian world had developed characteristic disease patterns, mechanisms for dealing with them, and in some cases immunity to them. But when contact among human communities occurred, people were exposed to unfamiliar diseases for which they had little immunity or few effective methods of coping. An early example involved Athens, which in 430–429 B.C.E. was suddenly afflicted by a new and still unidentified infectious disease that had entered Greece via seaborne trade from Egypt, killing perhaps 25 percent of its army and permanently weakening the city-state.

Even more widespread diseases affected the Roman Empire and Han dynasty China during the classical era as the Silk Roads promoted contact all across Eurasia. Smallpox and measles devastated the populations of both empires, contributing to their political collapse. Paradoxically, these disasters may well have strengthened the appeal of Christianity in Europe and Buddhism in China, for both of them offered compassion in the face of immense suffering.

Again in the period between 534 and 750 C.E., intermittent outbreaks of bubonic plague ravaged the coastal areas of the Mediterranean Sea as the black rats that carried the disease arrived via the seaborne trade with India, where they originally lived. What followed was catastrophic. Constantinople, the capital city of the Byzantine Empire, lost some 10,000 people per day during a forty-day period in 534 C.E., according to a contemporary historian. Disease played an important role in preventing Byzantium from reintegrating Italy into its version of a renewed Roman Empire encompassing the Mediterranean basin. The repeated recurrence of the disease over the next several centuries also weakened the ability of Christendom to resist the Muslim armies that poured out of Arabia in the seventh century C.E.

The most well-known dissemination of disease was associated with the Mongol Empire, which briefly unified much of the Eurasian landmass during the thirteenth and fourteenth centuries C.E. (see Chapter 12). That era of intensified interaction facilitated the spread of the Black Death—identified variously with the bubonic plague, anthrax, or a package of epidemic diseases—from China to Europe. Its consequences were enormous. Between 1346 and 1350, about one-third of the population of Europe perished from the plague. “A dead man,” wrote the Italian writer Boccaccio, “was then of no more account than a dead goat.”8 Despite the terrib
human toll, some among the living benefited. Tenant farmers and urban workers, now in short supply, could demand higher wages or better terms. Some landowning nobles, on the other hand, were badly hurt as the price of their grains dropped and the demands of their dependents grew.

A similar death toll afflicted China and parts of the Islamic world. The Central Asian steppes, home to many nomadic peoples including the Mongols, also suffered terribly, undermining Mongol rule and permanently altering the balance between pastoral and agricultural peoples to the advantage of settled farmers. In these and many other ways, disease carried by long-distance trade shaped the lives of millions and altered their historical development.

In the long run of world history, the exchange of diseases gave Europeans a certain advantage when they confronted the peoples of the Western Hemisphere after 1500. Exposure over time had provided them with some degree of immunity to Eurasian diseases. In the Americas, however, the absence of domesticated animals, the less intense interaction among major centers of population, and their isolation from the Eastern Hemisphere ensured that native peoples had little defense against the diseases of Europe and Africa. Thus, when their societies were suddenly invaded by Europeans from across the Atlantic, they perished in appalling numbers. Such was the long-term outcome of the very different histories of the two hemispheres.

Sea Roads: Exchange across the Indian Ocean

If the Silk Roads linked Eurasian societies by land, sea-based trade routes likewise connected distant peoples all across the Eastern Hemisphere. Since the days of the Phoenicians, Greeks, and Romans, the Mediterranean Sea had been an avenue of maritime commerce throughout the region, a pattern that continued during the postclassical era. The Italian city of Venice, for example, emerged by 1000 C.E. as a major center of commerce, with its ships and merchants active in the Mediterranean and Black seas as well as on the Atlantic coast. Much of its wealth derived from control of expensive and profitable imported goods from Asia, many of which came up the Red Sea through the Egyptian port of Alexandria. There Venetian merchants picked up those goods and resold them throughout the Mediterranean basin. This type of transregional exchange linked the maritime commerce of the Mediterranean Sea to the much larger and more extensive network of seaborne trade in the Indian Ocean basin.

Until the creation of a genuinely global oceanic system of trade after 1500, the Indian Ocean represented the world’s largest sea-based system of communication and exchange, stretching from southern China to eastern Africa (see Map 8.2). Like the Silk Roads, oceanic trade also grew out of the vast environmental and cultural diversities of the region. The desire for various goods not available at home—such as porcelain from China, spices from the islands of Southeast Asia, cotton goods and pepper from India, ivory and gold from the African coast—provided the incentive for Indian Ocean commerce. Transportation costs were lower on the Sea Roads

Comparison
How did the operation of the Indian Ocean trading network differ from that of the Silk Roads?
than on the Silk Roads, because ships could accommodate larger and heavier cargoes than camels. This meant that the Sea Roads could eventually carry more bulk goods and products destined for a mass market—textiles, pepper, timber, rice, sugar, wheat—whereas the Silk Roads were limited largely to luxury goods for the few.

What made Indian Ocean commerce possible were the monsoons, alternating wind currents that blew predictably eastward during the summer months and westward during the winter. An understanding of monsoons and a gradually accumulating technology of shipbuilding and oceanic navigation drew on the ingenuity of many peoples—Chinese, Malays, Indians, Arabs, Swahilis, and others. Collectively they made “an interlocked human world joined by the common highway of the Indian Ocean.”

But this world of Indian Ocean commerce did not occur between entire regions and certainly not between “countries,” even though historians sometimes write about India, Indonesia, Southeast Asia, or East Africa as a matter of shorthand or convenience. It operated rather across an “archipelago of towns” whose merchants often had more in common with one another than with the people of their own hinterlands. It was these urban centers, strung out around the entire Indian Ocean basin, that provided the nodes of this widespread commercial network.
Weaving the Web of an Indian Ocean World

The world of Indian Ocean commerce was long in the making, dating back to the time of the First Civilizations. Seaborne trade via the Persian Gulf between ancient Mesopotamia and the Indus Valley civilization is reflected in archaeological finds in both places. Some scholars believe that the still-undeciphered Indian writing system may have been stimulated by Sumerian cuneiform. The ancient Egyptians, and later the Phoenicians, likewise traded down the Red Sea, exchanging their manufactured goods for gold, ivory, frankincense, and slaves from the coasts of Ethiopia, Somalia, and southern Arabia. These ventures mostly hugged the coast and took place over short distances. An exception was Malay sailors; speaking Austronesian languages, they jumped off from the islands of present-day Indonesia during the first millennium B.C.E. and made their way in double-outrigger canoes across thousands of miles of open ocean to the East African island of Madagascar. There they introduced their language and their crops. Those food crops—bananas, coconuts, and cocoyams—soon spread to the mainland, where they greatly enriched the diets of African peoples. Also spread to the mainland was a Malayo-Polynesian xylophone, which is still played in parts of Africa today.

The tempo of Indian Ocean commerce picked up in the era of classical civilizations during the early centuries of the Common Era, as mariners learned how to ride the monsoons. Merchants from the Roman Empire, mostly Greeks, Syrians, and Jews, established settlements in southern India and along the East African coast. The introduction of Christianity into both Ethiopia and Kerala (in southern India) testifies to the long-term cultural impact of that trade. In the eastern Indian Ocean and the South China Sea, Chinese and Southeast Asian merchants likewise generated a growing commerce, and by 100 C.E. Chinese traders had reached India.

The fulcrum of this growing commercial network lay in India itself. Its ports bulged with goods from both west and east, as illustrated in the Snapshot. Its merchants were in touch with Southeast Asia by the first century C.E., and settled communities of Indian traders appeared throughout the Indian Ocean basin and as far away as

<table>
<thead>
<tr>
<th>Region</th>
<th>Products Contributed to Indian Ocean Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediterranean basin</td>
<td>ceramics, glassware, wine, gold, olive oil</td>
</tr>
<tr>
<td>East Africa</td>
<td>ivory, gold, iron goods, slaves, tortoiseshells, quartz, leopard skins</td>
</tr>
<tr>
<td>Arabia</td>
<td>frankincense, myrrh, perfumes</td>
</tr>
<tr>
<td>India</td>
<td>grain, ivory, precious stones, cotton textiles, spices, timber, tortoiseshells</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>tin, sandalwood, cloves, nutmeg, mace</td>
</tr>
<tr>
<td>China</td>
<td>silks, porcelain, tea</td>
</tr>
</tbody>
</table>
Alexandria in Egypt. Indian cultural practices, such as Hinduism and Buddhism, as well as South Asian political ideas began to take root in Southeast Asia.

In the era of third-wave civilizations between 500 and 1500, two major processes changed the landscape of the Afro-Eurasian world and wove the web of Indian Ocean exchange even more densely than before. One was the economic and political revival of China, some four centuries after the collapse of the Han dynasty. Especially during the Tang and Song dynasties (618–1279), China reestablished an effective and unified state, which actively encouraged maritime trade. Furthermore, the impressive growth of the Chinese economy sent Chinese products pouring into the circuits of Indian Ocean commerce, while providing a vast and attractive market for Indian and Southeast Asian goods. Chinese technological innovations, such as larger ships and the magnetic compass, likewise added to the momentum of commercial growth.

A second transformation in the world of Indian Ocean commerce involved the sudden rise of Islam in the seventh century C.E. and its subsequent spread across much of the Afro-Eurasian world (see Chapter 11). Unlike Confucian culture, which was quite suspicious of merchants, Islam was friendly to commercial life; the Prophet Muhammad himself had been a trader. The creation of an Arab Empire, stretching from the Atlantic Ocean through the Mediterranean basin and all the way to India, brought together in a single political system an immense range of economies and cultural traditions and provided a vast arena for the energies of Muslim traders.

Those energies greatly intensified commercial activity in the Indian Ocean basin in many ways. Middle Eastern gold and silver flowed into southern India to purchase pepper, pearls, textiles, and gemstones. Muslim merchants and sailors, as well as Jews and Christians living within the Islamic world, established communities of traders from East Africa to the southern China coast. Efforts to reclaim wasteland in Mesopotamia to produce sugar and dates for export stimulated a slave trade from East Africa, which landed thousands of Africans in southern Iraq to work on plantations and in salt mines under horrendous conditions. A massive fifteen-year revolt (868–883) among these slaves badly disrupted the Islamic Abbasid Empire before it was brutally crushed.

Beyond these specific outcomes, the expansion of Islam gave rise to an international maritime culture by 1000, shared by individuals living in the widely separated port cities around the Indian Ocean. The immense prestige, power, and prosperity of the Islamic world stimulated widespread conversion, which in turn facilitated commercial transactions. Even those who did not convert to Islam, such as Buddhist rulers in Burma, nonetheless regarded it as commercially useful to assume Muslim names. Thus we created “a maritime Silk Road . . . a commercial and informational network of unparalleled proportions.” After 1000, the culture of this network was increasingly Islamic.

**Sea Roads as a Catalyst for Change:**
**Southeast Asia and Srivijaya**

Oceanic commerce transformed all of its participants in one way or another, nowhere more so than in Southeast Asia and East Africa, at opposite ends of the...
Indian Ocean network. In both regions, trade stimulated political change as ambitious or aspiring rulers used the wealth derived from commerce to construct larger and more centrally governed states or cities. Both areas likewise experienced cultural change as local people were attracted to foreign religious ideas from Hindu, Buddhist, or Islamic sources. As on the Silk Roads, trade was a conduit for culture.

Located between the major civilizations of China and India, Southeast Asia was situated by geography to play an important role in the evolving world of Indian Ocean commerce. When Malay sailors, long active in the waters around Southeast Asia, opened an all-sea route between India and China through the Straits of Malacca around 350 C.E., the many small ports along the Malay Peninsula and the coast of Sumatra began to compete intensely to attract the growing number of traders and travelers making their way through the straits. From this competition emerged the Malay kingdom of Srivijaya, which dominated this critical choke point of Indian Ocean trade from 670 to 1025. A number of factors—Srivijaya’s plentiful supply of gold; its access to the source of highly sought-after spices, such as cloves, nutmeg, and mace; and the taxes levied on passing ships—provided resources to attract supporters, to fund an embryonic bureaucracy, and to create the military and naval forces that brought some security to the area.

Srivijaya monarchs drew upon local beliefs that chiefs possessed magical powers and were responsible for the prosperity of their people, but they also made use of imported Indian political ideas and Buddhist religious concepts, which had been brought to the area by a multitude of Indian merchants and teachers. Some Indians were employed as advisers, clerks, or officials to Srivijaya rulers, who began to assign Sanskrit titles to their subordinates. The capital city of Palembang was a cosmopolitan place, where even the parrots were said to speak four languages. Buddhism in particular provided a “higher level of magic” for rulers as well as the prestige of association with Indian civilization.14 These rulers sponsored the creation of images of the Buddha and various bodhisattvas whose faces resembled those of deceased kings and were inscribed with traditional curses against anyone who would destroy them. Srivijaya grew into a major center of Buddhist observance and teaching, attracting thousands of monks and students from throughout the Buddhist world. The seventh-century Chinese monk Yi Jing was so impressed that he advised Buddhist monks headed for India to study first in Srivijaya for several years.15

Srivijaya was not the only part of Southeast Asia to be influenced by Indian culture. The Sailendra kingdom in central Java, an agriculturally rich region closely allied with Srivijaya, mounted a massive building program between the eighth and tenth centuries featuring Hindu temples and Buddhist monuments. The most famous, known as Borobudur, is an enormous mountain-shaped structure of ten levels, with a three-mile walkway and elaborate carvings illustrating the spiritual journey from ignorance and illusion to full enlightenment. The largest Buddhist monument anywhere in the world, it is nonetheless a distinctly Javanese creation, whose carved figures have Javanese features and whose scenes are clearly set in Java, not India. Its
Borobudur
This huge Buddhist monument, constructed probably in the ninth century C.E., was subsequently abandoned and covered with layers of volcanic ash and vegetation as Java came under Islamic influence. It was rediscovered by British colonial authorities in the early nineteenth century and has undergone several restorations over the past two centuries. Although Indonesia is a largely Muslim country, its Buddhist minority (about 1 percent of the country’s population) still celebrates the Buddha’s birthday at Borobudur. (Robert Harding World Imagery/Alamy)

shape resonated with an ancient Southeast Asian veneration of mountains as sacred places and the abode of ancestral spirits. Borobudur represents the process of Buddhism becoming culturally grounded in a new place.

Temple complexes such as Borobudur and others constructed in Burma, in the Khmer state of Angkor, and elsewhere illustrate vividly the penetration of Indian culture—in both Hindu and Buddhist forms—throughout mainland and island Southeast Asia. Some scholars have spoken of the “Indianization” of the region, similar perhaps to the earlier spread of Greek culture within the empires of Alexander the Great and Rome. In the case of Southeast Asia, however, no imperial control accompanied Indian cultural influence. It was a matter of voluntary borrowing by independent societies that found Hindu or Buddhist ideas useful and were free to adapt those ideas to their own needs and cultures. Somewhat later, but in much the same way, Islam too began to penetrate Southeast Asia, as the world of Indian Ocean commerce brought yet another religious tradition to the region.

Sea Roads as a Catalyst for Change: East Africa and Swahili Civilization

On the other side of the Indian Ocean, the transformative processes of long-distance trade were likewise at work, giving rise to an East African civilization known as
Swahili. Emerging in the eighth century C.E., this civilization took shape as a set of commercial city-states stretching all along the East African coast, from present-day Somalia to Mozambique.

The earlier ancestors of the Swahili lived in small farming and fishing communities, spoke Bantu languages, and traded with the Arabian, Greek, and Roman merchants who occasionally visited the coast during the classical era. But what stimulated the growth of Swahili cities was the far more extensive commercial life of the western Indian Ocean following the rise of Islam. As in Southeast Asia, local people and aspiring rulers found opportunity for wealth and power in the growing demand for East African products associated with an expanding Indian Ocean commerce. Gold, ivory, quartz, leopard skins, and sometimes slaves acquired from interior societies, as well as iron and processed timber manufactured along the coast, found a ready market in Arabia, Persia, India, and beyond. In response to such opportunities, an African merchant class developed, villages turned into sizable towns, and clan chiefs became kings. A new civilization was in the making.

Between 1000 and 1500, that civilization flourished along the coast, and it was a very different kind of society than the farming and pastoral cultures of the East African interior. It was thoroughly urban, centered in cities of 15,000 to 18,000 people, such as Lamu, Mombasa, Kilwa, Sofala, and many others. Like the city-states of ancient Greece, each Swahili city was politically independent, generally governed by its own king, and in sharp competition with other cities. No imperial system or larger territorial states unified the world of Swahili civilization. Nor did any of them control a critical choke point of trade, as Srivijaya did for the Straits of Malacca. Swahili cities were commercial centers that accumulated goods from the interior and exchanged them for the products of distant civilizations, such as Chinese porcelain and silk, Persian rugs, and Indian cottons. While the transoceanic journeys occurred largely in Arab vessels, Swahili craft navigated the coastal waterways, concentrating goods for shipment abroad. Swahili cities were class-stratified societies with sharp distinctions between a mercantile elite and commoners.

Culturally as well as economically, Swahili civilization participated in the larger Indian Ocean world. Arab, Indian, and perhaps Persian merchants were welcome visitors, and some settled permanently. Many ruling families of Swahili cities claimed Arab or Persian origins as a way of bolstering their prestige, even while they dined off Chinese porcelain and dressed in Indian cottons. The Swahili language, widely spoken in East Africa today, was grammatically an African tongue within the larger Bantu family of languages, but it was written in Arabic script and contained a number of Arabic loan words. A small bronze lion found in the Swahili city of Shanga and dating to about 1100 illustrates the distinctly cosmopolitan character of Swahili culture. It depicted a clearly African lion, but it was created in a distinctly Indian artistic style and was made from melted-down Chinese copper coins.

Most important, however, Swahili civilization rapidly became Islamic. Introduced by Arab traders, Islam was voluntarily and widely adopted
within the Swahili world. Like Buddhism in Southeast Asia, Islam linked Swahili cities to the larger Indian Ocean world. These East African cities were soon dotted with substantial mosques. When Ibn Battuta, a widely traveled Arab scholar, merchant, and public official, visited the Swahili coast in the early fourteenth century, he found altogether Muslim societies in which religious leaders often spoke Arabic, and all were eager to welcome a learned visitor from the heartland of Islam. But these were African Muslims, not colonies of transplanted Arabs. “The rulers, scholars, officials, and big merchants as well as the port workers, farmers, craftsmen, and slaves, were dark-skinned people speaking African tongues in everyday life.”

Islam sharply divided the Swahili cities from their African neighbors to the west, for neither the new religion nor Swahili culture penetrated much beyond the coast until the nineteenth century. Economically, however, the coastal cities acted as intermediaries between the interior producers of valued goods and the Arab merchants who carried them to distant markets. Particularly in the southern reaches of the Swahili world, this relationship extended the impact of Indian Ocean trade well into the African interior. Hundreds of miles inland, between the Zambezi and Limpopo rivers, lay rich sources of gold, much in demand on the Swahili coast. The emergence of a powerful state, known as Great Zimbabwe, seems clearly connected to the growing trade in gold to the coast as well as to the wealth embodied in its large herds of cattle. At its peak between 1250 and 1350, Great Zimbabwe had the resources and the labor power to construct huge stone enclosures entirely without mortar, with walls sixteen feet thick and thirty-two feet tall. “[It] must have been an astonishing sight,” writes a recent scholar, “for the subordinate chiefs and kings who would have come there to seek favors at court.” Here in the interior of southeastern Africa lay yet another example of the reach and transforming power of Indian Ocean commerce.

Sand Roads: Exchange across the Sahara

In addition to the Silk Roads and the Sea Roads, another important pattern of long-distance trade—this one across the vast reaches of the Sahara—linked North Africa and the Mediterranean world with the land and peoples of interior West Africa. Like the others, these Sand Road commercial networks had a transforming impact, stimulating and enriching West African civilization and connecting it to larger patterns of world history during the postclassical era.

Commercial Beginnings in West Africa

Trans-African trade, like the commerce of the Silk Roads and the Sea Roads, was rooted in environmental variation. The North African coastal regions, long part of Roman or later Arab empires, generated cloth, glassware, weapons, books, and other manufactured goods. The great Sahara held deposits of copper and especially salt, while its oases produced sweet and nutritious dates. Although the sparse populations
of the desert were largely pastoral and nomadic, farther south lived agricultural peoples who grew a variety of crops, produced their own textiles and metal products, and mined a considerable amount of gold. The agricultural regions of sub-Saharan Africa are normally divided into two ecological zones: the savanna grasslands immediately south of the Sahara, which produced grain crops such as millet and sorghum; and the forest areas farther south, where root and tree crops such as yams and kola nuts predominated. These quite varied environments provided the economic incentive for the exchange of goods.

The earliest long-distance trade within this huge region was not across the Sahara at all, but largely among the agricultural peoples themselves in the area later known to Arabs as the Sudan, or “the land of black people.” During the first millennium B.C.E., the peoples of Sudanic West Africa began to exchange metal goods, cotton textiles, gold, and various food products across considerable distances using boats along the Niger River and donkeys overland. On the basis of this trade, a number of independent urban clusters emerged by the early centuries of the Common Era. The most well known was Jenne-jeno, which was located at a crucial point on the Niger River where goods were transshipped from boat to donkey or vice versa. This was the Niger Valley civilization, described in Chapter 7.

**Gold, Salt, and Slaves: Trade and Empire in West Africa**

A major turning point in African commercial life occurred with the introduction of the camel to North Africa and the Sahara in the early centuries of the Common Era. This remarkable animal, which could go for ten days without water, finally made possible the long trek across the Sahara. It was camel-owning dwellers of desert oases who initiated regular trans-Saharan commerce by 300 to 400 C.E.

Several centuries later, North African Arabs, now bearing the new religion of Islam, also organized caravans across the desert.

What they sought, above all else, was gold, which was found in some abundance in the border areas straddling the grasslands and the forests of West Africa. From its source, it was transported by donkey to transshipment points on the southern edge of the Sahara and then transferred to camels for the long journey north across the desert. African ivory, kola nuts, and slaves were likewise in considerable demand in the desert, the Mediterranean basin, and beyond. In return, the peoples of the Sudan received horses, cloth, dates, various manufactured goods, and especially salt from the rich deposits in the Sahara.

Thus the Sahara was no longer simply a barrier to commerce and cross-cultural interaction; it quickly became a major international trade route that fostered new relationships among distant peoples. The caravans that made the desert crossing could be huge, with as many as 5,000 camels and hundreds of people. Traveling mostly at night to avoid the daytime heat, the journey might take up to seventy days, covering fifteen to twenty-five miles per day. For well over 1,000 years, such caravans traversed the desert, linking the interior of West Africa with lands and people far to the north.
As in Southeast Asia and East Africa, long-distance trade across the Sahara provided both incentive and resources for the construction of new and larger political structures. It was the peoples of the western and central Sudan, living between the forests and the desert, who were in the best position to take advantage of these new opportunities. Between roughly 500 and 1600, they constructed a series of states, empires, and city-states that reached from the Atlantic coast to Lake Chad, including Ghana, Mali, Songhay, Kanem, and the city-states of the Hausa people (see Map 8.3).

All of them were monarchies with elaborate court life and varying degrees of administrative complexity and military forces at their disposal. All drew upon the wealth of trans-Saharan trade, taxing the merchants who conducted it. In the wider world, these states soon acquired a reputation for great riches. An Arab traveler in the tenth century C.E. described the ruler of Ghana as “the wealthiest king on the face of the earth because of his treasures and stocks of gold.”

At its high point in the fourteenth century, Mali’s rulers monopolized the import of strategic goods such as horses and metals; levied duties on salt, copper, and other merchandise; and reserved large nuggets of gold for themselves while permitting the free export of gold dust.

As in all civilizations, slavery found a place in West Africa. Early on, most slaves had been women, working as domestic servants and concubines. As West African civilization crystallized, however, male slaves were put to work as state officials, porters, craftsmen, miners harvesting salt from desert deposits, and especially agricultural laborers producing for the royal granaries on large estates or plantations. Most came from non-Islamic and stateless societies farther south, which were raided during the dry season by cavalry-based forces of West African states, though some white slave women from the eastern Mediterranean also made an appearance in Mali. A song in honor of one eleventh-century ruler of Kanem boasted of his slave-raiding achievements.

The best you took (and sent home) as the first fruits of battle. The children crying on their mothers you snatched away from their mothers. You took the slave wife from a slave, and set them in lands far removed from one another.”
Most of these slaves were used within this emerging West African civilization, but a trade in slaves also developed across the Sahara. Between 1100 and 1400, perhaps 5,500 slaves per year made the perilous trek across the desert. When the famous Muslim traveler Ibn Battuta visited Mali in the fourteenth century, he returned home to Morocco with a caravan that included 600 female slaves, who walked across the burning desert, while he rode a camel. Most such slaves were put to work in the homes of the wealthy in Islamic North Africa, but a small number were sold in Europe. Those who arrived in Ireland, for example, were termed “blue men.” Far more significant in Europe were slaves from the Slavic-speaking regions along the northern coast of the Black Sea. They were so numerous that the word “slave” in many European languages derives from the term “Slav.” Not until the Atlantic slave trade developed after the 1440s did Africans become the major source of slaves for Europeans.

These states of Sudanic Africa developed substantial urban and commercial centers—such as Koumbi-Saleh, Jenne, Timbuktu, Gao, Gobir, and Kano—where traders congregated and goods were exchanged. Some of these cities also became centers of manufacturing, creating finely wrought beads, iron tools, or cotton textiles, some of which entered the circuits of commerce. Visitors described them as cosmopolitan places where court officials, artisans, scholars, students, and local and foreign merchants all rubbed elbows. As in East Africa, Islam accompanied trade and became an important element in the urban culture of West Africa. The growth of long-distance trade had stimulated the development of an African civilization, which was linked to the wider networks of exchange in the Eastern Hemisphere.

An American Network: Commerce and Connection in the Western Hemisphere

Before the voyages of Columbus, the world of the Americas developed quite separately from that of the Eastern Hemisphere. Despite intriguing hints of occasional contacts, no sustained interaction between the peoples of these two great landmasses took place. But if the Silk, Sea, and Sand Roads linked the diverse peoples of the Afro-Eurasian world, did a similar network of interaction join and transform the various societies of the Western Hemisphere?

Clearly, direct connections among the various civilizations and cultures of the Americas were less densely woven than in the Afro-Eurasian region. The llama and the potato, both domesticated in the Andes, never reached Mesoamerica; nor did the writing system of the Maya diffuse to Andean civilizations. The Aztecs and the

The Gold of Mali
This detail from the Catalan Atlas, a series of maps issued in Spain in 1375, illustrates Mali’s reputation in Europe for its great wealth in gold. This reputation later propelled Portuguese voyages down the west coast of Africa in search of direct access to that wealth. (Bibliothèque nationale de France)
Incas, contemporary civilizations in the fifteenth century, had little if any direct contact with each other. The limits of these interactions owed something to the absence of horses, donkeys, camels, wheeled vehicles, and large oceangoing vessels, all of which facilitated long-distance trade and travel in Afro-Eurasia.

Geographic or environmental differences added further obstacles. The narrow bottleneck of Panama, largely covered by dense rain forests, surely inhibited contact between South and North America. Furthermore, the north/south orientation of the Americas—which required agricultural practices to move through, and adapt to, quite distinct climatic and vegetation zones—slowed the spread of agricultural products. By contrast, the east/west axis of Eurasia meant that agricultural innovations could diffuse more rapidly because they were entering roughly similar environments. Thus nothing equivalent to the long-distance trade of the Silk, Sea, or Sand Roads of the Eastern Hemisphere arose in the Americas, even though local and regional commerce flourished in many places. Nor did distinct cultural traditions such as Buddhism, Christianity, and Islam spread so widely to integrate distant peoples.

Nonetheless, scholars have discerned “a loosely interactive web stretching from the North American Great Lakes and upper Mississippi south to the Andes.”23 (See Map 8.4.) Partly, it was a matter of slowly spreading cultural elements, such as the gradual diffusion of maize from its Mesoamerican place of origin to the southwestern United States and then on to much of eastern North America as well as to much of South America in the other direction. A game played with rubber balls on an outdoor court has left traces in the Caribbean, Mexico, and northern South America. The spread of particular pottery styles and architectural conventions likewise suggests at least indirect contact over wide distances.

Commerce too played an important role in the making of this “American web.” A major North American chiefdom at Cahokia, near
present-day St. Louis, flourished from about 900 to 1250 at the confluence of the Mississippi, Illinois, and Missouri rivers (see Chapter 7). Cahokia lay at the center of a widespread trading network that brought it shells from the Atlantic coast, copper from the Lake Superior region, buffalo hides from the Great Plains, obsidian from the Rocky Mountains, and mica from the southern Appalachian Mountains. Sturdy dugout canoes plied the rivers of the eastern woodlands, connecting their diverse but related societies. Construction in the Tantoc region of northeastern Mexico resembled the earlier building styles of Cahokia, suggesting the possibility of some interaction between the two regions. Many items from Mesoamerica—copper bells, macaw feathers, tons of shells—have been found in the Chaco region of the southwestern United States, while turquoise flowed in the other direction.

Early European explorers and travelers along the Amazon and Orinoco rivers of South America reported active networks of exchange that may well have operated for many centuries. Caribbean peoples using large oceangoing canoes had long conducted an interisland trade, and the Chincha people undertook ocean-based exchange in copper, beads, and shells along the Pacific coast of Peru and Ecuador on large seagoing rafts. But the most active and dense networks of communication and exchange in the Americas lay within, rather than between, the regions that housed the two great civilizations of the Western Hemisphere—Mesoamerica and the Andes.

During the classical era of Mesoamerican civilization (200–900 C.E.), both the Maya cities in the Yucatán area of Mexico and Guatemala and the huge city-state of Teotihuacán in central Mexico maintained commercial relationships with one another and throughout the region. In addition to this land-based trade, the Maya conducted a seaborne commerce, using large dugout canoes holding forty to fifty people, along both the Atlantic and Pacific coasts. Although most of this trade was in luxury goods rather than basic necessities, it was critical to upholding the position and privileges of royal and noble families. Items such as cotton clothing, precious jewels, and feathers from particular birds marked the status of elite groups and served to attract followers. Controlling access to such high-prestige goods was an important motive for war among Mesoamerican states. Among the Aztecs of the fifteenth century, professional merchants, known as pochteca, undertook large-scale trading expeditions both within and well beyond the borders of their empire, sometimes as agents for the

Inca Roads
Used for transporting goods by pack animal or sending messages by foot, the Inca road network included some 2,000 inns where travelers might find food and shelter. Messengers, operating in relay, could cover as many as 150 miles a day. Here a modern-day citizen of Peru walks along an old Inca trail road. (Loren McIntyre/loremmcintyre.com)
state or for members of the nobility, but more often acting on their own as private businessmen.

Unlike the Aztec Empire, in which private traders largely handled the distribution of goods, economic exchange in the Andean Inca Empire during the fifteenth century was a state-run operation, and no merchant group similar to the Aztec *pochteca* emerged there. Instead, great state storehouses bulged with immense quantities of food, clothing, military supplies, blankets, construction materials, and more, all carefully recorded on *quipus* (knotted cords used to record numerical data) by a highly trained class of accountants. From these state centers, goods were transported as needed by caravans of human porters and llamas across the numerous roads and bridges of the empire. Totaling some 20,000 miles, Inca roads traversed the coastal plain and the high Andes in a north/south direction, while lateral roads linked these diverse environments and extended into the eastern rain forests and plains as well. Despite the general absence of private trade, local exchange took place at highland fairs and along the borders of the empire with groups outside the Inca state.

**Reflections: Economic Globalization—Ancient and Modern**

The densely connected world of the modern era, linked by ties of commerce and culture around the planet, certainly has roots in much earlier patterns. Particularly in the era of third-wave civilizations from 500 to 1500, the Silk, Sea, and Sand roads of the Afro-Eurasian world and the looser networks of the American web linked distant peoples both economically and culturally, prompted the emergence of new states, and sustained elite privileges in many ancient civilizations. In those ways, they resembled the globalized world of modern times.

In other respects, though, the networks and webs of the premodern millennium differed sharply from those of more recent centuries. By and large, most people still produced largely for their own consumption rather than for the market, and a much smaller range of goods was exchanged in the marketplaces of the world. Far fewer people then were required to sell their own labor for wages, an almost universal practice in modern economies. Because of transportation costs and technological limitations, most trade was in luxury goods rather than in necessities. In addition, the circuits of commerce were rather more limited than the truly global patterns of exchange that emerged after 1500.

Furthermore, the world economy of the modern era increasingly had a single center—industrialized Western European countries—which came to dominate much of the world both economically and politically during the nineteenth century. Though never completely equal, the economic relationships of earlier times occurred among much more equivalent units. For example, no one region dominated the complex pattern of Indian Ocean exchange, although India and China generally offered manufactured goods, while Southeast Asia and East Africa contributed agricultural commodities.
control of the Silk Roads and the Inca domination of the Andes for a century, no single power exercised political control over the other major networks of world commerce.

The world of third-wave civilizations, in short, was a more balanced, multicentered world than that of the modern era. Although massive inequalities occurred within particular regions or societies, relationships among the major civilizations operated on a rather more equal basis than in the globalized world of the past several centuries. With the rise of China and India as major players in the world economy of the twenty-first century, are we perhaps returning to that earlier pattern?

**Second Thoughts**

What’s the Significance?

- Silk Roads
- Srivijaya
- Sand Roads
- Ghana, Mali, Songhay
- Black Death
- Borobudur
- Swahili civilization
- trans-Saharan slave trade
- Indian Ocean trading network
- Great Zimbabwe
- American web

**Big Picture Questions**

1. What motivated and sustained the long-distance commerce of the Silk Roads, Sea Roads, and Sand Roads?
2. Why did the Eastern Hemisphere develop long-distance trade more extensively than did the societies of the Western Hemisphere?
3. In what ways did commercial exchange foster other changes?
4. In what ways was Afro-Eurasia a single interacting zone, and in what respects was it a vast region of separate cultures and civilizations?

**Next Steps: For Further Study**


Liu Xinru and Lynda Shaffer, *Connections across Eurasia* (2007). A brief, accessible, and up-to-date account by two major scholars of the Silk Road trading network.

*Bridging World History*, http://www.learner.org/channel/courses/worldhistory. Units 9 and 10 of this Web-based guide to world history provide an illustrated examination of global trade in the postclassical millennium.