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Reaching Out: Cross-Cultural Interactions



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One of the great world travelers of all time was the Moroccan legal scholar Ibn Battuta. Born in 1304 at Tangier, Ibn Battuta followed family tradition and studied Islamic law. In 1325 he left Morocco, perhaps for the first time, to make a pilgrimage to Mecca. He traveled by caravan across north Africa and through Egypt, Palestine, and Syria, arriving at Mecca in 1326. After completing his hajj, Ibn Battuta did not head for home but spent a year visiting Mesopotamia and Persia, then traveled by ship through the Red Sea and down the east African coast as far south as Kilwa. By 1330 he had returned to Mecca, but he did not stay there long. When he learned that the sultan of Delhi offered handsome rewards to foreign legal scholars, he set off for India. Instead of traveling there directly by sailing across the Arabian Sea, however, he followed a long and circuitous land route that took him through Egypt, Syria, Anatolia, Constantinople, the Black Sea, and the great trading cities of central Asia, Bokhara and Samarkand. Only in 1333 did he arrive in Delhi, from the north.

For the next eight years, Ibn Battuta remained in India, serving mostly as a qadi (judge) in the government of Muhammad Ibn Tughluq, the sultan of Delhi. In 1341 Muhammad appointed him to head an enormous embassy to China, but a violent storm destroyed the party's ships as they prepared to depart Calicut for the sea voyage to China. All personal goods and diplomatic presents sank with the ships, and many of the passengers drowned. (Ibn Battuta survived because he was on shore attending Friday prayers at the mosque when the storm struck.) For the next several years, Ibn Battuta made his way around southern India, Ceylon, and the Maldives Islands, where he served as a qadi for the recently founded Islamic sultanate, before continuing to China on his own about 1345. He visited the bustling southern Chinese port cities of Quanzhou and Guangzhou, where he found large communities of Muslim merchants, before returning to Morocco in 1349 by way of southern India, the Persian Gulf, Syria, Egypt, and Mecca.

Still, Ibn Battuta's travels were not complete. In 1350 he made a short trip to the kingdom of Granada in southern Spain, and in 1353 he joined a camel caravan across the Sahara desert to visit the Mali empire, returning to Morocco in 1355. During his travels Ibn Battuta visited the equivalent of forty-four modern countries and logged more than 117,000 kilometers (73,000 miles). His account of his adventures stands with Marco Polo's book among the classic works of travel literature.

Between 1000 and 1500 C.E., the peoples of the eastern hemisphere traveled, traded, communicated, and interacted more regularly and intensively than ever before. The large empires of the Mongols and other nomadic peoples provided a political foundation for this

OPPOSITE: A giraffe from east Africa sent as a present to China in 1414 and painted by a Chinese artist at the Ming zoo.

cross-cultural interaction. When they conquered and pacified vast regions, nomadic peoples provided safe roads for merchants, diplomats, missionaries, and other travelers. Quite apart from the nomadic empires, improvements in maritime technology led to increased traffic in the sea-lanes of the Indian Ocean and the South China Sea. As a result, long-distance travel became much more common than in earlier eras, and individual travelers such as Ibn Battuta and Marco Polo sometimes ventured throughout much of the eastern hemisphere.

Merchants and travelers exchanged more than trade goods. They diffused technologies and spread religious faiths. They also exchanged diseases and facilitated the spread of pathogens that caused widespread and deadly epidemics. During the middle decades of the fourteenth century, bubonic plague traveled the trade routes from western China to central Asia, southwest Asia, north Africa, and Europe. During its initial, furious onslaught, bubonic plague ravaged societies wherever it struck, and it continued to cause epidemics for three centuries and more.

Gradually, however, societies recovered from the plague. By the early fifteenth century, Chinese and western European peoples in particular had restabilized their societies and begun to renew cross-cultural contacts. In Europe, that effort had profound consequences for modern world history. As they sought entry to the markets of Asia, European mariners not only established direct connections with African and Asian peoples but also sailed to the western hemisphere and the Pacific Ocean. Their voyages brought the peoples of the eastern hemisphere, the western hemisphere, and Oceania into permanent and sustained interaction. Thus cross-cultural interactions of the period 1000 to 1500 pointed toward global interdependence, a principal characteristic of modern world history.

Long-Distance Trade and Travel

Travelers embarked on long-distance journeys for a variety of reasons. Nomadic peoples ranged widely in the course of migrations and campaigns of conquest. East European and African slaves traveled involuntarily to the Mediterranean basin, southwest Asia, India, and sometimes even southern China. Buddhist, Christian, and Muslim pilgrims undertook extraordinary journeys to visit holy shrines. Three of the more important motives for long-distance travel between 1000 and 1500 C.E. were trade, diplomacy, and missionary activity. The cross-cultural interactions that resulted helped spread technological innovations throughout the eastern hemisphere.

Patterns of Long-Distance Trade

Merchants engaged in long-distance trade relied on two principal networks of trade routes. Luxury goods of high value relative to their weight, such as silk textiles and precious stones, often traveled overland on the silk roads used since classical times. Bulkier commodities, such as steel, stone, coral, and building materials, traveled the sea-lanes of the Indian Ocean, since it would have been unprofitable to transport them overland. The silk roads linked all of the Eurasian landmass, and trans-Saharan caravan routes drew west Africa into the larger economy of the eastern hemisphere. The sea-lanes of the Indian Ocean served ports in southeast Asia, India, Arabia, and east Africa while also offering access via the South China Sea to ports in China, Japan, Korea, and the spice-bearing islands of southeast Asia. Thus, in combination, land and sea routes touched almost every corner of the eastern hemisphere.

As the volume of trade increased, the major trading cities and ports grew rapidly, attracting buyers, sellers, brokers, and bankers from parts near and far. Khanbaliq (modern Beijing), Hangzhou, Quanzhou, Melaka, Cambay, Samarkand, Hormuz,



The massive walls of this caravanserai in Cairo protected travelers and their goods, while food, drink, and lodging were available inside for merchants as well as their animals.

Baghdad, Caffa, Cairo, Alexandria, Kilwa, Constantinople, Venice, Timbuktu, and many other cities had large quarters occupied by communities of foreign merchants. When a trading or port city enjoyed a strategic location, maintained good order, and resisted the temptation to levy excessive customs fees, it had the potential to become a major emporium serving long-distance trade networks. A case in point is Melaka (in modern Malaysia). Founded in the 1390s, within a few decades Melaka became the principal clearinghouse of trade in the eastern Indian Ocean. The city's authorities policed the strategic Strait of Melaka and maintained a safe market that welcomed all merchants and levied reasonable fees on goods exchanged there. By the end of the fifteenth century, Melaka had a population of some fifty thousand people, and in the early sixteenth century the Portuguese merchant Tomé Pires reported that more than eighty languages could be heard in the city's streets.

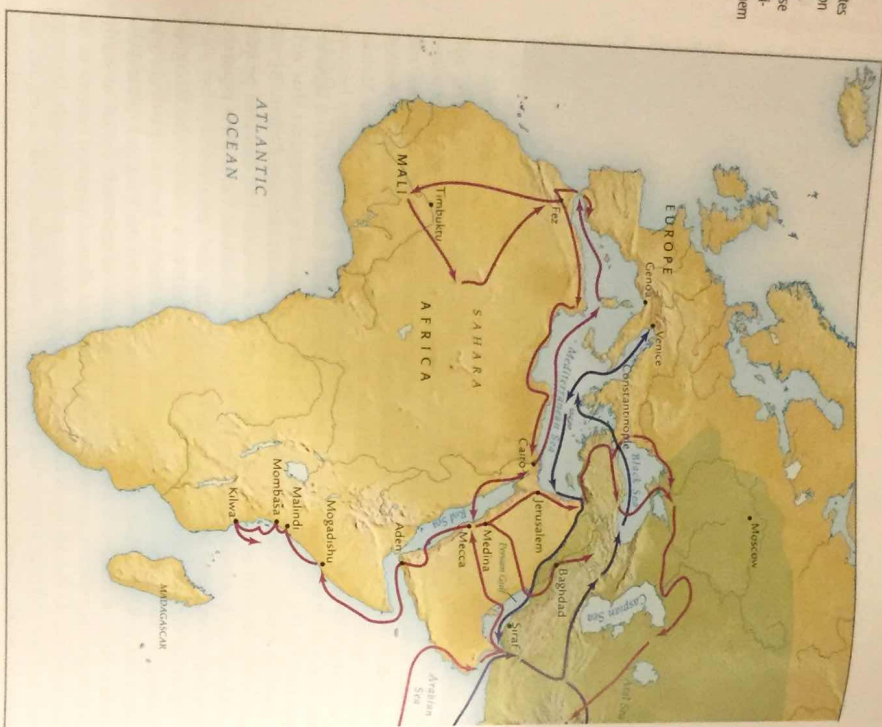
During the early and middle decades of the thirteenth century, the Mongols' campaigns caused economic disruption throughout much of Eurasia—particularly in China and southwest Asia, where Mongol forces toppled the Song and Abbasid dynasties. Mongol conquests inaugurated a long period of economic decline in southwest Asia where the conquerors destroyed cities and allowed irrigation systems to fall into disrepair. As the Mongols consolidated their hold on conquered lands, however, they laid the political foundation for a surge in long-distance trade along the silk roads. Merchants traveling the silk roads faced less risk of banditry or political turbulence than in previous times. Meanwhile, strong economies in China, India, and western Europe fueled demand for foreign commodities. Many merchants traveled the whole distance from Europe to China in pursuit of profit.

The best-known long-distance traveler of Mongol times was the Venetian Marco Polo (1253–1324). Marco's father, Niccolò, and uncle Matteo were among the first European merchants to visit China. Between 1260 and 1269 they traveled and traded throughout Mongol lands, and they met Khubilai Khan as he was consolidating his hold on China. When they returned to China in 1271, seventeen-year-old Marco Polo accompanied them. The great khan took a special liking to Marco, who was a marvelous conversationalist and storyteller. Khubilai allowed Marco to pursue his mercantile interests in China and also sent him on numerous diplomatic missions, partly because Marco regaled him with stories about the distant parts of his realm. After seventeen years in China, the Polos decided to return to Venice, and Khubilai

Marco Polo

Map 22.1 **Travels of Marco Polo and Ibn Battuta.**

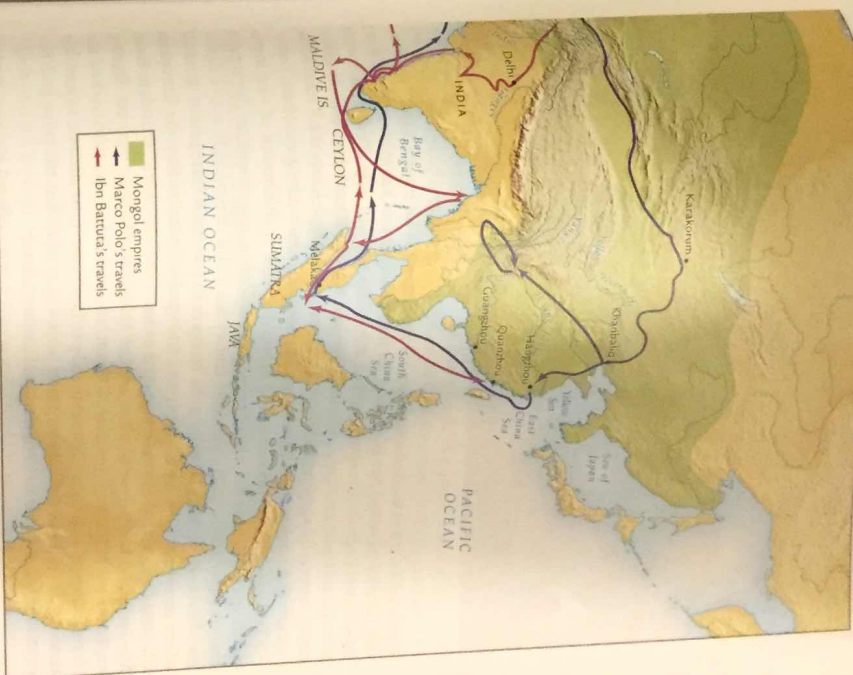
Compare the routes taken by Marco Polo and Ibn Battuta during their travels. How did the two men choose where to travel? What conditions made it possible for them to travel so far from their homes?



granted them permission to leave. They went back on the sea route by way of Sumatra, Ceylon, India, and Arabia, arriving in Venice in 1295.

A historical accident has preserved the story of Marco Polo's travels. After his return from China, Marco was captured and made a prisoner of war during a conflict between his native Venice and its commercial rival, Genoa. While imprisoned, Marco related tales of his travels to his fellow prisoners. One of them was a writer of romances, and he compiled the stories into a large volume that circulated rapidly throughout Europe.

In spite of occasional exaggerations and tall tales, Marco's stories deeply influenced European readers. Marco always mentioned the textiles, spices, gems, and other goods he observed during his travels, and European merchants took note, eager to participate in the lucrative trade networks of Eurasia. The Polos were among

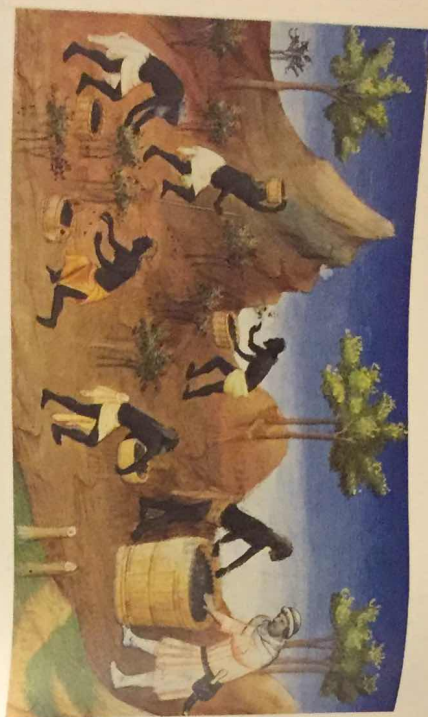


the first Europeans to visit China, but they were not the last. In their wake came hundreds of others, mostly Italians. In most cases their stories do not survive, but their travels helped to increase European participation in the larger economy of the eastern hemisphere.

Political and Diplomatic Travel

Marco Polo came from a family of merchants, and merchants were among the most avid readers of his stories. Marco himself most likely collaborated closely with Italian merchants during his years in China. Yet his experiences also throw light on long-distance travel undertaken for political and diplomatic purposes. Khubilai Khan and the other Mongol rulers of China did not entirely trust their Chinese subjects and regularly

An illustration from a fourteenth-century French manuscript depicts Marco Polo picking pepper with local workers in southern India.



appointed foreigners to administrative posts. In his account of his travels, Marco reported that Khubilai appointed him governor of the large trading city of Yangzhou. There is no independent evidence to confirm that claim, but Marco may well have filled some sort of administrative position. In addition, he represented Khubilai Khan's interests on diplomatic missions. To support himself in China, then, Marco supplemented his mercantile ventures with various official duties assigned to him by his patron, the great khan.

The emergence of elaborate trading networks and the establishment of vast imperial states created great demand for political and diplomatic representation during the centuries after 1000 C.E. The thirteenth century was a time of especially active diplomacy involving parties as distant as the Mongols and western Europeans, both of whom considered a military alliance against their common Muslim foes. As European Christians sought to revive the crusading movement and recapture Jerusalem from Muslim forces, the Mongols were attacking the Abbasid empire from the east. During the 1240s and 1250s, Pope Innocent IV dispatched a series of envoys who invited the Mongol khans to convert to Christianity and join Europeans in an alliance against the Muslims. The khans declined the invitation, proposing in reply that the pope and European Christians submit to Mongol rule or face destruction.

Although the early round of Mongol-European diplomacy offered little promise of cooperation, the Mongols later initiated another effort. In 1287 the Mongol ilkhan of Persia planned to invade the Muslim-held lands of southwest Asia, capture Jerusalem, and crush Islam as a political force in the region. In hopes of attracting support for the project, he dispatched Rabban Sauma, a Nestorian Christian priest born in the Mongol capital of Khanbaliq but of Turkish ancestry, as an envoy to the pope and European political leaders.

Rabban Sauma met with the kings of France and England, the pope, and other high officials of the Roman Catholic church. He enjoyed a fine reception, but he did not succeed in attracting European support for the ilkhan. Only a few years later, in 1295, Ghazan, the new ilkhan of Persia, converted to Islam, thus precluding any further possibility of an alliance between the Mongols of Persia and European Christians. Nevertheless, the flurry of diplomatic activity illustrates the complexity of political affairs in the eastern hemisphere and the need for diplomatic consultation over long distances.

The expansion of Islamic influence in the eastern hemisphere encouraged a different kind of politically motivated travel. Legal scholars and judges played a crucial role in Islamic societies, since the *sharia* prescribed religious observances and social relations based on the Quran. Conversions to Islam and the establishment of Islamic states in India, southeast Asia, and sub-Saharan Africa created a demand for judges educated in Islamic law. After about the eleventh century, educated Muslims from southwest Asia and north Africa regularly traveled to recently converted lands to help instill Islamic values.

Best known of the Muslim travelers was Ibn Battuta (1304–1369). Islamic rulers governed most of the lands Ibn Battuta visited—including India, the Maldives Islands, the Swahili city-states of east Africa, and the Mali empire—but very few Muslims educated in the law were available in those lands. With his legal credentials, Ibn Battuta had little difficulty finding government positions. As *qadi* and advisor to the sultan of Delhi, he supervised the affairs of a wealthy mosque and heard cases at law, which he strictly enforced according to Islamic standards of justice. On one occasion Ibn Battuta sentenced a man to receive eighty lashes because he had drunk wine eight years earlier.

After leaving northern India, Ibn Battuta obtained a post as *qadi* in the Maldives Islands. There he heard cases at law and worked zealously to promote proper observance of Islam. He ordered lashings for men who did not attend Friday prayers, and he once sentenced a thief to lose his right hand in accordance with punishment prescribed by the *sharia*. He also attempted, unsuccessfully, to persuade island women scrubbed by the standards of modesty observed in other Islamic lands by covering their breasts. In both east and west Africa, Ibn Battuta consulted with Muslim rulers and offered advice about government, women's dress, and proper relationships between the sexes. Like many legal scholars whose stories went unrecorded, Ibn Battuta provided guidance in the ways of Islam in societies recently converted to the faith.

Ibn Battuta

Missionary Campaigns

Islamic values spread not only through the efforts of legal scholars but also through the missionary activities of Sufi mystics. As in the early days of Islam, Sufis in the period from 1000 to 1500 ventured to recently conquered or converted lands and sought to win a popular following for the faith in India, southeast Asia, and sub-Saharan Africa. Sufis did not insist on a strict, doctrinally correct understanding of Islam but, rather, emphasized piety and devotion to Allah. They even tolerated continuing reverence of traditional deities, whom the Sufis treated as manifestations of Allah and his powers. By taking a flexible approach to their missions, the Sufis spread Islamic values without facing the resistance that unyielding and doctrinaire campaigns would likely have provoked.

Meanwhile, Roman Catholic missionaries also traveled long distances in the interludes of spreading Christianity. Missionaries accompanied the crusaders and other forces to all the lands where Europeans extended their influence after the year 1000. In lands where European conquerors maintained a long-term presence—such as the Baltic lands, the Balkan region, Sicily, and Spain—missionaries attracted converts in large numbers and Roman Catholic Christianity became securely established. In the eastern Mediterranean region, however, where crusaders were unable to hold their conquests permanently, Christianity remained a minority faith.

The most ambitious missions sought to convert Mongols and Chinese to Roman Catholic Christianity. Until the arrival of European merchants and diplomats in the thirteenth century, probably no Roman Catholic Christian had ever ventured as far east as China, although Nestorian Christians from central Asia had maintained communities

Sufi Missionaries

Christian Missionaries

Mongol-Christian Diplomacy

Rabban Sauma

Sources from the Past

Ibn Battuta on Customs in the Mali Empire

Long-distance travelers often encountered unfamiliar customs in foreign societies. The Moroccan traveler Ibn Battuta reported heartily when staying with hosts who honored the values of his own Muslim society, but he had little tolerance for those who did not. Here he describes what he witnessed at the sultan's court in the Mali empire.

The Blacks are the most respectful of people to their king and abase themselves most before him. They swear by him, saying, *Maria Sulaiman ki* [the law of Mansa Sulaiman, the Mali sultan]. If he summons one of them at his session in the cupola . . . the man summoned moves his robe and puts on a shabby one, takes off his turban, puts on a dirty skull-cap and goes in with his robe and his trousers lifted half way to his knees. He comes forward humbly and abjectly, and strikes the ground hard with his elbows. He stands as if he were prostrating himself in prayer, and hears what the Sultan answers him, he takes his robe off his back, and throws dust on his head and back like someone making his ablutions with water. I was astonished that they did not blind themselves.

When the Sultan makes a speech in his audience those present take off their turbans from their heads and listen in silence. Sometimes one of them stands before him, recounts what he has done for his service, and says: "On such and such a day I did such and such, and I killed so and so on such and such a day." Those who know vouch for the truth of that and he does it in this way. One of them draws the string of his bow, then lets it go as he would do if he were shooting. If the Sultan says to him: "You are right" or thanks him, he takes off his robe and pours dust on himself. That is good manners among them. . . .

Among their good practices are their avoidance of injustice; there is no people more averse to it, and their Sultan does not allow anyone to practice it in any measure; [other good practices include] the universal security in their country, for neither the traveller nor the

SOURCE: H. A. R. Gibb, trans. *The Travels of Ibn Battuta, A.D. 1325-1354*, 4 vols. London: Hakluyt Society, 1958-94, 4:960, 965-66.

there since the seventh century. As more Europeans traveled to China, their expatriate communities created a demand for Roman Catholic services. Many of the Roman Catholic priests who traveled to China probably intended to serve the needs of those communities, but some of them also sought to attract converts.

resident there has to fear thieves or bandits . . . their punctiliousness in praying, their perseverance in joining the congregation, and in compelling their children to do so; if a man does not come early to the mosque he will not find a place to pray because of the dense crowd; it is customary for each man to send his servant with his prayer-mat to spread it out in a place reserved for him until he goes to the mosque himself. . . . They dress in clean white clothes on Fridays; if one of them has only a threadbare shirt he washes it and cleans it and wears it for prayer on Friday. They pay great attention to memorizing the Holy Qur'an. . . .

Among their bad practices are that the women servants, slave-girls and young daughters appear naked before people, exposing their genitals. I used to see many like this in [the fasting month of] Ramadan, for it is customary for the *firiya* [commanders] to break the fast in the Sultan's palace, where their food is brought to them by twenty or more slave-girls, who are naked. Women who come before the Sultan are naked and unveiled, and so are his daughters. On the night of the twenty-seventh of Ramadan I have seen about a hundred naked slave-girls come out of his palace with food, with them were two daughters of the Sultan with full breasts and they too had no veil. They put dust and ashes on their heads as a matter of good manners. [Another bad practice:] Many of them eat carrion, dogs and donkeys.

FOR FURTHER REFLECTION

Discuss the various ways in which Islamic influences and established local customs came together in the Mali empire.

Most active of the Roman Catholic missionaries in China was John of Montecorvino, an Italian Franciscan who went to China in 1291, became the first archbishop of Khanbalik in 1307, and died there in 1328. While serving the community of Roman Catholic expatriates in China, John worked energetically to evangelize Christianity in the host society. He translated the New Testament and the book of Psalms into Turkish, a language commonly used at the Mongol court, and built several churches in China. He took in young boys from Mongol and Chinese families, baptized them, and taught them Latin and Roman Catholic rituals. He claimed to have baptized six thousand individuals by 1305, and he invited the great Khan himself to convert to Christianity. Although popular and widely respected among Europeans, Chinese, and Mongols alike, John attracted few Asian peoples to Christianity.

Roman Catholic authorities in Europe dispatched many other priests and missionaries to China during the early fourteenth century, but like John of Montecorvino, they won few converts. Missions successfully established Christian communities in Scandinavia, eastern Europe, Spain, and the Mediterranean islands that European armies recaptured from Muslims during the centuries after 1000 C.E., but east Asia was too distant for the resources available to the Roman Catholic church. Moreover, east Asian peoples already possessed sophisticated religious and cultural traditions, so Christianity had little appeal. Nevertheless, Christian missions to China continued until the mid-fourteenth century, when the collapse of the Mongols' Yuan dynasty and the eruption of epidemic disease temporarily disrupted long-distance travel across Eurasia.

Long-Distance Travel and Cross-Cultural Exchanges

Long-distance travel of all kinds, whether for commercial, political, diplomatic, or missionary purposes, encouraged cultural exchanges between peoples of different societies. Songs, stories, religious ideas, philosophical views, and scientific knowledge all passed readily among travelers who ventured into the larger world during the era from 1000 to 1500 C.E. The troubadours of western Europe, for example, drew on the poetry, music, and love songs of Muslim performers when developing the literature of courtly love. Similarly, European scientists avidly consulted the Muslim and Jewish counterparts in Sicily and Spain to learn about their understanding of the natural world.

Large numbers of travelers also facilitated agricultural and technological diffusion during the period from 1000 to 1500. Indeed, technological diffusion sometimes facilitated long-distance travel. The magnetic compass, for example, invented in China during the Tang or the Song dynasty, spread throughout the Indian Ocean basin during the eleventh century, and by the mid-twelfth century European mariners used



Caterina Vilioni, daughter of the Venetian merchant Domenico Vilioni, died in the Chinese trading city of Yangzhou in 1342. Her tombstone, which shows she was part of the Roman Catholic community in Yangzhou, came to light during a construction project in 1951.

John of Montecorvino

Sources from the Past

John of Montecorvino on His Mission in China

The Franciscan John of Montecorvino (1247–1328) served as a Roman Catholic missionary in Armenia, Persia, and India before going to China in 1291. There he served as priest to expatriate European Christians, and he sought to attract converts to Christianity from the Mongol and Chinese communities. In a letter of 8 January 1305 asking for support from his fellow Franciscans in Italy, John outlined some of his activities during the previous thirteen years.

[After spending thirteen months in India] I proceeded on my further journey and made my way to China, the realm of the emperor of the Mongols who is called the great khan. To him I presented the letter of our lord the pope and invited him to adopt the Catholic faith of our Lord Jesus Christ, but he had grown too old in idleness. However, he bestows many kindnesses upon the Christians, and these two years past I have gotten along well with him . . .

I have built a church in the city of Khanbalik, in which the king has his chief residence. This I completed six years ago, and I have built a bell tower to it and put three bells in it. I have baptized there, as well as I can estimate, up to this time some 6,000 persons. . . . And I am often still engaged in baptizing.

Also I have gradually bought one hundred and fifty boys, the children of pagan parents and of ages varying from seven to eleven, who had never learned any religion. These boys I have baptized, and I have taught them Greek and Latin after our manner. Also I have written out Psalters for them, with thirty hymns and breviaries [prayer books]. By help of these, eleven of the boys already know our service and form a choir and take their weekly turn of duty as they do in convents, whether I am there or not. Many of the boys are also employed

SOURCE: Henry Yule and Henri Cordier, eds, *Cathay and the Way Thither*, 4 vols. London: Hakluyt Society, 1913–16, 3:45–50. (Translation slightly modified.)

in writing out Psalters and other suitable things. His Majesty the Emperor moreover delights much to hear them chanting. I have the bells rung at all the canonical hours, and with my congregation of babies and sucklings I perform divine service, and the chanting we do by ear because I have no service book with the notes . . .

Indeed if I had but two or three comrades to aid me, it is possible that the emperor khan himself would have been baptized by this time! I ask then for such brethren to come, if any are willing to come, such I mean as will make it their great business to lead exemplary lives. . . .

I have myself grown old and grey, more with toil and trouble than with years, for I am not more than fifty-eight. I have got a competent knowledge of the language and script which is most generally used by the Tartars. And I have already translated into that language and script the New Testament and the Psalter and have caused them to be written out in the fairest penmanship they have, and so by writing, reading, and preaching, I bear open and public testimony to the law of Christ.

FOR FURTHER REFLECTION

To what extent did John of Montecorvino's missionary work reflect conditions different from those that motivated St. Francis of Assisi to found a mendicant order?

Spread of Crops

compasses in the Mediterranean and the Atlantic Ocean. Diffusion of the compass was a boon to maritime trade, since it allowed mariners to sail over long stretches of deep water with confidence in their ability to find their destinations and return home safely.

Long-distance journeys enabled Muslim travelers to introduce new food and commercial crops to sub-Saharan Africa. Food crops included citrus fruits and Asian strains of rice, which enriched diets in west Africa after the eleventh century. Muslims also introduced cotton to west Africa, and by 1100 cotton fabrics had become popular with the ruling elites and wealthy merchants of the west African kingdoms. Cotton grew well in the savannas, and by 1500 it was the principal textile produced in sub-Saharan Africa.



A thirteenth-century manuscript illustration depicts two lute players: Muslim (left) and Christian (right). Muslim artists deeply influenced Christian poetry and music during the middle ages.

Muslims were also instrumental in the continuing diffusion of sugarcane. Muslim merchants and other travelers had begun large-scale cultivation of sugarcane in south-west Asia and north Africa during the Abbasid caliphate. They experimented with the plant in west Africa but had limited success because of adverse environmental conditions.

After the twelfth century, however, Muslims facilitated the westward spread of sugarcane by acquainting European crusaders with crystallized sugar refined from cane. Up to that time Europeans had little access to refined sugar, and they relied on honey and fruits as sweeteners. They immediately appreciated the convenience of refined sugar. Italian entrepreneurs began to organize sugarcane plantations on Mediterranean islands such as Sicily, Cyprus, Crete, and Rhodes. Rapidly increasing demand for refined sugar encouraged investors to seek suitable locations throughout the Mediterranean basin. The cultivation of sugarcane had deep social and economic implications. Besides influencing local economic development in lands where it spread, it touched distant societies. Like their Muslim predecessors, European sugar producers often staffed their plantations with slave laborers, and the growth of plantations fueled an increasing demand for Muslim war captives and black Africans who could supply labor services.

Although Muslim merchants and travelers were especially prominent agents of diffusion, Mongols also contributed to the process, notably by helping to spread gunpowder technologies west from China. Mongol invaders learned about gunpowder from Chinese military engineers in the early thirteenth century and soon incorporated

Sugarcane

Gunpowder Technologies

English forces besiege a French citadel during the Hundred Years War (1337–1453). Note that the besiegers on the left side of this manuscript illustration employ cannons and smaller firearms that launch gunpowder bombs.



gunpowder-based weapons into their arsenal: as early as 1214 Chinggis Khan's armies included an artillery unit. During the 1250s, as they campaigned in Persia and southwest Asia, the Mongols used catapults and trebuchets to lob gunpowder bombs into cities under siege. Muslim armies soon developed similar weapons in response.

By the mid-thirteenth century gunpowder had reached Europe—possibly by way of Mongol-ruled Russia—and Europeans had begun to experiment with gunpowder-fueled rockets. By the early fourteenth century, armies from China to Europe possessed primitive cannons. Although not especially accurate, the weapons were powerful enough to blow holes in the defensive walls of cities under siege. Thus, with the assistance of Mongol warriors, gunpowder technology rapidly spread from its homeland in China across the entire Eurasian landmass.

Agricultural and technological diffusions of the era 1000 to 1500 were by no means unique processes in world history. For millennia, agricultural crops and technological skills had spread widely whenever peoples of different societies interacted with one another. Because of the particularly intense interactions of the period from 1000 to 1500, however, agricultural and technological diffusion profoundly influenced the lives of peoples throughout the eastern hemisphere. The spread of food crops enriched diets and supported increasing populations, and the spread of industrial crops such as cotton promoted economic development. The diffusion of the magnetic compass enabled mariners to sail the seas more safely and effectively, and the spread of gunpowder technology changed forever the nature of war.

Crisis and Recovery

As Eurasian peoples traveled over long distances, they not only exchanged trade goods, agricultural crops, and technological expertise but also unwittingly helped disease pathogens to spread. When diseases broke out among previously unexposed populations, they often caused deadly epidemics that severely disrupted whole societies.

During the fourteenth century, bubonic plague erupted in epidemics that ravaged societies throughout most of Asia, Europe, and north Africa. Epidemic plague struck again, albeit less severely, in the fifteenth century, but by the fifteenth century Chinese and European societies had begun to recover from its effects and would thereafter influence the larger world.

Bubonic Plague

About 1300 C.E. a process of global climatic change caused temperatures to decline significantly and abruptly throughout much of the world. For more than five hundred years, the earth experienced a "little ice age," when temperatures were much cooler than in the era from 1000 to 1300 C.E. With markedly cooler temperatures and shorter growing seasons, agricultural production declined in many lands, leading to famine and sometimes even starvation. In some northerly lands, agriculture ceased to be a practical possibility; after the onset of the little ice age, Norse settlers gradually abandoned the colonies they had occupied in Greenland since the tenth century. As they struggled to cope with the cooling climate, peoples in much of the eastern hemisphere suddenly encountered a new challenge in the form of devastating epidemic disease. Bubonic plague spread from the Yunnan region of southwestern China, where it probably had been endemic for centuries. The plague bacillus infects rodents such as rats, squirrels, and prairie dogs, and fleas transmit the pathogen from one rodent to another. If rodent populations decline, fleas seek other hosts and sometimes spread the disease to human victims. In the early fourteenth century, Mongol military campaigns helped spread plague from Yunnan to China's interior; an epidemic in 1331 reportedly killed 90 percent of the population in Hebei province in northeastern China, near modern Beijing. During the 1350s epidemics broke out in widely scattered regions of China, and contemporaries reported that plague carried away two-thirds of the population in some afflicted areas.

During the 1340s, Mongols, merchants, and other travelers spread the disease along trade routes to points west of China. It thrived in the cases and trading cities of central Asia, where domestic animals and rodents provided abundant breeding grounds for fleas and the plague bacillus. By 1346 it had reached the Black Sea ports of Caffa and Tana. In 1347 Italian merchants fled plague-infected Black Sea ports and unwittingly spread the disease throughout the Mediterranean basin. By 1348, following the trade routes, plague had sparked epidemics in most of western Europe.

Wherever it appeared, bubonic plague struck with frightful effects. Victims developed inflamed lymph nodes, particularly in the neck, armpit, and groin areas, and most died within a few days after the onset of symptoms. Internal hemorrhaging often discolored the inflammations known as buboes—which gave rise to the term *bubonic*—and because of the black or purple swellings, Europeans referred to the plague as the "Black Death." Bubonic plague typically killed 60 to 70 percent of its human victims and had the potential to ravage a society within a few months. In some small villages and towns, disease wiped out the entire population. A spate of new births generally followed outbreaks of plague as societies tried to replenish their numbers, but plague also returned and claimed new victims. In Europe plague erupted intermittently from the 1340s until the late seventeenth century.

Some parts of the eastern hemisphere did not suffer directly from plague-bearing rodents and fleas, so the northernmost parts of Europe escaped the plague's worst effects. For reasons unknown, India also seems to have avoided serious difficulties. In fact, the Indian population grew from 91 million in the year 1300 to 97 million a century later and 105 million in 1500. Epidemics also largely bypassed sub-Saharan Africa,

The Little Ice Age

Origins of Epidemic
Bubonic Plague

Spread of Plague

Population Decline



A painting of 1503 graphically communicates the horror felt by medieval Europeans when bubonic plague struck their communities. Here death takes away a cartload of victims while others die beside the road.

Islamic societies in southwest Asia, Egypt, and north Africa also suffered devastating population losses, and demographic recovery took much longer there than in China and Europe. In Egypt human population probably did not reach preplague levels until the nineteenth century.

Because of the heavy demographic toll that it levied, bubonic plague disrupted societies and economies throughout Eurasia and north Africa. Epidemics killed the young, the weak, and the old in especially high numbers, but they spared no group. Peasants and laborers, artisans and crafts workers, merchants and bankers, priests and nuns, rulers and bureaucrats all fell before the plague's onslaught. The disease caused severe labor shortages, which in turn generated social unrest.

In western Europe, for example, urban workers demanded higher wages, and many left their homes in search of better conditions. Political authorities responded by freezing wages and forbidding workers to leave their homes. For their part, peasants in the countryside also sought to improve their circumstances by moving to regions where landlords offered better terms. Landlords responded to that challenge by restricting the freedom of peasants to move and by reimposing labor requirements: in effect, the lords sought to reinstate conditions of serfdom that they had allowed to lapse before the arrival of plague. As a result of sharply conflicting interests, disgruntled workers and peasants mounted a series of rebellions that rocked both the towns and

even though plague had long been endemic in the Great Lakes region of east Africa.

In lands hard hit by plague, however, it took a century and more to begin recovery from the demographic consequences of epidemic disease. In 1300 China's population, already reduced by conflicts with the Mongols since the early thirteenth century, stood at eighty-five million. In 1400, after about seventy years of epidemic plague, Chinese numbers amounted to only seventy-five million. A century later demographic recovery was under way, and China's population rebounded to one hundred million.

European society also reeled from the effects of bubonic plague. From seventy-nine million in 1300, Europe's population dropped by almost 25 percent to sixty million in 1400. As in China, demographic recovery in Europe was under way in 1500 when the European population climbed to eighty-one million.

the countryside of western Europe. Authorities eventually extinguished the revolts not only after considerable social disruption and loss of life. Epidemics by the seventeenth century the plague had lost much of its ferocity. Epidemics occurred more sporadically, and they did not seriously diminish human populations. The 1940s antibiotic drugs have brought the disease largely under control since human populations, although it survives in rodent communities throughout much of the world.

Recovery in China: The Ming Dynasty

In the mid-fourteenth century the Mongols' Yuan dynasty was experiencing very difficult times. Financial mismanagement led to serious economic difficulties, and political conflicts led to assassinations and factional fighting among the Mongols. In 1368, with bubonic plague raging, the Yuan dynasty collapsed, and the Mongols departed China en masse and returned to the steppes, leaving China in a state of both demographic and political turmoil. An increasing birthrate soon helped to replenish human numbers. Political recovery accompanied the demographic rebound.

When the Yuan dynasty fell, the governance of China returned to Chinese hands. The new emperor came from a family so poor that he spent much of his youth as a beggar. Orphaned, he entered a Buddhist monastery to assure himself of food, clothing, and shelter. Because of his size and strength, he came to the notice of military commanders, and he made his way through the ranks to lead the rebellious forces that toppled the Yuan dynasty. In 1368 he became Emperor Hongwu, and he proclaimed the establishment of the Ming ("brilliant") dynasty, which lasted until 1644.

Hongwu immediately set about eliminating all traces of Mongol rule and establishing a government on the model of traditional Chinese dynasties. Like the founders of several earlier Chinese dynasties, Hongwu had little interest in scholarly matters, but he reestablished the Confucian educational and civil service systems to ensure a supply of talented officials and bureaucrats. At the same time, he moved to centralize authority more tightly than ever before in Chinese history. In 1380, when he suspected his chief minister of involvement in a treasonous plot, Hongwu executed the minister and his bureaucratic allies and also abolished the minister's position altogether. From that time forward the Ming emperors ruled directly, without the aid of chief ministers, and they closely supervised imperial affairs.

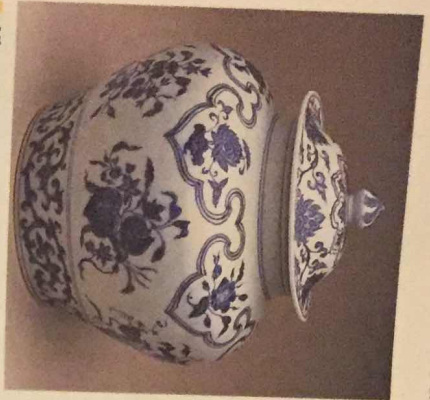
The Ming emperors insisted on absolute obedience to the policies and initiatives of the central government. They relied heavily on the mandarins, a special class of powerful officials sent out as emissaries of the central government to ensure that local officials implemented imperial policy. The Ming emperors also turned to eunuchs for governmental services. Earlier Chinese emperors, as well as rulers of other lands, had long relied on eunuchs, since they could not generate families and build power bases that might challenge ruling houses. In keeping with their centralizing policy, however, the Ming emperors employed eunuchs much more extensively than any of their predecessors, in the expectation that servants whose fortunes depended exclusively on the emperors' favor would work especially diligently to advance the emperors' interests.

The employment of mandarins and eunuchs enhanced the authority of the central government. The tightly centralized administration instituted by the early Ming emperors lasted more than five hundred years. Although the dynasty fell in 1644 to Manchu invaders, who founded the Qing dynasty, the Manchus retained the administrative framework of the Ming state, which largely survived until the collapse of the Qing dynasty in 1911.

Hongwu

Ming Centralization

Mandarins and Eunuchs



Ming artisans won worldwide fame for their blue-and-white porcelain, which inspired the founders of the Delft porcelain factory in the Netherlands. This covered jar dates from the early fifteenth century.

While building a centralized administration, the Ming emperors also worked toward economic recovery from nomadic rule and epidemic disease. The new rulers conscripted laborers to rebuild irrigation systems that had fallen into disrepair during the previous century, and agricultural production surged as a result. At the same time, they promoted the manufacture of porcelain, lacquerware, and fine silk and cotton textiles. They did not actively promote trade with other lands, but private Chinese merchants eagerly sought commercial opportunities and conducted a thriving business marketing Chinese products in ports and trading cities from Japan to the islands of southeast Asia. Meanwhile, domestic trade surged within China, reflecting increasing productivity and prosperity.

In addition to political and economic recovery, the Ming dynasty sponsored a kind of cultural revival in China. Emperor Hongwu tried to eradicate all signs of the recent nomadic occupation by discouraging the use of Mongol names and the wearing of Mongol dress. Ming emperors actively promoted Chinese cultural traditions, particularly the Confucian and neo-Confucian schools. Hongwu's successor, Yongle, organized the preparation of a vast encyclopedia that compiled all significant works of Chinese history, philosophy, and literature. This *Yongle Encyclopedia* ran to almost twenty-three thousand manuscript rolls, each equivalent to a medium-size book. The government originally planned to issue a printed edition of the encyclopedia but abandoned the project because of its enormous expense. Nevertheless, the *Yongle Encyclopedia* was a remarkable anthology, and it signaled the Ming rulers' interest in supporting native Chinese cultural traditions.

Recovery in Europe: State Building

Demographic recovery strengthened states in Europe as it did in China. In Europe, however, political authority rested with a series of regional states rather than a centralized empire. By the late fifteenth century, states in Italy, Spain, France, England, and Russia had devised techniques of government that vastly enhanced their power.

During the later middle ages (1300–1500), internal problems as well as bubonic plague complicated European political affairs. The Holy Roman Empire survived in name, but after the mid-thirteenth century effective authority lay with the German princes and the Italian city-states rather than the emperor. In Spain descendants of Muslim conquerors held the kingdom of Granada in the southern portion of the Iberian peninsula. The kings of France and England spared constantly over lands claimed by both. Their hostilities eventually resulted in the Hundred Years' War (1337–1453), a protracted series of intermittent campaigns in which the warring factions sought control of lands in France. Russia had even more difficult problems. In the late 1230s Mongol armies conquered the flourishing commercial center of Kiev,

and descendants of Chinggis Khan extracted tribute from Russia for almost 250 years after. In the fifteenth century, however, regional states in western Europe had greatly

gained rise to a vast power vacuum in Russia. By the late fifteenth century, and some had also laid the foundations for the emergence of powerful monarchies. The state-building efforts of the later middle ages involved especially important elements. The first was the development of fresh sources of income, usually through new taxes levied directly on citizens and subjects, which supplied the income that rulers received from their subordinates. The second was the maintenance of large standing armies, often composed of mercenary forces and equipped with gunpowder weapons, supported by state funds.

The state-building process began in Italy, where profits from industrial production and trade enriched the major cities. The principal Italian states—the city-states of Milan, Venice, and Florence, the papal state based in Rome, and the kingdom of Naples—needed large numbers of officials to administer their complex affairs. They also needed access to military forces that could protect their interests. Beginning as early as the thirteenth century, the Italian city-states financed those needs by levying direct taxes and issuing long-term bonds that they repaid from treasury receipts. With fresh sources of finance, the principal Italian states strengthened their authority within their own boundaries and between them controlled public affairs in most of the Italian peninsula.

During the fourteenth and fifteenth centuries, Italian administrative methods made their way beyond the Alps. Partly because of the enormous expenses they incurred during the Hundred Years' War, the kings of France and England began to levy direct taxes and assemble powerful armies. The French kings taxed sales, hearths, and plow rates and their English counterparts instituted annual taxes on hearths, hearths, and plow rates. Rulers in both lands asserted the authority of the central government over the realm. The English kings did not establish a standing army, but they were able to nobility. The English kings when rebellion threatened public order. In France, however, King Louis XI (reigned 1461–1483) maintained a permanent army of about fifteen thousand powerful forces when rebellion threatened public order. In France, however, King Louis XI (reigned 1461–1483) maintained a permanent army of about fifteen thousand troops, many of them professional mercenary soldiers equipped with firearms. Because the high expense of maintaining such forces was beyond the means of the cause the nobility enjoyed a decisive edge over ambitious subordinates nobility, Louis and his successors enjoyed a decisive edge over ambitious subordinates seeking to challenge royal authority or build local power bases.

The process of state building was most dramatic in Spain, where the marriage in 1469 of Fernando of Aragon and Isabel of Castile united the two wealthiest and most important Iberian realms. Receipts from the sales tax, the primary source of royal income, supported a powerful standing army. Under Fernando and Isabel, popularly known as the Catholic Kings, Christian forces completed the *reconquista* by conquering the kingdom of Granada and absorbing it into their state. The Catholic Kings also projected their authority beyond Iberia. When a French army threatened the kingdom of Naples in 1494, they seized southern Italy, and by 1559 Spanish forces had established their hegemony throughout most of the Italian peninsula. By forces had established their hegemony throughout most of the markets of Asia by nando and Isabel also sought to make a place for Spain in the markets of Asia by sponsoring Christopher Columbus's quest for a western route to China.

Russia

State building took place in Russia as well as in western Europe. After the fourteenth century, as Mongol power waned, Russian princes sought to expand their territories. Most successful of them were the grand princes of Moscow. As early as the mid-fourteenth century, the princes began the process of "gathering the Russian land" by acquiring the territories surrounding their strategically located commercial town of Moscow on the Volga River. In 1480 Grand Prince Ivan III (reigned 1462–1505), later known as Ivan the Great, stopped paying tribute to the Mongol khan. By refusing to acknowledge the khan's supremacy, Ivan in effect declared Russian independence from Mongol rule. He

Taxes and Armies

Italian States

France and England

Spain



The Florentine painter Masaccio was a pioneer of Renaissance art. His fresco *Tribute Money*, produced about 1427, relies on the technique of linear perspective to depict figures in realistic relationship to one another and their surroundings.

then made Moscow the center of a large and powerful state. His territorial annexations were impressive: Moscow, the principality ruled from Moscow, almost tripled in size as he brought Russian-speaking peoples into his realm. The most important addition to his possessions came with the acquisition of the prosperous trading city of Novgorod. A hub of the lucrative fur trade and a member of the Hanseatic League of Baltic commercial cities, Novgorod was an autonomous city-state that governed its affairs through a town council. The city's merchants had strong ties to Poland and Lithuania to the west, and Ivan wanted to make sure that Novgorod's prosperity did not benefit neighboring states. Thus he demanded that the city acknowledge his authority. After crushing a futile uprising organized by Novgorod's merchants, he ended the city's independence in 1478 and absorbed it into the expansive Muscovite state. With the aid of Novgorod's wealth, Ivan was then able to build a strong centralized government modeled on the Byzantine empire. Indeed, Ivan went so far as to call himself *tsar* (sometimes spelled *czar*)—a Russianized form of the term *caesar*, which Byzantine rulers had borrowed from the classical Roman empire to signify their imperial status.

Competition between European states intensified as they tightened their authority in their territories. This competition led to frequent small-scale wars between European states, and it encouraged the rapid development of military and naval technology. As states sought technological advantages over their neighbors, they encouraged the refinement and improvement of weapons, ships, and sails. When one state acquired powerful weapons—such as personal firearms or ships equipped with cannons—neighboring states sought more advanced devices in the interests of security. Thus technological innovations vastly strengthened European armies just as they began to venture again into the larger world.

Recovery in Europe: The Renaissance

Demographic recovery and state-building efforts in Europe coincided with a remarkable cultural flowering known as the Renaissance. The French word *renaissance*

means “rebirth,” and it refers to a round of artistic and intellectual creativity that took place from the fourteenth to the sixteenth century and that reflected and contributed to the development of a sophisticated urban culture in western Europe. Painters, sculptors, architects, and humanists drew inspiration from classical Greek and Roman artists rather than from their medieval predecessors. They admired the convincing realism of classical sculpture and the simplicity of classical architecture. In their efforts to revive classical aesthetic standards, they translated European art. Meanwhile, Renaissance scholars looked to classical rather than medieval literary models, and they sought to update medieval moral thought and adapt it to the needs of a bustling urban society.

Just as they pioneered new techniques of statecraft, the Italian city-states also pioneered Renaissance innovations in art and architecture. In search of realistic depictions, Italian artists studied the human form and represented the emotions of their subjects. Italian painters such as Masaccio (1401–1428) and Leonardo da Vinci (1452–1519) relied on the technique of linear perspective to represent the three dimensions of real life on flat, two-dimensional surfaces. Sculptors such as Donatello (1386–1466) and Michelangelo Buonarroti (1475–1564) sought to depict their subjects in natural poses that reflected the actual workings of human muscles rather than in the awkward and rigid postures often found in earlier sculptures.

Renaissance architects designed buildings in the simple, elegant style preferred by their classical Greek and Roman predecessors. Their most impressive achievement was the construction of domed buildings—awesome structures that enclosed large spaces but kept them open and airy under massive domes. Roman architects had built domes, but their technology and engineering did not survive the collapse of the Roman empire. Inspired by the Pantheon, a handsome Roman temple constructed in the second century C.E., the Florentine architect Filippo Brunelleschi (1377–1446) reinvented equipment and designs for a large dome. During the 1420s and 1430s, he oversaw the construction of a magnificent dome on the cathedral of Florence. Residents of Florence took Brunelleschi's dome as a symbol of the city's wealth and its leadership in artistic and cultural affairs.

Like Renaissance artists and architects, scholars and literary figures known as humanists also drew inspiration from classical models. The term *humanist* referred to scholars interested in the humanities—literature, history, and moral philosophy. They had nothing to do with the secular and often antireligious interests of movements that go under the name humanism today: on the contrary, Renaissance humanists were deeply committed to Christianity. Several humanists worked diligently to prepare accurate texts and translations of the New Testament and other important Christian writings. Most notable of them was Desiderius Erasmus of Rotterdam (1466–1536), who in 1516 published the first edition of the Greek New Testament along with a revised Latin translation and copious annotations. Other humanists drew inspiration from the intense spirituality and high moral standards of early Christianity and promoted those values in their society.

Humanists scorned the dense and often convoluted writing style of the scholastic theologians. Instead, they preferred the elegant and polished language of classical Greek and Roman authors and the early church fathers, whose works they considered more engaging and more persuasive than the weighty tomes of medieval philosophers and theologians. Thus humanists such as the Florentine Francesco Petrarca, also known in

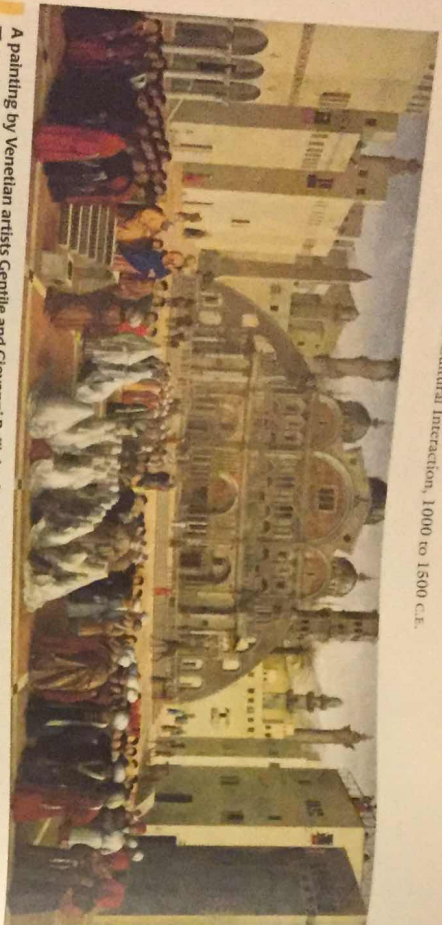


Brunelleschi's magnificent dome on the cathedral of Florence dominates the city's skyline even today.

Italian Renaissance Art

Renaissance Architecture

The Humanists



A painting by Venetian artist Giovanni Bellini reflects Renaissance interests in the Muslim world. The painting depicts St. Mark standing in the pulpit, left, preaching in Alexandria, Egypt. The audience includes Egyptians, Berbers, Turks, Persians, Ethiopians, and Mongols.

Humanist Moral Thought

English as Petrarch (1304–1374), traveled throughout Europe searching for manuscripts of classical works. In the monastic libraries of Italy, Switzerland, and southern France, they found hundreds of Latin writings that medieval scholars had overlooked. During the fifteenth century, Italian humanists became acquainted with Byzantine scholars and enlarged the body of classical Greek as well as Latin works available to scholars.

Classical Greek and Latin values encouraged the humanists to reconsider medieval ethical teachings. Medieval moral philosophers had taught that the most honorable calling was that of monks and nuns who withdrew from the world and dedicated their lives to prayer, contemplation, and the glorification of God, but the humanists drew inspiration from classical authors such as Cicero, who demonstrated that it was possible to lead a morally virtuous life while participating actively in the affairs of the world. Renaissance humanists argued that it was perfectly honorable for Christians to enter into marriage, business relationships, and public affairs, and they offered a spirited defense for those who rejected the cloister in favor of an active life in society. Humanist moral thought thus represented an effort to reconcile Christian values and ethics with the increasingly urban and commercial society of Renaissance Europe.

Quite apart from their conscious effort to draw inspiration from classical antiquity, Renaissance art and thought also reflected increasing European participation in the affairs of the eastern hemisphere. As merchants linked Europe to the larger hemispheric economy, European peoples experienced increased prosperity that enabled them to invest resources in artistic production and support for scholarship. Renaissance painters filled their canvases with images of silk garments, ceramic vessels, lacquered wares, spice jars, foreign peoples, and exotic animals that had recently come to European attention. Princes and wealthy patrons commissioned hundreds of these paintings that brought a cosmopolitan look to their palaces, residences, and places of business.

This enchantment with the larger world extended also into the realm of ideas. The Italian humanist Giovanni Pico della Mirandola (1463–1494) perhaps best reflected the enthusiasm of Renaissance scholars to comprehend the world beyond western Europe. In his exuberant *Oration on the Dignity of Man* (1486), Pico made

supported effort to harmonize the divergent teachings of Plato, Aristotle, Judaism, Christianity, and Islam, not to mention Zoroastrianism and various occult and magical traditions. His ambitious endeavor was ultimately unsuccessful. Pico had limited attention about several of the traditions he sought to reconcile, and he sometimes offered superficial interpretations of doctrines that he imperfectly understood. Nevertheless, his *Oration* gave eloquent voice to the burning desire of many European scholars to understand the larger world. It is not surprising that just as Pico and other scholars were undertaking that effort, European mariners were organizing expeditions to explore the lands and seas beyond Christendom.

Exploration and Colonization

As peoples of the eastern hemisphere recovered from demographic collapse and reasserted order to their societies, they also sought to revive the networks of long-distance trade and communication that epidemic plague had disrupted. Most active in that effort were China and western Europe—the two societies that recovered most rapidly from the disasters of the fourteenth century. During the early Ming dynasty, Chinese ports accommodated foreign traders, and mariners mounted a series of enormous naval expeditions that visited almost all parts of the Indian Ocean basin. Meanwhile, European ventures from the Mediterranean into the Atlantic Ocean, which served as a gateway to sub-Saharan Africa and the Indian Ocean basin. By the end of the fifteenth century, Europeans not only had established seaports to India but also had made several return voyages to the American continents, thus inaugurating a process that brought all the world's peoples into permanent and sustained interaction.

The Chinese Reconnaissance of the Indian Ocean Basin

Having ousted the Mongols, the early Ming emperors were not eager to have large numbers of foreigners residing in China. Yet the emperors permitted foreign merchants to trade in the closely supervised ports of Quanzhou and Guangzhou, where they obtained Chinese silk, porcelain, and manufactured goods in exchange for pearls, gems, spices, cotton fabrics, and exotic products such as tortoise shells and animal skins. The early Ming emperors also refurbished the large Chinese navy built during the Song dynasty, and they allowed Chinese merchants to participate in overseas trading ventures in Japan and southeast Asia.

Moreover, for almost thirty years, the Ming government sponsored a series of seven ambitious naval expeditions designed to establish a Chinese presence in the Indian Ocean basin. Emperor Yongle organized the expeditions for two main purposes: to impose imperial control over foreign trade with China and to impress foreign peoples with the power and might that the Ming dynasty had restored to China. Indeed, he might well have hoped to extend the tributary system, by which Chinese dynasties traditionally recognized foreign peoples, to lands in the Indian Ocean basin.

The expeditions took place between 1405 and 1433. Leading them was the eunuch admiral Zheng He, a Muslim from Yunnan in southwestern China who rose through the ranks of eunuch administrators to become a trusted advisor of Yongle. Zheng He embarked on each voyage with an awesome fleet of vessels complemented by armed forces large enough to overcome resistance at any port where the expedition called. On the first voyage, for example, Zheng He's fleet consisted of 317 ships accompanied by almost twenty-eight thousand armed troops. Many of these vessels were mammoth, nine-masted "treasure ships" with four decks capable of accommodating

Zheng He's Expeditions

five hundred or more passengers, as well as huge stores of cargo. Measuring up to 124 meters (408 feet) long and 51 meters (166 feet) wide, these treasure ships were by far the largest marine craft the world had ever seen.

On the first three voyages, Zheng He took his fleet to southeast Asia, India, and Ceylon. The fourth expedition went to the Persian Gulf and Arabia, and later expeditions ventured down the east African coast, calling at ports as far south as Malindi in modern Kenya. Throughout his travels, Zheng He liberally dispensed gifts of Chinese silk, porcelain, and other goods. In return he received rich and unusual presents from his hosts, including African zebras and giraffes which ended their days in the Ming imperial zoo. Zheng He and his companions paid respect to the local deities and customs they encountered, and in Ceylon they erected a monument honoring Buddha, Allah, and Vishnu.

Zheng He generally sought to attain his goals through diplomacy. For the most part his large contingents of armed troops overawed his hosts, and he had little need to engage in hostilities. But a contemporary reported that Zheng He walked like a tiger, and he did not shrink from violence when he considered it necessary to impress foreign peoples with China's military might. He ruthlessly suppressed pirates who had long plagued Chinese and southeast Asian waters. He also intervened in a civil disturbance to establish his authority in Ceylon, and he made displays of military force when local officials threatened his fleet in Arabia and east Africa. The seven expeditions established a Chinese presence and reputation in the Indian Ocean basin. Returning from his fourth voyage, Zheng He brought envoys from thirty states who traveled to China and paid their respects at the Ming court.

Yet suddenly, in the mid-1430s, the Ming emperors decided to end the expeditions. Confucian ministers, who mistrusted Zheng He and the eunuchs who supported the voyages, argued that resources committed to the expensive expeditions would go to better uses if devoted to agriculture. Moreover, during the 1420s and 1430s the Mongols mounted a new military threat from the northwest, and land forces urgently needed financial support.

Thus in 1433, after Zheng He's seventh voyage, the expeditions ended. Chinese merchants continued to trade in Japan and southeast Asia, but imperial officials destroyed most of the nautical charts that Zheng He had carefully prepared and gave up any plans to maintain a Chinese presence in the Indian Ocean. The decommissioned treasure ships sat in harbors until they rotted away, and Chinese craftsmen forgot the technology of building such large vessels. Yet Zheng He's voyages demonstrated clearly that China could exercise military, political, and economic influence throughout the Indian Ocean basin.

European Exploration in the Atlantic and Indian Oceans

As Chinese fleets reconnoitered the Indian Ocean, European mariners were preparing to enter both the Atlantic and the Indian Ocean basins. Unlike Zheng He and his companions, Europeans did not venture onto the seas in the interests of diplomacy or in hopes of establishing a political and military reputation in foreign lands. Instead, they acted on two different but complementary motives: the desire to expand the boundaries of Roman Catholic Christianity and the desire to profit from commercial opportunities.

The experience of Portugal illustrates that mixture of motives. Though Portuguese merchants were not especially prominent in trading circles, Portuguese fishermen had a long tradition of seafaring in the stormy Atlantic Ocean. Building on that experience, the Portuguese mariners emerged as the early leaders in both Atlantic exploration and the search for a sea route to Asian markets through the Indian Ocean. During the fifteenth

century Prince Henrique of Portugal, often called Prince Henry the Navigator, embarked on an ambitious campaign to spread Christianity and increase Portuguese influence on the seas. In 1415 he watched as Portuguese forces seized the Moroccan city of Ceuta, which guarded the Strait of Gibraltar from the south. He regarded his victory with a blow against Islam and as a strategic move enabling Christian vessels to move safely between the Mediterranean and the Atlantic.

Following the capture of Ceuta, Henrique encouraged Portuguese mariners to venture into the Atlantic. During their voyages they discovered the Madeira and Azores islands, all uninhabited, which they soon colonized. They also made an unsuccessful effort to occupy the Canary Islands, inhabited by indigenous peoples but claimed since the early fifteenth century by the kingdom of Castile. Later discoveries included the Cape Verde islands, Fernando Po, São Tomé, and Príncipe off the west African coast. Because these Atlantic islands enjoyed fertile soils and a Mediterranean climate, Portuguese entrepreneurs soon began to cultivate sugarcane there, often in collaboration with Italian investors. Italians had financed sugar plantations in the Mediterranean islands since the twelfth century, and their commercial networks provided a ready means to distribute sugar to Europeans, who were rapidly developing a taste for sweets.

During the middle decades of the fifteenth century, a series of Portuguese fleets also explored the west African coast, each expedition proceeding a bit farther than its predecessor. Originally, the Portuguese traded guns, textiles, and other manufactured items for African gold and slaves. Portuguese traders took full advantage of the long-established African commerce in slaves, but they also changed the nature of the slave trade by dramatically increasing its volume and by sending slaves to new destinations. By the mid-fifteenth century the Portuguese dispatched thousands of slaves annually from their bases on islands off the African coast. They delivered most of their human cargo to recently founded plantations in the Atlantic islands, where the slaves worked as laborers, although some worked as domestic servants in Europe.

The use of African slaves to perform heavy labor on commercial plantations soon became common practice, and it fueled the development of a huge, Atlantic-wide trade that delivered as many as twelve million enslaved Africans to destinations in North America, South America, and the Caribbean region.

While some Portuguese mariners traded profitably in west Africa, others sought to enter the lucrative trade in

Colonization of the Atlantic Islands

Slave Trade

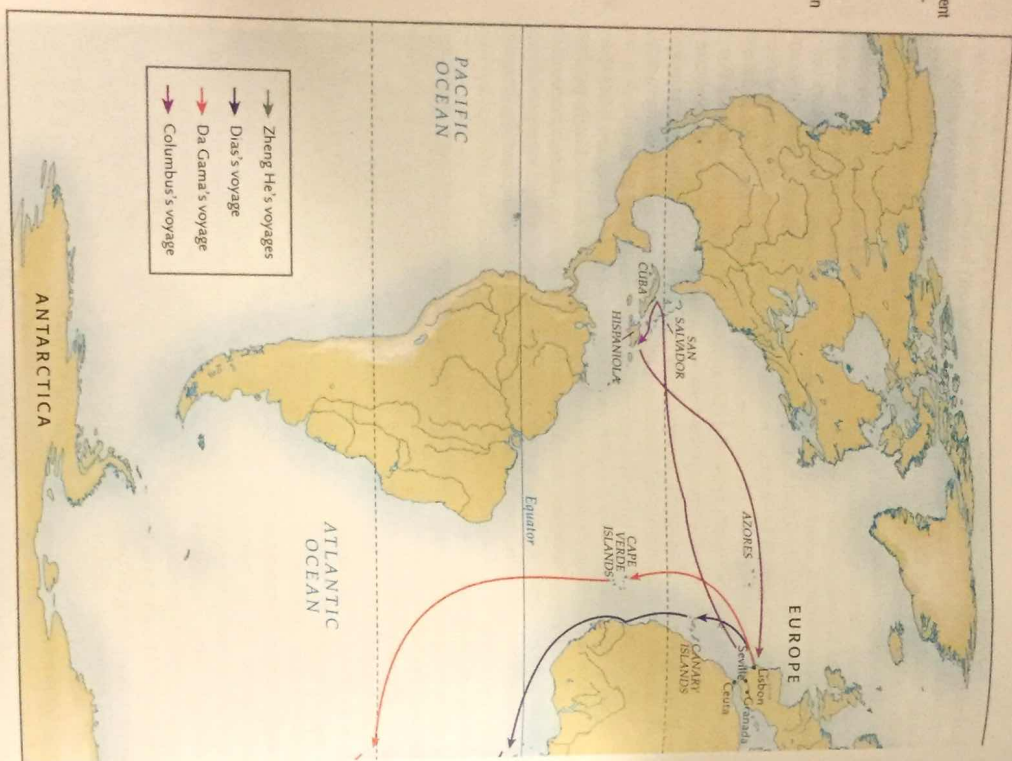


A fifteenth-century manuscript illustration depicts a mariner (left) using an astrolabe to determine his latitude while sailing on the Indian Ocean.

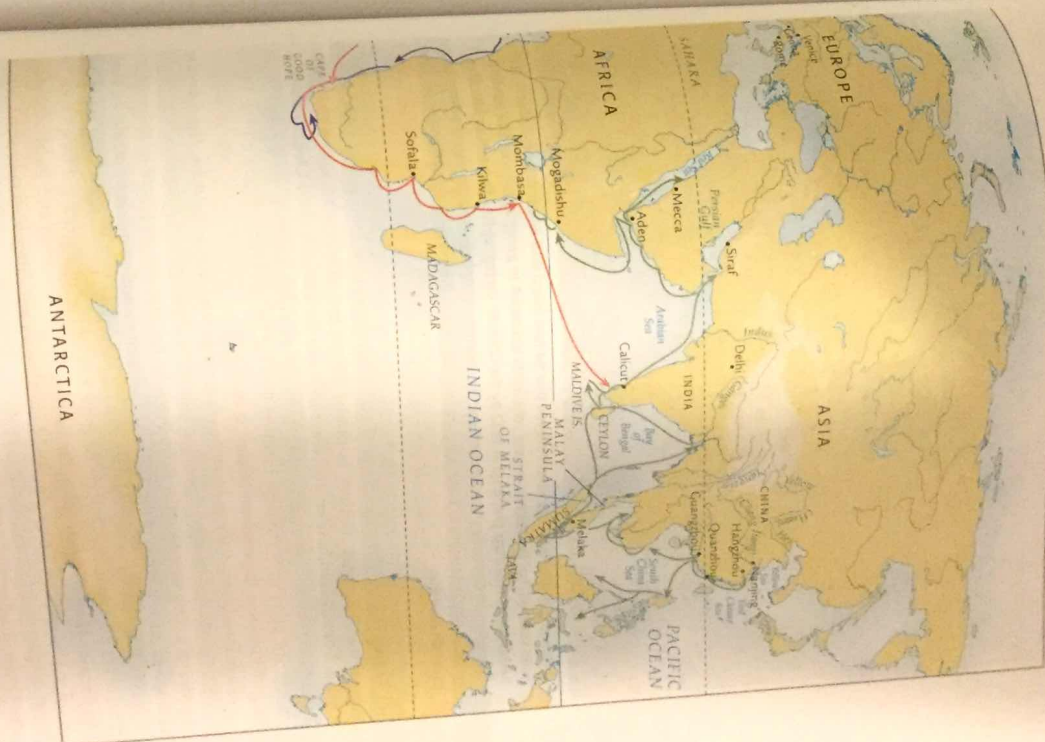
Indian Ocean Trade

Map 22.2 Chinese and European voyages of exploration, 1405–1498.

Although they followed different routes, all the voyagers represented on this map were seeking destinations in the Indian Ocean basin. Why did Chinese and Iberian mariners want to establish a presence in the Indian Ocean during the fifteenth century?

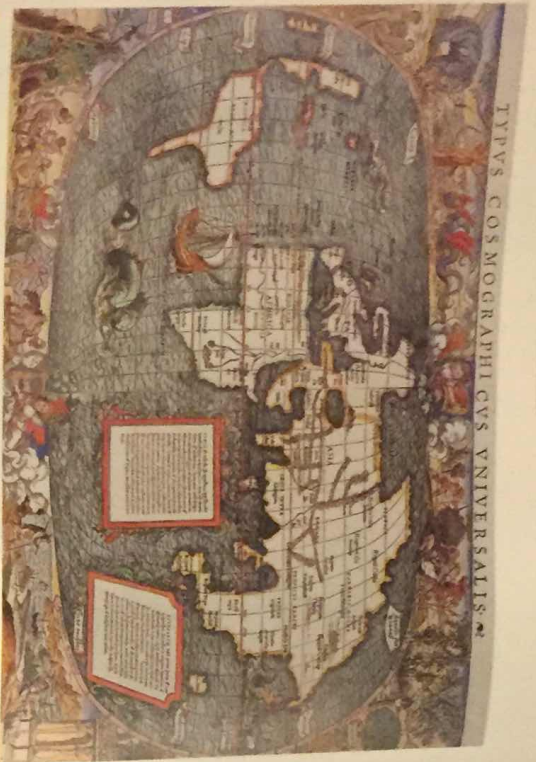


Asian silk and spices. A sea route to Asian markets would enable Portuguese merchants to avoid Muslim and Italian intermediaries, through whom almost all Asian luxury goods reached European markets, and participate directly in the flourishing commercial world of the Indian Ocean basin. Toward the end of the fifteenth century, Portuguese mariners began to search seriously for a sea-lane from Europe around Africa and into the Indian Ocean. By 1488 Bartolomeu Dias had sailed around the Cape of Good Hope and entered the Indian Ocean. Restless because of the long journey and distance from home, the crew forced Dias to return immediately to Portugal, but his voyage proved that it



was possible to sail from Europe to the Indian Ocean. In 1497 Vasco da Gama departed Portugal with the intention of sailing to India. After rounding the Cape of Good Hope, he cruised up the east African coast and found a Muslim pilot who showed him how to take advantage of the seasonal monsoon winds to sail across the Arabian Sea to India. In 1498 he arrived at Calicut, and by 1499 he had returned to Lisbon with a hugely profitable cargo of pepper and spices.

During the following century, Portuguese merchants and mariners dominated trade between Europe and Asia. Indeed, they attempted to control all shipping in



Although Christopher Columbus believed that he had sailed into Asian waters, later mariners soon realized that the Americas were continents unknown to geographers of the eastern hemisphere. This map, prepared in 1532 by the German cartographer Sebastian Münster, shows that by the early sixteenth century, European geographers had acquired a rough but accurate understanding of South America but had reconnoitered only the Atlantic coastline of North America.

the Indian Ocean. Their ships, armed with cannons, were able to overpower the vessels of Arabs, Persians, Indians, southeast Asians, and others who sailed the Indian Ocean. They did not have enough ships to police the entire Indian Ocean, however, so most merchants easily evaded their efforts to control the region's commerce. Nevertheless, the entry of Portuguese mariners into the Indian Ocean signaled the beginning of European imperialism in Asia.

While Portuguese seafarers sought a sea route around Africa to India, the Genoese mariner Cristoforo Colombo, known in English as Christopher Columbus, conceived the idea of sailing west to reach Asian markets. Because geographers in the eastern hemisphere knew nothing of the Americas, Columbus's notion made a certain amount of good sense, although many doubted that his plan could lead to profitable trade because of the long distances involved. After the king of Portugal declined to sponsor an expedition to test Columbus's plan, the Catholic Kings, Fernando and Isabel of Spain, agreed to underwrite a voyage. In 1492 Columbus set sail. After a stop in the Canary Islands to take on supplies and make repairs, his fleet of three ships crossed the Atlantic Ocean, reaching land at San Salvador (Watling Island) in the Bahamas.

Columbus returned to Spain without the gold, silk, and spices that he had expected to find, but he persistently held that he had reached islands near the Asian mainland and the markets of China and Japan. Although he made three more voyages to the Caribbean region, Columbus never acknowledged that his expeditions had not reached Asia. News of his voyages spread rapidly, however, and by the end of the fifteenth century other mariners had explored the Caribbean and the American continents enough to realize that the western hemisphere constituted a world apart from Europe, Asia, and Africa.

European mariners ventured into the Indian and Atlantic Ocean basins, they inaugurated a new era in world history. For millennia, peoples of different societies had traded, communicated, and interacted. As technologies of transportation improved, they dealt with peoples at increasingly greater distances. By 1500 the Indian Ocean served as a highway linking peoples from China to east Africa, and overland traffic kept the silk roads busy from China to the Mediterranean Sea. Trade goods, diplomatic missions, religious faiths, technological skills, agricultural crops, and disease pathogens all moved readily over the sea-lanes and the silk roads, and they profoundly influenced the development of societies throughout the eastern hemisphere. In the western hemisphere, trading networks linked lands as distant as Mexico and the Great Lakes region, while Pacific islanders regularly traveled and traded between island groups.

Never before, however, had peoples of the eastern hemisphere, the western hemisphere, and Oceania dealt with one another on a regular and systematic basis. The voyages of European mariners during the fifteenth and following centuries initiated a long-term process—one that continues in the present day—that brought all regions and peoples of planet earth into permanent and sustained interaction. The formation and reconfiguration of global networks of power, communication, and exchange that followed from those interactions rank among the most prominent themes of modern world history.

CHRONOLOGY

1214	Creation of a Mongol artillery unit
1251–1324	Life of Marco Polo
1287–1288	Rabban Sauma's embassy to Europe
1291–1328	John of Montecorvino's mission to China
1304–1369	Life of Ibn Battuta
1304–1374	Life of Francesco Petrarca
1330s	First outbreaks of bubonic plague in China
1337–1453	Hundred Years' War
1347	Arrival of bubonic plague in the Mediterranean basin
1368–1644	Ming dynasty
1405–1433	Zheng He's expeditions in the Indian Ocean
1466–1536	Life of Desiderius Erasmus of Rotterdam
1488	Bartolomeu Dias's voyage around Africa
1492	Christopher Columbus's first voyage to the western hemisphere
1497–1498	Vasco da Gama's voyage to India