The compass is a simple enough device—something you can make yourself with an iron needle and a magnet. Yet it was also a revolutionary device, allowing sailors (and now, airplane pilots) to maintain a sense of direction no matter how dark, stormy, foggy, or unfamiliar the environment.

Although there has been debate about the origins of the compass, the instrument was clearly developed first by the Chinese. Chinese scientists may have had some knowledge of magnetic principles as early as the 1st century. Actual compasses may have been developed during the Tang dynasty. They undoubtedly originated from the discovery of naturally magnetized iron, or lodestone, that could then be used to fashion a needle that would point north. Some believe that the Chinese first used compasses in the practice of feng shui, which was a set of design principles by which people could align their living quarters with the forces of nature.
Compasses for navigation had been introduced by 1100. They were part of a growing Chinese effort to make contact with sources of spices and teas in southeast Asia. Prior to that point, Chinese seagoing had been confined to coastlines, but now it became much more venturesome. Wide-ranging Chinese expeditions introduced the compass to seafarers throughout the Indian Ocean, including Arab merchants, by the 12th century. Europeans are first known to have used the compass in 1187. Europeans may have invented the compass separately, but it is far more likely that they learned about its use as a result of contacts with Arabs or Asians.

The compass was fundamental to ambitious seagoing expeditions, like the great Chinese voyages through the Indian Ocean. Along with observation of the sun and stars, the compass provided the guidance for Columbus's travels to the Americas. It changed the shape of world history by facilitating dramatic new contacts and exchanges. By the 13th century, various seagoing peoples—Malaysians, for example, as well as Europeans—were introducing improvements in the compass, making it easier to read and more stable at sea. Italian navigators introduced the compass card, which involved placing the needle over a set of indicators. Knowledge of the compass reached Scandinavia by 1300, a further step in the long process of dissemination.

In 1400 the world was undergoing a profound transition. This chapter highlights the main features of that process. The principal focus is the shifting balance among civilizations in Asia, Africa, and Europe and how these power shifts changed the nature of international contact.

This period of transition began with the decline of Arab strength—symbolized by the fall of the last Arab caliphate in 1258—and the disruptions that Mongol incursions caused elsewhere in Asia and eastern Europe. These developments created new opportunities in the Afro-Eurasian network that had been established during the postclassical centuries, initially under Arab sponsorship. Various candidates emerged to take a new international leadership role, including, for a short time, Ming China. The Chinese expeditions showed the importance transregional contacts had acquired. The end of the expeditions, however, opened the way for new alignments. Within the Middle East itself, Arab and then Mongol decline created new opportunities for Turkish conquerors and migrants. In 1453 the Ottoman Turks captured Constantinople, effectively completing the destruction of the Byzantine empire and creating a new Islamic political power. The Ottomans quickly established control around much of the Black Sea, including the Balkans, and began to push southward into Arab lands.

While the Ottomans would play some role in transregional trade, ultimately the most dynamic new contender for leadership ultimately proved to be western Europe; the conditions that propelled Western civilization into this new position around 1400 are the second key theme of this chapter. The West was not yet a major power; it did not replace the Arabs or Chinese as international leaders quickly or easily. The first stages of the rise of the West were accompanied by important changes in Western civilization itself, which were beginning to take shape by 1400. At this point, Italy, Spain, and Portugal took the lead in western European outreach, a lead that they would hold for about two centuries.

It is also vital to note changes in societies outside the international network, in the Americas and Polynesia. New difficulties in the great American empires, in particular, would reduce their ability to respond to the challenge of contact with Europeans after 1492.

Focusing on new frameworks for international contacts, this chapter inevitably deals with the question of why individual societies reacted differently to key forces. Comparison is essential. Western Europe's response, for example, should be compared to reactions at the same time in regions like Japan or sub-Saharan Africa.
Amid variations and great change, the transitions around 1450 highlighted one important continuity as well: the importance of the level of contacts that had developed through the formation of the transcontinental network. A variety of societies in Africa, Asia, and Europe depended on far-flung trade relations, and when one exchange network collapsed—as with the decline in travel security overland when the Mongol empires faded—another system quickly moved into place. Not only trade, but continued exchanges of technology and ideas continued to mark Afro-Eurasian relationships during the 15th century.

KEY CHANGES IN THE MIDDLE EAST

What were the most important changes in the Middle East between the 13th and the 15th centuries?

In 1200, the Middle East was still dominated by two powerful empires, the Byzantine in the northwest and the Islamic caliphate through much of the Middle Eastern heartland. By 1400, this structure was in disarray. The Byzantine empire still existed, but it was in rapid decline, pressed by invading Ottoman Turks. The Turkish capture of the imperial capital, Constantinople, in 1453 effectively ended the empire. Two centuries earlier, the caliphate, long sapped by increasing reliance on foreign troops and advisors, including the Turks, had fallen to Mongol invasion. Division in the Middle East, and among Arab peoples, took new forms.

Social and Cultural Change in the Middle East

Culture shifted, along with politics, in this crucial region. An earlier tension in philosophy and the arts yielded to the predominance of the Islamic faith. The new piety associated with the rising Sufi movement, discussed in Chapter 8, contributed to a new religious emphasis. In literature, attention to secular themes, such as the joys of feasting and hunting, gave way to more strictly religious ideas. In philosophy, the rationalistic current encountered new attack. In Muslim Spain, philosopher Ibn Rushd (IH-buhn RUSHT) (Averroës) (uh-VEHR-oh-eez), espoused Greek rationalism, but his efforts were largely ignored in the Middle East. In fact, European scholars were more heavily influenced by his work. In the Middle East proper, a more typical philosopher, Al-Ghazali, in a book revealingly titled The Destruction of the Philosophers, now claimed to use Aristotle’s logic to show that it was impossible to discover religious truth by human reason. Many Sufi scholars wrote excitedly of their mystical contacts with God and the stages of their religious passion. Islamic science continued, but its role diminished.
Changes in society and the economy were as telling as the shifts in politics and intellectual life. As the authority of the caliphate declined, landlords seized power over the peasantry. As a result, from about 1100 onward, Middle Eastern peasants increasingly lost their freedom, becoming serfs on large estates, providing the labor and produce landlords now sought. This loss was not the peasants' alone, for agricultural productivity suffered as a result. Landlords turned to sucking what they could from their estates rather than trying to develop a more vital agriculture. Tax revenues declined, and Arab and other Middle Eastern traders began to lose ground. Few Arab coins have been found in Europe dating from later than 1100. European merchants began to control their own turf and challenge the Arabs in other parts of the Mediterranean, gaining increasing initiative in this vital trading area.

Arab decline was gradual and incomplete. It cannot be compared with the dramatic fall of the Roman empire many centuries before. A more subtle model is needed. The reduced dynamism in trade did not take the Arabs out of major world markets, for example. Indeed, Middle Eastern commerce rebounded somewhat by 1400.

Finally, the political fragmentation of the Arab world did not produce prolonged confusion in the Middle East. The emerging Ottoman Turkish state soon mastered many of the lands of the old caliphate as well as the Byzantine corner, expanding into southeastern Europe. The new empire gave renewed vitality to Islamic politics, and it would soon be joined by two other Islamic empires, too, in Persia and India. (See Chapter 22 for the development of the new Ottoman Empire.) It is important to realize that the empire was far more powerful, politically and militarily, than the caliphate had been for many centuries. It was thus more challenging to observers in neighboring civilizations such as western Europe.

THE STRUCTURE OF TRANSREGIONAL TRADE

16.2 What caused the Chinese decision to abandon major expeditions?

Even the rise of the Ottoman empire did not restore the full international vigor that the Islamic caliphate wielded had at the height of its powers. The empire did not become the sole hub of an international network, as the caliphate had been a few centuries before. By the 15th century, merchants from many societies were competing for roles in transregional trade. In the Mediterranean, European, and particularly Italian, merchants were increasingly active; even North African pilgrims to Mecca often booked space on Italian ships. In the Indian Ocean, merchants from India and southeast Asia, most of them Muslims, rivaled Arab activity.

The big issue in the 15th century, however, involved the aftermath of the Mongol era. For 150 years, the interlocking Mongol states had facilitated overland trade between China, the Middle East, and Europe. Essentially, this Mongol system replaced earlier Arab leadership in facilitating transregional trade. But Mongol defeat in China, late in the 14th century, and new pressure on Mongol rulers in Russia and elsewhere unraveled this system. Overland travel become more difficult and dangerous without Mongol political protection. Trade and its motivations did not diminish in importance, but inevitably new emphasis focused on seagoing routes, particularly in the Indian Ocean. Two societies, first China and then Europe, sought to take advantage of the new opportunities involved.

Chinese Outreach and Reconsideration

For a brief time China asserted new leadership in international trade. This activity reflected earlier gains in Chinese shipping, and China’s longstanding focus on manufacturing for export. Rebellions in China drove out the deeply resented Mongol overlords in 1368. A rebel leader from a peasant family, Zhu Yuanzhang (joo wan-jang), seized the Mongol capital of Beijing and proclaimed a new Ming—meaning “brilliant”—dynasty that was to last until 1644. The dynasty began with a burst of unusual expansionism. The initial Ming rulers pressed to secure the borders of the Middle Kingdom. This meant pushing the Mongols far to the north, to the plains of what is now Mongolia. It meant reestablishing influence over neighboring governments and winning tribute payments from states in Korea, Vietnam, and Tibet, reviving much of the east Asian regional structure set up by the Tang dynasty. Far
more unusual was a new policy, adopted soon after 1400, of mounting huge, state-sponsored trading expeditions to southern Asia and beyond.

A first fleet sailed in 1405 to India, with 62 ships carrying 28,000 men. Later voyages reached the Middle East and the eastern coast of Africa, bringing chinaware and copper coinage in exchange for local goods. Chinese shipping at its height consisted of 2700 coastal vessels, 400 armed naval ships, and at least as many long-distance ships. Nine great treasure ships, the most sophisticated in the world at the time, explored the Indian Ocean, the Persian Gulf, and the Red Sea, establishing regular trade all along the way.

Between 1405 and their termination in 1433, these expeditions were commanded by the admiral Zheng He. A Muslim from western China, Zheng He was well suited to deal with Muslims in southeast Asia on the Indian Ocean trade route. Zheng He was also a eunuch, castrated for service at the royal court. China's Ming emperors retained a large harem of wives to ensure succession, and eunuchs were needed to guard them without threat of sexual rivalry; many gained bureaucratic powers well beyond this service. Zheng He's expeditions usually hugged the coastline, but he had an improved compass and excellent maps as well as huge vessels that contained ample supplies—even gardens—as well as goods for trade. His fleets must have impressed, even terrified, the local rulers around the Indian Ocean, many of whom paid tribute to the emperor. For even though Zheng He brought gifts, he also had well-armed troops on his expeditions. Several missions visited China from the Middle East and Africa. From Africa also came ostriches, zebras, and giraffes for the imperial zoo; the latter became the unicorns of Chinese fable. But Zheng He was resented by the Confucian bureaucrats, who refused even to write much about him in their chronicles.

There is no question that the course of world history might have been changed dramatically had the Chinese thrust continued, for the tiny European expeditions that began to creep down the western coast of Africa at about the same time would have been no match for this combination of merchant and military organization. Indeed, historians wonder if one expedition might have rounded Africa to at least glimpse the Atlantic. But China's emperors called the expeditions to a halt in 1433. The bureaucrats had long opposed the new trade policy, out of rivalry with other officials such as Zheng He, but there were deeper reasons as well. The costs seemed unacceptable, given the continuing expenses of the campaigns against the Mongols and establishing a luxurious new capital city in Beijing. A new emperor also wanted to differentiate his policies from those of his predecessor.

This was a crucial shift. It reflected a preference for traditional expenditures rather than distant foreign involvements. Chinese merchant activity continued to be extensive in southeast Asia. Chinese trading groups established permanent settlements in the Philippines, Malaysia, and Indonesia, where they added to the cultural diversity of the area and maintained a disproportionate role in local and regional trading activities into the 20th century. And manufacturing levels remained high. Nonetheless, China's chance to become a dominant world trading power was lost, at least for several centuries.

One result, today, is an interesting challenge to interpretation. To Western eyes, accustomed to judging a society's dynamism by its ability to reach out and gain new territories or trade positions, China's decision may seem hard to understand—the precursor to decline. But to the Chinese, it was the ambitious expeditionary flurry that was unusual, not its end. Its leaders were suspicious of any policy that would unduly elevate commercial activity as opposed to rule by the scholar-gentry. Ming emperors consolidated their rule over the empire's vast territory. Internal economic development continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, Chinese products continued to be highly valued in the world market. Industry expanded, with growth continued as well, with no need for foreign products save for goods from southeast Asia. Moreover, China's chances to become a dominant world trading power were lost, at least for several centuries.

The shift in Chinese policy unintentionally cleared the way for another, in most ways less organized civilization to work toward a new international position. With the Arabs in partial eclipse and with China retreating from its brief initiative, hesitant Western expansionism, ventured before 1400, began to take on new significance. Within a century, Western explorers and traders had launched an attempt to seize international trading dominance and had expanded the international network to include parts of the Americas for the first time.
Western expansion had many causes. It must be seen as the result of growing problems as well as new strengths.

The West's gradual emergence into larger world contacts during the 15th century was surprising in many respects. Westerners remained awed by the powerful bureaucracies and opulent treasuries of empires in the traditional civilization centers such as Constantinople. Furthermore, the West was changing in some painful ways. Key features of medieval culture and society were being questioned by 1400. The church, which had long been one of the organizing institutions of Western civilization, was under new attack. Medieval philosophy had passed its creative phase. Warrior aristocrats, long a key leadership group in feudal society, softened their style of life, preferring court rituals and jousting tournaments and adopting military armor so cumbersome that real fighting was difficult.

Even more strikingly, the lives and economic activities of ordinary Europeans were in disarray. This was a time of crisis, and Europe's expanding world role could not reverse the fundamental challenges to its internal economic and demographic structure. Europeans began to suffer from recurrent famine after 1300 because population outstripped the food supply and no new food production techniques were discovered. Famine reduced disease resistance, making Europe more vulnerable to the bubonic plagues that spread from Asia.

Bubonic plague, or Black Death, surfaced in various parts of Asia in the 14th century. In China it reduced the population by nearly 30 percent by 1400. Following trade routes, it then spread into India and the Middle East, causing thousands of deaths per day in the larger cities. The plague's worst European impact occurred between 1348 and 1375, by which time 30 million people, one-third of Europe's population, died. The resulting economic dislocation produced bitter strikes and peasant uprisings.

Sources of Dynamism: Medieval Vitality

How, in this context, could the West be poised for a new global role? The answer to that question is complex. A number of different interpretations deserve attention, although some might be blended. First, several key advances of medieval society were not really reversed by the troubles of the decades around 1400. For example, the strengthening of feudal monarchy provided more effective national or regional governments for much of the West. The Hundred Years War between Britain and France stimulated innovations in military organization, including nonaristocratic soldiers recruited and paid directly by the royal government, that enhanced central political power. Strong regional monarchies took hold in parts of Spain and in Portugal as Christian leaders drove back the Muslim rulers of this region. The growth of cities and urban economies continued to spur the commercial side of Western society. Even the church had made its peace with such key principles of capitalism as profit-seeking. Technology continued to advance, particularly in ironwork—used for bells and weapons—and timekeeping.

In short, explaining the new Western vigor involves an understanding that some of the gains the West achieved during the postclassical period continued even as certain characteristic medieval forms wavered.

Imitation and Commercial Problems

Two additional factors affected western Europe's international position, one a clear plus, the other a growing problem. New opportunities for imitation were an obvious advantage. The Mongol empire established in Asia and eastern Europe in the late 13th and early 14th centuries provided new access to Asian knowledge and technology. Political stability and an openness to foreign visitors by the great khans helped Westerners learn of Asian technologies, ranging from printing to the compass and explosive powder. Western Europe had ideal access in the Mongol period. It was not disrupted by the Mongols, as eastern Europe and so many parts of Asia were, but it was in active contact, unlike sub-Saharan Africa. Internal European warfare and merchant zeal made western Europe an eager learner, for the Asian technologies promised to respond to both military and commercial needs.

The second international factor was the intensification of European problems in the existing world market and international arena. From the Crusades onward, Western elites had become used to increasing consumption of Asian luxury products, including spices such as cinnamon and nutmeg,
### VISUALIZING THE PAST

**Population Trends**

<table>
<thead>
<tr>
<th>Continents</th>
<th>1000</th>
<th>1700</th>
<th>1800</th>
<th>1900</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>12.2</td>
<td>19.6</td>
<td>19.7</td>
<td>24.0</td>
<td>16.3</td>
</tr>
<tr>
<td>Asia</td>
<td>62.9</td>
<td>67.6</td>
<td>69.3</td>
<td>59.8</td>
<td>59.2</td>
</tr>
<tr>
<td>Africa</td>
<td>11.2</td>
<td>10.0</td>
<td>7.8</td>
<td>6.8</td>
<td>9.9</td>
</tr>
<tr>
<td>Americas</td>
<td>13.4</td>
<td>2.1</td>
<td>2.7</td>
<td>8.9</td>
<td>14.0</td>
</tr>
<tr>
<td>Oceania</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.6</td>
</tr>
</tbody>
</table>

**QUESTIONS**

The following population charts show relationships in population size, and comparative trends in population size, among the major inhabited regions of the world. Population pressure did not drive European expansion in the 15th century, because population was falling temporarily, but there were longer-term trends, from the year 1000, that might have encouraged the expansionist effort. The chart allows comparison, showing what regions experienced the greatest changes in population levels between 1000 and 1800. What might have caused these changes? Finally, the chart extends comparisons into the later 20th century.

Reading population statistics provides vital information, but it also raises questions, including ones about causation, which numbers alone cannot answer. What other data would be most helpful to put these figures in appropriate world history contexts? Which figures are more revealing: absolute numbers or percentages? Why?

### POPULATION LEVELS (MILLIONS)

<table>
<thead>
<tr>
<th>Continents</th>
<th>1000</th>
<th>1700</th>
<th>1800</th>
<th>1900</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>36</td>
<td>120</td>
<td>180</td>
<td>390</td>
<td>635</td>
</tr>
<tr>
<td>Asia (includes Middle East)</td>
<td>185</td>
<td>415</td>
<td>625</td>
<td>970</td>
<td>2300</td>
</tr>
<tr>
<td>Africa</td>
<td>33</td>
<td>61</td>
<td>70</td>
<td>110</td>
<td>385</td>
</tr>
<tr>
<td>Americas</td>
<td>39</td>
<td>13</td>
<td>24</td>
<td>145</td>
<td>545</td>
</tr>
<tr>
<td>Oceania (includes Australia)</td>
<td>1.5</td>
<td>2.25</td>
<td>2.5</td>
<td>6.75</td>
<td>23</td>
</tr>
<tr>
<td>Totals</td>
<td>294.5</td>
<td>611.25</td>
<td>901.5</td>
<td>1621.75</td>
<td>3888</td>
</tr>
</tbody>
</table>

**NOTE:** Earlier figures are only estimates; they are fairly accurate indicators of relative size.

**SOURCE:** Adapted from Dennis H. Wrong, ed., *Population and Society* (1977).

---

Silks, sugar, perfumes, and jewels. In exchange for the luxury items, Europeans mainly had cruder goods to offer: wool, tin, copper, honey, and salt. The value of European exports almost never equaled the value of what was imported from Asia. The resulting unfavorable balance of trade had to be made up in gold, but western Europe had only a limited gold supply. By 1400, the constant drain to Asia was creating a gold famine that threatened the whole European economy with collapse.

Furthermore, there were legitimate fears of a new Muslim threat. The Ottoman empire was taking shape, and Europeans began to fear a new Muslim surge. Even before this, the Muslim capture of the last crusader stronghold (the city of Acre in the Middle East) in 1291 gave Muslim traders, particularly Egyptians, new opportunities to act as intermediaries in the Asian trade, for there were no western-controlled ports left in the eastern Mediterranean. One response to this was a series of conquests by the city-state of Venice along the eastern coast of the Adriatic. A more important response was to begin exploring alternative routes to Asia that would bypass the Middle East and the feared and hated Muslim realms.

In sum: One explanation for Europe’s new activity would emphasize the gains made in the later postclassical centuries, particularly in terms of urban and commercial growth, despite population setbacks. These gains could now be combined with new technologies learned from Asia—especially weaponry. The final ingredient was the realization that innovations were essential to meet balance of payments problems and concern about reliance on Muslim traders.
**THE SPREAD OF THE PLAGUE IN THE 14TH CENTURY**

The plague of 1348-1350, known as the Black Death, was one of the most devastating pandemics in human history. It affected major parts of Asia, the Middle East and Egypt, and Europe, leading to the deaths of millions of people. Muslim and Christian observers described the plague and its reactions to it. Ibn al-Wardi was a Muslim scholar who died of the plague in 1349; Jean de Venette was a monk who died in 1368.

**IBN AL-WARDI**

God is my security in every adversity. My sufficiency is in God alone. Is not God sufficient protection for His servant? Oh God, pray for our master, Muhammad, and give him peace. Save us for his sake from the attacks of the plague and give us shelter.

The plague frightened and killed. It began in the land of darkness. Oh, what a visitor! It has been current for fifteen years. China was not preserved from it nor could the strongest fortress hinder it. The plague afflicted the Indians of India. It weighed upon the Sind. It seized with its hand and ensnared even the lands of the Uzbeks. The plague destroyed mankind in Cairo. Its eye was cast upon Egypt, and behold, the people were wide-awake. It stilled all movement in Alexandria. The plague did its work like a silkworm.

Then, the plague turned to Upper Egypt. It, also, sent forth its storm to Barah. The plague attacked Gaza, and it shook Asqalan severely. The plague oppressed Acre. The scourge came to Jerusalem and paid the zakat [with the souls of men]. It overtook those people who fled to the al-'Aqsa Mosque, which stands beside the Dome of the Rock. If the door of mercy had not been opened, the end of the world would have occurred in a moment. It then hastened its pace and attacked the entire maritime plain. The plague trapped Sidon and descended unexpectedly upon Beirut, cunningly.

This plague is for the Muslims a martyrdom and a reward, and for the unbelievers a punishment and a rebuke. When the Muslim endures misfortune, then patience is his worship. It has been established by our Prophet: God bless him and give him peace, that the plague-stricken are martyrs. This noble tradition is true and assures martyrdom. And this secret should be pleasing to the true believer. If someone says it causes infection and destruction, say: God creates and creates. If the liar disputes the matter of infection and tries to find an explanation, I say that the Prophet, on him be peace, said: who infected the first? If we acknowledge the plague's devastation of the people, it is the will of the Chosen Doer. So it happened again and again.

Among the benefits... is the removal of one's hopes and the improvement of his earthly works. It awakens men from their indifference for the provisioning of their final journey.

Nothing prevented us from running away from the plague except our devotion to the noble tradition. Come then, seek the aid of God Almighty for raising the plague, for He is the best helper. Oh God, we call You better than anyone did before. We call You to raise from us the pestilence and plague. We do not take refuge in its removal other than with You. We do not depend on our good health against the Plague but on you. We seek your protection, oh Lord of creation, from the blows of this stick.

**JEAN DE VENETTE**

This sickness or pestilence was called an epidemic by the doctors. Nothing like the great numbers who died in the years 1348 and 1349 has been heard of or seen or read of in times past. This plague and disease came from unction or association and contagion, for if a well man visited the sick he only rarely avoided the risk of death. Therefore, in many towns timid priests withdrew, leaving the exercise of their ministry to such of the religious as were more daring... A very great number of the saintly sisters of the Hôtel-Dieu who, not fearing to die, nursed the sick in all sweetness and humility, with no thought of honor, a number too often renewed by death, rest in peace with Christ, as we may piously believe.

Some said that this pestilence was caused by infection of the air and waters, since there was at this time no famine nor lack of food supplies, but on the contrary great abundance. As a result of this theory of infected water and air as the source of the plague the Jews were suddenly and violently charged with infecting wells and water and corrupting the air. The whole world rose up against them cruelly on this account. In Germany and other parts of the world where Jews lived, they were massacred and slaughtered by Christians, and many thousands were burned everywhere, indiscriminately...

But woe is me! the world was not changed for the better but for the worse... For men were more avaricious and grasping than before, even though they had far greater possessions. They were more covetous and disturbed each other more frequently with suits, brawls, disputes and pleas. Nor by the mortality resulting from this terrible plague inflicted by God was peace between kings and lords established. And this fact was very remarkable. Although there was an abundance of all goods, yet everything was twice as dear, whether it were utensils, victuals, or merchandise, hired helpers or peasants and serfs, except for some hereditary domains which remained abundantly stocked with everything. Charity began to cool, and iniquity with ignorance and sin to abound, for few could be found in the good towns and castles who knew how or were willing to instruct children in the rudiments of grammar...

**QUESTIONS**

- How did Christian and Muslim reactions compare?
- Did the reactions suggest that the plague might have different results in the Middle East and in Europe?
- How did the plague relate to other major developments toward the end of the postclassical period?
This explanation may not be entirely adequate, and it certainly is not the explanation preferred by most European historians. They turn—sometimes exclusively—to another set of factors: developments within Europe that would then spill outward.

**Secular Directions in the Italian Renaissance**

Significant changes in Europe, away from characteristic postclassical patterns, started in Italy. Medieval forms had never fully taken hold here. Cities were livelier and more independent, and institutions like feudalism did not gain ground. In 1400, Italy was in the midst of a vital cultural and political movement known as the Renaissance, or rebirth—referring to revival of styles and themes from classical Greece and Rome. The early phases of the Renaissance stressed more secular subjects in literature and art. Religious art remained dominant but used more realistic portrayals of people and nature, and some nonreligious themes surfaced outright (Figure 16.2). The doings of human beings deserved attention for their own sake, in the Renaissance view, not as they reflected a divine plan. Artists and writers became more openly ambitious for personal reputation and glory. Italy was the center of initial Renaissance culture because it had more contact with Roman tradition than did the rest of Europe and because by the 14th century it led the West in banking and trade.

**Renaissance Culture**

Although it had political and commercial roots in Italian cities, the Renaissance was first and foremost a cultural movement, launched in Florence and manifesting itself in literature and various arts (Figure 16.3). The Renaissance focused on a new interest in stylistic grace and a concern for practical ethics and codes of behavior for urban gentlemen. One leading 14th-century writer, Francesco Petrarca, not only took pride in his city and his age but explored the glories of personal achievement with new confidence.
Innovation flourished in the visual arts and music as well. The subject matter of art moved toward nature and people, including cityscapes and portraits of the rich and powerful, whether the themes were religious or secular. Florentine painter Giotto (gee-YAW-toh), led the way, departing from medieval formalism and stiffness. While still a young apprentice to the painter Cimabue (chee-mah-BOO-eh), Giotto painted a fly on the nose of one of Cimabue's portrait subjects, and it was so realistic that Cimabue repeatedly tried to swat it off before going back to work on the canvas. Other painters, beginning later in the 14th century, started to introduce perspective while using new colors and other materials. In architecture, favor shifted away from the Gothic to a classicism derived from the styles of Greece and Rome. Vivid, realistic statues complemented the new palaces and public buildings.

The impact of the early Renaissance must not be exaggerated. It had little influence outside of Italy. Even in Italy, it focused on high culture, not popular culture, and on the arts; there was little initial interest in science. And although it built on distinctive political and economic forms, it was not a full break from medieval tendencies.

Nevertheless, these new cultural currents were an important innovation in Western history. The full ramifications of the Renaissance feed into the next period of both world and Western history (see Chapter 18). The movement was only getting started by 1400. However, the wide range of Italian commerce and shipping proved to be one of the building blocks of European outreach. By the 15th century, ships, particularly from the western Italian city of Genoa, which was less well placed than Venice for eastern Mediterranean trade and the resultant links to Asia, were ready for new roles. Ambitious city-state governments encouraged new ventures, eager to collect more tax money and promote commerce as one of their explicit functions. A general "Renaissance spirit" could also spur innovation. Whereas people such as Petrarch defined human ambition mainly in cultural terms, other urban and commercial leaders, including seafarers such as Genoa's Christopher Columbus, might apply some of the same confidence and desire for personal glory to different areas, such as exploration or conquest.
The Iberian Spirit of Religious Mission

Along with Italy, a key center for change by the 14th century was the Iberian peninsula, where Christian military leaders had for several centuries been pressing back the boundaries of the Muslim state in Spain. Soon after 1400, major regional monarchies had been established in the provinces of Castile and Aragon, which would be united through royal marriage in 1469.

Even before the marriage between Ferdinand and Isabella, Spanish and Portuguese rulers had developed a vigorous military and religious agenda. They supported effective armies, including infantry and feudal cavalry. And they believed that government had a mission to promote Christianity by converting or expelling Arabs and Jews and by maintaining doctrinal purity within the church. Close links between church and state, portrayed in art, provided revenues and officials for the royal government. In return, the government supported church courts in their efforts to enforce moral and doctrinal purity. Later in the 15th century, this interaction led to the reestablishment of the church-run courts of the Inquisition in Spain, designed to enforce religious orthodoxy. In other words, Spain and Portugal were developing effective new governments with a special sense of religious mission and religious support. These changes promoted the West's expansion into wider world contacts.

The First Phases of Western Expansion

As early as 1291, two Italian brothers, the Vivaldis from Genoa, sailed with two galleys through the Straits of Gibraltar, seeking a western route to the "Indies," the spice-producing areas of south and southeast Asia. They were never heard from again. Although they were precursors of a major western thrust into the southern Atlantic, it is not even entirely clear what they meant by the "Indies." Early in the 14th century, other explorers from Genoa rediscovered the Canary Islands, in the Atlantic, populated by a hunting-and-gathering people. These islands had been known vaguely since classical times but had never been explored by Europeans. Genoese sailors also visited the Madeiras and probably reached the more distant Azores by 1351. Soon after this, ships from northeastern Spain, based in the port of Barcelona, sailed along the African coast as far south as present-day Sierra Leone.

Until 1430, technological barriers prevented further exploration for alternative routes. Without adequate navigation instruments, Europeans could not risk wider ventures into the Atlantic. They also needed better ships than the shallow-drafted, oar-propelled Mediterranean galleys. However, efforts were under way to develop an oceangoing sailing vessel. At the same time, the crucial navigational problems were met by the compass and the astrolabe, used to determine latitude at sea by reckoning from the stars. Contacts with Arab merchants and with the Chinese provided knowledge of these devices. European mapmaking, improving steadily during the 14th century, was another key innovation. Because of these advances, as well as mistaken geographic assumptions shown on the map in Figure 16.4, Europeans were ready in the decades after 1400 to undertake voyages impossible just a century before. In 1498, the Portuguese explorer Vasco da Gama was the first European to reach India by sea, preparing Portuguese entry into the Indian Ocean (Figure 16.5).
Colonial Patterns

Even as these wider-ranging voyages began, westerners, led by the Spanish and Portuguese, had begun to take advantage of the new lands they had already discovered. A driving force behind both the further expeditions and the efforts to make already discovered areas economically profitable was Prince Henry of Portugal, known as Henry the Navigator. A student of astronomy and nautical science, Henry sponsored about a third of Portuguese voyages of exploration before his death in 1460. His mixture of motivations—scientific and intellectual curiosity, desire to spread the name of Christ to unfamiliar lands, and financial interest—reflected some of the key forces in late postclassical Europe.

Portugal by 1439 had taken control of the Azores and had granted land to colonists. Soon Spaniards and Portuguese had conquered and colonized the Madeiras and Canaries, bringing in western plants, animals, weapons, and diseases. The result was something of a laboratory for the larger European colonialism that would soon take shape, particularly in the Americas. European colonists quickly set up large agricultural estates designed to produce cash crops that could be sold on the European market. First they introduced sugar, an item once imported from Asia but now available in growing quantities from western-controlled sources. Ultimately, other crops such as cotton and tobacco were also introduced to the Atlantic islands. To produce these market crops, the new colonists brought in slaves from northwestern Africa, mainly in Portuguese ships—the first examples of a new, commercial version of slavery and the first sign that western expansion could have serious impact on other societies as well.

These developments about 1400 remained modest, even in their consequences for Africa. They illustrate mainly how quickly Western conquerors decided what to do with lands and peoples newly in their grasp. The ventures were successful enough to motivate more extensive probes into the southern Atlantic as soon as technology permitted. Indeed, voyages of exploration down the coast of Africa and across the Atlantic began to occur as the island colonies were being fully settled.

Finally, these early ventures summed up the swirl of forces that were beginning to reshape the West's role in the world: inferiorities and fears, particularly with regard to the Muslims; economic pressure from an inferior but eager position in world trade; new energies of Renaissance merchants and Iberian rulers. In final analysis, what is the best explanation for why Europe began to reach out in new ways?

OUTSIDE THE WORLD NETWORK

16.4 How did patterns in the Americas and Polynesia reflect their isolation from main transregional trade networks?

Developments in the Americas and Polynesia were not affected by the new international exchange. During the next period of world history, these regions all were pulled into a new level of international contact, but a world balance sheet in 1400 must emphasize their separateness.

At the same time, several of the societies outside the international network were experiencing some new problems during the 15th century that would leave them vulnerable to outside interference thereafter. Such problems included new political strains in the leading American civilizations and a fragmentation of the principal island groups in Polynesian culture.
Political Issues in the Americas

As we discussed in Chapter 12, the Aztec and Inca empires ran into increasing difficulties not long after 1400. Aztec exploitation of subject peoples for gold, slaves, and religious sacrifices roused great resentment. What would have happened to the Aztec empire if the Spaniards had not intervened after 1500 is not clear, but it is obvious that disunity created opportunities for outside intervention that might not have existed otherwise. The Inca system, although far less brutal than that of the Aztecs, provided ongoing tension between central leadership and local initiative. This complicated effective control of the vast expanse of the Inca domains. Here too, overextension made change likely by the 1500s—indeed, the empire was already receding somewhat—even without European intervention. At the same time, other cultures were developing in parts of the Americas that might well have been candidates for new political leadership, if American history had proceeded in isolation or if European intervention had been less sweeping.

Expansion, Migration, and Conquest in Polynesia

A second culture that was later pulled into the expanding world network involved Polynesia. Here, as in the Americas, important changes took place during the postclassical era but with no relationship to developments in societies elsewhere in the world. The key Polynesian theme from the 7th century to 1400 was expansion, spurts of migration, and conquest that implanted Polynesian culture well beyond the initial base in islands such as Tahiti, Samoa, and Fiji (Map 16.1).

One channel of migration pointed northward to the islands of Hawaii. The first Polynesians reached these previously uninhabited islands before the 7th century, traveling in great war canoes. The canoes carried all that was needed to settle on new lands, including pigs. These were to wreak some havoc on native flora and fauna in Hawaii, but at the same time Hawaiians created a land use system incorporating coastal fisheries, mid-mountain vegetable crops, and highland hunting that supported a sustainable lifestyle for centuries.

From the 7th century until about 1300 or 1400, recurrent contacts remained between the Hawaiian Islands and the larger Society Islands group, allowing periodic new migration. From about 1400 until the arrival of European explorers in 1778, Hawaiian society was cut off even from Polynesia.

Polynesians in Hawaii spread widely across the islands in agricultural clusters and fishing villages amid the volcanic mountains. Hawaiians were inventive in using local vegetation, weaving fabrics as well as making materials and fishing nets from grass. Politically, Hawaii was organized into regional kingdoms, which were highly warlike. Society was structured into a caste system with priests and nobles at the top, who reserved many lands for their exclusive use. Commoners were viewed almost as a separate people, barred from certain activities.

Thus, with a Neolithic technology and no use of metals, the Hawaiians created a complex culture on their islands. Without a written language, their legends and oral histories, tracing the genealogies of chiefly families back to the original war canoes, provided a shared set of stories and values.

Isolated Achievements by the Maori

Another group of Polynesians migrated thousands of miles to the southwest of the Society Islands, perhaps as early as the 8th century, when canoe or raft crews discovered the two large islands that today make up New Zealand. The original numbers of people were small but were supplemented over the centuries that followed by additional migrations from the Polynesian home islands. The Polynesians in New Zealand, called the Maori, successfully adapted to an environment considerably colder and harsher than that of the home islands. They developed the most elaborate of all Polynesian art and produced an expanding population that may have reached 200,000 people by the 18th century; primarily on the northern of the two islands. As in Hawaii, tribal military leaders and priests held great power in Maori society; each tribe also included a group of slaves drawn from prisoners of war and their descendants.
All these achievements were accomplished in total isolation from the rest of the world and, particularly after 1400, substantial isolation of each major island grouping from the rest of the Polynesian complex. Polynesians would be the last of the major isolated cultures to encounter the larger world currents brought forcefully by European explorers in the 18th century. When this encounter did come, it produced the same effects that it had in the Americas: vulnerability to disease, weakness in the face of superior weaponry and technology, and cultural disintegration.

THINKING HISTORICALLY

The Problem of Ethnocentrism

Many cultures encourage an ethnocentric outlook, and the culture of the West is certainly one of them. Ethnocentrism creates problems in interpreting world history. The dictionary definition of **ethnocentrism** is "a habitual disposition to judge foreign peoples or groups by the standards and practices of one's own culture or ethnic group"—and often finding them inferior. Most of us take pride in many of our own institutions and values, and it is tempting to move from this pride to a disapproval of other peoples when they clearly do not share our behaviors and beliefs. Many Americans have a difficult time understanding how other peoples have failed to establish the stable democratic political structure of our own country. Even liberals who pride themselves on a sophisticated appreciation of different habits in some areas may adopt an ethnocentric shock at the oppression (by current American standards) of women that is visible in certain societies today or in the past. Indeed, unless a person is almost totally alienated from his or her own society, some ethnocentric reactions are hard to avoid.

Nevertheless, unexamined ethnocentrism can be a barrier in dealing with world history. We will grasp other times and places better, and perhaps use our own values more intelligently, if we do not too readily dismiss cultures in which "objectionable" practices occur.

Ethnocentrism is not just an issue for modern Westerners. Civilized peoples in the past routinely accused outsiders of barbaric ways, as in the Islamic characterizations of the Mongols described in Chapter 15. But the current power of Western standards makes our own ethnocentric potential a real issue today in dealing with world history, as in the tendency to dismiss any people who did not exploit the latest available military technology as somehow inferior.

Controlling ethnocentrism does not mean abandoning all standards, as if any social behavior were as good as any other. It involves a certain open-mindedness and sophistication. Reducing distracting levels of ethnocentrism can be aided by some specific procedures. It is important to realize that few cultures behave irrationally over long periods of time. They may differ from our taste, but their patterns respond to valid causes and problems. Our own values are not without complexity. We sometimes believe things about our own society that are not as true as we want, or in judging other societies, we forget about drawbacks in our own surroundings. Perspective on our own habits, including awareness of how other cultures might judge us, helps us restrain our ethnocentrism.

However, ethnocentrism may become a particularly strong impulse in dealing with some of the changes in world history taking shape about 1400. The West was gaining strength. Because many Americans identify with Western civilization, it is tempting to downplay some of the subtleties and disadvantages of this process or to exaggerate the extent to which the West began to organize world history more generally.

The balance of power among civilizations was beginning to shift about 1400, and it is legitimate—not simply ethnocentric—to note that the West's rise was one of the leading forces of this change. It is unnecessary to ignore the many other patterns continuing or emerging—including new vigor in several other societies—or to gloss over the motives and results that the West's rise entailed. The rise of the West was not just "good." It did not result simply from a triumph of progressive values. At the same time, avoiding ethnocentric impulses in evaluating this crucial transition period in world history does not require an anti-Western approach. Balance and perspective are essential—easy to say, not always easy to achieve.

**QUESTIONS**

- Why can ethnocentrism complicate interpretations of world history?
- How can one balance disapproval and understanding in dealing with practices such as female infanticide?
- What are some nonethnocentric ways to interpret initial European expansion?
Adding Up the Changes

It is tempting to see some sort of master plan in the various changes that began to occur around 1400. People who emphasize an ethnocentric approach to world history, stressing some inherent superiorities in Western values, might be tempted to simplify the factors involved. However, a series of complex coincidences provides a more accurate explanation, as in other cases in which the framework of world history changed substantially. Independent developments in the Americas and elsewhere figured in, as did crucial policy decisions in places such as China. Each of the separate steps can be explained, but their combination was partly accidental.

Several elements of the world history transition deserve particular attention. Technology played a role, as opportunities to copy Asian developments were supplemented by European initiative, particularly in gunnery and ship design. The role of individuals, such as Prince Henry, must be compared with the impact of more general forces, such as Europe's international trade woes.

The overall result of change affected even societies where existing patterns persisted. Sub-Saharan Africa, for example, was not experiencing great political or cultural shifts around 1400. Regional kingdoms fluctuated: The empire of Mali fell to regional rivals, but another Muslim kingdom, Songhay, soon arose in its stead, flourishing between 1464 and 1591. African political and religious themes persisted for several centuries, but the context for African history was shifting. The decline of the Arabs reduced the vitality of Africa's key traditional contact with the international network, although African merchants remained comfortable in dealing with North Africa and the Middle East. In contrast to the Europeans, Africans had no exchange with the Mongols. Even as Africa enjoyed substantial continuity, its power balance with western Europe was beginning to change, and this became a source of further change.

Global Connections and Critical Themes

1450 AND THE WORLD

The end of the postclassical period saw both change and continuity in the contacts that affected so many societies in Asia, Africa, and Europe. Change came in the procession of societies that served as active agents for contacts. Muslim traders and missionaries from the Middle East continued to be active, particularly in the Indian Ocean and in dealing with Africa. But the period of Mongol consolidation had introduced a new set of contacts, many of them land-based and involving Asia and Europe. Mongol overlords turned out to be delighted to encounter different ideas and to use officials from many different places and cultures. Mongol decline returned attention to sea-based contacts, particularly in the Indian Ocean. This was where, for a brief time, China took an unusually active stance. The Mongol era left other impacts as well: Japan, proud of its avoidance of Mongol occupation in contrast to China, began to think in terms of greater self-sufficiency, less reliance on imitation. Russian leaders, initially around Moscow, began to gain greater independence from Mongol control; their chief goal involved further expansions of territory and they paid attention to other contacts. Overall, at a time of many regional changes the question of roles in global contacts was a vital one, and by 1450 it was in flux.

The key continuity involved the interest and dependence of many societies on interregional trade and other contacts. African merchants and leaders continued to rely heavily on interactions with the Middle East. Western Europe's involvement in contacts was intensifying. Southeast Asia was increasingly drawn in, not only to trade but also to Muslim missionary efforts. The Middle East, India, and China continued to assume the availability of goods and merchant activities beyond their own borders. The diverse advantages of Afro-Eurasian contacts were widely realized, even amid changes in trade routes and regional initiatives.

The decades around the mid-15th century both reflected and intensified the transcontinental network. On the one hand, it was clear that the level of intercontinental connections developed in the postclassical period allowed increasingly rapid imitation, in areas like technology. This gave once-backward societies, like western Europe, a chance to accelerate their economic and military development. The networks also brought sufficient advantages, in access to luxury consumer goods, that the decline of one trade system—for example, the overland Mongol routes—quickly brought forward other societies eager to develop an alternative framework—the Chinese, then the Europeans. This process, from the Mongols onward, quickened the pace of contact, from ambitious travelers like Ibn Battuta (IH-buhn BAH-too-tuh) and Marco Polo, to imaginative merchants and explorers. The stage was set for a next phase in the globalization process, in which the whole world would, for the first time, be directly involved.
Further Readings


On MyHistoryLab

Critical Thinking Questions

1. What were the consequences of the fall of the Byzantine empire? Was this a short-term or long-term change in world history?
2. What was new about Renaissance culture? Is it possible to use a cultural change of this sort to explain innovations in trade and exploration?
3. What caused the main differences between developments in West Africa and those in western Europe during the 14th and 15th centuries?
4. Should China have maintained its commitment to great expeditions?
5. What distinctive features of Polynesian society reflected lack of contact with other major centers?