The Crucible: The Eurasian Crises of the Thirteenth and Fourteenth Centuries

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This Korean world map, from about 1402, known as the Kangnido, is the earliest known map of the world from east Asia. It is also the oldest surviving Korean map. Based on Chinese maps from the fourteenth century, the Kangnido clearly shows Africa (with an enormous lake in the middle of the continent) and Arabia on the lower left. The Indian subcontinent, however, has been merged into a gigantic landmass that represents China. The Korean peninsula, on the upper right, is shown as much bigger than it actually is, while Japan, on the lower right, is placed much farther south than where it is actually located.
1330s–mid–1400s
(and sporadically to 1700s)
Plague in Eurasia

1368–1644
Ming Dynasty (China)

1440s
Rise of Muscovy

from mid–1400s
Rise of Incas, Aztecs
Beginnings of oceanic imperialism

from 1350s
Rise of the Ottomans

since mid–1400s
Growth of Atlantic navigation
The Mongols arrive in Georgia. Two coins from the kingdom of Georgia, minted less than two decades apart, show that the Mongols had conquered that Caucasian state. The front of the top coin, minted by Queen Rusudan of Georgia in 1230, features a bust of a bearded Jesus Christ, draped in a mantle and backed by a cross-shaped halo. The Greek abbreviations for the words “Jesus” and “Christ” flank his right and left shoulders respectively. A Georgian inscription runs along the border. The back of the coin shows inscriptions in both Georgian and Arabic. In contrast, on the bottom coin, minted by King David in 1247, a figure on horseback has replaced the image of Jesus Christ (front), while the inscription on the back of the coin is exclusively in Arabic and identifies the king as “the slave of the Great Khan.”

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Two coins lie alongside each other in the British Museum in London. One, minted in the Caucasus Mountains, in 1230, is stamped with the name of the queen of Georgia, Rusudan, and the words, “Queen of Queens, Glory of the World and Faith, Champion of the Messiah.” Beside it, another Georgian coin, minted only 17 years later, shows a figure on horseback, named as “King David, slave of the empire of the Great Khan Kuyuk.” A lot had happened in Georgia in a short time. The changes the coins reflect were important, not just for Georgia but for the world, for they were huge in scale, reshaping the politics, communications, and culture of Eurasia.

Georgia, protected by its high mountains, had been remarkably successful in resisting the nomad armies of the eleventh and twelfth centuries. Though the Seljuk Turks (see Chapter 12) had briefly terrorized the kingdom and exacted tribute, the Georgians fought back. They refused to pay tribute, recovered their lost possessions, and extended their frontiers over parts of neighboring Armenia. In the early thirteenth century, Georgia was a formidable state, capable of imposing rulers as far afield as the Byzantine city of Trebizond (TREH-bih-zahnd) on the Black Sea and the Muslim city of Ahar in Azerbaijan (ah-zehr-bay-ZHAHN) on the Caspian. In the 1220s, James of Vitry, a Catholic bishop and historian of his own times, admired Georgian pilgrims he saw in Jerusalem, who “march into the holy city with banners displayed, without paying tribute to anyone, for the Muslims dare in no way molest them”.

As James of Vitry noted, Georgia was “surrounded by infidels on all sides”. That did not seem to matter. The Georgians even wrote to the pope promising assistance in a new crusade. Suddenly, however, in 1224, letters from Georgia arrived in Rome, withdrawing the promise. “A savage people of hellish aspect has invaded my realm,” wrote Rusudan, “as voracious as wolves in their hunger for spoils, and as brave as lions.” In the next decade, her letters got increasingly desperate. The Mongols were coming. The world would never be the same again.
The effects of the events of the rest of the century refashioned Eurasia, destroying old states, creating new ones, disrupting existing communications and reforging stronger, wider-ranging links. Though at first the Mongols razed cities, destroyed crops, slaughtered elites, and depleted peoples, it looked for a while as if a safer, richer, more interconnected, more dynamic, more expanding, and more enlightened world might emerge—as if something precious were to form in an alchemist’s crucible, out of conflicting ingredients, flung at random and stirred with violence. Then a century of environmental disasters arrested these changes in most of Eurasia. Catastrophes reversed the growth of populations and prosperity. But previously marginal regions began to be drawn more closely into a widening pattern of contacts and cultural exchange. Some peoples, in Africa and southeast Asia, for example, looked outward because they escaped disaster. Others, especially in Europe, did so because their reverses were so enormous that there was nothing else they could do.

**THE MONGOLS: RESHAPING EURASIA**

The earliest records of Mongol-speaking peoples occur in Chinese annals of the seventh century, when they emerged onto the steppes of Central Asia, from forests to the north, and became horse-borne nomads and sheepherders. In the early twelfth century, the bands or alliances they formed got bigger, and their raids against neighboring sedentary peoples became more menacing. In part, this was the effect of the growing preponderance of some Mongol groups over others. In part, it was the result of economic change.

Contact with richer neighbors enriched Mongol chiefs as mercenaries or raiders. Economic inequalities arose in a society in which blood relationships and seniority in age had formerly settled every person’s position. Prowess in war enabled particular leaders to build up followers in parallel with—and sometimes in defiance of—the old social order. They called this process “crane catching”—comparing it to caging valuable birds. Successful leaders enticed or forced rival groups into submission. The process involved peoples who were not strictly Mongols, including many who spoke Turkic languages. In 1206, Temujin (TEH-moo-jeen), the most dynamic leader, proclaimed himself ruler “of all those who live in felt tents”—staking a claim to a steppe-wide empire. He was acclaimed by a title of obscure meaning that is traditionally rendered in the Roman alphabet as “Genghis Khan” (GEHN-gihs hahn).

Today, his memory is twisted between myths. When Mongolia was a communist state between 1921 and 1990, he was an almost unmentionable figure, inconsistent with the “peace-loving” image the communists tried to project. Now he is Mongolia’s national hero. In his own day, he addressed different audiences with conflicting messages. To Muslims, he was sent by God to punish them for their sins. To Chinese, he was a candidate for the mandate of heaven. To Mongols, he was a giver of victory and of the treasure it brought. To monks and hermits, he stressed his own asceticism. “Heaven is weary of the inordinate luxury of China,” he declared. “I have the same rags and the same food as cowherds and grooms, and I treat the soldiers as my brothers.”
The violence endemic in the steppes now turned outward to challenge neighboring civilizations. Historians have been tempted to speculate about the reasons. One explanation is environmental. Temperatures in the steppe fell. People farther west on the Russian plains complained that a cold spell in the early thirteenth century caused crops to fail. So declining pastures might have driven the Mongols to expand from the steppes. Population in the region seems to have been relatively high, and the pastoral way of life demands large amounts of grazing land to feed relatively few people. So perhaps the Mongol outthrust was a consequence of having more mouths to feed. Yet the Mongols were doing what steppelanders had always sought to do: dominate and exploit sedentary peoples. The difference was that they did it with more ambition and efficiency than their predecessors.

Genghis Khan enforced or induced unity over almost the entire steppeland. A single ideology came to animate, or perhaps reflect, his program: the God-given right of the Mongols to conquer the world. Mongol-inspired sources constantly insist on an analogy between the overarching unity of the sky and God’s desire for the Earth to echo that unity through submission to one ruler. This imperial vision probably grew on Genghis Khan gradually, as he felt his way from raiding, tribute gathering, and exacting ransom to constructing an empire, with permanent institutions of rule. Tradition alleges a turning point. When one of his generals proposed to exterminate 10 million Chinese subjects and convert their fields into pasture for Mongol herds, Genghis Khan realized that he could profit more by sparing the peasants and taxing them to the tune of 500,000 ounces of silver, 400,000 sacks of grain, and 80,000 bolts of silk a year.

The process, however, that turned him from destroyer to builder was tentative. The khan himself may have been only dimly aware of it. His initially limited ambitions are clear from the oath Mongol chiefs swore to him at his election. “If you will be our khan, we will go as your vanguard against the multitude of your enemies. All the beautiful girls and married women that we capture and all the fine horses we will bring to you.” The khan acquired an unequalled reputation for lust and bloodlust. “My greatest joy,” he was remembered for saying, “is to shed my enemies’ blood, wring tears from their womenfolk and take their daughters for bedding.” Meanwhile, he made the streets of Beijing (bay-jeeng)—according to an admittedly imaginative eyewitness—“greasy with the fat of the slain.” His victims in Persia amounted, believably, to millions. Even after Genghis Khan had introduced more constructive policies, terror remained an instrument of empire. Mongol sieges routinely culminated in massacre.

Wherever Mongol armies went, their reputation preceded them. Armenian sources warned Westerners of the approach of “precursors of Antichrist ... who rush with joy to carnage as if to a wedding feast or orgy.” The invaders looked like monkeys, it was said, barked like dogs, ate raw flesh, drank their horses’ urine, knew no laws, and showed no mercy. Matthew Paris, the thirteenth-century English monk who, in his day, probably knew as much about the rest of the world as any of his countrymen, summed up the Mongols’ image: “They are inhuman and beastly, rather monsters than men. ... And so they come, with the swiftness of lightning to the confines of Christendom, ravaging and slaughtering, striking everyone with terror and with incomparable horror.”

The Mongol conquests reached farther and lasted longer than those of any previous nomad empire (see Map 13.1). At its fullest

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**The Rise of the Mongols**

<table>
<thead>
<tr>
<th>Century</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>Seventh</td>
<td>Earliest records of the Mongol people</td>
</tr>
<tr>
<td>Early twelfth</td>
<td>Larger Mongol bands attack sedentary peoples</td>
</tr>
<tr>
<td>1206</td>
<td>Temujin proclaims himself khan</td>
</tr>
</tbody>
</table>
I CHAPTER 13

1200: Cold spell throughout Eurasian steppe
1206: Mongols united under Genghis Khan
1208: Battle of Ain Jalut
1211: First invasion of northern China
1215: Second invasion of northern China
1216: Beginning of conquest of Russia
1218: Mongols reach Elbe River (Germany)
1220: Sack of Baghdad; last Caliph put to death
1222: First failed attempt at invading Japan
1226: Mongols invade Egypt
1227: Death of Genghis Khan
1228: Mongols sack Jerusalem
1229: Mongols invade Egypt
1230: Mongols invade Egypt
1232: Conquest of Song China complete
1235: Mongols raid Java
1237: First failed invasion of Japan
1239: Mongols invade Egypt
1240: Kiev sacked
1242: Mongols reach Elbe River (Germany)
1246: Mongols invade Egypt
1247: Mongols invade Egypt
1250: Mongols invade Egypt
1251: Mongols invade Egypt
1252: Mongols invade Egypt
1254: Mongols invade Egypt
1256: Mongols invade Egypt
1258: Mongols invade Egypt
1260: Battle of Ain Jalut
1265: Mongols invade Egypt
1266: Mongols invade Egypt
1268: Mongols invade Egypt
1270: Mongols invade Egypt
1271: Mongols invade Egypt
1272: Mongols invade Egypt
1273: Mongols invade Egypt
1274: First failed invasion of Japan
1275: Mongols invade Egypt
1276: Mongols invade Egypt
1277: Mongols invade Egypt
1278: Mongols invade Egypt
1279: Mongols invade Egypt
1280: Mongols invade Egypt
1281: Second failed invasion of Japan
1282: Mongols invade Egypt
1283: Mongols invade Egypt
1284: Mongols invade Egypt
1285: Mongols invade Egypt
1286: Mongols invade Egypt
1287: Mongols invade Egypt
1288: Mongols invade Egypt
1289: Mongols invade Egypt
1290: Mongols invade Egypt
1291: Mongols invade Egypt
1292: Mongols invade Egypt
1293: Mongols invade Egypt
1294: Mongols invade Egypt
1295: Il-Khans adopt Islam
1296: Mongols invade Egypt
1297: Mongols invade Egypt
1298: Mongols invade Egypt
1299: Mongols invade Egypt
1300: Mongols invade Egypt

Scale varies with perspective

8,372 km (5,224 miles)
MAP 13.1
Mongol Campaigns of the Thirteenth Century

- Mongol homeland, ca. 1206
- campaigns of Genghis Khan (1206–1227)
- Mongol campaigns 1227–1294
- Mongol capital
- city sacked by Mongols
- Mongol defeat, 1260
- Uighurs
- modern-day country
- Silk Road

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extent, the empire encompassed the whole of Russia, Persia, China, the Silk Roads, and the steppes. It was the largest empire, in terms of territorial extent, the world had seen. Efforts to explain this success appeal to Genghis Khan’s military genius, the effectiveness of the Mongols’ curved bows and inventive tactics, the demoralizing psychological impact of their ruthless practices. Of course, they had the usual steppelander advantages of superior horsemanship and unrivaled mobility. It is likely that they succeeded, in part, through sheer numbers. Though we call it a Mongol army, Genghis Khan’s was the widest alliance of steppelander peoples ever. And it is probable that, relatively speaking, the steppeland was more populous in his day than ever before.

Above all, the Mongols were exceptionally adaptable warmongers. They triumphed not only in cavalry country, but also in environments where previous steppelander armies had failed, pressing into service huge forces of foot soldiers, mobilizing complex logistical support, organizing siege trains and fleets, appropriating the full potential of sedentary economies to finance further wars. The mountains of Georgia could not stop them. Nor, in the long run, could the rice paddies and rivers of southern China where the Mongols destroyed the Song dynasty in the 1270s. Toward the end of the century, when another supreme khan wanted to conquer Java and Japan, they were even willing to take to the sea. But both attempts failed.

As well as for extent, the Mongol Empire was remarkable, by steppelander standards, for longevity. As his career progressed, Genghis Khan became a visionary lawgiver, a patron of letters, an architect of enduring empire. His first steps toward acquiring a bureaucracy and a judicial system more or less coincided with his election as khan. He then turned to lawmaking. Gradually, a code took shape, regulating hunting, army discipline, behavior at feasts, and social relationships, with death the penalty for murder, serious theft, conspiracy, adultery, sodomy, and witchcraft. Initially, the khan relied on Uighurs (see Chapter 9) for his administrators and ordered the adoption of the Uighur script for the Mongols’ language. But he recruited as and where he conquered, without
favoritism for any community or creed. His closest ministers included Muslims, Christians, and Buddhists.

In 1219, a Chinese Daoist sage, Changchun (chahng-chwauhn), answered the khan’s call for wise experts. At age 71, he undertook a three-year journey from China to meet the khan at the foot of the Hindu Kush mountains. There were sacrifices of principle he would not make. He would not travel with recruits for the imperial harem, or venture “into a land where vegetables were unavailable”—by which he meant the steppe. Yet he crossed the Gobi Desert, climbed “mountains of huge cold,” and braved wildernesses where his escort smeared their horses with blood to ward off demons. Admittedly, Changchun’s meeting with the khan was disappointing. The question the conqueror was most eager to put was not about the art of government, but about a potion to confer longevity on himself.

The Mongol Steppe

Still, many lettered and experienced officials from conquered states took service at the khan’s court. The result was an exceptional, though short-lived, era in steppe land history: the Mongol peace. A European, who witnessed it in the 1240s, described it to reproach his fellow Christians with the moral superiority of their enemies: “The Mongols are the most obedient people in the world with regard to their leaders, more so even than our own clergy to their superiors. ... There are no wranglings among them, no disputes or murders.” This was obviously exaggerated, but Mongol rule did make the steppeland safe for outsiders. This was new. A previously inaccessible road through the steppes opened across Eurasia north of the Silk Road. The Mongols became its highway police. Teams of Mongol horses, for instance, took the pope’s ambassador, John of Piano Carpini, 3,000 miles in 106 days in 1246. Missionaries, spies, and craftsmen in search of work at the Mongol court also made the journey in an attempt to forge friendship between the Mongols and the Christian West, or, at least, to gather intelligence (see Map 13.2).

William of Rubruck, a Franciscan envoy, recorded vivid details of his mission to Genghis Khan’s grandson in 1253. After taking leave of the king of France, who hoped for an alliance with the Mongols against the Muslims, William crossed the Black Sea in May and set out across the steppe by wagon, bound for Karakorum (kah-rah-KOH-ruhn), the new city in Mongolia where the khan held court. “After three days,” he recorded, “we found the Mongols and I really felt as if I were entering another world.”
By November, he was in Transoxiana, "famished, thirsty, frozen, and exhausted." In December, he was high in the dreaded Altai Shan, the mountains. Here he "chanted the creed, among dreadful crags, to put the demons to flight." At last, on Palm Sunday, 1254, he entered the Mongol capital.

Friar William always insisted that he was a simple missionary, but he was treated as an ambassador and behaved like a spy. And, indeed, he had more than one objective. The Mongols might adopt Christianity or at least make an alliance against common enemies in the Muslim world. On the other hand, they were potential enemies, who had invaded the fringes of Europe and might do so again. Intelligence about them was precious. William realized that the seasonal migrations of Mongol life had a scientific basis and were calculated for military efficiency. "Every commander," he noted, "according to whether he has a greater or smaller number of men under him, is familiar with the limits of his pasture lands and where he ought to graze in summer and winter, spring and autumn."

Little useful intelligence escaped William. But he also showed interest in the culture he tried unsuccessfully to convert to Christianity. His description of a Mongol tent dwelling still holds good. The layout, social space, and way of life William saw have not changed much since his day. A frame of interlaced branches stretched and converged at the top. The covering was of white felt, "and they decorate the felt with various fine designs." Up to 22 oxen hauled houses on wagons 20 feet broad.
A MONGOL PASSPORT

Although they were in use in China before the Mongols arrived, documents called *paizi*, such as the one depicted here, were used as passports to regulate communication and administration in the vast Mongol empire. Their use, the way they were designed, and the language in which they were written help us understand the massive movements of people and the rapid exchange of ideas and technology that occurred across Eurasia during the thirteenth and fourteenth centuries when Mongol rule was at its height. William of Rubruck and Marco Polo would have carried one of these passports on their return journeys from Mongol courts in Asia to Europe.

The inscription reads:
“By the strength of Eternal Heaven, an edict of the Emperor [Khan]. He who has no respect shall be guilty.”

Above the inscription is a handle with a silver lion mask inlaid on it that shows the influence of Tibetan and Indian art.

Most *paizi* were circular or rectangular in shape and were either fastened on an item of clothing or suspended from the neck, so that customs officers could easily see them.

This passport is made of iron. Thick silver bands on it form characters in the script that the Tibetan monk Phagspa, a close advisor to Kubilai Khan (r. 1260–1294), devised for writing the Mongol language in 1269.
Each wife of the master of the household had her own tent, where the master had a bench facing the entrance. In an inversion of Chinese rules of precedence, the women sat on the east side, the men to the right of the master, who sat at the north end. Ancestral spirits resided in felt bags arrayed around the walls. One each hung over the heads of master and mistress, with a guardian image between them. Others hung on the women's and men's sides of the tent, adorned with the udders of a cow and a mare, symbols of life for people who relied on dairy products for their diet. The household would gather to drink fermented mare’s milk in the tent of the chosen wife of the night. “I should have drawn everything for you,” William assured his readers, “had I known how to draw.”

Shamans’ trances released the spirits from the bags that held them. Frenzied drumming, dancing, and drinking induced the shamans’ ecstasies. The power of speaking with the ancestors’ voices gave shamans enormous authority in Mongol decision making, including the opportunity to interfere in making and unmaking khans. This was a point William missed. The Mongols leaders’ interest in foreign religions, and their investment in the cult of heaven, were, in part at least, strategies to offset the power of the native priests.

Outside the tent, William vividly captured the nature of the terrain—so smooth that one woman could pilot 30 wagons, linked by trailing ropes. He described a way of life that reflected steppeland ecology. The Mongols had mixed flocks of various kinds of sheep and cattle. Mixed pastoralism is essential in an environment in which no other source of food is available. Different species have different cycles of lactation and fertility. Variety ensures a reliable food supply.

The horse was the dominant partner of life on the steppe. Mare’s milk was the Mongols’ summer food. By drawing blood from the living creatures, Mongols on campaign could refresh themselves without slowing the herds. This was the basis of their reputation for blood-sucking savagery among their sedentary neighbors. Fermented mare’s milk was the favorite intoxicating drink. The Mongols revered drunkenness and hallowed it by rites: offerings sprinkled over the bags of ancestral spirits, or poured out toward the quarters of the globe. Drinking bouts were a nightly entertainment.

William’s conversations with the habitually drunken Möngke Khan, (MOHNG-keh hahn), grandson of Genghis Khan, revealed some of the qualities that made the Mongols of his era great: tolerance, adaptability, respect for tradition. “We Mongols believe,” Möngke said, “that there is but one God, in Whom we live and in Whom we die, and towards him we have an upright heart.” Spreading his hand, he added, “But just as God has given different fingers to the hand, so He has given different religions to people.” Later in the thirteenth century, Kubilai Khan (KOO-bih-la-ye hahn), another of Genghis Khan’s grandsons, expressed himself to the Venetian traveler, Marco Polo, in similar terms.
The steppeland route was ideal for horseborne travelers. Trading caravans, however, still favored the traditional Silk Roads, which crossed Eurasia to the south of the steppe through the Taklamakan (tahk-lah-mah-KAHN) Desert. These routes had developed over centuries, precisely because high mountains protected them from steppeland raiders. But the security of the Mongol peace boosted the amount of traffic the roads carried. Mongol partiality for merchants also helped. Mongols encouraged Chinese trade, uninhibited by any of the traditional Confucian prejudices against commerce as an ignoble occupation. In 1299, after the Mongol Empire had been divided among several rulers, a Persian merchant was made the ambassador of the Supreme Khan to the court of the subordinate Mongol Il-khan (EEL-hahn) in Persia—an elevation unthinkable under a native Chinese dynasty, which would have reserved such a post for an official educated in the Confucian classics. The khans gave low-cost loans to Chinese trading companies. Chinese goods—and with them, patterns and styles—flowed to Persian markets as never before. Chinese arts, under Mongol patronage, became more open to foreign influences.

Geography still made the Silk Roads hard to travel. Marco Polo was a young Venetian who accompanied his father and uncle on a trading mission to Mongol-ruled China in the early 1270s. “They were hard put to it to complete the journey in three and a half years.” The Taklamakan Desert was the great obstacle. The normal rule for caravans was the bigger, the safer. But the modest water sources of the desert could not sustain many more than 50 men at a time with their beasts. The key to exploiting the desert routes was the distribution of water, which drains inland from the surrounding mountains and finds its way below the desert floor by underground channels. It was normal to go for 30 days without finding water, though there might be an occasional salt-marsh oasis or an unreliable river. The worst danger was getting lost—“lured from the path by demon-spirits.” As a fourteenth-century painter at Persia’s Mongol court imagined, the demons were black,
athletic, and ruthless, waving dismembered limbs of horses as they danced. As Friar William had seen, the Mongols recommended warding them off by smearing a horse’s neck with blood.

A fourteenth-century guide included tips for Italian merchants who headed for East Asia to extend the reach of the commerce of their cities. At the port of Tana (TAH-nah), on the Black Sea, you should hire a good guide, regardless of expense. “And if the merchant likes to take a woman with him from Tana, he can do so.” On departure from Tana, 25 days’ supply of flour and salt fish were needed—“other things you will find in sufficiency and especially meat.” The road was “safe by day and night” and protected by Mongol police. But it was important to take a close relative for company. Otherwise, should a merchant die, his property would be forfeit. The text specified rates of exchange at each stop and recommended suitable conveyances for each stage of the journey: oxcart or horse-drawn wagon to the city of Astrakhan (AHS-trah-hahn) where the Don River runs into the Caspian Sea. Thereafter camel train or pack mule was best, until you arrived at the river system of China. Silver was the currency of the road, but the Chinese authorities would exchange it for paper money, which—Westerners were assured—they could use throughout China.

After the deserts, the next obstacles were the mountains on their rims. The Tian Shan, which screens the Taklamakan Desert, is 1,800 miles long, up to 300 miles wide, up to 24,000 feet high, and punctuated by deep depressions. Farther north, the Altai Shan mountains guard the Mongolian heartlands. “Before the days of the Mongols,” wrote the bishop of the missionary diocese the Franciscans had established in China, “nobody believed that the Earth was habitable beyond these mountains, ... but by God’s leave and wonderful exertion the Mongols crossed them, and ... so did I.”

Europeans frequently made the journey to China. That reflects the balance of wealth and power at the time. China was rich and productive, Europe a needy backwater. We know of only one subject of the Chinese emperor who found it worthwhile to make the journey in the opposite direction. Rabban Bar Sauma (rah-BAHN bahr SAH-no-mah) was a Nestorian Christian who set out from China on a pilgrimage to Jerusalem. He got as far as Maragha in what is now Azerbaijan, the intellectual capital of the western Mongol world, with a library reputedly of 400,000 books and a new astronomical observatory. Then in 1286 he was appointed the Mongols’ ambassador to the kingdoms of the Christian West, to negotiate an alliance against Muslim Egypt (see Map 13.3).

When he got to Rome, he was received by the cardinals who had assembled to elect a pope. In Paris, he recognized the university there as an intellectual powerhouse reminiscent of Maragha, with schools of mathematics, astronomy, medicine, and philosophy. Persian was the only language in which Bar Sauma could communicate with Western interpreters. He mistook diplomatic evasions for assent and vague expressions of Christian fellowship for doctrinal agreement. But the fact that he completed the journey at all shows how the Mongols made it possible to cross Eurasia.

**China**

The Mongols never ran their dominions as a centralized state. Three main areas of conquest beyond the steppeland—in China, Persia, and Russia—were added after Genghis Khan’s death. All were exploited in different ways, specific to the Mongols’ needs and the peculiarities of each region.
MAP 13.3
The Travels of Rabban Bar Sauma, 1275–1288

The conquest of Song China was long and difficult for two reasons. It was a more powerful state than any the Mongols faced elsewhere, and it was highly defensible: compact, so that its armies could maneuver on interior lines of communication, and scored by terrain inhospitable to Mongol horsemen. But, fueled by resources from the Mongols’ other conquests, the conquest unfolded relentlessly bit by bit. Letters from the Chinese court seeped desperation as the Mongols closed in for the kill. In 1274, the Chinese empress mother reflected on where the blame lay.

The empire’s descent into peril is due, I regret, to the instability of our moral virtue. ... The sound of woeful lament reverberated through the countryside, yet we failed to investigate. The pall of hunger and cold enveloped the armed forces, yet we failed to console.2

Unlike previous steppelander invaders, the Mongols spared no resources to pursue all-out victory and hired the troops and equipment needed to subdue a country of cities, rice paddies, and rivers. Clearly, the size of the Mongols’ existing empire helped. Persian engineers built the siege engines that helped overcome southern Chinese cities. The last battle was at Changzhao (chanhg-jeewo)
in 1275. The Chinese poet Yi Tinggao (yee teen-gow) was there, “smelling the acrid dust of the field,” spying “the green iridescent hue of the dead.” The misery could be measured in the grief-stricken literature that survives: the suicide notes, the cries of longing for loved ones who disappeared in the chaos, massacred or enslaved. Years later, Ni Bozhuang (nee bwo-chwang), bailiff of a Daoist monastery, recalled the loss of his wife: “I still do not know if you were taken because of your beauty, or if, surrounded by horses, you can still buy cosmetics.” In 1276, with his advisers fleeing and his mother packed for flight, the young Song emperor wrote his abdication letter to the Mongol khan. “The Mandate of Heaven having shifted, your Servant chooses to change with it, ... yet my heart is full of emotions and these cannot countenance the prospect of the abrupt annihilation of the ... altars of my ancestors. Whether they be misguidedly abandoned or specially preserved intact rests solely with the revitalized moral virtue you bring to the throne.”

For the Mongols, the conquest of China was a logical continuation of the policies of Genghis Khan and a stage in fulfilling the destiny of world conquest heaven supposedly envisaged. But it was also the personal project and passion of Kubilai Khan (1214–1294), Genghis’s grandson, who became so immersed in China that he never asserted his supremacy against those Mongol leaders in the extreme west of the Mongol world who resisted his claims to supremacy. Some of his Chinese subjects resented Kubilai’s foreign ways: the libations of fermented mare’s milk with which he honored his gods, his barbarous banquets of meat, the officials he chose from outside the Confucian elite and even from outside China. Marco Polo reported that all the Chinese “hated the government of the Great Khan, because he set over them steppelanders, most of whom were Muslims, and ... it made them feel no more than slaves.” In this respect, the khan indeed broke with Chinese tradition, which was to confine administrative positions to a meritocracy, whose members were selected by examination in the Confucian classics. Kubilai showed his reverence for Confucius by building a shrine in his honor, but he needed to recruit, as Genghis Khan had, from the full range of talent the Mongol Empire supplied.

Kubilai, indeed, remained a Mongol khan. In some respects, he flouted Chinese conventions. He showed traditional steppelander respect for the abilities of women, giving them court posts and, in one case, a governorship. His wife, Chabi, was one of his closest political advisers. Mongols became a privileged minority in China, ruled by their own laws, and resented for it by most Chinese. In defiance of Confucian teachings, Kubilai felt obliged to fulfill the vision of world conquest he inherited from Genghis Khan. But beyond China, he registered only fleeting success. In Java, the Mongols replaced one native prince with another, without making permanent gains. In Vietnam, the Mongols were only able to levy tribute at a rate too low to meet the cost of their campaigns there. So-called kamikaze winds—divine typhoons that wrecked the Mongol fleets—drove Kubilai’s armies back from Japan.

While upholding Mongol traditions, Kubilai also sought to be a Chinese emperor, who performed the due rites, dressed in the Chinese manner, learned the
language, patronized the arts, protected the traditions, and promoted the interests of his Chinese subjects. Marco Polo, who seems to have served him as a sort of professional storyteller, called him “the most powerful master of men, lands, and treasures there has been in the world from the time of Adam until today.”

**Persia**

In Persia, meanwhile, the Mongol rulers were like chameleons, taking on the hues of the culture they conquered. But, as in China, they were anxious to maintain a distinct identity and to preserve their own traditions. The court tended to stay in the north, where there was grazing for the kinds of herds their followers brought with them from the steppe. The Il-khans—“subordinate rulers,” so called in deference to Kubilai Khan’s nominal superiority—retained nomadic habits, migrating every summer and winter to new camps. In southern Iran and Iraq, the Il-khans tended to entrust power to local dynasties, securing their loyalty by marriages with the ruling family or court nobility. In effect, this gave them hostages for the good conduct of provincial rulers.

Eventually in 1295, the Il-khans adopted Islam, after flirtations with Nestorianism and Buddhism. This marked an important departure from the tradition of religious pluralism Genghis Khan had begun and Kubilai had upheld. From the moment the Il-khan Ghazan (r. 1295–1304) became a Muslim, the state began to take on a militantly religious character, excluding the Christians, Zoroastrians, Buddhists, and Jews formerly admitted to the khan’s service. Moreover, the form of Islam the Il-khans finally adopted was Shiism, the prevailing tradition in Iran. Shiites (see Chapter 9) embraced doctrines most Muslims rejected: that Muhammad’s authority descended via his nephew Ali; that a divinely selected leader or imam would perfect the Prophet’s message; and that in the meantime the clergy had the right to interpret Islam. The Il-khans’ option ensured that Persia would be the only officially Shiite state in the Muslim world.

The religious art of the Il-khanate looked unorthodox, full of human figures, especially those of Muhammad and his nephew. Painters even copied Christian nativity scenes to produce versions of the Prophet’s birth. The Il-khans’ Persia, however, was not isolated from neighboring states. On the contrary, as was usual in the Mongol world, the presence of rulers descended from Genghis Khan promoted trans-Eurasian contacts and exchanges of goods, personnel, and ideas. Persia supplied China, for instance, with engineers, astronomers, and mathematicians, while Persia received Chinese porcelain and paper money, which, however, did not take root in Persia before the twentieth century. Chinese designs influenced Persian weavers, and Chinese dragons appeared on the tiles that decorated Persian buildings. Mongol rule ended in Persia in 1343 when the last Il-khan died without an heir.

**Russia**

Meanwhile, the Mongols who remained in their central Asian heartlands continued their traditional way of life. So did those who formed the elite in the remaining areas the heirs of Genghis Khan inherited: in Turkestan and Kashgaria in Central Asia, and the steppes of the lower Volga River. From the last of these areas, where the Mongols were known as the Golden Horde, they exercised overlordship over Russia, where they practiced a kind of imperialism different from
those in China and Persia. The Mongols left the Christian Russian principalities and city-states to run their own affairs. But their rulers had to receive charters from the khan’s court at Saray (sah-RAY) on the lower Volga, where they had to make regular appearances, loaded with tribute and subject to ritual humiliations. The population had to pay taxes directly to Mongol-appointed tax gatherers—though as time went on, the Mongols assigned the tax gathering to native Russian princes and civic authorities.

The Russians tolerated this situation—albeit unhappily, and with many revolts—partly because the Mongols intimidated them by terror. When the Mongols took the great city of Kiev in 1240, it was said, they strewed the fields “with countless heads and bones of the dead.” Partly, however, the Russians were responding to a milder Mongol policy. In most of Russia, the invaders came to exploit rather than to destroy. According to one chronicler, the Mongols spared Russia’s peasants to ensure that farming would continue. Ryazan, a Russian principality on the Volga, southeast of Moscow, seems to have borne the brunt of the Mongol invasion. Yet there, if the local chronicle can be believed, “the pious Grand Prince Ingvary Ingvarevitch sat on his father’s throne and renewed the land and built churches and monasteries and consoled newcomers and gathered together the people. And there was joy among the Christians whom God had saved from the godless and impious khan.”

Many cities escaped lightly by capitulating at once. Novgorod, that hugely rich city (see Chapter 11), which the Mongols might have coveted, they bypassed altogether. Moreover, the Russian princes were even more fearful of enemies to the west, where the Swedes, Poles, and Lithuanians had constructed strong monarchies, capable of sweeping the princes away if they ever succeed in expanding into Russian territory. Equally menacing were groups of mainly German adventurers, organized into crusading “orders” of warriors, such as the Teutonic Knights and the Brothers of the Sword, who took monastic-style vows but dedicated themselves to waging holy war against pagans and heretics. In practice, these orders were self-enriching companies of professional fighters, who built up territorial domains along the Baltic coast by conquest. Between 1242 and 1245, Russian coalitions fought off western invaders, but they could not sustain war on two fronts. The experience made them submissive to the Mongols.

THE LIMITS OF CONQUEST: MAMLUK EGYPT AND MUSLIM INDIA

In the 1200s, Egypt was in chaos because of rebellions by pastoralists from the southern desert and revolt by the slaves who formed the elite fighting force. It seems counterintuitive to arm slaves. But for most of the thirteenth century, the policy worked well for Saladin’s heirs, who had ruled Egypt since 1192. The rulers’ handpicked slave army, or Mamluks, came overwhelmingly from Turkic peoples that Mongol rebels displaced or captured and sold. These slaves had
nowhere else to go and no future except in the Egyptian sultan’s service. They were acquired young. They were trained in barracks, which became their substitutes for families and the source of their pride and sense of comradeship. The Mamluks seemed, from the ruler’s point of view, ideally reliable: a dependent class. However, in the 1250s, they rebelled “like an unleashed torrent.” Their own later propaganda cites the sultan’s failure to reward them fairly for their services, and their outrage at the promotion of a black slave to one of the highest offices in the court.

In September 1260, the rebels turned back the Mongol armies at one of the decisive battles of the world at Ain Jalut (EYE-in jah-LOOT) in Syria. It was the first serious reversal the Mongols had experienced since Genghis Khan united them. And it gave the slave army’s commander, Baybars (BYE-bahrs), the chance to take over Egypt and Syria. He boasted that he could play polo in Cairo and Damascus within the space of a single week. The Mamluks mopped up the last crusader states on the coast of Syria and Palestine between 1268 and 1291. In combination with the effects of the internal politics of the Mongol world, which inhibited armies from getting too far from the centers of power, the Mamluk victory kept the Mongols out of Africa.

Mamluk victory marked a further stage in the Islamization of Africa. The Mamluks levied tribute on the Christian kingdoms of Nubia (see Chapter 9). Then, in the next century, they imposed Islam there. Cairo became a normal stopping place on the pilgrimage route to Mecca for Muslim kings and dignitaries from West Africa. Islam percolated through the region of Lake Chad and in what is today Nigeria.

**Muslim India: The Delhi Sultanate**

After the disruptions the violent Turkic migrations of the twelfth century caused, it took a long time for a state in the mold of Mahmud’s to reemerge in Ghazna (see Chapter 12). By the 1190s, however, a Muslim Turkic dynasty and people, the Ghurids (GOO-rids), had resumed the habit of raiding into Hindu India, where they levied tribute and scattered garrisons. One of their most far-flung outposts—and therefore one of the strongest—was at the city of Delhi in northern India. The adventurer Iltutmish (eel-TOOT-mihsh) took command there in 1211. He was a former slave who had risen to general and received his freedom from his Ghurid masters. He avoided war with Hindus—which was, in essence, his job—in favor of building up his own resources. In 1216 he effectively declared himself independent. Over the next 12 years, he exploited the rivalries of Muslim commanders to construct a state from the Indus River to the Bay of Bengal. Meanwhile, the effects of the Mongol conquests on Central Asia protected this new realm, which became known as the Sultanate of Delhi, against outside attack (see Map 13.4). As one of the early chroniclers of the sultanate said, “Rulers and governors, ... and many administrators and notables came to Iltutmish’s court from fear of the slaughter and terror of the accursed Mongol, Genghis Khan.”

There was no consistent form of administration. In most of the remoter territories, the Delhi sultan was an overlord of small, autonomous states, many of which Hindus ruled. But there was a core of lands that was the sultan’s personal property, exploited to benefit his treasury and run by his administrators. Lands the sultan granted in exchange for military service ringed the core. At great
oath-taking ceremonies, the aristocracy—a great diversity of freelance warriors and local rulers whom it was difficult or impossible for the sultan to dismiss—would make emotional but often short-lived declarations of loyalty.

As an ex-slave, Iltutmish was no respecter of conventional ideas of hierarchy. Denouncing his sons for incompetence, he chose his daughter, Radiyya (rah-DEE-ah), as his successor in 1236. In the steppes, women often handled big jobs. In the Islamic world, a woman ruler was a challenge to what was thought to be the natural order of the world. When, in 1250, a little before the Mamluks took over in Egypt, a woman had seized the throne there and applied to Baghdad for legitimation by the caliph, he is supposed to have replied that he could supply capable men, if no more existed in Egypt. Radiyya had to contend both with a brother who briefly ousted her—she put him to death—and male mistrust. Some of her coins emphasize claims to unique feminine virtues as “pillar of women.” Others have modest inscriptions, in which all the glorious epithets are reserved for her father and the caliph in Baghdad. Her best strategy was to behave like a man. She dressed in male clothing, refused to cover her face, and “mounted horse like men, armed with bow and quiver.” To conventional minds, these were provocations. Accused of taking a black slave as a lover, she was deposed in 1240 in favor of a brother. Her real offense was self-assertion. Those modest coin inscriptions suggest that power brokers in the army and the court were only willing to accept her as a figurehead, not as an active leader of men.

The sultanate had to cope not only with the turbulence of its elite but also with Hindu subjects and neighbors. Dominion by any state over the entire Indian subcontinent remained, at best, a dream. Frontier expansion was slow. Deforestation was an act of state, because, as a Muslim writer of the fourteenth century complained, “the infidels live in these forests, which for them are as good as city walls, ... so that they cannot be overcome except by strong armies of men who go into these forests and cut down those reeds.” In Bengal, the eastward shift of the Ganges River made Islamization easier. Charismatic sufis, with tax-free grants of forest land for mosques and shrines, led the way.

For most of the thirteenth century, the Mongol menace overshadowed the sultanate. The internal politics of the dynasty of Genghis Khan caused dissensions and hesitancies that protected Delhi. Mongol dynamic disputes cut short periodic invasions. Moreover, a buffer state dissident Mongols created in Delhi’s western territories absorbed most of the khans’ attacks. In the 1290s, however, the buffer collapsed. By what writers in Delhi considered a miracle, the subsequent Mongol attacks failed.

EUROPE

With the scare the Mongol invasions caused and the loss of the last crusader states in Syria to the Mamluks, Latin Christendom looked vulnerable. Attempts to revitalize the crusading movement—especially by Louis IX, the king of France (r. 1226–1270) who became a model monarch for the Western world—all failed. A further reverse was the loss of Constantinople by its Latin rulers to a Byzantine revival. The Mongols destroyed or dominated most of the successor states that
claimed Byzantium’s legacy, but at the city of Nicaea in western Anatolia, rulers who continued to call themselves “Roman emperors” maintained the court rituals and art of Byzantine greatness. In 1261, they recaptured the old capital from the crusaders “after many failures,” as Emperor Michael VIII (r. 1261–1282), admitted, “because God wished us to know that the possession of the city was a grace dependent on his bounty.”

Nevertheless, Latin Christendom grew on other fronts, deep into formerly pagan worlds along the Baltic in Livonia, Estonia, Prussia, and Finland. The Rhyming Chronicle of the conquest of Livonia recounts with equal pleasure the destruction of native villages and the piety of forced converts. Swedish knights led by Henry of Finland (d. ca. 1160) were said to have wept over the potential converts they slew in the twelfth century.

Between the 1220s and the 1260s, Christian kingdoms seized most of the Mediterranean seaboard of Spain and the Balearic islands from Muslim rulers. Here the existing economy and population were not much disturbed. Conquests Castile and Portugal made over the same period in the Iberian southwest became a sort of wild west, of sparse settlements, tough frontiersmen, and vast cattle and sheep ranches. Meanwhile, traders of the western Mediterranean increased their commerce with northern Europe along the coasts the Spaniards conquered, through the Strait of Gibraltar (see Map 13.5). Toward the end of the century, as they became accustomed to Atlantic sailing conditions, some of them began to think of exploring the ocean for new routes and resources. In 1291, an expedition set off from the Italian city of Genoa to try to find “the regions of India by way of the ocean.” The voyagers were never heard of again, but their voyage marked the beginning of a long effort by maritime communities of Western Europe to exploit the ocean at their feet.

The big new opportunities, however, lay to the east, from where transforming technologies reached Europe. Paper was a Chinese invention that had already reached the West through Arab intermediaries, but only in the late thirteenth century was it manufactured in Europe on a large scale. European maritime technology—a prerequisite of the prosperity borne by long-range trade and of the reach of most long-range imperialism—was especially primitive by non-European standards up to this time. Though the compass was first recorded in Europe in about 1190, the West had as yet no maritime charts. The earliest reference to such a device dates only from 1270. Gunpowder and the blast furnace were among the magical-seeming technologies that first reached Europe from China in the thirteenth and fourteenth centuries.

Meanwhile, with consequences for the future that can hardly be overestimated, Western science grew more empirical, more committed to observation and experiment. The cosmos came to seem measurable, portrayed between the dividers of Christ the geometer, like a ball of fluff trapped between tweezers. At the University of Paris, scholars cultivated a genuinely scientific way of understanding the world. The work of encyclopedists arrayed in precise categories everything known by experience or report. The greatest intellect of the age, Thomas Aquinas (1225–1274), compiled comprehensive schemes of faith and secular knowledge.
In the third quarter of the thirteenth century, Parisian teachers pointed out that the doctrines of the church on the creation and the nature of the soul conflicted with classical philosophy and empirical evidence. “Every disputable question,” they argued, “must be determined by rational arguments.” A professor at the University of Paris, Roger Bacon, said that excessive deference to authority—including ancestral wisdom, custom, and consensus—was a cause of ignorance. He insisted that scientific observations could help to validate holy writ and that medical experiments could increase knowledge and save life. He also claimed—citing the lenses with which Archimedes reputedly set fire to a Roman fleet during the siege of the Greek city of Syracuse in Sicily in 212 B.C.E.—that science could cow and convert infidels. Bacon was a Franciscan friar, a follower of Francis of Assisi (1181–1226), and his enthusiasm for science seems to have owed something to Francis’s doctrine that because the world made God manifest, it was worth observing.

Francis was a witness and maker of the new European imagination. He was a rich man’s son inspired by Jesus’ advice to renounce riches for a life of total dependence on God. In anyone less committed and charismatic, his behavior might have been considered insane or heretical. He launched his mission by stripping naked in the public square of his native city, as a sign that he was throwing himself, unprotected, on God’s mercy. He relied for sustenance on what people gave him. He modeled his followers’ way of life on the way he thought Jesus and the Apostles lived, refusing to accept property, sharing the alms the brethren received. For a church that relied on immense wealth to keep its operations going, these were dangerous ideas. The very notion of a religious
order wandering around the world without the discipline of common life ran counter to everything the church had believed about monasticism for at least 500 years.

Francis, however, could be tamed. He had enough humility to defer to the church’s discipline. Bishops who met him—including the pope himself—let him carry on. He made compromises with respectability, ordering his female followers into nunneries, and—in obedience to a vision in which Jesus told him, “Build my Church”—put his efforts into buildings of stone and mortar, as well as spiritual edification. Francis was suspicious of learning. It was a kind of possession—a compromise with poverty. It made men vain. But he accepted that education was part of the church’s mission and that friars had to study to equip them to be preachers and confessors.

The Franciscans became the spearhead of the church’s mission to the poor and inspired other orders of friars—clergy who combined religious vows of poverty, chastity, and obedience with work in the world. In an age of urbanization, friars could establish bonds of sympathy with the rootless masses, who had lost the familiar companionship of rural parishes. Friars, if they stayed true to their vocations, were also a valuable counter force to heretics who denounced the church for worldliness.

In his attitude to nature, Francis was representative of his time. Against heretics who condemned the world as evil, he insisted on the goodness of God’s creation, which was all “bright and beautiful.” Even its conflicts and cruelties were there to elicit human love. He tried to enfold the whole of nature in love. He preached to ravens and called creatures, landscapes, sun, and moon his brothers and sisters, eventually welcoming “Sister Death.” He communicated his sensibilities to his followers. As a result, Franciscans were prominent in scientific thinking in the West. Love of nature made them observe it more closely and keenly and scrutinize it for good uses.

Franciscans also became patrons of naturalistic art. The art they commissioned for their churches drew the onlooker into sacred spaces, as if in eyewitness of the lives of Jesus and the saints. The devotion of the rosary, introduced early in the thirteenth century, encouraged the faithful to imagine sacred mysteries, while praying, with the vividness of scenes of everyday life, as if witnessed in person—looking at the world with eyes as unblinking as those of the new scientific thinkers. Considered from one point of view, the realism Western painting increasingly favored was a tribute to the enhanced prestige of the senses. To paint what one’s eyes could see conferred dignity on a subject not previously thought worthy of art. So art linked the science and piety of the age.

The revolutionary experiences of the West at the time—the technical progress, the innovations in art, the readjustment of notions of reality through the eyes of a new kind of science—were owed, in part, to influences transmitted along routes the Mongols maintained. None of this experimentation and imagination put
Western science abreast of that of China, where observation and experiment had been continuous in scientific tradition since the first millennium B.C.E. (see Chapter 6). In two technologies, however—key technologies for their influence on world history—Western Europe came to house the world’s leading centers of development and production.

The first was glassmaking. In the thirteenth century, demand for fine glassware leaped in the West because of the growing taste for using church windows made of stained glass, to illuminate sacred stories and to exhibit the wonders of creation. Glassmakers adapted their skills to meet demand for glass mirrors and optical lenses. These objects were not manufactured on a significant scale anywhere else in the world, though for centuries scholars writing in Arabic had known how to make them and use them in scientific observation. Now Western savants could make the same experiments and even improve on them.

Second, the West drew ahead in the technology of clockwork. Mechanical clocks had a long history in China and the Islamic world. But clockwork never caught on except in Europe, perhaps because it is too regular to match the movements of the heavens. It divides the day into arbitrary hours of equal length that do not match those of the sun. But this way to organize life suited Western monasteries, where, apart from the prayers prescribed for the dawn and nightfall, the services of prayer were best arranged at regular intervals, independently of the sun. For city churches in an age of urban growth, regular timekeeping was also convenient. Clockwork suited the rhythms of urban life. Civic authorities began to invest in town clocks in the thirteenth and fourteenth centuries. This was the beginning of the still-familiar Western convention of an urban skyline dominated by the town hall clock tower.

The combination of lenses and clockwork mattered because eventually—not until the seventeenth century, when telescopes were combined with accurate chronometry—it gave Western astronomers an advantage over Muslim and Chinese competitors. This in turn gave Western scientists the respect of their counterparts and secured the patronage of rulers all over the world in societies interested in astronomy either for its own sake or—more often—because of astrology.

**IN PERSPECTIVE: The Uniqueness of the Mongols**

Like most great revolutionaries, the Mongols started bloodily and became constructive. The Mongols came to play a unique and constructive role in the history of Eurasia. For 100 years after the initial horror of the Mongol conquests, the steppe became a highway of fast communication, helping transfer culture across two continents. Without the Mongol peace, it is hard to imagine any of the rest of world history working out as it did, for these were the roads that carried Chinese ideas and technology westward and opened up European minds to the vastness of
The importance of the Mongols’ passage through world history does not stop at the frontiers of their empire. It resonated across Eurasia.

The Eurasian experience was unique. Why did nothing like it happen in Africa or the Americas? Cultural exchanges across the grasslands of prairie, pampa, and Sahel never spread far until the nineteenth century. None of those regions saw conquerors like the Mongols, able to unify the entire region and turn it into a causeway of civilizations, shuttling ideas and techniques across a continent.

In the Americas, geography was an inhibiting influence. The North American prairie is aligned on a north–south axis, across climatic zones, whereas the steppe stretches from east to west. Plants and animals can cross the steppe without encountering impenetrable environments. Seeds can survive the journey without perishing and without finding, at the end of the road, an environment too sunless or cold to thrive in. In North America, it took centuries longer to achieve exchanges on a comparable scale. As we have seen almost whenever the Americas have entered our story, transmissions of culture across latitudes are much harder to effect than those that occur within latitudes, which have relatively narrow boundaries, where climate and conditions are familiar.

Moreover, to function, an avenue of communications needs people at either end of it who want to be in touch. The Eurasian steppe was like a dumbbell, with densely populated zones and productive economies at either end of it (see Map 13.6). People in Europe, southwest Asia, and North Africa wanted the products of south, southeast, and east Asia. The suppliers of spices, drugs, fine textiles, and luxury products in the east liked having customers who paid in silver. In the Americas, there was no chance to reproduce such relationships. The concentrations of

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| **MAKING CONNECTIONS** |
| **EUROPEAN TRANSFORMATIONS AND INNOVATIONS, THIRTEENTH AND EARLY FOURTEENTH CENTURIES** |

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<thead>
<tr>
<th>TRADE AND TRANSPORTATION</th>
<th>TECHNOLOGY AND SCIENCE</th>
<th>POLITICS</th>
<th>RELIGION</th>
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<tbody>
<tr>
<td>Increased communication across Eurasia leads to introduction of Chinese and Arabic technology, medicine, and inventions</td>
<td>Imported inventions such as paper, magnetic compasses, gunpowder, and blast furnace combine with focus on empiricism</td>
<td>Christian kingdoms seize Muslim lands in Spain, Mediterranean islands; revival of Crusades, extension of frontier north to the Baltics, Finland, and Scandinavia</td>
<td>Francis and his religious order place new emphasis on observing nature, serving the poor, and renouncing wealth; increased emphasis on sacred mysteries</td>
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<tr>
<td>Increased transportation and trade links within Europe aided by new infrastructure (roads, canals); growth of towns; economic and political stability leads to larger towns and cities; more productive industry</td>
<td>Better maritime technology expands range of sea voyages; demand for elaborate church windows spurs glassmaking and innovation in glass lenses; clocks provide regularized timekeeping for monasteries and cities; availability of paper multiplies books and empowers states with a medium for their messages</td>
<td>Bigger, richer states with more scope to communicate and enforce commands; more church–state competition and conflict</td>
<td>Mendicants prominent in scientific thinking in West; spearhead Church’s mission to poor in growing towns</td>
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Civilizations of Mesoamerica and Andes are not linked by grasslands or other easily traveled routes. Although the Sahel is aligned east–west, it never became a conduit of cultural exchange until the nineteenth century.

North American praire is aligned on a North–South axis, making transmissions of crops and culture difficult.

Wealth and population were in two regions—Mesoamerica and the Andes—that neither grasslands nor any other easily traveled routes linked. Though societies in other parts of the hemisphere drew lessons, models of life, technologies, and types of food from those areas, the results (see Chapter 11) were hard to sustain because communications between these areas and outlying regions were hard to keep up. Without the horse—extinct in the Americas for 10,000 years—the chances of an imperial people arising in the prairie or the pampa to do the sort of job the Mongols did in Europe were virtually zero. (Much later, as we shall see in Chapter 21, when European invaders reintroduced the horse in the Americas in the 1500s, experiments in grassland imperialism by peoples such as the Sioux followed.)

In Africa, the constraints were different. The Sahel might have played a role similar to that of the steppes in Eurasian history. There was a viable corridor of communication between the Nile and Niger valleys. In theory, an imperial people might have been able to open communications across the continent between the civilizations of East Africa, which were in touch with the world of the Indian Ocean, and those of West Africa, which the trade routes of the Sahara linked to the Mediterranean. But it never happened. For long-range empire building, the Sahel was, paradoxically, too rich, compared with the Eurasian steppe. The environment of the Sahel was more diverse. Agrarian or partly agrarian states had more oppor-
tunity to develop, obstructing the formation of a Sahel-wide empire. Although pastoral peoples of the western Sahel often built up powerful empires, they always tended to run into either or both of two problems. First, as we have seen, and shall see again, invaders from the desert always challenged and sometimes crushed them (see Chapter 12).

Second, while they lasted, the empires of the Sahel never reached east of Lake Chad. Here states grew up, strong enough to resist conquest, but not strong enough to expand to imperial dimensions themselves: states like Kanem and Bornu—which were sometimes separate, sometimes united. Early Muslim visitors reviled the region for its “reed huts ... not towns” and people clad only in loincloths. But by the twelfth and thirteenth centuries, Kanem and Bornu commanded respect in Arab geography. Lakeshore floodplains for agriculture enriched them, together with the gold they obtained from selling their surplus millet. According to Arab sources, the region enclosed 12 “kingdoms” around 1300.

The Mongols, after their initial bout of extreme destructiveness, brought peace, and, in the wake of that peace, wealth and learning. But with increased travel, the steppeland also became a highway to communicate disease. The Mongol peace lasted less than 150 years. The age of plague that was about to begin would influence the history of Eurasia, and therefore of the world, for centuries.
CHAPTER 13

1. How did the Mongols transform Eurasia in the thirteenth century? What techniques did the Mongols use to rule neighboring civilizations, and how successful were they?

2. How did Mongol rule affect travel and trade along the Silk Roads?

3. How did the civilizations they conquered affect the Mongols? How did Mongol culture in turn influence the civilizations they ruled?

4. Why did Egypt and India show so much vitality in the thirteenth century?

5. How did Francis of Assisi and the Franciscan order remedy some of the social problems that medieval Europe faced? What was the impact of empirical-based learning on European thinking at this time?

6. How did geography hinder the development of continent-wide empires in Africa and the Americas?

CHRONOLOGY

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>1181–1226</td>
<td>Life of Francis of Assisi</td>
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<tr>
<td>1190</td>
<td>First European recorded reference to a compass</td>
</tr>
<tr>
<td>1206</td>
<td>Temujin proclaims himself khan</td>
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<td>1211–1236</td>
<td>Reign of Iltutmish, sultan of Delhi</td>
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<td>1225–1274</td>
<td>Life of Thomas Aquinas</td>
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<tr>
<td>1234</td>
<td>Mongols conquer Georgia</td>
</tr>
<tr>
<td>1241–1242</td>
<td>Mongol armies reach Elbe River, Germany</td>
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<tr>
<td>1253–1254</td>
<td>Mission of William of Rubruck to Mongolian court</td>
</tr>
<tr>
<td>1258</td>
<td>Mongols capture Baghdad, last caliph put to death</td>
</tr>
<tr>
<td>1260</td>
<td>Mamluks defeat Mongols at battle of Ain Jalut</td>
</tr>
<tr>
<td>1261</td>
<td>Byzantine Empire regains Constantinople</td>
</tr>
<tr>
<td>1268–1291</td>
<td>Mamluks overthrow last crusader kingdoms</td>
</tr>
<tr>
<td>1270</td>
<td>Earliest European reference to maritime charts</td>
</tr>
<tr>
<td>1271–1275</td>
<td>Marco Polo’s first journey to China</td>
</tr>
<tr>
<td>1274, 1281</td>
<td>Failed Mongol attempts to invade Japan</td>
</tr>
<tr>
<td>1279</td>
<td>Mongol conquest of China completed</td>
</tr>
<tr>
<td>1286</td>
<td>Rabban Bar Sauma appointed Mongol ambassador to Christian West</td>
</tr>
</tbody>
</table>

PROBLEMS AND PARALLELS

1. How did the Mongols transform Eurasia in the thirteenth century? What techniques did the Mongols use to rule neighboring civilizations, and how successful were they?

2. How did Mongol rule affect travel and trade along the Silk Roads?

3. How did the civilizations they conquered affect the Mongols? How did Mongol culture in turn influence the civilizations they ruled?

4. Why did Egypt and India show so much vitality in the thirteenth century?

5. How did Francis of Assisi and the Franciscan order remedy some of the social problems that medieval Europe faced? What was the impact of empirical-based learning on European thinking at this time?

6. How did geography hinder the development of continent-wide empires in Africa and the Americas?

DOCUMENTS IN GLOBAL HISTORY

- John of Piano Carpini on the Mongols
- William of Rubruck’s account of the Mongols
- From The Travels of Marco Polo
- From Francesco Balducci Pegolotti’s The Practice of Commerce (ca. 1340)
- From The History of the Life and Travels of Rabban Bar Sauma
- Excerpt from the Novgorod Chronicle
- Roger Bacon on experimental science
- Francis of Assisi, selection from Admonitions

Please see the Primary Source CD-ROM for additional sources related to this chapter.


Of many studies of St. Francis, none is entirely satisfactory, but J. H. R. Moorman, *St. Francis of Assisi* (1976) can be recommended, first, for its scholarship and brevity and, second, for its vividness. K. B. Wolf, *The Poverty of Riches* (2003) is good on St. Francis’s theology.