An Age of Explorations and Isolation

MAIN IDEA

SCIENCE AND TECHNOLOGY
Advances in sailing technology enabled Europeans to explore other parts of the world.

WHY IT MATTERS NOW

European exploration was an important step toward the global interaction existing in the world today.

TERMS & NAMES

- Bartolomeu Dias
- Prince Henry
- Vasco da Gama
- Treaty of Tordesillas
- Dutch East India Company

SETTING THE STAGE

By the early 1400s, Europeans were ready to venture beyond their borders. As Chapter 17 explained, the Renaissance encouraged, among other things, a new spirit of adventure and curiosity. This spirit of adventure, along with several other important reasons, prompted Europeans to explore the world around them. This chapter and the next one describe how these explorations began a long process that would bring together the peoples of many different lands and permanently change the world.

For “God, Glory, and Gold”

Europeans had not been completely isolated from the rest of the world before the 1400s. Beginning around 1100, European crusaders battled Muslims for control of the Holy Lands in Southwest Asia. In 1275, the Italian trader Marco Polo reached the court of Kublai Khan in China. For the most part, however, Europeans had neither the interest nor the ability to explore foreign lands. That changed by the early 1400s. The desire to grow rich and to spread Christianity, coupled with advances in sailing technology, spurred an age of European exploration.

Europeans Seek New Trade Routes

The desire for new sources of wealth was the main reason for European exploration. Through overseas exploration, merchants and traders hoped ultimately to benefit from what had become a profitable business in Europe: the trade of spices and other luxury goods from Asia. The people of Europe had been introduced to these items during the Crusades, the wars fought between Christians and Muslims from 1096 to 1270 (see Chapter 14). After the Crusades ended, Europeans continued to demand such spices as nutmeg, ginger, cinnamon, and pepper, all of which added flavor to the bland foods of Europe. Because demand for these goods was greater than the supply, merchants could charge high prices and thus make great profits.

The Muslims and the Italians controlled the trade of goods from East to West. Muslims sold Asian goods to Italian merchants, who controlled trade across the land routes of the Mediterranean region. The Italian merchants resold the items at increased prices to merchants.
throughout Europe. Other European traders did not like this arrangement. Paying such high prices to the Italians severely cut into their own profits. By the 1400s, European merchants—as well as the new monarchs of England, Spain, Portugal, and France—sought to bypass the Italian merchants. This meant finding a sea route directly to Asia.

**The Spread of Christianity** The desire to spread Christianity also motivated Europeans to explore. The Crusades had left Europeans with a taste for spices, but more significantly with feelings of hostility between Christians and Muslims. European countries believed that they had a sacred duty not only to continue fighting Muslims, but also to convert non-Christians throughout the world.

Europeans hoped to obtain popular goods directly from the peoples of Asia. They also hoped to Christianize them. Bartolomeu Dias, an early Portuguese explorer, explained his motives: “To serve God and His Majesty, to give light to those who were in darkness and to grow rich as all men desire to do.”

**Technology Makes Exploration Possible** While “God, glory, and gold” were the primary motives for exploration, advances in technology made the voyages of discovery possible. During the 1200s, it would have been nearly impossible for a European sea captain to cross 3,000 miles of ocean and return again. The main problem was that European ships could not sail against the wind. In the 1400s, shipbuilders designed a new vessel, the caravel. The caravel was sturdier than earlier vessels. In addition, triangular sails adopted from the Arabs allowed it to sail effectively against the wind.

Europeans also improved their navigational techniques. To better determine their location at sea, sailors used the astrolabe, which the Muslims had perfected. The astrolabe was a brass circle with carefully adjusted rings marked off in degrees. Using the rings to sight the stars, a sea captain could calculate latitude, or how far north or south of the equator the ship was. Explorers were also able to more accurately track direction by using a magnetic compass, a Chinese invention.

**Portugal Leads the Way**

The leader in developing and applying these sailing innovations was Portugal. Located on the Atlantic Ocean at the southwest corner of Europe, Portugal was the first European country to establish trading outposts along the west coast of Africa. Eventually, Portuguese explorers pushed farther east into the Indian Ocean.

**The Portuguese Explore Africa** Portugal took the lead in overseas exploration in part due to strong government support. The nation’s most enthusiastic supporter of exploration was Prince Henry, the son of Portugal’s king. Henry’s dreams of overseas exploration began in 1415 when he helped conquer the Muslim city of Ceuta in North Africa. There, he had his first glimpse of the dazzling wealth that lay beyond Europe. In Ceuta, the Portuguese invaders found exotic stores filled with pepper, cinnamon, cloves, and other spices. In addition, they encountered large supplies of gold, silver, and jewels.
The Tools of Exploration

Out on the open seas, winds easily blew ships off course. With only the sun, moon, and stars to guide them, few sailors willingly ventured beyond the sight of land. In order to travel to distant places, European inventors and sailors experimented with new tools for navigation and new designs for sailing ships, often borrowing from other cultures.

The average caravel was 65 feet long. This versatile ship had triangular sails for maneuverability and square sails for power.

The large cargo area could hold the numerous supplies needed for long voyages.

Its shallow draft (depth of the ship’s keel below the water) allowed it to explore close to the shore.

The sextant replaced the astrolabe in the mid-1700s as the instrument for measuring the height of the stars above the horizon—to determine latitude and longitude.

Here, a French mariner uses an early navigation instrument that he has brought ashore to fix his ship’s position. It was difficult to make accurate calculations aboard wave-tossed vessels.

This 17th-century compass is typical of those taken by navigators on voyages of exploration. The compass was invented by the Chinese.

Connect to Today

1. Analyzing Motives Why did inventors and sailors develop better tools for navigation?

2. Summarizing What types of navigational or other tools do sailors use today? Choose one type of tool and write a brief explanation of what it does.
Henry returned to Portugal determined to reach the source of these treasures in the East. The prince also wished to spread the Christian faith. In 1419, Henry founded a navigation school on the southwestern coast of Portugal. Mapmakers, instrument makers, shipbuilders, scientists, and sea captains gathered there to perfect their trade.

Within several years, Portuguese ships began sailing down the western coast of Africa. By the time Henry died in 1460, the Portuguese had established a series of trading posts along western Africa’s shores. There, they traded with Africans for such profitable items as gold and ivory. Eventually, they traded for African captives to be used as slaves. Having established their presence along the African coast, Portuguese explorers plotted their next move. They would attempt to find a sea route to Asia.

**Portuguese Sailors Reach Asia** The Portuguese believed that to reach Asia by sea, they would have to sail around the southern tip of Africa. In 1488, Portuguese captain Bartolomeu Dias ventured far down the coast of Africa until he and his crew reached the tip. As they arrived, a huge storm rose and battered the fleet for days. When the storm ended, Dias realized his ships had been blown around the tip to the other side. Dias explored the southeast coast of Africa and then considered sailing to India. However, his crew was exhausted and food supplies were low. As a result, the captain returned home.

With the tip of Africa finally rounded, the Portuguese continued pushing east. In 1497, Portuguese explorer Vasco da Gama began exploring the east African coast. In 1498, he reached the port of Calicut, on the southwestern coast of India. Da Gama and his crew were amazed by the spices, rare silks, and precious gems that filled Calicut’s shops. The Portuguese sailors filled their ships with such spices as pepper and cinnamon and returned to Portugal in 1499. Their cargo was worth 60 times the cost of the voyage. Da Gama’s remarkable voyage of 27,000 miles had given Portugal a direct sea route to India.

**Spain Also Makes Claims**

As the Portuguese were establishing trading posts along the west coast of Africa, Spain watched with increasing envy. The Spanish monarchs also desired a direct sea route to Asia.

In 1492, an Italian sea captain, Christopher Columbus, convinced Spain to finance a bold plan: finding a route to Asia by sailing west across the Atlantic Ocean. In October of that year, Columbus reached an island in the Caribbean. He was mistaken in his thought that he had reached the East Indies. But his voyage would open the way for European colonization of the Americas—a process that would forever change the world. The immediate impact of Columbus’s voyage, however, was to increase tensions between Spain and Portugal.

The Portuguese believed that Columbus had indeed reached Asia. Portugal suspected that Columbus had claimed for Spain lands that Portuguese sailors might
have reached first. The rivalry between Spain and Portugal grew more tense. In 1493, Pope Alexander VI stepped in to keep peace between the two nations. He suggested an imaginary dividing line, drawn north to south, through the Atlantic Ocean. All lands to the west of the line, known as the Line of Demarcation, would be Spain’s. These lands included most of the Americas. All lands to the east of the line would belong to Portugal.

Portugal complained that the line gave too much to Spain. So it was moved farther west to include parts of modern-day Brazil for the Portuguese. In 1494, Spain and Portugal signed the Treaty of Tordesillas, in which they agreed to honor the line. The era of exploration and colonization was about to begin in earnest.

Trading Empires in the Indian Ocean

With da Gama’s voyage, Europeans had finally opened direct sea trade with Asia. They also opened an era of violent conflict in the East. European nations scrambled to establish profitable trading outposts along the shores of South and Southeast Asia. And all the while they battled the region’s inhabitants, as well as each other.

Portugal’s Trading Empire In the years following da Gama’s voyage, Portugal built a bustling trading empire throughout the Indian Ocean. As the Portuguese moved into the region, they took control of the spice trade from Muslim merchants. In 1509, Portugal extended its control over the area when it defeated a Muslim fleet off the coast of India, a victory made possible by the cannons they had added aboard their ships.

Portugal strengthened its hold on the region by building a fort at Hormuz in 1514. It established control of the Straits of Hormuz, connecting the Persian Gulf and Arabian Sea, and helped stop Muslim traders from reaching India.

In 1510, the Portuguese captured Goa, a port city on India’s west coast. They made it the capital of their trading empire. They then sailed farther east to Indonesia, also known as the East Indies. In 1511, a Portuguese fleet attacked the city of Malacca on the west coast of the Malay Peninsula. In capturing the town, the Portuguese seized control of the Strait of Malacca. Seizing this waterway gave them control of the Moluccas. These were islands so rich in spices that they became known as the Spice Islands.

In convincing his crew to attack Malacca, Portuguese sea captain Afonso de Albuquerque stressed his country’s intense desire to crush the Muslim-Italian domination over Asian trade:

**PRIMARY SOURCE**

If we deprive them [Muslims] of this their ancient market there, there does not remain for them a single port in the whole of these parts, where they can carry on their trade in these things. . . . I hold it as very certain that if we take this trade of Malacca away out of their hands, Cairo and Mecca are entirely ruined, and to Venice will no spiceries . . . [be] . . . conveyed except that which her merchants go and buy in Portugal.

-AFONSO DE ALBUQUERQUE, from *The Commentaries of the Great Afonso Dalbuquerque*

Portugal did break the old Muslim-Italian domination on trade from the East, much to the delight of European consumers. Portuguese merchants brought back goods from Asia at about one-fifth of what they cost when purchased through the Arabs and Italians. As a result, more Europeans could afford these items.
In time, Portugal’s success in Asia attracted the attention of other European nations. As early as 1521, a Spanish expedition led by Ferdinand Magellan arrived in the Philippines. Spain claimed the islands and began settling them in 1565. By the early 1600s, the rest of Europe had begun to descend upon Asia. They wanted to establish their own trade empires in the East.

**Other Nations Challenge the Portuguese** Beginning around 1600, the English and Dutch began to challenge Portugal’s dominance over the Indian Ocean trade. The Dutch Republic, also known as the Netherlands, was a small country situated along the North Sea in northwestern Europe. Since the early 1500s, Spain had ruled the area. In 1581, the people of the region declared their independence from Spain and established the Dutch Republic.

In a short time, the Netherlands became a leading sea power. By 1600, the Dutch owned the largest fleet of ships in the world—20,000 vessels. Pressure from Dutch and also English fleets eroded Portuguese control of the Asian region. The Dutch and English then battled one another for dominance of the area.

Both countries had formed an East India Company to establish and direct trade throughout Asia. These companies had the power to mint money, make treaties, and even raise their own armies. The Dutch East India Company was richer and more powerful than England’s company. As a result, the Dutch eventually drove out the English and established their dominance over the region.

**Dutch Trade Outposts** In 1619, the Dutch established their trading headquarters at Batavia on the island of Java. From there, they expanded west to...
conquer several nearby islands. In addition, the Dutch seized both the port of Malacca and the valuable Spice Islands from Portugal. Throughout the 1600s, the Netherlands increased its control over the Indian Ocean trade. With so many goods from the East traveling to the Netherlands, the nation’s capital, Amsterdam, became a leading commercial center. By 1700, the Dutch ruled much of Indonesia and had trading posts in several Asian countries. They also controlled the Cape of Good Hope on the southern tip of Africa, which was used as a resupply stop.

**British and French Traders** By 1700 also, Britain and France had gained a foothold in the region. Having failed to win control of the larger area, the English East India Company focused much of its energy on establishing outposts in India. There, the English developed a successful business trading Indian cloth in Europe. In 1664, France also entered the Asia trade with its own East India Company. It struggled at first, as it faced continual attacks by the Dutch. Eventually, the French company established an outpost in India in the 1720s. However, it never showed much of a profit.

As the Europeans battled for a share of the profitable Indian Ocean trade, their influence inland in Southeast Asia remained limited. European traders did take control of many port cities in the region. But their impact rarely spread beyond the ports. From 1500 to about 1800, when Europeans began to conquer much of the region, the peoples of Asia remained largely unaffected by European contact. As the next two sections explain, European traders who sailed farther east to seek riches in China and Japan had even less success in spreading Western culture.

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**TERMS & NAMES**

1. For each term or name, write a sentence explaining its significance.

- **Bartolomeu Dias**
- **Prince Henry**
- **Vasco da Gama**
- **Treaty of Tordesillas**
- **Dutch East India Company**

**USING YOUR NOTES**

2. Which event in the European exploration of the East is the most significant? Explain with references from the text.

3. What role did the Renaissance play in launching an age of exploration?

4. What was Prince Henry’s goal and who actually achieved it?

5. What European countries were competing for Asian trade during the age of exploration?

**MAIN IDEAS**

**CRITICAL THINKING & WRITING**

6. **MAKING INFERENCES** What did the Treaty of Tordesillas reveal about Europeans’ attitudes toward non-European lands and peoples?

7. **ANALYZING MOTIVES** What were the motives behind European exploration in the 1400s? Explain.

8. **RECOGNIZING EFFECTS** In what ways did Europeans owe some of their sailing technology to other peoples?

9. **WRITING ACTIVITY** Review “The Tools of Exploration” on page 531. Write a one-paragraph opinion piece on which technological advancement was the most important for European exploration.

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**SECTION 1 ASSESSMENT**

**CONNECT TO TODAY**

**WRITING A DESCRIPTION**

Research the Global Positioning System (GPS). Then write a brief description of this modern navigation system.

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