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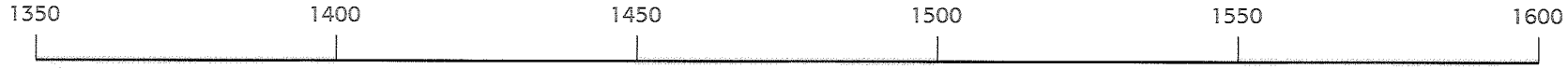

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European Exploration and its Motives

About 600 years ago, people from the continent of Europe began to move out to the rest of the world. They already knew that other continents existed, but they knew very few specific details. Travelers who had visited in distant lands brought back fascinating stories, exotic spices, and other products. Current technological advances made sea travel possible for traders wanting to acquire these goods faster and more easily than by land routes.

Some Europeans, from Spain and France, sought to spread Roman Catholic beliefs. Many went as proselytizing priests to bring pagan peoples into submission to Catholic traditions.

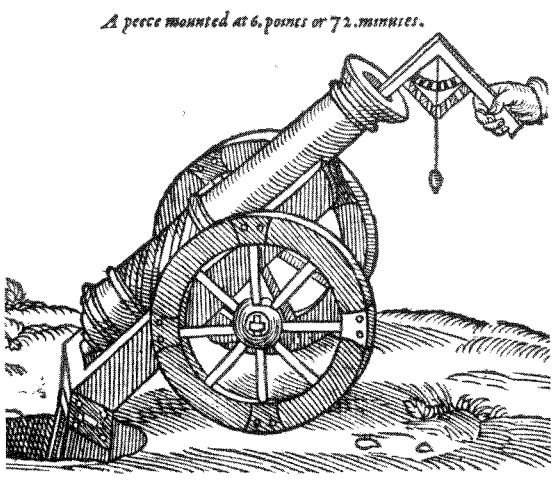
Still others were motivated by the possibility of great wealth, since trade and exploration could be very profitable. New economic arrangements in different parts of Europe caused improved financing of long-distance trade. As exploration and conquest continued, large amounts of gold were brought back from the New World.

This map, issued in the 1600s, shows the American continents as they were known at the time. Geographers thought that Australia lay just south of Latin America and stretched across the earth's southern part.

New Technology

In order to launch what we now call the Age of Exploration, we need to understand the development of Western **technology**. *Technology* is the science of applying knowledge to practical purposes. Several kinds of inventions affected social and intellectual life. More seaworthy vessels and reliable navigational instruments made long ocean voyages possible. Without these, East Asia and the Western Hemisphere would have been beyond reach.

All through the Middle Ages, people found ways to improve their tools and methods of doing



This early cannon is being raised to its maximum elevation. The gunner's quadrant is being used to determine the correct elevation for the desired range.

work. They invented the crank, the wheelbarrow, and the canal lock. A major breakthrough came with inventions that are now taken for granted. Windmills and watermills began to take over jobs like cutting wood, grinding grain, and draining swamps and mines. Also in this period came the nailed horseshoe and the **tandem** harness. With its hoofs now protected from breaking, the horse replaced slow-moving oxen for pulling plows and heavy loads. The tandem harness hitched pairs of horses, one behind the other, to a load. Animals pulled more effectively this way. Another invention, the heavy plow, made farming more efficient and cut down on the labor required. This tendency of Europeans to think of labor-saving devices helped shift the whole basis of their economy from human labor to machines.

Metals. During the Renaissance, Europe also made notable improvements in mining and metallurgy. By the fourteenth century, surface ores were exhausted, and it became necessary to dig shafts deep into the ground. Because underground shafts often filled up with water, mine operators had to find some way to drain them. The drainage designs and machines that were developed brought a mining boom to central Europe. By 1525, more than 100,000 workers were employed by the mining industry in the Holy Roman Empire. People worked out better ways to smelt, cast, roll, and forge metals. They used water power to make metals and published illustrated books which aided the miners in this work. These changes greatly increased the amount of metal in Europe.

Clocks. Some of the new Renaissance technology caused dramatic changes in Europe's life-style. Take clocks, for example. Although people had used sundials and hourglasses to tell time for thousands of years, mechanical clocks did not become common in Europe until the fifteenth century. Installed in churches or city halls, these clocks struck on the hour or quarter hour, telling the townspeople the time of day or night. People began to regulate their lives by exact time rather than by dawn, noon, and sunset, which changed with the seasons. Because early mechanical clocks were driven by weights, they were too heavy to be moved. In about 1500, however, spring-driven watches were invented. These were much larger and heavier than modern pocket watches, and they gained or lost fifteen minutes a day, but they enabled each person who could afford to buy one to have his own timepiece. While early clocks did not immediately cause society to schedule everything precisely, they laid the groundwork for the unique time-conscious approach to our modern world.

Movable type. Even greater changes in the way people lived came with the invention of the printing press. As early as the sixth century, the Chinese had made prints by pressing linen paper against inked wooden blocks. It took centuries for this process to reach Europe, but by 1400 wood engravings and block-printed books were being produced. Each page had to be carved separately, which made books very expensive. Only the church or a few rich people could afford them.

About 1450, **Johann (John) Gutenberg** of Mainz, Germany, began to make individual

Gunpowder and Guns

Just as guns enabled the West to conquer native peoples and dominate the world, these weapons hastened an enormous change in the West itself. The early discoverers of gunpowder seemed to sense its significance. When Roger Bacon first wrote down the formula for it, he used a code, so dangerous did he consider this substance. But the secret could not be kept. Someone invented the cannon. Historians do not agree on whom to credit for this development, but the first time these noisy, undependable weapons appeared in battle was in 1346 at Crécy, France.

After that, attackers pointed the great guns at castle walls, an act which helped bring the medieval way of life to an end. No longer safe within his castle, the noble had to join with other lords when he was threatened. The vast number of small kingdoms gave way to larger units, and these would later form nations. Since the serfs and villagers could no longer count on the lord's castle for protection, their ties to him weakened. Thus while guns and gunpowder changed the nature of warfare both on land and at sea, these weapons also helped change the structure of Western society.

All through history, people have used weapons to help them force their will upon others. As nations developed, they took up this practice on a larger scale. It is ironic that before nations made serious attempts to change this habit, a weapon powerful enough to destroy all life had to appear.

Printing in the 16th Century

metal letters instead of wood-block pages. Since these letters were **interchangeable** and could be used many times, the process was much cheaper. Also, large numbers of books could be printed. Society soon felt the impact of this invention.

By 1501, there were printing presses in 110 European towns and cities. Printing with movable type enabled new ideas, art forms, and information to travel rapidly throughout Europe. In the past, it often took centuries for a change to become widespread. With such limited communication, only a privileged few were able to enjoy the work of poets, artists, and philosophers. However, once printing became common, the pace of change and progress speeded up greatly.

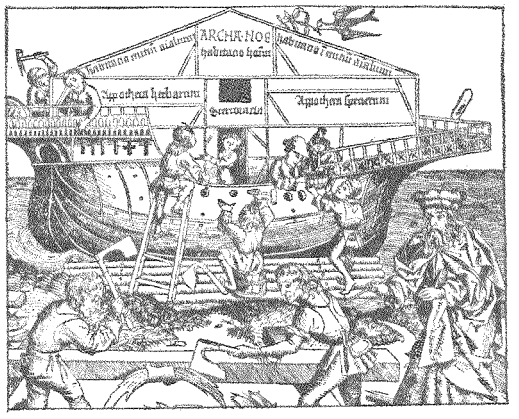
Sharing new information and ideas with other people is one of the significant *streams of civilization*. Diagrams of inventions or instructions for new procedures can be spread more easily than the inventions or the instructors themselves. In this way, people in one part of the world can be helped by those in another. New insights can also be communicated by the printed word.

The Protestant Reformation clearly showed the new power of the press to bring changes. Martin Luther's ideas spread very quickly through the printed page. Calling the printing press one of God's greatest gifts to mankind, Luther published something every two weeks.

Besides the works of Luther and other Reformers, people could also own a copy of the Bible for themselves. Gutenberg's first Bible was very large, but soon copies were smaller and more affordable. From this developed a great interest in having the Bible in the **vernacular**, or one's own language, instead of only in Latin, Greek, and Hebrew.

Navigation. As the Portuguese did more sailing, they began to modify their ships to cope with new conditions. During the fifteenth century, the Portuguese developed a sturdy ship that could sail down the west coast of Africa and then return to Europe. This was not easy because of the winds and tides. Combining features from Roman, Viking, and Arab ships, the Portuguese gave their *caravel* a long hull, or frame, and a stern-post rudder. Placing the rudder at the back made the ship easier to maneuver than other craft. The vessel had two types of sails, square and triangular, giving it unusual speed. By the sixteenth century, the Europeans were building larger *galleons* with bulging hulls to carry troops and cannons.

Besides these changes in the ships themselves, sailors could also use new instruments such as the *astrolabe* and the *quadrant*. These plotted a ship's position, direction, and speed. Accurate coastal maps called **portolani** were also drawn. Seamen had already charted the coast of the Mediterranean Sea on such maps. They noted exact compass bearings and careful details about landmarks,



Ship Building in the 16th Century

soundings, and harbors. The outstanding achievement of the Portuguese **mariners** who sailed under Prince Henry in the fifteenth century was their *portolan* of the west coast of Africa.

In order to gain control of Asia, the Europeans also needed good weapons. They used an invention of the Chinese—*gunpowder*. The Chinese had used gunpowder for firecrackers and for starting fires, not for weapons. The Byzantines borrowed it to make the "Greek Fire" used to defend Constantinople. During the thirteenth century, an English monk, **Roger Bacon**, carried on many experiments with gunpowder. By the fifteenth century, Europeans had designed cannons fired by gunpowder, but these were too heavy for ships. Then in the early sixteenth century, they made lighter cannons. The cannon balls from these could be effective at a range of 300 yards.

Cannons and the new ships built to carry them won the seas for Europe. Until the sixteenth century, most ships still used oarsmen and battering rams. In battle, commanders tried to ram the enemy ship and sink it or board it and fight hand to hand. Such slow, awkward, and risky methods

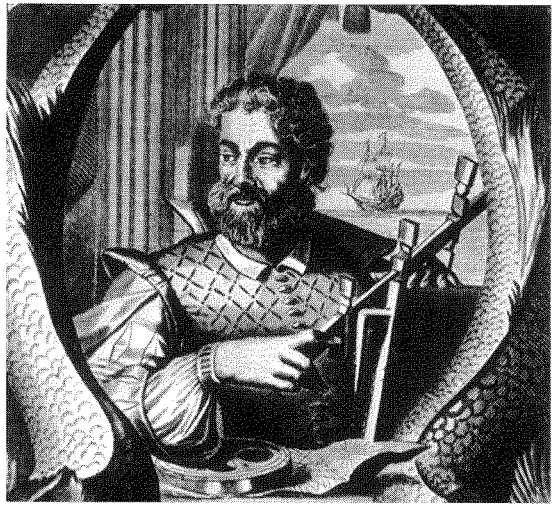
still used in Asia were no match for the new technology of the Europeans.

The Missionary Motives of Catholicism

While considering the reasons Western explorers set out on their quest, one must not overlook religion, for it too played an important part. Many people knew that Christians were supposed to preach throughout the whole earth (Matthew 28:19-20). Some had specifically studied the Bible to see what it had to say about the rest of the world. Not only does the Bible teach *evangelization*, but, as Christian scholars, especially some of the Reformers, discovered anew, it also calls upon man to have general *dominion* over all creation—to discover it, explore and study it, use it for his benefit, and carefully husband, manage, steward, and replenish it (Genesis 1:27-28, 9:1-2,7).

Columbus and Prince Henry. The Italian-born, pre-Reformation mariner Christopher Columbus (1451–1506) was one explorer who sailed into new worlds partly because of a vision drawn from the Bible. He compiled verses from the Bible into his *Book of Prophecies*. It includes biblical teachings about the earth, the seas, undiscovered tribes, the spread of the Gospel, the second coming of Christ, and the nature of His Kingdom.

Columbus believed that the Kingdom of God would not come until all the lands of the earth had heard the Gospel. He felt that God had chosen him to discover the unreached tribes so that the Gospel could be preached to them. In order that he might complete this task, the Holy Spirit had given him special aid in understanding the Scriptures and the science of navigation. Later,



Christopher Columbus, 1451–1506

after he had discovered new lands, he wrote to Pope Alexander VI asking for priests and friars to help him teach the natives.

Prince Henry the Navigator of Portugal (1394–1460) had previously become involved in exploration because of his Christian faith. Entrusted with the defense of the Portuguese foothold on the North African coast, he was convinced of the need to **outflank** Islam. Stretching in a great crescent from the Russian Steppe to the Atlantic coast of Morocco, Muslim lands hemmed in and threatened Christian Europe.

However, Europeans believed that beyond Islam to the east and south were non-Islamic peoples, many of whom were Christians. If the Europeans could work their way around the Muslims and contact the African Christians, it would be possible to take the enemy from the rear in a new crusade. The only way to do that was to sail down the west coast of Africa.

The Legend of Prester John. Henry, like other Europeans, believed that the Eastern Christians were led by a great king, Prester John. The legend of Prester (Priest) John probably began in the 12th century with some Asian Christian priest and king who was an enemy of the Muslims. Later, the story placed him in Ethiopia, which was ruled by a Coptic Christian. Some of this ruler's priests had chapels at Jerusalem, and his **envoys** occasionally came to Rome. Europeans were able in their thinking to transfer the king from central Asia to eastern Africa because both lands lay "somewhere toward the Indies: on the borders between myth and reality."

In the marvelous kingdom of Prester John one could find **unicorns**, giants, and men whose heads grew beneath their shoulders. In the midst of these wonders, the king lived in a fantastic castle surrounded by a moat of precious stones. His throne room contained a magic mirror in which he could see at will any part of the world. Dozens of lesser kings obeyed him. His army had millions of foot soldiers, hundreds of thousands of horsemen, and thousands of war elephants.

The descriptions of Prester John vary, but they have one central theme—he was extremely wealthy and powerful. Representatives of the Ethiopian emperor who reached the West encouraged this idea. As the Portuguese embarked on their voyages to the East, they wished to increase their knowledge, convert the heathen, and share in the riches of the Orient. But the main goal was to find Prester John and reunite broken Christendom in a great crusade to crush Islam.

Missionary motives. Most of the missionary zeal fueling early Western expansion came from the Spanish and Portuguese Roman Catholics. Columbus first sailed to the New World 25 years before the beginning of the Reformation. The Protestants were first busy in Europe, and later became involved in English colonies in North America. Beginning in the eighteenth century

and then increasing dramatically in the nineteenth and twentieth centuries, many Protestant groups also became involved in worldwide missions.

Catholic missionary activity had to face many non-Christian religions. It should not be surprising, then, that Christianity and Islam clashed, since the latter religion instructs its adherents to conquer territory for its God, Allah. By way of contrast, followers of most Asian religions did not try to win converts. Confucianism does not include the teaching that it should be spread to other cultures. So a follower of that system would have had no religious motivation to explore the rest of the world. But the beliefs of Christianity gave Europeans a drive to contact other peoples.

Kongo Kingdom. One of the earliest European missionary efforts of this period took place in the African kingdom of Kongo. Portuguese seamen came upon this realm in the 1480s, baptized the ruler, and helped him in struggles with neighboring tribes. When his son **Afonso** became king in 1507, the new ruler established close relations with the king of Portugal and asked for technical aid.

A strong Catholic, Afonso renamed his capital São Salvador, which means "holy savior." He made Catholicism the state religion and based his royal authority on it. He asked for more missionaries but few actually came. Because of Portuguese slaving in his domains and meddling in local politics, he soon grew disgusted with the Europeans. Vainly he protested to the pope and Portuguese king. He may have been one of the first Africans to learn that not all Europeans followed the Christian principles which they supposedly believed.

After Afonso's death in 1545, Roman Catholicism slowly declined in Kongo. His successor at first worked with the church, especially to obtain better schools; but the newly arrived Jesuit missionaries did not show him proper respect. Still, Kongo kept its diplomatic ties with the Vatican and won papal support in a quarrel with Portugal over nearby Angola in the 1620s. An Africanized form of Catholicism thrived for a short time in Kongo. The sect claimed that God and His angels were black and that Christ had lived in the area. Eventually, all that survived of that faith was the use of the cross and images of saints as charms.

Catholicism in the New World. The missionary outreach that began in Africa continued in other parts of the world. As the Spanish took control in the Western Hemisphere, a friar named **Bartolomé de Las Casas** came to the New World to preach to the Indians. Las Casas not only tried to win the native people to Catholicism, but he also taught the Spanish that the Indians were human beings who should be treated with kindness and consideration. Some of the other friars, however, did not join Las Casas in his crusade. Many were content to follow the practice of **Toribino**, archbishop of Lima from 1580 to 1606. Although he tried to defend the Indians, he must have spent most of his time baptizing and **confirming** them. Mass baptisms led to converts who had very little

The Indians' Protector

A priest named Bartolomé de Las Casas was the strongest defender of the rights of the native people of the New World. Horrified by Spanish atrocities, he began to speak out against the colonial system which gave large grants of land to settlers. The Indians who lived on the land became virtual slaves of the new owners. In 1514, Las Casas gave up his own land and set his Indians free.

Father de Las Casas also protested the Spaniards' use of military conquest to Christianize the Indians. Rather than forcing the native people to become Christians, the priest insisted that the settlers should live among them and set an example, using love, reason, and persuasion. Twice he gathered groups of settlers to try to put this idea into practice, but circumstances were against him. The first attempt failed completely. The second was more successful, lasting for twenty years.

In 1540, Las Casas carried his fight for reform to Spain where he endlessly petitioned for a change in the laws. One day he read to the court from a book he was writing. With shocked dismay, the nobles listened to stories of the cruelty of "Christian" settlers.

Las Casas told of one Indian ruler named Hatuey who heard that the Spaniards were coming. Glancing at a basket of gold and jewels near him, he said, "Behold, here is the god of the Christians. Let us perform Areytos (worshipful dances) before him and perhaps we shall please him, and he will command that they do us no harm."

The people did as Hatuey suggested, but the Spaniards captured them anyway and prepared to burn Hatuey alive at the stake. Before lighting the fire, the conquistadors allowed a monk to talk to the chieftain about his soul. The monk explained heaven and hell.

"Do the Spanish go to heaven," Hatuey asked.

"Some do."

"Then I want to go to hell," declared the chief. "I don't want to be with such cruel people."

Stories like this caused such a sensation that the emperor changed the laws as Las Casas requested. Unfortunately, the New World was far away, and the colonial administrators did not enforce the new laws. To his death, Las Casas continued to fight for his beloved Indians, upholding the dignity and freedom of all men.

Material on Hatuey is based on "The Brevissima Relacion," in: Francis A. McNutt, ***Bartholomew de Las Cases*** (New York: G.P. Putnam's Sons, 1909) Appendix I.

knowledge of Christianity. By 1594, he claimed to have confirmed 800,000 people.

To deal with the problems caused by contact between Indians and Europeans, separate villages were set up for Catholic Indians. These villages resembled the reservations started later in the United States. In Paraguay, for example, there were 30 villages, each with a church, hospital, convent, and a school where children could learn Latin. Governed by priests, these communities offered Indians an eight-hour workday and recreational activities. Church attendance was required. However, most Indians of South and Central America did not live on reservations but attended parish churches modeled after those of Spain and Portugal.

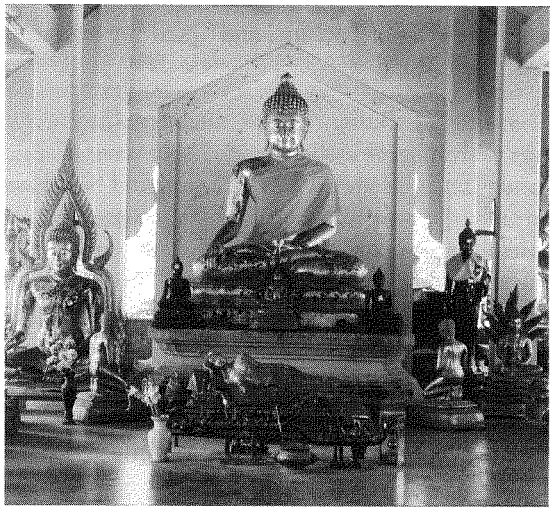
Spanish friars were also active in Asia. A Spanish proselyte effort came to the Philippines, which by 1620 had an archbishop, a Catholic university, and more than 300,000 baptized converts. The success in this land raised hopes that other victories would soon follow.

St. Francis Xavier. Among those who tried to produce such miracles was the Basque priest Francis Xavier (1506–1562). One of the founders of the Jesuit Order, his work demonstrated that Roman Catholic proselyting was headed by the Jesuits. Formed with military patterns, the Jesuits were the key opponents in the Roman Catholic Church to combat the Reformation. This autocratic order stressed exact discipline and salvation by human effort. Their missionary or proselyting activity was marked by formalism and syncretism. Syncretism meant that they did not seek for the gospel to transform culture and society but to mix with pagan cultures as an supplement. As a result there was no real long term leavening influence of the gospel. Instead their defective form of Christianity was mixed up with pagan false religions. Xavier went on a mission to India in 1542 and later to Malacca in the East Indies and Japan. Although mastering none of the languages which he encountered, he felt at home among Hindus, Muslims, and Buddhists. He used the technique of formalized mass **conversion**. Working under the protection of the government, he would gather a crowd to hear him. Then he would recite the Apostles' Creed, the Ten Commandments, the Rosary, and the Lord's Prayer. After repeating this process many times, he would baptize those who had simply memorized these statements and expressed faith in God. Then he would move onto another place, leaving behind some of his more dedicated followers to care for the new converts.

In the Orient, Jesuit missionaries faced the challenge of strong, competing religions. Often they found their worship welcome in the temples, but Hindu and Buddhist worship continued along with it. While the Bible teaches that idols must be destroyed and non-Christian worship stopped, in India and China, the Jesuits modified this view. They built on the idolatry of Roman Catholicism, as evident in the worship of the crucifix, images and mariolatry, and accommodated to other pagan forms of idolatry.

Jesuits also applied their syncretist approach to Asian beliefs and traditions, hoping that such action would aid the spread of Catholicism. These proselytizers analyzed Japanese, Chinese, or Indian customs. They determined which were merely social or civil and which had religious significance opposed to Christianity. Previous missionaries had condemned the old traditions of emperor worship and veneration of Confucius and forebears as pagan and incompatible with Christian faith. The Jesuits argued that many of these old rites were not religious but merely related to legitimate respect for one's ancestors. They contended that the Chinese and other Orientals influenced by Confucian culture would never accept Catholicism if these rites were forbidden. The Jesuits made great progress, by the late 1600s, in converting the Chinese emperor, and they hoped that if the old traditions could be absorbed into Christianity, the whole of Chinese culture would follow the emperor into Christianity. One Italian Jesuit leading this effort in its early days was Matteo (Matthew) Ricci.

Matthew Ricci. Trained in science at Rome, Matteo Ricci (1552–1610) spent four years in India before going to China in 1583. Typical of his accommodating approach, he began a lecture by showing clocks, scientific instruments, maps, and books. He then spent hours discussing with his hearers the areas of agreement between Confucian wisdom and Catholic Christianity. Hundreds of thousands of copies of his dialogue between a Chinese scholar and a European priest were distributed to the Chinese. By the year of his death, 1610, there were more than 2,000 converts to Roman Catholicism in China.

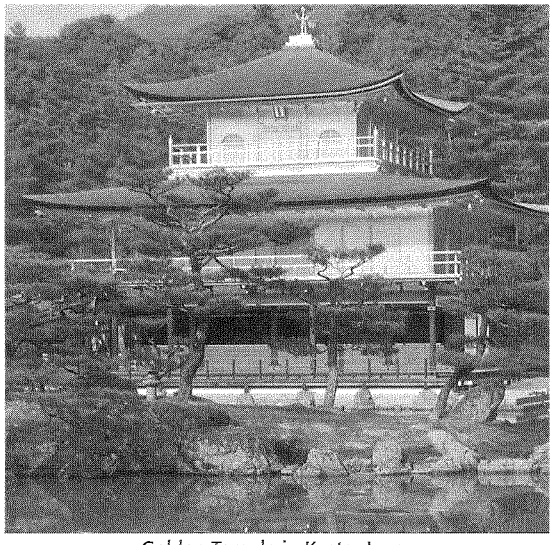


Jesuit missionaries found a great array of gods being worshipped in China and simply added Jesus Christ to the list.

For more than a century, the issue of adapting to ancient customs as Ricci had done was debated by church officials. There were occasional persecutions and occasional periods of growth in the number of Catholics in China. Finally, after 50 years of debate, Pope Clement XI declared it wrong to value Confucian tradition too highly or pay undue respect to one's ancestors. The next two emperors exiled most missionaries from China and intensified restrictions on Chinese Catholics. Because Chinese culture was so influential throughout the Far East, the decision of the pope effectively shut the door to Christianity in that part of the world for years to come.

Roman Catholics in Japan. Another major oriental land, Japan, seemed to offer a chance to repeat the Philippine success. By 1617, there were at least 300,000 Catholics in Japan. Fearing that the priests would help Westerners take over the land, the government halted the rapid spread of this religion. In a series of horrible persecutions marked by savage tortures, the Catholic church of Japan was all but destroyed. A decree in 1638 closed the land to all foreigners, and by the end of the century few Christians of any kind remained.

The fate of the Japanese church illustrates the problems of early Roman Catholic missions in the Orient. Despite early success, the work of winning people to the Catholic religion did not go as well in South and East Asia as it did in the Americas. The fundamental problem with such Jesuit missions was that it was not true biblical evangelism in its message or method. It was but an extension of the Roman Catholic formalism that sought to add religious ceremonies to culture rather than see the truth of Christ make all things new.



Golden Temple in Kyoto, Japan

Economic Motives

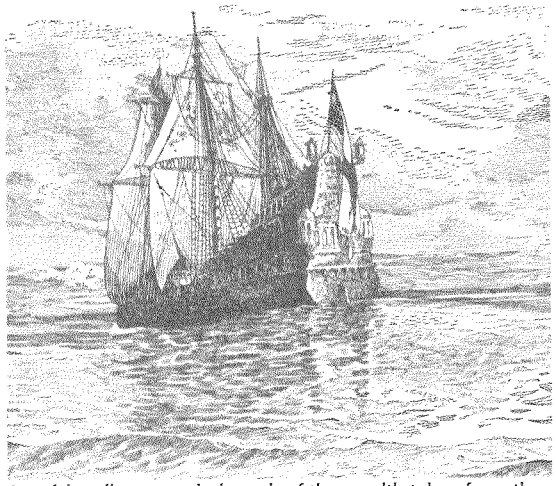
European technology and the desire to spread Christianity were significant factors in European expansion around the globe. But there were other reasons for the Western success—reasons that had to do with money, production, and trade.

All during the Middle Ages, European trade increased greatly. By the time the Renaissance started, many merchants had grown very rich. Farmers, craftsmen, and others had to increase production to supply this growing trade. During the fourteenth and fifteenth centuries this increase in production and wealth in Italy led to a new type of economy—capitalism.

What is Capitalism? Capitalism is an economic system characterized by the voluntary exchange of goods and services among individuals who are free and self-governing. In a capitalistic economy, private individuals invest sums of money in commercial, industrial, and banking ventures. Under capitalism, private persons own property or the means of production. Capitalistic enterprises produce goods for sale on the open market, in contrast to the early medieval manor which produced only enough goods for its own use. In a capitalistic economy, decisions are in the hands of people most closely related to the individual enterprise—those whose resources have been invested in it. The capitalist expects to receive a profit on his investment. These ideas are based on the biblical concept that God created man to be self-responsible under His law and intends man to enjoy the fruits of his own productive efforts, which encompass his material investment and his labor.

During the Middle Ages, a master craftsman generally would not have been a capitalist. He did not have a large investment in his business, and he worked closely with his journeymen and apprentices. But the Médici bank of fifteenth-century Florence was definitely a capitalistic enterprise.

Italians' New Business Methods. The Italians worked out many of the techniques of capitalism during the Renaissance era. They developed **double-entry** (credits and debits) **bookkeeping**, which helped businessmen keep track of what they owed and the money owed to them. With these records, they could decide whether to take on new ventures. Italians also invented a kind of insurance for ships, which greatly reduced the risk of loss. They experimented with various types of companies, some of which became the forerunners of modern corporations. Earlier traders had gone from place to place to trade, but the new companies built a base of operations and stayed in one spot. Run by groups of merchants, these companies conducted business from a cen-



Spanish galleons carried much of the wealth taken from the New World to Spain.

tral office by means of agents or partners located in distant cities.

One of the largest of these early companies belonged to the Médici family. A series of partnerships, it operated three businesses in Florence and had several foreign branches. The Médici supplied more than half the capital to each partnership so that they could keep control. They traded in many types of goods, engaged in industry and mining, and operated large banks. **Foreign exchange** and credit also brought great profits for the Médici. The use of credit began during this period and made it unnecessary for merchants to carry large amounts of cash. Then too, credit made borrowing easier.

Since it was expensive and dangerous to move gold and silver from one part of Europe to another, the bill of exchange was created. If a merchant in London wanted to purchase goods in Florence, he could go to the Médici bank branch in London and buy a bill of exchange payable in Florence several months later. On the agreed date, he or his agent in Florence would make purchases in London with a bill of exchange, the one would cancel the other. Very little actual gold or silver had to be transferred. These bills of exchange, the beginning of paper currency, were also used by travelers just as people today use travelers' checks.

The papacy also had the Médici bank transfer funds from various parts of Europe to Rome. The bank made a profit on these operations due to the difference in the rate at which one currency could be changed into another. While the Roman Catholic Church forbade the charging of interest, Italian bankers used currency exchange and many other methods to dodge the rules.

Capitalism In Northern Europe. Capitalism spread from Italy to the rest of Europe when a series of crises swept across the continent. In 1315 and 1316, crops failed and famines resulted. Then the Black Death plague snuffed out countless lives in 1348 and 1349. These events caused changes in normal social activities. Many people also perished in the Hundred Years' War between England and France. Constant fighting made it hard to hold medieval trade fairs any longer. However, the new Italian money economy soon replaced both the fairs and the medieval barter economy.

Capitalism affected all aspects of European life. No previous society had dreamed so boldly of boundless growth. Most only wished to keep their present standard of living, not better it. But capitalism provided a new frame of mind. Driven by the profit motive, the capitalist reinvested his increase so that production would grow.

Jacob Fugger, the wealthiest man in sixteenth century Europe, expressed the spirit of capitalism: "Let me earn as long as I am able." Fugger got his wish. Compare the Fugger family fortune with those of earlier capitalist families.

Fugger	(1546)	$160,000,000
Médici	(1440)	30,000,000
Peruzzi	(1300)	3,200,000

The north Europeans improved on the Italian way of doing business. They developed joint-stock companies, which work something like our modern corporations. Few businessmen had enough money to acquire a ship, crew, cargo, and supplies for the long voyage to Asia. Moreover, many ships never returned from this dangerous journey. Such a loss would normally wipe out a merchant's whole fortune. So a great many merchants pooled their money for these voyages through joint-stock companies. By purchasing shares of stock, each became part owner in the business venture. Not only did this method provide large amounts of money, it also reduced the risk for each investor. He did not have to invest everything he owned, only a small part.

Joint-stock companies such as the Dutch, English, and French East India companies raised enormous sums of money this way. With few individual merchants able to compete, these

Bankruptcy

The word ***bank*** comes from the Italian word ***banca***, which means "bench." In medieval times, an Italian moneylender sat on a bench in the marketplace to conduct his business. If he lost all his money, the people broke his bench. That is how the word ***bankrupt*** came into use. It means "broken bench."

By the time of the Renaissance, the money lenders had moved into buildings. As financial dealings increased in size and complexity, these new banks took an even more important place in a country's economic life.

The Fuggers

Although history gives few bankers more than honorable mention, the behind-the-scenes activities of these men of finance have often greatly influenced historical events. For example, the wealthy Fugger banking family of Germany put up money for bribes which affected the election of two popes and made Charles V the Holy Roman Emperor. Bishops, kings, businessmen, towns, and even European countries financed operations with enormous loans from Fugger banks.

Starting as cloth makers, the Fuggers, through several generations, expanded their business to include spices, metals, and jewels. They opened branches in all the large cities of Central and Western Europe and by 1473 counted the Hapsburg rulers of Austria among their clients. Under Jacob the Rich, the Fuggers gained control of the silver, copper, and iron production in much of Central Europe.

As his fortune increased, Jacob loaned money to businessmen and then to political rulers as well. He accepted deposits, handled foreign exchange, and transferred money over long distances. A major user of this last service was the pope, who needed money transferred from Northern Europe to Rome. The Fugger enterprises utilized the most advanced bookkeeping methods of the day, developed their own credit rating system, and kept careful watch on events in the business world. When Jacob died, he was the richest man in Europe.

In the following years, the loans to political rulers proved the Fuggers' undoing. Spain and France defaulted on their debts in 1557. Then other borrowers also failed to repay their loans. The firm went bankrupt in 1607.

firms became the tool by which Europe gained economic control of the globe.

From remote, mysterious lands came products to enrich European life and to spur even further growth of capitalism. In the sixteenth century, Eastern spices and American gold and silver filled the holds of most ships sailing from colonial lands. By the seventeenth and eighteenth centuries other items replaced these. Tea, coffee, cocoa, exotic dyes such as **indigo**, and new products such as tobacco began to change European patterns of **consumption**. Cotton and sugar, although known earlier, became widely available for the first time.

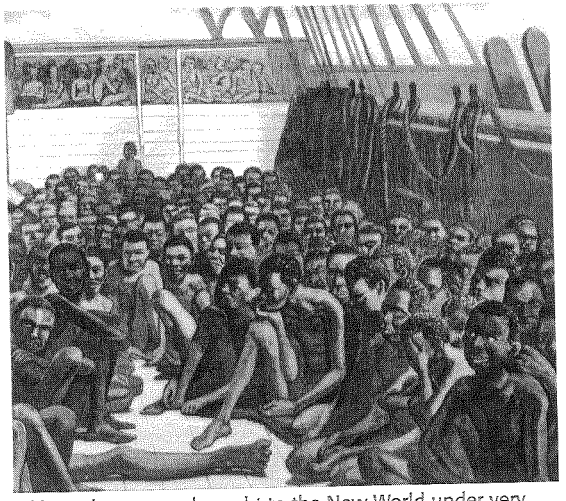
The Slave Trade. One branch of the new commerce was not admirable, because it dealt in human beings—the slave trade. Beginning in the 1440s, ships often returned to Portugal with a few African captives. They were used mainly as house servants and craftsmen. But before long, they were put to work on sugar plantations.

The production of sugar posed unusual problems. It was partly agriculture, growing cane, and partly manufacturing, making the cane juice into refined sugar. Moreover, the whole process required large numbers of people to work a small piece of land. Nowhere in Europe was the farm population large enough to provide workers for a plantation, so owners used slave labor. The slaves were usually war prisoners and black Africans. Unlike the other forms of slavery and forced labor in use at the time, the unskilled plantation workers were scarcely considered human beings.

As Europeans ventured out into the Atlantic, the plantation idea moved with them. Eventually, gold and silver in the New World began to run out. Then the colonists discovered that many areas were suitable for plantations. After first working American Indians on the plantations, the Europeans began bringing Africans over. Unlike the Indians, most of whom were hunters and gatherers, the Africans were experienced tropical farmers. They had had more contact with European diseases and thus did not die off as quickly as the Indians. Being black-skinned, they could not run away and blend into the population. Finally, Africa seemed to have an endless supply of human beings.

The flow of slaves across the Atlantic was not large until the middle of the seventeenth century. Then the Dutch took charge of supplying the rapidly growing plantations in the West Indies and Brazil. Soon British and French slave shippers displaced the Dutch. From about 2,000 slaves imported per year in the sixteenth century, the figures peaked at more than 80,000 annually in the 1780s. Close to 10 million Africans landed in the Western Hemisphere during the 400-year history of the Atlantic slave trade.

This traffic in human beings proceeded through several steps. First, ships from Europe carrying manufactured items, rum, cloth, and other trade goods came to the West African coast. There the captains exchanged these for slaves provided by African middlemen. The native middlemen had obtained the slaves from the interior either through kidnapping or by purchase. Forced to



African slaves were brought to the New World under very inhumane conditions.

The Middle Passage

Capture by slavers was a frightening experience for Africans. But slaves faced their most terrible ordeal on the ships which carried them across the Atlantic, a journey called the Middle Passage. It lasted from three weeks to three months, depending on the distance covered and the winds. Inadequate food, disease, and overcrowding took the lives of about 13 percent of the slaves before they reached the Americas. Sometimes the ship would be attacked by competitors, and the slaves would drown during the fighting. If severe storms came up, the sailors often threw their captives overboard to lighten the ship. John Newton, an English slaver who himself became a slave of an African queen and later was converted to Christianity, becoming an evangelical minister, described conditions on these ships this way:

"Approximately 200 to 250 slaves can be carried in the hold of a 100-ton vessel. Their lodging rooms below deck are in three parts (for the men, the boys, and the women) and are around five feet high. They are divided toward the middle and the slaves lie in two rows, one above the other, on each side of the ship, close to each other like books upon a shelf. I have seen them so close that the shelf would not easily contain one more.

"The poor creatures, thus cramped, are likewise kept in iron chains which makes it difficult for them to turn or move or attempt to rise or lie down without hurting themselves or each other. Almost every morning instances are found of the living and dead fastened together."

Adapted from John Newton, ***Thoughts Upon the African Slave Trade*** (London: J. Buckland, 1788)

walk to the coast bound by heavy ropes or chains, the captives then waited in dungeons or floating prison ships until a trader came by.

After purchase, the slaves were crammed into the ship's hold, with scarcely room to move, and taken as quickly as possible to an American port before too many of them died. Deaths, of course, meant lost profits. Yet conditions on the voyage were dreadful. Chained together in the dank hold with its stale air and lack of sanitation, the captives suffered from hunger and brutal treatment. The shock of being torn from homes and loved ones still gripped them. During capture, journey to the coast, and shipment across the Atlantic, the loss of life was appalling.

When the slave cargoes landed in the New World, planters bought the Africans at auctions. Then the ships picked up plantation products, especially raw sugar and molasses, and returned to Europe. Merchants made a large profit at each stage of this three-cornered trade.

Growing Wealth. Above all of the world's exotic goods, Europeans hungered for gold and silver most. Said the conquistador, Hernando Cortez, "We, the Spanish, suffer an affliction (sickness) of the heart which can only be cured by gold.... I came in search of gold and not to work the land as a laborer." Between 1591 and 1595, the flow of silver pesos into Spain reached a peak of 35,184,863. Great quantities of gold also reached Spain and began to move through trade channels to the rest of Europe. Soon these precious metals flooded the continent and started a price revolution. During the sixteenth century, prices jumped fourfold, fivefold, and even sixfold.

Because prices rose more rapidly than wages, this inflation made capitalism grow even faster. Profits increased, giving capitalists more desire, as well as more money, to invest. The real income of workers dropped while the middle class grew wealthy. The growth of the middle class gave Europe a decided advantage in its economic conquest of the globe.

Not Altogether a European Innovation

To be sure, the African slave trade was not altogether a European innovation. Some form of slavery had existed in Africa, among Africans, for centuries. Prisoners of war and convicted criminals were often treated as "wageless labor," liable to be bought and sold. However, there was one important distinction. They were not chattels as they came to be in the mines and plantations of the Americas. In African society there was no clear and rigid division between bond and free. Every African was a working member of some domestic group, attached normally through the bond of kinship. The slave, too, was a working member of a group, but since he was not kin, his status was lower. It need not, however, remain so. A slave could advance through work; he could buy his freedom with the produce of the plot of land assigned to him for cultivation. Or he could advance through good fortune, by inheriting goods or marrying his master's daughter. Through such means it was not at all unusual for slaves to acquire positions of great influence and power.

But in many cases it was this reservoir of "captive labor" within African society that opened the gates to overseas slavery. African chiefs and kings sold their slaves to Europeans just as they had always sold them to one another. In this respect, moreover, they were behaving no differently from people in other cultures. For centuries the strong people in Europe had bought and sold their weaker brethren: even during the comparatively enlightened Renaissance, the pope more than once had occasion to excommunicate Venetian and Genoese merchants for selling Christian captives into Muslim slavery in Egypt and the Middle East.

From Basil Davidson, ***African Kingdoms: Great Ages of Man–A History of the World's Cultures*** (New York: Time-Life Books, Time Inc., 1966)

For your consideration

Questions

1. What effect did technology have on individual freedom?
2. How might the increase of metal in Europe have influenced progress?
3. Have you ever thought of any ideas for inventions? If so, list a few. What kind of thinking leads to new ideas? What other factors are necessary for the process of invention? What are some modern impediments to the spirit of invention?
4. In what ways may the invention of the printing press have aided the Age of Exploration?
5. Compare and evaluate the evangelistic approaches of Toribino, Xavier, and Ricci. Which do you think would have produced the strongest converts?
6. What actions of the Europeans may have hindered their missionary efforts?
7. What problems face a person who converts from one religion to another?
8. Does religion have any part in motivating people to attempt great projects today? Illustrate.
9. What are some strengths and weaknesses of capitalism?
10. Did the slave trade increase racial prejudice? Is any form of slavery justifiable?
11. Why did inflation in the sixteenth century increase business profits? How would inflation have affected craftsmen?

Projects

1. Choose one of the following headlines and write a newspaper article to go with it:

   Florence Bank Announces New Credit Services

   Local Merchant Concerned Over Trade Fair Decline

   Fugger Tells Graduates How to Succeed

   Inventor Demonstrates Windmill

   Old Timer Describes Life Before Clocks

   Caravels Sink Arab Fleet

   Pope Receives Protest from Kongo King

   Las Casas Scolds Conquistadors

   Japan Moves into Isolation

2. Create a newspaper advertisement for the new products brought to Europe by traders. Put together a bulletin board using the news stories above and the advertisements or actually put out a newspaper.
3. Do some research on one of the Asian religions such as Hinduism, Buddhism, or Confucianism. Prepare a report explaining the basic beliefs and practices.
4. Imagine you are a sixteenth century missionary in South America. Write a letter to a friend in Spain telling about your experiences.
5. Make a model or drawing (perhaps cutaway) of one of the inventions mentioned in this chapter. Basic materials for models might be clay, pieces of wood, or paper. Explain to the class how the invention worked and why it was important.

Word List

tandem
interchangeable
vernacular
portolani
mariners
outflank
envoys
unicorn
confirm
conversion
evangelistic
foreign exchange
indigo
consumption

People and Groups

Johann Gutenberg
Christopher Columbus
Prince Henry the Navigator
Prester John
Afonso
Bartholomew de Las Casas
Archbishop Toribino
Francis Xavier
Matteo Ricci
The Jesuits
Jacob Fugger and the Fugger Family
Médici Family
Hernando Cortez
Roger Bacon
Alhazen
Pere Marquette
Hatuey