

The Shift to European Trade Dominance

"No man should die who can afford a cup of tea." This belief was prevalent in some European cities as the practice of drinking tea became fashionable among the wealthier classes of society. By the end of Big Era Six (1400-1800), tea became more available, but in the fifteenth century, few could afford it, even though many people believed in its restorative powers. Historians believe that perhaps the health properties of tea may have been mainly due to boiling and purifying water. But as demand for this product grew, so did the pressure on merchants to supply it.

Many Europeans believed that good health depended on a balance of the fluids or "humors" in one's body. It was further believed that by adding spices to one's food, these humors were put into balance. Spices such as cinnamon, cloves, ginger, nutmeg, mace, saffron, and pepper were in high demand in growing European cities, but only a minority could afford them. As Big Era Six opened, Arab traders sold their cargoes of these precious goods to Italian shippers, who, in turn, sold them to people in European towns and cities. Other merchants, in addition to Arab traders, such as Indian, Chinese, and Malay, were actively trading as well, as we have seen in our Case Study of Malacca. Each time these goods changed hands, their price increased.

In addition to medicinal purposes, spices were highly desired to add flavor to foods, to preserve meats (no refrigeration), or to conceal the flavor of partly spoiled meat. Spices were used to produce medicines, perfumes, and dyes, and to flavor drinks. Wealthy ladies sometimes carried ginger around their necks in order to sweeten their breath.

Sugar was another highly desired commodity. Produced on a large scale in India and Southwest Asia and exported by Arab, Indian, and Persian merchants, it attracted the palates of the European Crusaders who went to Southwest Asia on military expeditions between the eleventh and fourteenth centuries.

But who would have thought that one of the most highly desired spices was a small, black, wrinkled berry called pepper? The sale of pepper in the market-place required the same kind of protection for the commodity as one might expect for an expensive jewelry store.

Pepper merchants sell their product individually, by the peppercorn; because of its expense, a housewife was able to buy just one peppercorn if she wished. The popularity and costliness of pepper resulted in its being guarded like diamonds. Longshoremen, [who unload ships and] who handle the peppercorns are closely watched and frequently searched. Crossbows and blades of the guards bristle on the galleys that bring the pepper through the Mediterranean. . . . But these precautions do not protect the pepper from being tampered with by grocers, wholesalers and middlemen, any of whom may mix a bit of something with it making a few fake peppercorns. They were made to look like peppercorns by using some clay, oil, and mustard, which was difficult to distinguish from the genuine peppercorn.ⁱ

Many Europeans could not afford peppercorns or any spices. Others used them only for special occasions, such as weddings. In richer homes, the spice cabinet was kept locked.

Other products sought from the Asian-centered trading networks included manufactured goods as well: rugs, Chinese lacquer-ware, and cotton cloth which was more comfortable and lighter than clothing made out of European wool. Some of the names for cotton fabrics we use today can be traced to their place of origin:

The very names by which cotton fabrics are known in English and other European languages reveal the places from which they were thought to come. “Madras” and “calico” refer to the Indian cities of Madras and Calicut, “muslin” to the Arab city of Mosul. “Gingham” comes from a Malay word meaning “striped,” and “chintz” from a Hindustani word meaning “spotted.”ⁱⁱ

The demand for cotton textiles was so high that those involved in the wool, linen, or silk commercial ventures in Britain pressured for laws that would forbid the importation of these fabrics. Daniel Defoe observed in 1780: “Despite the laws, cottons were not only sought as clothing by all classes, but crept into our houses, in our closets, and bedchambers; curtain, cushions, chairs and at last beds themselves were nothing but calicoes or Indians stuffs.”ⁱⁱⁱ

This, then, is essentially the picture at the beginning of Big Era Six. Europeans simply did not have access to the knowledge of the spice routes and trading networks that were known to the Chinese, Arabs, Indians, and Africans. Even if they did, the Europeans did not have the maritime technology, skills, and knowledge needed to participate in these oceanic ventures in the early fifteenth century. Despite being sought after, the control of these commodities remained in the hands of non-Europeans who essentially controlled the supply and price.

But the word beginning is stressed because soon after it began, Europeans borrowed basic maritime technology, such as the compass and stern-post rudder from China, the Arab lateen sail, and Muslim charts and maps. By the time Big Era Six drew to a close, the situation changed dramatically. It is important to note that while Europeans were in conflict with non-Europeans, they were also in conflict with each other. They competed for trade in Asia and the Americas, and their efforts to establish markets, conquer, and drive out competition, often led to clashes. These commercial and political rivalries led to wars between ships flying different flags. European warfare dominated much of Big Era Six.

ⁱ Joseph and Frances Gies, *Life in a Medieval City* (New York: Harper and Row, 1969), 281.

ⁱⁱ R. R. Palmer and Joel Colton, *A History of the Modern World* (New York: Alfred Knopf, 1971), 267.

ⁱⁱⁱ Palmer and Colton, *A History of the Modern World*, 268.

Technological Advances during the Song Dynasty (China: AD 960-1279)



Shipbuilding

The Song Chinese were world leaders in shipbuilding. Watertight bulkheads improved buoyancy and protected cargo. Stern-mounted or **stern-post rudders** (see left) improved steering. Sounding lines were used to determine depth. Some ships were powered by both oars and sails and large enough to hold several hundred men.

The Compass

Also important to oceangoing travel was the perfection of the compass. The way a magnetic needle would point north-south had been known for some time, but in Song times the needle was reduced in size and attached to a fixed stem (rather than floating in water). In some cases it was put in a small protective case with a glass top, making it suitable for sea travel. The first reports of a compass used in this way date to 1119.

<http://afe.easia.columbia.edu/song/tech/compass.htm>



History of the Lateen Sail

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The lateen sail: a triangular sail that was of decisive importance to medieval navigation. The ancient square sail permitted sailing only before the wind; the lateen was the earliest fore-and-aft sail. The triangular sail was affixed to a long yard or crossbar, mounted at its middle to the top of the mast and angled to extend aft far above the mast and forward down nearly to the deck. The sail, its free corner secured near the stern, was capable of taking the wind on either side, and, by enabling the vessel to tack into the wind, the lateen immensely increased the potential of the sailing ship.

The lateen is believed to have been used in the eastern Mediterranean as early as the 2nd century AD, possibly imported from Egypt or the Persian Gulf. Its effective use by the Arabs caused its rapid spread throughout the Mediterranean, contributing significantly to the resurgence of medieval

commerce. Combined with the square sail, it produced the ocean-conquering full-rigged ship. The Sunfish class of one-design sailboats is lateen-rigged.

Cannon to the Right of Us, Cannon to the Left of Us: How Shipboard Cannon Changed the Rules

The Portuguese

Vasco da Gama reached India, though only half of his crew would make it safely back to Portugal. His cargo of pepper and cinnamon was so profitable that, despite these crew losses, Portuguese merchants began to push for more expeditions. They wanted to control trade routes by forcing merchant vessels to land at their trading sites and pay duties or fees to them. A trading post was established at Calicut in 1498. By the mid-sixteenth century, the Portuguese had more than fifty trading posts between West Africa and East Asia. They traded for West African slaves and tried to control the southern African gold trade. From Hormuz, located on the Strait of Hormuz leading from the Arabian Sea to the Persian Gulf, they seized control of access to the gulf. From Goa on the western coast of India they organized export trade in pepper. Finally, at Malacca, they oversaw shipping between the South China Sea and the Indian Ocean. They established posts in the Ternate spice, also at Macau off the coast of China and near Nagasaki in Japan.

How Did They Do It?

The Portuguese ships were relatively small and light, but they had one great advantage: shipboard cannon. Their vessels had sturdy rib construction so that the recoil from the heavy cannon did not blow them apart. The non-European ships that plied the Indian Ocean were built differently and did not traditionally carry large firearms. After the Portuguese arrived, Muslim and other traders in the Indian Ocean began to install shipboard cannon but not before the Europeans won many sea battles.

The Portuguese soldier Afonso d'Albuquerque (1453-1515) battled for Hormuz. The excerpt below describes the methods the Portuguese used to take over the spice trade. They seized cities and built military and trading posts in the Indian Ocean. For about fifty years, Portugal controlled the spice trade between Europe and Asia. The following represents an eye-witness account of the methods employed by the Portuguese under the command of Albuquerque:

When Afonso d'Albuquerque perceived the gleaming swords and waving of the bucklers and other doings of the moors [Muslims] on shore, . . . he ordered a broadside to be fired. The bombardiers took aim so that with the first two shots they fired they sent two large ships which were in front of them, with all their men, to the bottom. Manuel Telez, after having caused great slaughter upon some vessels, . . . ran into a large vessel that lay close to him and killed a part of the men in it, while the rest threw themselves into the sea, and those who were heavily armed went down at once.ⁱ

After the Portuguese came Spanish, Dutch, French, and British expeditions. Because European traders were often backed by their governments, which sought new riches as a way to give them a competitive edge in an increasingly competitive European state system, they “gate crashed” the commercial networks of South and Southeast Asia similarly to the way that Mongol armies had taken over the trade of the silk roads three centuries before.ⁱⁱ

ⁱ Jerry H. Bentley and Herbert F. Ziegler, *Traditions and Encounters: A Global Perspective on the Past*. 2nd ed., vol. 2 (Boston: McGraw Hill, 2003), 624.

ⁱⁱ Andre Gunder Frank, *ReOrient: Global Economy in the Asian Age* (Berkeley: University of California Press, 1998), 256; David Christian, *Maps of Time: An Introduction to Big History* (Berkeley: University of California Press, 2004), 394.

The Historical Context for the Early Global Economy

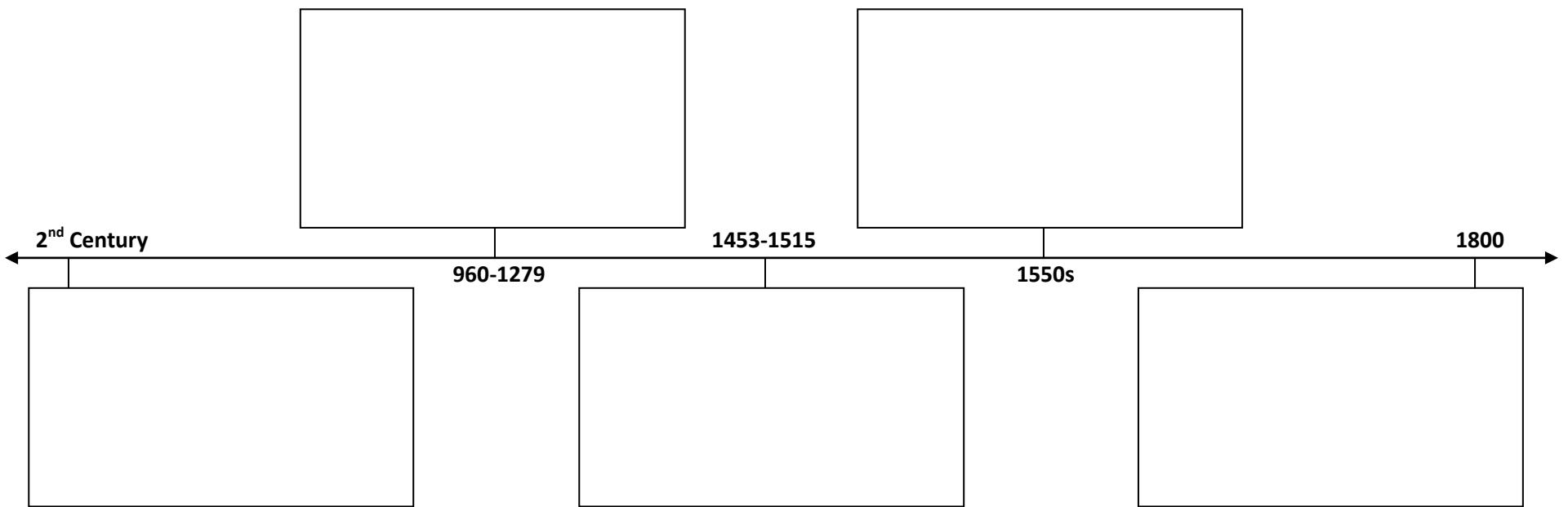
The emergence of a truly global economy was another consequence of the Great Global Convergence, which linked together all major regions, except Antarctica, in a single web of exchange. Silver was the great lubricator of global trade. In the 1550s, silver mined in the Americas became available to Spain, then to the rest of Western Europe. Silver financed Europe's increasing involvement in the world market, which was centered in East and South Asia well into the eighteenth century. By 1800, the world economy was shifting toward the Atlantic as its center.

Far-reaching changes in maritime shipbuilding and navigation greatly speeded global exchange in Big Era Six. New maritime technology, plus the European innovation of mounting cannons on shipboard, permitted the rise of the Spanish, Portuguese, Dutch, British, and French maritime empires. These empires were larger and more diverse than any earlier ones. New firearms technology also contributed to the expansion of Afroeurasian land empires that were better organized (for controlling their subjects and collecting taxes from them) than earlier agrarian empires. These states included the Turkish Ottoman, Safavid Persian, Mughal Indian, Qing Chinese, and Romanov Russian empires, plus others in Inner Eurasia, West Africa, and Southeast Asia.

The world economy was Asia-centered at the beginning of Big Era Six, but it gradually underwent a major shift in organization. By 1800, it was becoming focused on the Atlantic world. How did this come about, and what were the main consequences? The linking of Afroeurasia with the Americas was the most important factor. The sudden arrival in the sixteenth century of vast quantities of silver on world markets led to a rapid increase in world commercial exchanges of all kinds. This was as true for Asia, where the economies of both China and India were based on silver coinage, as it was for Europe. In the long run, it seems clear that Europeans benefited the most from this development. But this was not apparent at the time.

In the early part of Big Era Six, European participation in the trade of Africa and Asia was seriously limited. Europeans did not produce commodities or finished goods that Asians wanted to buy. American silver, which American Indians and African slaves extracted from the earth, provided a solution for capitalist entrepreneurs. These merchants could purchase Asian commodities (pepper, spices, coffee, tea, porcelain, carpets, silk, and cotton cloth) with American silver and, to some extent, gold. The Japanese also supplied silver to the Asian market. Once Europeans with precious metals to sell entered the trade of Asia, they also profited as specialists in moving goods from one part of Asia or Africa to another—Chinese porcelain to India, for example, or Indian textiles to West Africa. The trade boom in maritime Asia soared to new heights between the sixteenth and eighteenth centuries. Because it greatly benefited European states and merchants, however, the weight of the world economy began to shift from East and South Asia to the Atlantic world.

Lesson 5 – European Trade



What four maritime technologies/tools/resources contributed to European dominance? • • • •	What various products did Europeans increasingly demand? How many can you list (from today)?	What key commodity was the “great lubricator” of global trade? Why was this? What was it about that commodity that allowed it to facilitate so much trade?
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Based on what you have learned, what one thing (or combination of things) do you think ultimately gave Europeans the edge in global trade, and **why**?