

Why Didn't China Discover the New World?

Scott Wolla

Mention China in any conversation and you are likely to hear a variety of concerns: China's growing economic and political power, the loss of American manufacturing jobs due to trade with China, patent and copyright violations, and the level of U.S. government debt held by China.



This modern model of Ming Dynasty treasure ships as compared to one of Columbus's ships was on display in the China Court of the Ibn Battuta Mall in Dubai, 2006. The purported size of the Ming ships, however, is strongly disputed by maritime historians.

China surely warrants the attention it receives. But China also embodies many contradictions and some historical reversals of fortune: For one, China is the world's second-largest economy, although it is still considered "emerging" or "less developed." It is officially communist, but has some of the most active markets in the world. To many Americans, China seems to have only recently risen to stardom on the world stage. Yet, China was once a global leader

in nearly everything, long before Western nations dreamed of greatness.

The rise of China, as well as any of the emerging economies, has much to offer students and teachers of social studies—especially in the fields of history and economics. Traditionally, history education in the United States has emphasized Western civilization and provided instruction for educators with that end in mind. In an era of increased globalization, the Western emphasis is opening

up into a more global view. While this is a necessary and positive change, some social studies teachers may feel under-prepared and hesitant to teach Eastern or Asian history. One way to overcome this hesitancy about broadening curriculum is to seek out a broader range of expertise.

Economics Can Enliven a History Lesson

The fields of history and economics coexist in an environment of mutual respect and occasional encounters; unfortunately, truly interdisciplinary curricula in these fields are hard to come by. Economics can add an interesting dimension to history instruction. When teachers attempt to integrate economics into history instruction, they often do so by including a nation's GDP or a discussion of the effects of inflation or poverty on political revolutions. While this is important, it only scratches the surface of what meaningful interdisciplinary social studies education can be. Teachers can strengthen lessons by incorporating economic *reasoning* into the context of history instruction.

One of the basic assumptions of economic reasoning is that people respond to incentives in predictable ways. Incentives are perceived costs and benefits that encourage people to act. When incentives change, people's choices and behaviors change. Using this approach to teach history adds a new dimension to historical understanding and a fresh way to introduce critical thinking into the social studies. China provides a wonderful merger of surprising historical study and clear

economic lessons. But first, let's address our country's European perspective on global exploration and discovery.

So, Who Discovered the New World?

When discussing the "discovery" of the New World, a few things must be made clear:

1. Native American populations were already living in the New World.
2. There is evidence that Vikings had arrived in North America long before Columbus and his crew bumped into the "New World" on their way to the East.
3. While the term "discovered" is generally not accurate, it should be acknowledged that the voyages of Columbus led to European knowledge of America and opened a way for a new age of exploration and discovery. From the admittedly narrow perspective of Europe at the time, he did "discover" America. To restate the issue: When we discuss discovering the New World in this manner, we assume a European perspective—which many Americans still do when interpreting history. There are some very understandable reasons for this, foremost being the cultural heritage of many of those who populated the United States during its first 200 years, as well as our current political, economic, and cultural ties to Europe.

Clearly, the study of history provides a wider, global view from which we can see that European nations were not the only active seafarers looking for trade routes. In fact, Chinese explorers were in many ways better equipped to do this work and did so much earlier than their European counterparts. Much of the technology that made European exploration possible in the fifteenth and sixteenth centuries had been used by Chinese sailors hundreds of years earlier: European sailors first used axial rudders in the twelfth

century; Chinese sailors were using them in the first century. European sailors incorporated multiple masts and sails in the fourteenth century; the Chinese had done so in the second century. Europeans implemented watertight compartments in ship hulls in the eighteenth century; the Chinese used them beginning in the second century. Europeans started using magnetic compasses in the twelfth century; the Chinese were using them in the ninth century. All these technologies are important because they allowed crews to sail farther from land and more easily withstand storms at sea. Before these advances, captains were hesitant to wander too far from the safety of shore. So, in many ways, Chinese explorers were much more technologically prepared to dominate the seas than explorers from Europe.

Enter Zheng He

The third Chinese emperor of the Ming dynasty, Yung-lo (1403–1425), sent Zheng He, his chief envoy, on a mission to "proceed all the way to the ends of the earth to collect tribute from the barbarians beyond the seas." These expeditions were an effort to make the country more prosperous and powerful, but also to promote trade and collect tribute from neighboring countries. His first expedition included over 300 ships with a crew of more than 28,000 men. His fleet included supply ships to carry horses, troop transports, patrol boats, warships, and tankers to carry fresh water. The largest ship in his fleet was reported to be 400 feet long, with nine masts and crew of over 1,000 men. This is a wonder when we consider the first voyage of Columbus: three ships and a crew of about 90 men—the largest ship being 85 feet long, with three masts and a crew of 40. During his seven expeditions, Zheng He explored the coasts of faraway places, visited many ports, and gained prestige for his accomplishments. Between 1405 and 1433 C.E., he led seven naval expeditions south and west to India, Persia, Arabia, and Africa. Many of these expeditions included

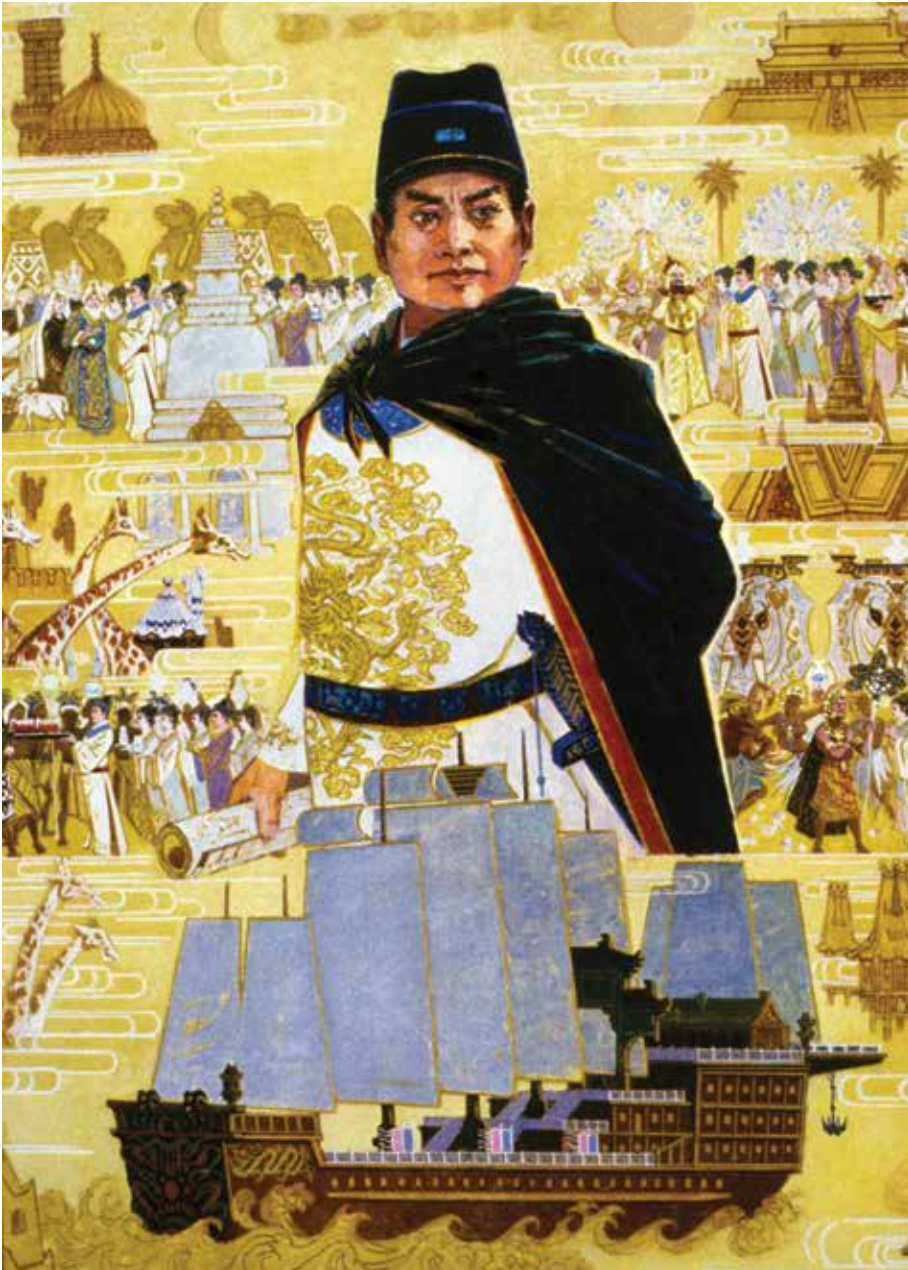
several hundred ships and thousands of soldiers.

Zheng He earned great status for his efforts. Indeed, we are still talking about his accomplishments today. In addition, his emperor gained power, wealth, and the admiration of neighboring countries. But what specific role did economics play in these impressive expeditions? How might economic incentives have encouraged these endeavors?

Incentives Matter

China seemed to be on the road to growth and prosperity, but the incentives suddenly changed. Government power changed hands and policy changes quickly followed, leading to a period of isolationism that lasted for hundreds of years. After 1433, the Chinese government launched no further naval expeditions. In 1436, the emperor forbade the building of ships for overseas voyages. Existing ships were left to rot. Forty years later, the government destroyed the records of the voyages of Zheng He. While Spanish and Portuguese explorers claimed lands of Central and South America, the Chinese withdrew from the seas. Why didn't China embrace and sustain its technological superiority? What led to China's isolationism? Here are several theories:

- The spending of Yung-lo's government greatly exceeded the tax revenue that could be collected. Although the Chinese system of taxation was the most advanced in the world, even the emperor could not continue to fund massive fleets on the scale of those used by Zheng He. The tributes collected by the fleets also clearly fell short of the amounts needed to sustain their operation.
- Mongols began frequent attacks on China's northern border. These attacks may have forced China to devote more resources to the defense of the border.
- Neo-Confucian scholars held many important government posts. Neo-Confucian philosophy encouraged



Chinese mariner Zheng He carried out seven naval expeditions for the Ming dynasty—many with several hundred ships and thousands of soldiers—between 1405 and 1433 C.E. (Modern painting by Yu Zheng.)

the suppression of desire for worldly things. Trade and profits were held in contempt. Particularly after Yung-lo's death, the influence of Neo-Confucian scholars grew.

- Some of the Chinese people at the time were concerned about the influence that foreign goods and ideas had on Chinese culture.

In many ways, the discussion of Zheng He's role in history and the subsequent turn toward isolation, is similar to con-

cerns in modern American society about the growth of globalization and increasing competition from China. China's own experience should encourage us to embrace competition, globalization, and exploration.

Economic Lessons for the Classroom

There are important economic lessons for the social studies classroom that can be drawn from the story of Zheng He. First, it's hard to say whether, given time, China

would have discovered the New World. We do know that after 1433, discovery stopped because the incentive structure as established by government policy did not encourage investment in overseas exploration. It was not only discouraged, it was forbidden. Policies became increasingly inward looking and eventually led to a withdrawal from the global economy. This may be a warning of how current policymakers might think about current trends in globalization. A nation can turn inward and protect its domestic industries and cut ties to the outside, or it can embrace a changing world and use trade to facilitate economic growth and interdependence. The lesson from Zheng He is to embrace the global economy and compete.

Next, the story of Zheng He is a great way to discuss institutions—or, as economists sometimes call them, the “rules of game.” Nobel Laureate Douglass North offers the following definition: “Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction.”¹ Specifically, these institutions include society's rules, customs, and laws. Institutions are important to development because they provide a society's incentive framework. When society develops an institutional framework that provides the rule of law, private property rights, open and competitive markets, and an atmosphere of individual freedom, people are most likely to pursue activities that generate personal benefits, and in the process can generate economic growth and benefits for the nation as a whole. When institutions seek to diminish or even destroy personal incentives for productive economic activity, economic growth suffers. This is the story of Zheng He and the story of China.

Normally, institutional changes happen gradually and customs, values, and laws generally evolve. But the story of Zheng He shows us a change in leadership that led to changes in the institutional structure of society that were drastic enough to change the economic

TEACHING ACTIVITY

Students read about two unnamed explorers and the resources they used (see page 72). Using a graphic organizer, they learn about the huge differences between the explorers' available resources and technology. Based on this information, students predict which explorer would be most likely to "discover" the New World. Students are most likely to choose Explorer B, who is revealed to be Zheng He, a Chinese explorer. Students may be surprised, because Christopher Columbus is given credit for discovering the New World. The question posed: With all its technology and resources, why didn't China discover the New World?

Sailing Technology

Axial Rudder: An axial rudder is a vertical blade at the stern of a vessel that can be used to change direction.

Multiple Masts and Sails: A ship with multiple masts and sails can sail better into the wind.

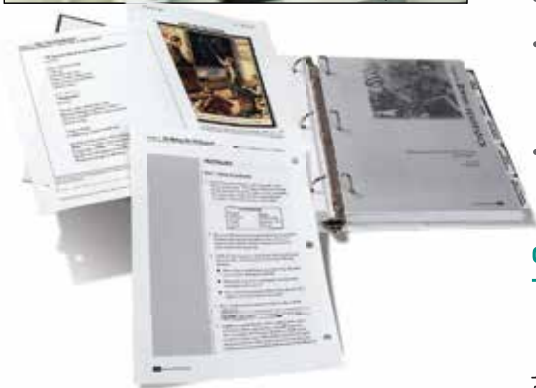
Watertight Compartments in Ship Hulls: These compartments prevent water from filling the entire hull of a ship after it has been damaged.

Leeboard: A leeboard is a board that is lowered into the water to prevent a ship from drifting sideways.

Magnetic Compass: The magnetic compass allows sailors to determine the direction of the ship when navigators are out of sight of land. The magnetic compass made it possible to find direction at sea.

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HANDOUT

Explorer A

This explorer was seeking a better trade route. After looking to several governments to fund his expedition, he finally found enough financial support from one reluctant government and some private investors. If his expedition succeeded, he would be given many rewards, including the rank of Admiral of the Ocean Sea. He would also be appointed Viceroy and Governor of all the newly colonized lands. In addition, he would receive a portion of all profits from the expedition. Although the rulers financially supported him, they thought that the odds of his success were very low. It was a very risky venture. They were willing to take a chance because success would give them a trade advantage over neighboring countries. The goals of this voyage were exploration, wealth, alternative trade routes, spices, and gold. His first voyage used three ships and a crew of 90 men, the largest ship being 85 feet long, with three masts and a crew of 40.

Explorer A's society developed the following technologies:*

Axial rudder	12th century
Multiple masts and sails	14th century
Watertight compartments in ship hulls	18th century
Leeboard	16th century
Magnetic compass	12th century

Explorer B

This explorer led seven expeditions. The ruler of his country funded his voyages in an effort to make the country more prosperous and powerful than it had been under other rulers. He also wanted to increase his own status as a regional leader. The voyages were also an effort to promote trade and collect tribute (taxes) from neighboring countries. The explorer's first expedition included over 300 ships with a crew of more than 28,000 men. His fleet included supply ships to carry horses, troop transports, patrol boats, warships, and tankers to carry fresh water. The largest ship in his fleet was reported to be 400 feet long, with nine masts and a crew of over 1,000 men.

During his seven expeditions, he explored the coasts of faraway places, visited many ports, and gained prestige for his accomplishments. As a result of his voyages, merchants from his country settled in busy trade centers. Surrounding countries feared this country's power and strength. The country had little desire to establish colonies; its focus was trade in goods that were not readily available at home.

Explorer B's society developed the following technologies:*

Axial rudder	1st century
Multiple masts and sails	2nd century
Watertight compartments in ship hulls	2nd century
Leeboard	8th century
Magnetic compass	9th–11th centuries

*Temple, Robert K. G., and Joseph Needham. *The Genius of China: 3,000 Years of Science, Discovery, and Invention*. New York: Simon and Schuster, 1986.

GRAPHIC ORGANIZER

	Length of longest ship	Number of masts on longest ship	Number of ships in fleet	Number of crew members in fleet
Explorer A				
Explorer B				

When did each explorer's society develop the following technologies?

	Explorer A	Explorer B
Axial rudder	_____ century	_____ century
Multiple masts and sails	_____ century	_____ century
Watertight compartments in ship hulls	_____ century	_____ century
Leeboard	_____ century	_____ century
Magnetic compass	_____ century	_____ century

incentives to the point of prohibiting exploration and trade.

Classroom Application

Viewing history through the lens of incentives is a way to introduce higher-order thinking skills to the process of teaching and learning history. Once the framework has been developed, it can be applied and reapplied throughout the social studies curriculum. For example, have your students examine China's Cultural Revolution or the rise and fall of the Soviet Union from the perspective of personal incentives and economic institutions. In both cases, the society's economic institutions diminished the personal economic incentive for economically productive activity. The resulting economic outcomes were painful for the citizens of these nations. Economics and history are not mutually exclusive, or at least they should not be. Economic models of thinking can enhance historical understanding and add relevance and depth to the study of societies through the ages.

Finally, the story of Zheng He is also a great opportunity to discuss with students the importance of understanding history in the context of emerging research and scholarly disagreement among historians. Textbooks are useful tools to convey important historical knowledge, but they should serve as a beginning of the discussion, not the end. The danger is that many students come away from reading textbooks with the assumption that history has been written—that it is a closed book. That is the perception of many, but it is unfortunate. There are many current academic discussions over history's important people and events that have implications for our understanding of our own time.

In his book *1421*, Gavin Menzies discusses evidence that Zheng He himself had discovered the Americas by 1421. The jury is still out on this. Many historians dispute the claims as lacking credible evidence. Tan Ta Sen,

president of the International Zheng He Society, shares some of the speculation. He says, "The book is very interesting, but you still need more evidence.... We (the society) don't regard it as an historical book, but as a narrative one. I want to see more proof. But at least Menzies has started something, and people could find more evidence."² This is the nature of academic research: One claim or discovery leads to further research and discussion by the academic community in the quest for understanding. This might seem a little like "navel gazing," but it is important for students to recognize the changing nature of history. They should know that there is an active historical research community that seeks a more complete understanding of the world by studying how society developed over time. Teachers who include current research and economic reasoning will ensure that studying history is less like a list of events, people, and dates, and more like a mystery that is unfolding as investigators find new clues and piece together the evidence.

Conclusion

The story of Zheng He can be a great way for teachers to infuse history with economic reasoning in a thought-provoking way. Students will come away from the experience better informed of the historical events, capable of using economic reasoning methods in historical contexts, and mindful of the ever-changing process by which history is written. ●

Notes

1. Douglass C. North, *Institutions, Institutional Change, and Economic Performance* (New York: Cambridge University Press, 1990), 3.
2. Sonia Kolesnikov-Jessop, "Did Chinese beat out Columbus?," *The New York Times* (June 25, 2005), www.nytimes.com/2005/06/24/arts/24iht-chinam.html?, accessed October 12, 2012.

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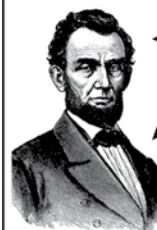
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