The Rise and Fall of 15th Century Chinese Sea Power

by Michael L. Bosworth

Over fifty years before the first intrepid Portuguese caravels inspired by Prince Henry the Navigator traversed the southern tip of Africa to first enter the Indian Ocean in 1488, fleets of hundreds of immense Chinese junks sent by the Ming Emperor Zhu Di traversed from the China Sea past Sumatra to Ceylon, India, Arabia and East Africa. Seven epic Chinese naval expeditions from 1405 to 1433 explored and brought under the Chinese tributary system the vast periphery of the Indian Ocean. However, less than a century after this Chinese maritime high water mark, it was a crime to even go to sea from China in a multi-masted ship. How could an empire have such a dramatic shift in nautical policy? Jared Diamond postulated that the rapid demise of Chinese seapower and ocean-going maritime technology was a result of a political power struggle between two factions of the Chinese court, combined with an overwhelming political unity. One decision stopped fleets over the whole of China. He further postulated that the decision became irreversible due to the loss of shipyards capable of turning out ships that would prove the folly of that temporary decision. Politically fragmented Europe thus had the advantage, in Diamond's view, of enabling multiple and continual opportunities for continuing and expanding overseas exploration. For instance, Christopher Columbus, an Italian by birth, succeeded on his fifth try convincing Spain to support his western explorations, after failure to convince the King of Portugal, the Duke of Medina-Sedona, the Count of Medina-Celi, and a initial, rejected proposal to the King and Queen of Spain.

Professor Diamond's thesis is perhaps over-simple. From a background in both 18th century and modern naval technology and policy, combined with a modest initial background in Far Eastern history and subsequent reading, I postulate several interrelated reasons for the demise of China's initially promising ocean-going technology and policies. One element of the interrelated reasons is the centralization argument as espoused by Jared Diamond, that is, that China had centralized political unification that ultimately hindered broader based support for a long term maritime policy. Another reason (also mentioned by Jared Diamond) is that there was a struggle in the Imperial court between the Confucian courtiers and the palace eunuchs, with seapower losing in parallel with its eunuch sponsors. Third (and here is where the divergence from Professor Diamond commences), there was an internal Chinese court policy struggle between competing theories of the commercial and technology benefits of foreign
trade, against the benefits in social purity of isolationism. Isolationism won. Fourth, the navy had become dependent in the 15th century on a meager set of maritime missions that were overly fragile and thus the Chinese navy was vulnerable to relatively minor changes in the strategic situation. The completion of the Grand Canal as a more efficient and safer means of grain transport is the primary event that engendered the demise of the Chinese ocean-going navy. And finally, that maritime threats were always considered secondary in China to continental or land-based threats, and thus in difficult economic times such as the middle Ming dynasty, the maritime solutions to national security (i.e. the navy) lost resources to the continental solutions (i.e. the army). I further argue that it was not a lack of nautical technology, but rather a combination of the above factors that caused a Chinese rejection of sea trade and seapower in the mid-15th century.

Until the 8th century A.D., Chinese water-borne technology was concentrated in river and eventually canal craft. However, various Arab, Persian and Singhalese merchants came to southern China in the 5th through 8th centuries to trade in medium sized (about 500 ton) ocean-going ships. As early as the 6th century, Chinese were building some river and canal ships of up to five decks, but for the 5th through 7th centuries, more is read about in surviving documents of ocean shipping in foreign hulls. Needham quotes a passage from Thang Yu Lin (Miscellanea of the Thang Dynasty), compiled in the Sung (12th century) from Thang documents by Wang Tang, which refers to the 8th century A.D.: In the Ta-Li and Chen-Yuan reign-periods (766 to 779 and 785 to 804) there were the (large) ships of the Yu Ta-Niang. The crews of these ships lived on board; they were born, married and died there. The ships had, as it were, lanes (between the dwellings), and even gardens (on board). Each one had several hundred sailors. South to Chiangsi and north to Huainan they made one journey in each direction every year, with great profit..... The sea-going junks (hai-po) are foreign ships. Every year they come to Canton and An-i. Those from Ceylon are the largest, the companion-ways alone being several tens of feet high. Everywhere the various kinds of merchandise are stacked up. Whenever these ships arrive, crowds come forth into the streets, and the whole city is full of noise. There is a foreign Headman (Fan-Chhang) in charge.....When these ships go to sea, they take with them white (homing) pigeons, so that in case of shipwreck the birds can return with messages.

This source thus speaks of very large Chinese river and canal boats (nearly 700 tons) but of foreign ships controlling the ocean-going trade in the 8th century. Beginning in the 8th century, it became the practice to carry large cargoes of grain from the south to Hopei, the northern province menaced by Chhi-tan and Koreans. This period was a high point of maritime intercourse among China, Japan and Korea. From the 9th to the 12th
century, large Chinese sea-going ships were apparently developed. The first Sung emperor often visited shipyards, which produced both river and sea-going vessels. In 1124 two very large ships were built for the embassy to Korea. There is a relief carving on the Bayon temple built by Jayavarman VII in Angkor Thom in Cambodia cited in Needham.5 Dating from circa 1185, it pictures a Chinese junk with two masts, Chinese matting sails, and stern-post rudder. A Nan Sung scholar, Mo Chi of the Imperial University, is reported as sailing far to the north in Chhi Tung Yeh Yu.6 In 1161, the main fleet of the Sung navy fought a larger Jin Empire fleet off the Shandong Peninsula and won.7 Thus, the Southern Sung of the 12th century gained complete control of the East China Sea.8 There were four decades of maritime strength for the Sung (until the first decade of the 13th century), when the Sung navy declined and the Mongols started building a navy to help conquer the Sung. In 1279, the Mongol Khubilai Khan had conquered the Sung capital and then his quickly created fleet chased a large Sung junk with the renegade Sung court and the last Sung prince, who leaped into the water and drowned.9

The Yuan (Mongol) dynasty of the 13th and 14th centuries maintained the large fleet, sent emissaries to Sumatra, Ceylon, and southern India to establish influence, and Yuan merchants gradually took over the spice trade from the Arabs. It was the Yuan ships of this era that Marco Polo saw and reported, consisting of four-masted ocean-going junks with sixty individual cabins for merchants, up to 300 crew and watertight bulkheads.10 The Yuan dynasty greatly favored sea power (somewhat at the expense of lake and river combatants, which had been developing human-powered paddlewheel ships up until this period).11 However, while the Yuan achieved greater foreign contacts and overseas trading success,12 Khubilai Khan failed spectacularly in his two massive maritime expeditions against Japan (1274 and 1281), and also in expeditions against the Liu Ch'iu (Ryukyu) Islands.13 Initial successes of a Yuan armada against Java were followed by a forced retirement.14 A major feature of the Mongol rule of the Yuan dynasty was a dramatic lessening of Confucian influence in the Imperial court, and a great opening to foreign influences.15

When the Manchus retook the Imperial throne and thus founded the Ming dynasty in the second half of the 14th century, the early Ming emperors inherited much of the Yuan maritime technology and policy. There were huge ocean-going warships, large ocean capable cargo ships, a regular coastal grain delivery system transporting grain from the southern provinces to the northern ones, and considerable foreign contacts, primarily in south east Asia but extending to Ceylon and India. However, two other dynamics were at work. First, the Ming dynasty was continually working to restore her native culture after a century-long of foreign rule.16 The Grand Canal, initially completed during the Sui dynasty (6th century
AD), with a vast remodelling and extension to the new northern capital at
Peking during the Yuan (13th century), was initially in disrepair due to the
extensive conflict between the Yuan and Ming. The early Ming saw the
rebuilding and improvement of the Grand Canal and other canals, paved
highways, bridges, defenses, temples, shrines and walled cities.17 Second,
the Ming administration was being restructured, with a resurgence of
Confucian scholars as senior officials and a great development in the use
of eunuchs in high office as well.18 These two categories of high officials
were in considerable conflict throughout the Ming period. The Confucians
were generally ascendant, but during the rule of the third Ming Emperor,
Zhu Di, the eunuch administrators and warriors were greatly trusted and
given great power. This was largely because Zhu Di was a rebel warrior
prince who usurped the throne of his nephew, with an initial power base
purely in the north. Many of the government ministers disapproved of his
usurpation early in his reign, so Zhu Di preferred to entrust eunuchs with a
large share of the business of government. Many of the eunuch
administrators had been loyal retainers to Zhu Di in the frontier wars and
the rebellion for decades, whereas the Confucian administrators and
warrior princes had defended the old, recently defeated regime.19

In the case of the Ming Indian Ocean expeditions, the Emperor Zhu Di
chose as his agent and leader of the expeditions the eunuch Admiral Zheng
He. Born 1372 into a Muslim family named Ma in Yunnan, he was taken
at age ten into the Ming service, and subsequently castrated at age thirteen
and placed into the household of the twenty-five year old Prince of Yan,
Zhu Di, the fourth son of the first Ming emperor. Over the next ten years,
from Yunnan to the northern frontier, Ma He (who was to be given the
name Zheng He when the prince became emperor) served in the field
doing frontier defense with Prince Zhu Di. The large, commanding and
battle experienced eunuch distinguished himself during Prince Zhu Di's
bid for the throne, in both the 1399 defense of Beiping and the final
campaign of 1402 to capture Nanjing.20

In 1403 the new emperor Zhu Di issued orders to begin construction of an
imperial fleet of warships and support ships to visit ports in the China seas
and the Indian Ocean. The Ming Tong Jian, an unofficial history of the
period, says: Regarding the Jianwen emperor's escape, there are some who
say he is abroad. The emperor ordered Zheng He to seek out traces of
him.21 The fleet was larger than required to reopen trade with the southern
and western regions, but such magnificence might well convince any
foreign ruler harboring the deposed Chinese emperor of Zhu Di's strength.
And foreign trade, such as that which had occurred fifty years previously
under the Yuan dynasty, might well help a treasury depleted by a long
civil war.22 An imperial history compiled in 1767, the Li-Tai Thung Chien
Chi Lan (Essentials of the Comprehensive Mirror of History), states: In
the third year of the Yung-Lo reign-period [Zhi Di's dynastic title, 1405],
the Imperial Palace Eunuch Zheng He was sent on a mission to the Western Oceans. The emperor [Zhu Di], under the suspicion that (his nephew) the (previous) emperor might have fled beyond the seas, commissioned Zheng He, Wang Ching-Hung and others, to pursue his traces. Bearing vast amounts of gold and other treasures, and with a force of more than 37,000 officers and men under their command, they built great ships and set sail from...the prefecture of Suchow, whence they proceeded by way of Fukien to Chan-Chheng (Indo-China), and thence on voyages throughout the western seas....Every country became obedient to the imperial commands, and when Zheng He turned homewards, sent envoys in his train to offer tribute.....Zheng He was commissioned on no less than seven diplomatic expeditions, and thrice made prisoners of foreign chiefs.....At the same time, the different peoples, attracted to the profit of Chinese merchandise, enlarge their mutual intercourse for purposes of trade, and there was uninterrupted going to and fro.23

At the time of the Ming Indian Ocean voyages, Chinese ocean-going technology was somewhat superior to the European, with the exception of navigation. In ship size, the Chinese had by far the larger ships. The largest ships of the Zheng He expeditions were about 500 feet long. The dimension of the ships given in Chinese histories was always subject to the accusation of exaggeration. However, in 1962, an actual rudder post of one of Zheng He's treasure ships was discovered at the site of one of the Ming shipyards near Nanking. This timber was 36.2 feet long, and when reverse engineered to typical proportions, this yields a ship length of 480 to 536 feet, depending upon different assumptions about the draught.24 In comparison, the ocean-going European ships of this period were considerably smaller, more typically 100 feet long (i.e. 1500 tons for Zheng He and perhaps 300 tons for the Portuguese explorers). The Chinese had been using multi-masted ships for several centuries, while the Portuguese had just in the past century developed this innovation with their new, secret design caravel. In compartmentation, the Chinese had a clear advantage, with large ships of up to thirteen watertight compartments for centuries prior the period of examination. Western ships were not provided with watertight compartments until the middle of the 19th century, after reports of Chinese compartmentation illuminated the advantages in surviving a hole in the ship's hull.25 In sail technology, the Europeans had long sufficed with square sail rigs on their ocean vessels (while with some lateen rigs on smaller ships since the 3rd century), which were good running before the wind but unhandy in beating upwind. The Chinese had been using fore-and-aft lugsails (more efficient in beating upwind) since the 3rd century AD, and since the 9th century in ocean-going ships, and were thus long able to steer closer to the wind.26

However, in the 15th century, the western and eastern sail technology was comparable. The mariner's compass, so crucial to navigation out of sight
of land, was developed from the Chinese magnetized needle of the 8th century, and it traveled via land route to the Mediterranean where about the 12th century the Europeans or the Arabs developed the true mariner's compass (floating), but China soon received the improved model. So both East and West had the mariner's compass in the 15th century. Stern post rudders, which are a significant advantage over steering oars in steering larger ships in tumultuous seas, were utilized in China as early as the 1st century A.D. These were not developed until about the 14th century in Europe, but stern post rudders were available to both East and West in the 15th century. Knowledge of wind and sea currents was considerably more advanced in the West by the Portuguese and Dutch than by the Chinese in the 15th century. The West also had superior knowledge of celestial navigation, that advantage being shared by the Arabs; the Chinese were reduced to utilizing Islamic astronomers and mathematicians at the Imperial Observatory, but had not extended celestial work to the practical work of navigating as of yet. The Arab and the Portuguese cross-staff or balestilha developed in the 14th century, and the astrolabe for even better measurement of the angle of celestial objects in the early 15th century. In military technology, both East and West had cannon, armor and horses.

In summary, before the 15th century, the Chinese were ahead in oceangoing ship technology, with larger compartmented ships and efficient fore-and-aft lugsails on multiple masts. In the 15th century, the Chinese and the Europeans were in rough overall parity. The Chinese were ahead in ship size and hull construction, and the Portuguese were ahead in the arts of navigation, and there was parity in sail technology (the Chinese with battened lugsails, the Portuguese with lateen sails). Neither had a distinct overall advantage. Both were technologically capable of great voyages of discovery, mercantile enterprise, and colonization. In tracing the developments, what is distinctive is that the rate of progress in nautical technology of the West was considerably faster than that of the East. By the 16th century, the West was clearly superior in ocean-going maritime technology (especially considering the regression that occurred in China due to policy influences).

What about unification versus fragmentation as the conventional postulate for decline of Asian maritime technology? Certainly Europe was fragmented; there were hundreds of principalities, and the Columbus story of requesting support for an epic undertaking is both true and illuminating. However, how unified was Asia? For China proper, a review of China's history does indeed reveal 'more' centralization, but it is by no means the 'single ruler' thesis put forth by Professor Diamond. In the 2nd century B.C., the Ch'in state became dominant (temporarily), lent its name to China, and then civil war followed. The Han dynasty dominated for four centuries, which provided considerable cultural unity. However, this was
followed by almost four centuries of political division of the "Three Kingdoms", then a brief reunification followed by division into the "Northern" (Mongol and Turk invaders) and "Southern" (Chinese) dynasties. There was again reunification in 589 to 907 under the Sui and then Tang dynasties, and they encountered the young Moslem Arab empire. For most of the 10th century, China was broken up into competing "Five Dynasties". Then, the Sung dynasty gathered not quite all of China proper for three centuries, followed by the 1279 - 1368 Yuan (or Mongol) dynasty rule, which included considerable direct foreign and Western contact, including the famous Marco Polo expedition. The 1368 - 1644 Ming dynasty saw the massive Indian Ocean naval expeditions, raids by the Japanese on Chinese coasts, and pressure on the north by the Mongols. So there was notable lack of unity within China proper for much of the preceding millennia and a half. However, measuring Asian unity by Chinese unity is somewhat akin to measuring European unity by the strongest empire therein, for instance Spain in the 16th century. There were other powers, and other potential or realized seapowers, in Asia. Mentioning only known maritime powers, there are quite a few over the centuries. The Arab shipmasters were strong enough in 758 to burn and loot Canton, just a century after the first Arab embassy to China (651 A.D.). Large Persian ocean-going trading ships were active (during the Tang period the Moslem Arabs overthrew the Zoroastrian Sassanid line in Persia but Indian Ocean trade was dominated up to the 12th century by ethnic Persians and Arabs). The Singhalese of Ceylon were also active in trading, bringing large 500 ton merchant ships to southern China in the 8th century. There were large sea battles between Chinese and Annam (modern Vietnam), Korea, and Japan fleets, encompassing several centuries. In many cases there was tributary trade going on between these countries, in which the Chinese felt they were acknowledged as supreme and the Japanese or Ceylonese felt it was simply a method of trade.

This discussion of non-unity in Asia does not attempt to counter the clear fact that China was the single most dominant power for a wide range of centuries in Asia. It does bring into question whether the decision of a single ruler could terminate ocean-going trade and technology development throughout the Asian region. By making a central and large tract of Asia incommunicado on the subject, progress was surely slowed. However, Japan, Korea, and Arabia had the size and energy of Europe's modest Portugal, with similar geographic position on the periphery. If the political will had been present in any of these over the long term, maritime technology and exploration could have made the same progress, from an equal level in the 15th century.

An answer perhaps lies in a detailed comparison of the seapower organization of the East and the West. The requisite level of comparison is beyond the scope of this paper. However, it is clear that Chinese seapower
progress was most substantial during the Sung and the Yuan dynasties, when the motive was the expansion of trade. The Sung were driven into a southern power base, and deprived of the greater agricultural tax revenues of the north, sought maritime trade to fill the gap. The Yuan were foreign rulers, without the fear of foreign contamination so common to indigenous Chinese ruling lines, and valued trade as demonstrated by the opening of both overland and maritime trade routes. The zenith of Chinese seapower was reached during the Ming dynasty, but it was fleeting and carried by the momentum of opportunities created by the earlier Sung and Yuan maritime advances. The Ming maritime effort was primarily prestige and diplomacy. In Yuan times, the tax income from ship duties essentially paid the costs of maritime activities. In the early Ming period, excessive, empire-wide taxation developed a fleet that was magnificent but overly expensive for the limited benefits gained. The tributary revenues of the Ming Indian Ocean treasure fleet flowed straight to the emperor for the construction of palaces and temples, far removed from the maritime shipyards. In effect, it was over-taxation, with the Ming maritime organization set up to take the blame. In Europe, the maritime structure was initially governmental, but the continuing long term effort was generally mercantile. Companies were set up, groups of individuals invested in colonies in expectation of personal profit. The Spanish in Central and South America, the Portuguese in Brazil, Africa and the Indian Ocean, the Dutch in Africa and India and the English in North America and the Indian subcontinent all shared this aggressive mercantile nature. The British East India Company, so powerful for centuries with its own sepoys army and Bombay Marine, is merely the most famous and most powerful of a host of lesser yet effective Western merchant corporations dedicated to the expanse of trade. The West also had the impetus of a centuries long and bitter war versus Islam. By aggressive exploration and exploitation, the Portuguese could hope to gain an alternative and lucrative sea-route to the East Indies and also take the Islamic competitors from the rear.

The geography of the compared regions (Europe and southeast Asia) may bring light upon the maritime and continental strategies that became dominant in each region. Ming China of the 15th century was beset by several threats. By far the overarching threat was that of the Mongols to the north. This was a continental threat. Other, lesser threats included Annam to the south (continental and maritime), Korea to the northeast (continental and maritime) and Japan (maritime). In Europe, Spain has eminently defensible land borders with the mountainous constriction of that peninsula, so in most of Spain's dealings a maritime strategy dominated. The island of Britain is even a more clearcut case for maritime dominance. Holland was so dependent on overseas trade, as a relatively small landmass, that Dutch considerations have also been maritime. In
Europe, France and Germany have been the traditional continental powers, due to each having wide borders with several powerful competitors.

Alfred Thayer Mahan, an American naval officer of the late 18th, early 19th centuries, suggested that the growth of the British Empire was predicated on her command of the seas. Mahan perceived that seapower was developed by the combination of (1) geographic position, (2) physical conformation, (3) extent of territory, (4) number of population, (5) character of the people, and (6) character of the government. While China is blessed with plenty of territory and a large population, her geographic position is to be largely surrounded by land, with sea trade routes not particularly convenient, with most of the people far from the sea (the exception being the south coastal Chinese), and with governments through the ages generally disinterested in the seapower or ocean commerce. In a few periods of history, Chinese governments have managed (Sung and Yuan dynasties) to fight these natural factors. However, when it comes down to either army or navy, or either agricultural or maritime trade, in China the army/agriculture side has always won. The navy/maritime trade aspect is a luxury to be discarded in China when the strategic situation is deteriorating and resources are limited.

The debate within the Ming dynasty in the early 15th century was between the Confucian scholar officials and the eunuch administrators, with topics of domestic agriculturalism versus sea-borne trade, canal transport versus coastal transport, and cultural purity through isolationism versus cultural improvement through extensive foreign contacts. This set of debates with application to relative worth of maritime power was common to most dynasties, and in most the Confucian, agriculture, canal and cultural purity side of the debate won, and not without good reason. The primary threat was generally from the broad land boundary to the north from the Mongols. The canal transport system was safer from marauding sea-pirates and weather. The Chinese were culturally inclined to be disinterested in non-Chinese products and ideas, with a few notable exceptions. And the Confucian ideals had longer powers of persuasion than any temporary good eunuch leadership, especially since the eunuch system more often than not created abuses. The early Ming period, especially that of the third Ming emperor Zhu Di, was unique. As a recently established successful rebel, Zhu Di had trusted, capable and experienced eunuchs available to fill a leadership gap. He had a need to create personal and dynastic prestige combined with maritime technology inherited from the Sung and Yuan (and extrapolating upon the ever present Chinese canal and river boat marine technology). The damaged canal system, due to the long civil war, was supplemented by the coastal transport route, which required sea-going protection and created a nursery of deep-water sailors. However, in 1411 the important Grand Canal was
fully repaired and brought to full capacity in all seasons by an improved water supply at the summit section.\textsuperscript{37} After the efficiency of the inland canal grain transport route had been proven in supplying the northern capital, the coastal grain transport service was abolished in 1415, while thousands of new canal sailing barges were constructed. As Zhu Di settled into his emperor role and the nephew he had deposed never reappeared, the need for expensive overseas prestige diminished. The expense of the maritime adventure was put on the political account of the eunuchs, who were placed in a defensive political position. Finally, challenges on the northern border from the Mongols became more serious, and they required investment in land power (army, land defenses) for survival. Zhu Di, who had created the treasure fleet, himself diminished the sea service after the fifth expedition that was conducted from 1416 to 1419 due to these pressures. There was a single, much smaller sixth expedition to return the fifth expedition ambassadors to their countries conducted in 1421, but Admiral Zheng He came back early from that expedition for the dedication of the new Forbidden City in Peking (the grand palace). Soon after dedication, lightening from a spring storm struck three great ceremonial halls. Fire quickly spread, burned for a full day, and it was considered the most ill of portents. Zhu Di was shaken by the disaster, and after conferring with his advisors, issued the following imperial edict: My heart is full of trepidation. I do not know how to handle it. It seems that there has been some laxness in the rituals of honoring Heaven and serving the spirits.....Is this what brought about [the fires]? Harshness to the people below; and, above, going against Heaven. I cannot find the reason in my confusion.....If our actions have in fact been improper, you should lay these out one by one, hiding nothing, so that we may try to reform ourselves and regain the favor of Heaven.\textsuperscript{38} Zhu Di remitted a substantial number of taxes to reduce the burden of the people and temporarily suspended future voyages of the treasure fleet. But Zhu Di was old and sick, his regime sorely troubled, and he died on campaign in 1424 at age 64. His successor was his studious elder son Zhu Gaozhi. The new emperor was no warrior, and began plans to reverse many of his father's policies including the heavy taxation for military campaigns and public projects. However, Zhu Gaozhi died (perhaps heart failure, perhaps poison) after only nine months as emperor, and was succeeded in turn by Zhu Zhanji (age twenty-six) in 1426.\textsuperscript{39} This fifth Ming emperor was a good combination of his warrior, spendthrift grandfather and scholarly, fiscally conservative father, and his reign was a time of peace, prosperity and good government. He commissioned Zheng He to accomplish one final, seventh treasure ship expedition in 1430, for increased prestige and restoration of the tribute trade. This was the largest expedition, with 300 ships and 27,500 men. However, Confucian courtiers and a general trend towards a sterile conventionalized version of Neo-Confucianism, very idealistic in metaphysics, led to a widespread loss of interest in geographical science and maritime techniques. The introspective culture of the Middle and Late
Ming periods was one cause of many for a decline in many branches of
science and technology.  

The navy collapsed. By 1474 it was down to one third of its Early Ming
size. By 1503 the navy was down to one tenth of its Early Ming size,
desertions were widespread and the corps of shipwrights disintegrated.
Sailors were sent inland to support the Grand Canal, and loss of prestige
for the navy precluded effective recruitment. The anti-maritime party grew
more powerful and made its power known through imperial edicts. In
1500 it was made a capital offense for a Chinese to go to sea in a ship with
more than two masts without special permission. A ruling of 1525
authorized officials to destroy the larger classes of ships. China entered a
xenophobic isolationist phase similar to (but less intense than) that which
closed Japan for two centuries. The navy and Chinese-borne overseas
trade was gone.

The motives of the Western sea explorers and the Eastern treasure fleets
were very different. The Chinese were essentially on a dignified tour of
the civilized world, initially perhaps in a search for the deposed emperor,
but ultimately for the rich gifts of tribute and for the prestige. The
Europeans, on the other hand, were engaged in their bitter war with Islam
and working for profit. De Zurara, chronicler of Prince Henry the
Navigator, lists these motives for Prince Henry in priority order: (1)
Cosmographical knowledge, (2) Profit of traffic, (3) Commerce, (4) War
versus Islam, (5) Missionary zeal, and (6) the Prince's famous horoscope.

There were great economic considerations for the Europeans. In China, the
economic considerations were reserved for the inland activities; overseas
activities were wanton expenses without sufficient return demonstrated to
warrant continuation. The Europeans were in competition with Islam and
with each other; the Chinese acknowledged no competitors. In summary,
the precipitous fall of Chinese seapower in the 15th century is not
surprising. It was fragile even in its time of greatest glory during the
treasure ship expeditions of the early Ming dynasty. As Ming China
settled down into the more typical Chinese isolationist philosophy,
increased efficiency of inland transport (notably an all weather capable
Grand Canal) enabled a turning away from the sea and the coast line, and
a reliance on a semi-static coastal militia vice a mobile sea-striking arm.
This was to prove painfully inadequate against the 16th century large scale
piratical activities of the Wo-k'ou (Chinese and Japanese sea mauraders
who occupied large sections of coastal China for years). A balanced
approach, in the twenty-twenty vision of hindsight, of a smaller but still
capable Chinese navy with large seagoing warships, focused to developing
and protecting Chinese overseas trade that generated prosperity for the
country and generated more than enough tax revenue to pay for itself,
would have been more effective and perhaps would have survived. The
reasons for the dramatic fall of the 15th century Ming navy were political
centralization argument in the country that consistently dominated the region, the struggle in the Imperial court between the Confucian courtiers and the palace eunuchs, the internal policy struggle of ideologies between foreign trade and isolationism. Isolationism won. Also, the navy had become dependent in the 15th century on just a few missions; large scale diplomacy to exact tribute, defense of the coast from sea pirates, and protection of coastal grain transport. The solidification of the new regime, and the completion of the Grand Canal summit water supply, removed two of the three missions by the mid 15th century. Finally, maritime threats were considered secondary in China to continental threats, and thus when Mongol border wars and limited resources pressed the Ming dynasty, the navy lost resources to the army. It was not a lack of nautical technology, but rather a combination of the above political and strategic factors that caused a Chinese rejection of sea trade and seapower in the mid-15th century. Ocean-going technology was subsequently lost in China due to official hostility and neglect.

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Footnotes
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6 Needham, Vol. 4 Part III, pgs 476 - 477
7 Levathes, pgs. 46 - 48
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12 Latourette, pgs 133 - 134
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