1493

Uncovering the New World Columbus Created

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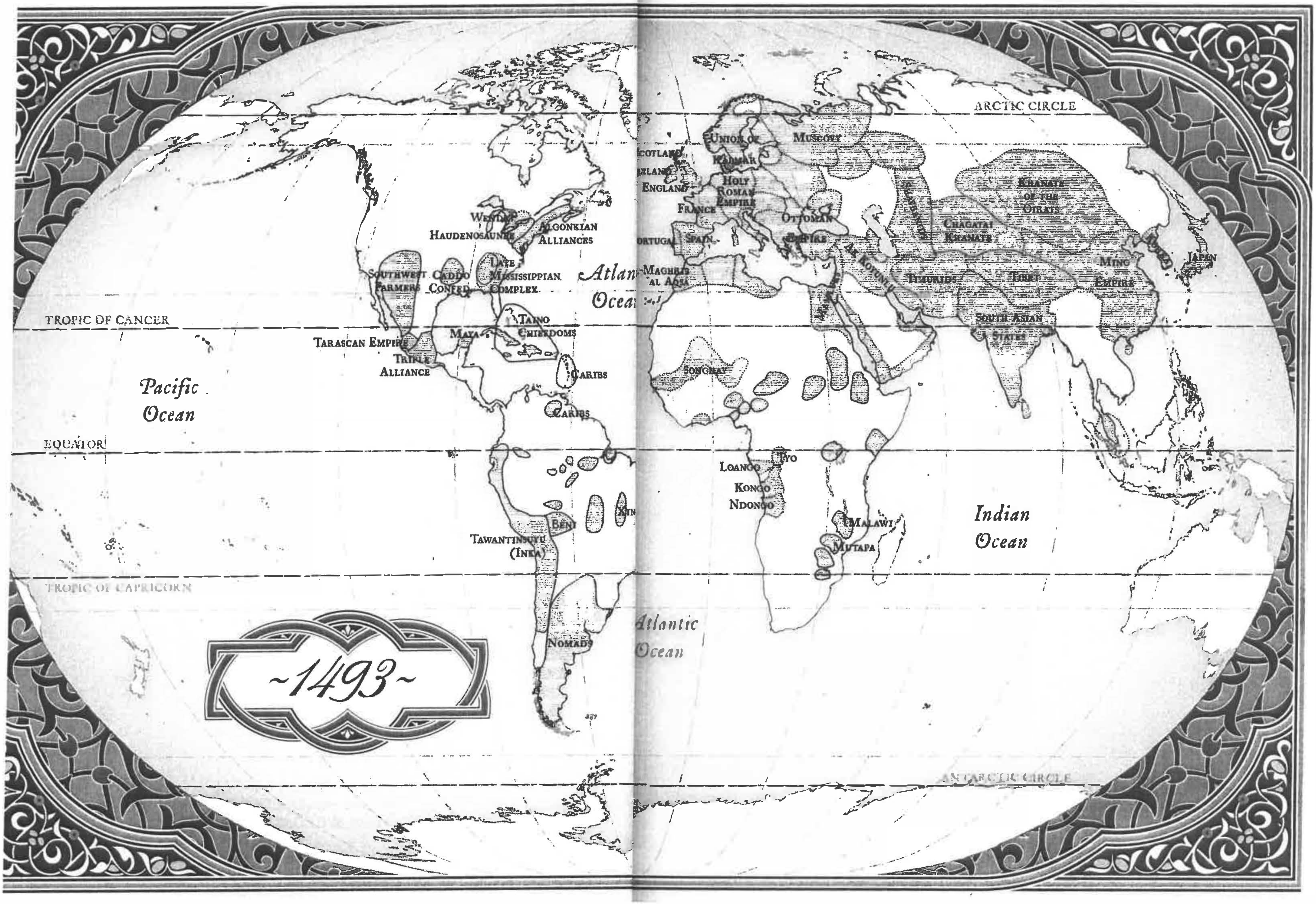


~1493~
ARCTIC CIRCLE
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
Pacific Ocean
Atlantic Ocean
Indian Ocean
MUSCOVY
ENGLAND
FRANCE
HOLY ROMAN EMPIRE
OTTOMAN EMPIRE
SPAIN
CHAGATAI KHANATE
TIBET
MING EMPIRE
JAPAN
SOUTH ASIAN STATES
SONGHAY
LOANGO
TYO
KONGO
NDONGO
MALAWI
MUTAPA
HAUDENOSAUNEE
ALGONKIAN ALLIANCES
LATE MISSISSIPPIAN COMPLEX
SOUTHWEST FARMERS
CADDO CONFED.
TAINO CHIEFDOMS
MAYA
TARASCAN EMPIRE
TRIPLE ALLIANCE
CARIBS
CARIBS
TAWANTINSUYU (INKA)
NOMADS

4

Shiploads of Money

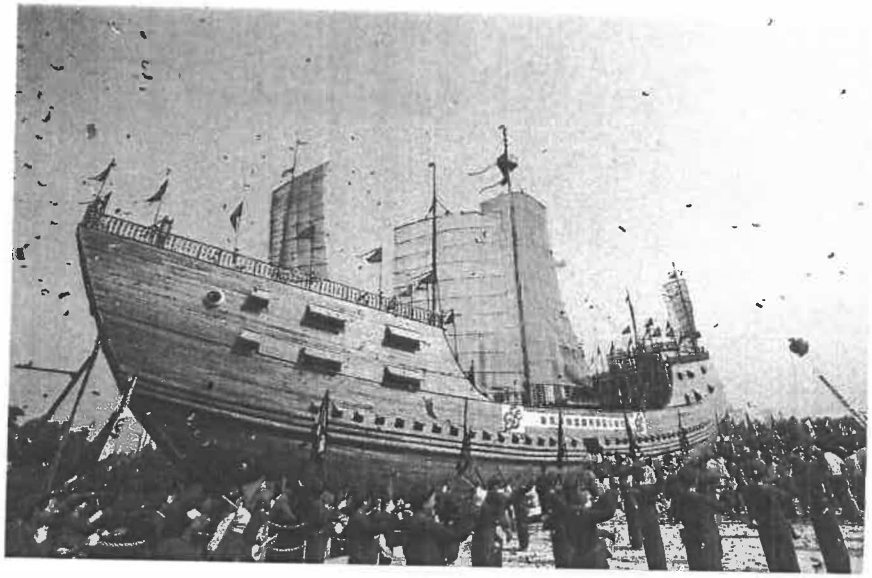
(Silk for Silver, Part One)

"THAT EXTRA LITTLE EFFORT"

Vastness was its greatest characteristic, with wonder close behind. The vastness—intimidating, confounding, beyond credence—spoke clearly from a hundred miles away. It is said that kings in their palaces looked over the ocean to see a new mountain range on the horizon: wide-bellied ships by the hundred, rigged fore and aft, soldiers massed at their bulwarks. Strange warlike banners snapped from the topgallants. The armada was larger than any before or since. It must have seemed *geographic*. Wonder attended its sails, followed by capitulation and obeisance. These were the great maritime expeditions sponsored by the Ming emperor Yongle in the early fifteenth century. Such a mark did they leave that some historians believe they were the font of the stories of Sinbad the Sailor.

Built in enormous dry docks, encrusted with precious metals, replete with technical innovations—double hulls, watertight compartments, rustproofed nails, mechanical bilge pumps—that Europe would not discover for a century, the Chinese ships were marvels for their time. The flagship of their commander, Zheng He, was more than 300 feet long and 150 feet wide, the biggest wooden vessel ever constructed. Records claim it had nine masts. Zheng's grandest expedition had 317 ships, an amazing figure even now. The Spanish Armada, then the largest fleet in European history, consisted of just 137; the biggest was half the size of Zheng's flagship.

Zheng himself was among the more unlikely figures to grace Chinese history. Strikingly tall and powerfully built, a Muslim from the backlands, he was captured as a child in 1381 during one of the Yuan dynasty's last battles



To celebrate the 2010 Olympics, China displayed this exact copy of Zheng He's flagship. Six centuries after the original was built, the ship still was large enough to dazzle crowds.

against the invading Ming. (For a synopsis of Chinese dynastic history, see the chart on p. 127.) Standard treatment by the Ming of enemy boys was castration. The emasculated Zheng was pressed into service at the Ming court and gained a reputation for shrewdness and competence. Displaying his eye for the main chance, he jumped to support a coup in which the monarch's uncle seized power from his nephew. The usurper became the Yongle emperor.* Zheng became one of his most trusted lieutenants. When the ambitious sovereign planned a series of sea expeditions, he put his favorite eunuch in charge.

history of zheng (naval head)

The voyages began in 1405 and ended in 1433 and took Zheng across the Indian Ocean as far as southern Africa. The Yongle emperor viewed them as a way to throw his weight around, and they were powerfully effective. During these voyages Zheng's fleet subjugated a misbehaving Chinese enclave in Sumatra; intervened in a civil war in Java; invaded Sri Lanka and took its captured ruler to China; and wiped out bandits in Sumatra. Even where no swords were unsheathed Zheng's armadas were a political triumph, scaring the wits out of every foreign leader who saw them. But the voyages were not

* By convention emperors were referred to not by their personal names, but by the names of their reigns. For example, the usurping uncle, born Zhu Di, chose Yongle ("perpetual happiness") as his title, and thus became the Yongle emperor: the ruler during the Yongle period.

followed up. They had become a target in political infighting—one bureaucratic faction championing them, another trying to take down the first by decrying their expense. Yongle's son and successor aligned with the faction that opposed his father's policies. He canceled the grand naval adventures on the day he ascended to the throne. Ultimately almost all records of Zheng's travels were suppressed. China didn't again send ships so far outside its borders until the nineteenth century.

Comon claim

Many researchers have seen the failure to continue as emblematic of a fatal insularity in Chinese society. "Why did China not make that extra little effort that would have taken it around the southern end of Africa and up into the Atlantic?" asked Landes, the Harvard historian, in his *Wealth and Poverty of Nations*. Landes's answer: "The Chinese lacked range, focus, and above all, curiosity." Hobbled by Confucian ideology, arrogant and complacent, China was "a reluctant improver and a bad learner." *The European Miracle*, University of Melbourne historian Eric Jones's celebrated account of the West's climb to political dominance, similarly attributes China's rejection of foreign adventures to "empty cultural superiority" and "self-engrossment." After Zheng He, the empire "retreated from the sea and became inward-looking." China, the McGill University political scientist John A. Hall charged in *Powers and Liberties: The Causes and Consequences of the Rise of the West*, "was stuck in the same stage for over two thousand years, while Europe, in comparison, progressed like a champion hurdler." Bubbling with entrepreneurial vim, Portugal, the Netherlands, Spain, and Britain dragged sclerotic China into the rough-and-tumble of the outside world.

Other scholars disagree with this image of Chinese passivity. Nor do they believe the shutdown of Zheng He's voyages exemplified a cultural lack of curiosity or drive. No matter how far the admiral traveled from home, these writers note, he never encountered a nation richer than his own. Technologically speaking, China was so far ahead of the rest of Eurasia that foreign lands had little to offer except raw materials, which could be obtained without going to the bother of dispatching gigantic flotillas on lengthy journeys—Beijing easily could have sent Zheng past Africa to Europe, observed the George Mason University political scientist Jack Goldstone. But the empire stopped long-range exploration "for the same reason the United States stopped sending men to the moon—there was nothing there to justify the costs of such voyages."

conflicting claims—why did china stop sea exploration ?

In a broader sense, though, the question remains. Zheng's voyages were an exception to a longer, more consequential trend. During most of the Ming dynasty (1368–1644), Beijing issued edicts that effectively banned private sea trade. The Yongle emperor and a few other rulers opened it up, but they were exceptions; as a rule, the dynasty clamped down on international exploration and exchange. So draconian were the prohibitions that in 1525 the court ordered coastal officials to destroy all private seagoing vessels.

As puzzling in today's context as the shutdown was its reversal. Fifty years after the demolition order another emperor reversed course. With the court bureaucracy's reluctant blessing, a new generation of Chinese ships went on the waters. Soon the Ming had been drawn into a worldwide network of exchange. In a trice, the Chinese economy became enmeshed with Europe (a place previously regarded as too poor to be worth bothering with) and the Americas (a place the emperors hadn't known existed).

The court had long feared that unrestricted trade would lead to chaos. Indeed, it did have catastrophic by-effects, though not those predicted by imperial bureaucrats. I've already described how the Columbian Exchange across the Atlantic shaped economic and political institutions. Now I turn to the Pacific, where the economic exchange established itself first and greased the skids for the Columbian Exchange. Accordingly, this chapter concerns economics and politics. The next chapter describes their ecological consequences; an environmental convulsion that had dire economic and political consequences for China—among them, in part, its later collapse before the West.

"MERCHANTS WERE PIRATES, PIRATES WERE MERCHANTS"

Claim

Why did China let in the flood? The decision was driven by two factors, one largely political, one largely economic. The political factor was the Ming desire to enhance the power of the state. Beijing's prohibition on private trade had less to do with an abhorrence of trade than a desire to control it for the dynasty's benefit. Unhappily, the attempt backfired—the reaction to the trade ban ended up weakening government control, rather than strengthening it. When Beijing finally admitted this, it abandoned its previous policy. Further driving the emperors to make this decision was the economic factor: China had severe money woes. Literally so—the empire had lost control of its own coinage, and merchants had to buy and sell goods with little lumps of silver. To obtain the necessary silver, China lifted its trade ban, opening itself to the world. Soon the great ships of the galleon trade were carrying silk and silver across the Pacific—the final links in the global economic and ecological network begun by Colón's efforts in the Caribbean islands and Legazpi's sojourn in the Philippine islands.

RECENT CHINESE DYNASTIES

Tang	618–907 A.D.
Chaotic interregnum	907–960
Song	960–1279
Yuan (Mongols)	1279–1368
Ming	1368–1644
Qing (Manchus)	1644–1911

Chinese history is divided into dynasties, beginning before 2000 B.C. The tally here is simplified; the Song dynasty, for instance, is usually split into two eras (it fell apart after an invasion and regrouped with its power center in a different place). And this list doesn't show the messy transitions between dynasties—the Ming dynasty is usually said to have seized power in 1368, but fighting with the Yuan lasted for several decades before and after that date.

trade under ming (controlled)

The Ming trade bans have often been described as emblems of Chinese cultural deficiency (Landes: "the Confucian state abhorred mercantile success"). But they were more complicated than that. The bans did not stop *all* foreign contact. They permitted one exception: "tribute payments," in which foreigners, hosted in designated government hostels, were generously allowed to offer presents to the throne. Then the emperor would, out of politeness, give them Chinese goods in return. He also allowed them to sell anything he didn't want, which was often quite a lot.

Coastal merchants recognized the ban-and-tribute scheme for what it was: a way for the government to control international commerce. It was a busy, lucrative affair—in 1403–04, at the height of the supposed ban on foreign merchants, the Ming court hosted "tribute delegations" from no less than thirty-eight nations. Naturally, the Ming wanted the profits from trade. What the dynasty didn't want was the traders themselves; foreign goods, not foreign people. With a few exceptions, all contact with the world outside was supposed to be supervised by Beijing.*

SK

With bureaucratic logic, court bureaucrats reasoned that because maritime trade was outlawed the nation therefore didn't need a coastal force to police that trade. China reduced its navy to a few vessels, not enough to

* The Ming dynasty's predecessors, the Mongol-led Yuan, had tried to do exactly the same thing, forbidding private overseas trade in 1303, 1311, and 1320. In each case the law was soon repealed. The prospect of monopoly was tempting, but the Yuan always found it more profitable—and *much* less trouble—to tax private trade than to run the trade themselves.

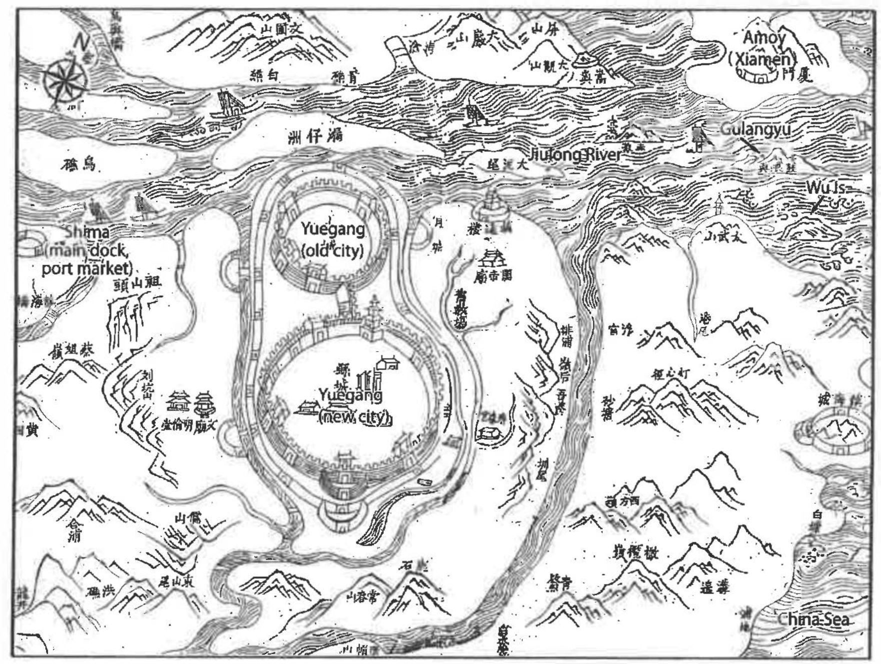
patrol the nation's long coastline. The entirely unsurprising result was a delirium of smuggling (if business is outlawed, only outlaws will do business).

Wokou filled the southeastern coast. Literally, *wokou* means "Japanese pirates," but most weren't Japanese and many weren't pirates. Although they sometimes had bases in Japan, the majority of the *wokou* groups were led by Chinese traders who turned to smuggling after one Ming edict or another eliminated their livelihoods. Their ships were crewed by a crazy quilt of citizens in trouble: scholars who had failed to obtain an official post; bankrupt businesspeople; draft dodgers; fired government clerks; starving farmers; disgraced monks; escaped convicts; and, of course, actual professional smugglers. Scattered among them were a few skilled sailors lured into piracy by the promise of wealth. When officials tried to stop these people, violence often ensued. Every now and then this led to the occupation of a city. "Merchants were pirates, pirates were merchants," Lin Renchuan, a historian at Xiamen University, told me. They would trade peacefully if they could; not so peacefully if they couldn't.

China's efforts to control piracy were hampered by incompetence at the top. Histories of the late Ming dynasty are like advertisements for the virtues of democracy. One emperor refused to meet with his ministers for twenty years. Another was a drunk. A third ran away from his duties and lived in the

palace garden, researching alchemical recipes for immortality and prostituting hundreds of young women. This last was the Jiajing emperor, who reigned from 1521 to 1567. He put the empire into the hands of a cabal of grand secretaries, who concerned themselves with personal advancement, rather than, say, the piracy on the southeast coast.

Worst affected by piracy was the resource-poor province of Fujian, in southeastern China, facing Taiwan across the Taiwan Strait. Most of the province consists of low but craggy mountains with weathered red soil; flat, arable land is mainly confined to river valleys and a narrow ribbon along the coast. "The mountains peak in rocky summits, and the labor of plowing never ceases," moaned one thirteenth-century Fujianese writer. "The lowlands are salt marshes and cannot be tilled." Famine was a constant risk; despite big terracing and land-reclamation projects, Fujian couldn't grow enough grain to feed itself. Half of the province's rice had to be imported—not an easy task, because the mountains isolate Fujian from the rest of the nation. Among the region's few natural assets are the fine natural harbors



The walled city of Yuegang, portrayed in this seventeenth-century Chinese map, was once one of the world's most important ports. Today its role has been taken by the modern city of Xiamen (then the village of Amoy), on an island in the harbor.

that scallop its stony coast. For evident reasons, Fujian depended on the sea. It has long been China's center for maritime trade—which, in the days of sail, meant that it was China's center for international trade. When international trade was officially banned, Fujianese found themselves in an uncomfortable position—there was nothing for them on land.

The conflict was particularly intense around the port city of Yuegang. Located at the mouth of the Jiulong River, Yuegang's harbor was full of small islets, sandbars, and other shipping hazards. Because of the area's notorious haze, navigation was difficult—when I puttered about the harbor during my visits, I sometimes couldn't see boats that were only a few hundred yards away. The main docks were several miles up the Jiulong, in water so shallow that ships had to be towed in on the incoming tide. The location was an antipiracy measure: criminals would not dare raid the docks, because the incoming tide that permitted entrance was too strong to allow escape. At the same time, many Yuegang shipowners *were* pirates—the harbor protected them from people like themselves.

The old city, full of Tang dynasty shrines, was connected by a raised walkway to the newer Ming city, built further inland with larger walls. Inside both were packed huddles of houses—"bandit dens," sneered one official in the 1560s, whose inhabitants "have collaborated with foreigners to spread chaos to the detriment of the local area for a long time now." Indeed, Yuegang was such a pirates' paradise that at one point Beijing divided the populace into groups of ten families that had to account for their members every five days; if one family did something illegal, all ten would be punished.

Imperial China's day-to-day history is largely recorded in the annual gazetteers sent to Beijing from each of the nation's counties. Yuegang's county had so much *wokou* trouble that the gazetteer's compilers eventually devoted a special appendix to it: "Bandit Incursions."

Bandit Incursions began in 1547, when a Dutch merchant/pirate/smuggler group set up a base on Wu Island, a recently shuttered naval base just south of Yuegang's harbor. "Dutch" is a bit of a misnomer; the traders flew a Dutch flag, but they were a hodgepodge of Spanish, Portuguese, and Dutch hustlers with some semi-enslaved Malays. Chinese and Japanese *wokou* happily sent ships to trade with them, as did legitimate businesspeople from Yuegang; a busy, multilingual market sprang up in Wu Island's small but serviceable harbor. Unenthusiastic about the encampment was Zhu Wan, governor for both Fujian and Zhejiang, the province to the north. He dispatched soldiers to drive out the foreigners.

Wu Island consists of two rocky, steep, scrub-covered mounds with a low "saddle" between them. The Dutch had ensconced themselves in an impro-

A former pirate stronghold, Wu Island, in the hazy waters off of Yuegang, is now a center for fishing and aquaculture.

vised fort atop one of the mounds, forcing the Chinese to attack uphill. In a brief skirmish, the merchant/pirate group beat back the Chinese forces. Zhu changed tactics: he imprisoned ninety local merchants who had traded at Wu Island. In a gesture that even the unsympathetic gazetteer described as altruistic, the Dutch sent emissaries to plead for their allies' lives. Dismissing the entreaties, Governor Zhu beheaded all ninety. The Dutch abandoned Wu Island and gave up their attempt to trade openly; later they roamed the region, preying on the very Fujianese merchants and smugglers with whom they previously had collaborated.

Zhu Wan was anything but satisfied. A rigid, moralistic former magistrate, Zhu irritated his superiors by denouncing corruption at every level in a spray of angry memoranda. He was such a stickler that when his subordinates gave small gifts to his visiting family he punished himself with a hefty fine. Late in 1548 Zhu assaulted a major smuggling base in Zhejiang, scuttling more than 1,200 illicit boats. Led by the infamous "Baldy" Li, *wokou* fled by the hundred to a new base in the extreme southern end of Fujian. Three months later Zhu's men hunted them down there, killing almost 150 and capturing scores of Portuguese, Japanese, and Chinese smugglers.

Many of Li's gang turned out to be from influential Yuegang merchant families.* Angered by this evidence of routine collusion among local elites

* "Families" is a misnomer. The traders were *gongsi*, which were clan-like groups of related families that often had hundreds of members. I'm reluctant to use the term *gongsi*, though, because it now means "company"—an indication of the familial roots of many Chinese businesses but a source of potential confusion to readers.

and foreign smugglers, Zhu ordered all the captives to be summarily executed—the second round of executions in two years. The executions united Zhu's enemies against him. Yuegang's wealthy appealed to Zhu's superiors, the courtiers of the alchemy-besotted Jiajing emperor. Zhu was demoted, then fired, then subjected to politically motivated investigations. Facing indictment, he poisoned himself in January 1550. "Even if the Emperor doesn't kill me," Zhu said, "powerful court officials will kill me. And even if powerful court officials don't kill me, the people of Fujian and Zhejiang will kill me."

Emboldened by Zhu's absence, pirate gangs seized entire towns, pillaging "until the stench of rotten flesh forced them to leave." In one city north of Yuegang more than twenty thousand people died after a pirate assault. Across southeast China, the Ming historian Luo Yuejiong recalled, terrified families "ate without cooking their food, and slept unsoundly on their pillows; farmers left behind their pitchforks and women dozed off on their looms." When the *wokou* attacked, Luo wrote,

> fathers and sons, young and old, were taken prisoner and followed the pirates on the road. As for the dead, their heads and bodies were found in different places, bones left out in the grassy swamps, heads stiff. Looking on the horizon, the coastal counties were almost nothing but hilly ruins.

Wokou were "burning homes, seizing women and children, and stealing huge quantities of valuables," wrote the chronicler Zhuge Yuansheng in 1556. "Officials and common people alike were killed with weapons, their bodies, numbering in the tens of millions [an idiom for "huge numbers"], filled ravines. Government troops dared not oppose them." At the mere appearance of *wokou* in an area, he wrote, "people scream in panic and take flight." In a scene straight out of a Stephen Chow martial-arts comedy,

> [a] messenger from Songjiang [near Shanghai] rode at a gallop into town and cried out to his followers, "We're here! we're here!" The locals misunderstood him and thought the [pirates] were coming. Men and women scurried like ants, nothing could stop them. Women and children were separated, families lost countless valuables and possessions. At the time, more than 600 soldiers were garrisoned at the city, stationed on the bastions along the walls; they all threw down their weapons and armor and ran away. Not until the next day did calm return to the town.

In Yuegang the *wokou* didn't strike back at the government until 1557, according to the county gazetteer, when a disgruntled farmer secretly opened the city gates to two pirate gangs. Overwhelming all resistance, the *wokou* "abducted more than a thousand people and burned more than a thousand homes."

Dire as it was, the assault was a sideshow. Even as *wokou* beset Yuegang, twenty-four of the city's merchants pooled resources and built a fleet to work with the pirates in what amounted to an interlocking network of joint ventures. The traders had access to domestic markets; the smugglers, to foreign goods. Known as the Twenty-four Generals, the merchants decided to control access to their home markets by carving up Yuegang, gangland style, into neighborhoods, each dominated by a single "general" in an earthen-walled fortress. Three hundred imperial soldiers were sent to dislodge them. The Twenty-four Generals beat back the attack. Observing this success, other smugglers in other parts of Fujian followed the Generals' lead, forming the Twenty-four Constellations and the Thirty-six Bravos. The region became a bewildering, violent amalgam of overlapping loyalties and betrayals, as business gangs and pirate gangs from different neighborhoods, regions, and nations vied among themselves for control of the smuggling trade.

private traders/ smugglers beat government

For Coastal Surveillance Vice Commissioner Shao Pian—the late Zhu Wan's subordinate—the last straw occurred when Fujianese traders invited three thousand Japanese and Portuguese smugglers to reoccupy the former Dutch base at Wu Island. Shao had no good options. Bled by cutbacks, the imperial navy was outgunned and outmanned by the *wokou*—indeed, for its missions it often hired smugglers, who had superior skill and experience. Worse, he could not trust many of his own officers, because they came from the merchant families involved in the smuggling. In a classic move, Shao forged an alliance with—that is, bribed—Hong Dizhen, former leader of the three thousand *wokou* at Wu Island. Hong gathered up a force in 1561 and attacked the smugglers' largest bases in Yuegang. "Countless *wo* died," the gazetteer states—a face-saving formulation meaning that the pirate gangs, who were allied with the entire local populace, drove Hong back with heavy losses.

Shao effectively capitulated. "Over ten years," the gazetteer reported, "we lost one outpost, two smaller outposts, a prefecture, six counties and no fewer than twenty-some fortified towns. . . . People wailed and ghosts cried out, and the stars and moon gave off no light as the grassy wilderness itself moaned." The world's richest, most technologically advanced nation had utterly lost control of its borders. In 1567 a new Ming emperor threw in the towel and rescinded the ban on private foreign trade.

The government reversed course not only because it recognized its inability to stop smuggling, or because it had begun to appreciate how much Fujian's populace depended on trade. Beijing had come to realize that the nation desperately needed the merchants' most important good: silver.

OUT OF MONEY

Several hundred years before the birth of Christ, the Chinese state began to issue round coins made of bronze, an alloy of copper and tin. Each coin was worth its own weight in bronze and had a square hole in its center. The system had defects. Because bronze was not especially valuable, a single coin wasn't worth much. To create units of larger value, people strung the coins together into groups of one hundred or one thousand.

bronze
defficiency
\/
paper
money

The strings were heavy, bulky—and still not worth much. Asking large-scale Chinese traders to use them was like asking today's mergers-and-acquisition bankers to buy companies with rolls of quarters. Worse, according to Richard von Glahn, a historian at the University of California at Los Angeles who specializes in the history of Chinese currency, the empire ultimately didn't have enough copper to keep up with the demand for coins. The copper-starved Song dynasty was forced to create a "short-string" standard, in which strings of 770 coins were officially treated as if they contained a thousand.

In 1161 the Song dynasty introduced what would become the first modern paper currency: the *huizi*. Regional governments and powerful merchants had experimented with paper money for two centuries, but the *huizi* was the first nationwide, state-printed banknote. It was denominated in terms of bronze coins; the lowest-value note was worth two hundred coins and the highest was worth three thousand. (The first European banknotes appeared in 1661, five centuries later.)

Theoretically speaking, people could redeem their *huizi* for actual coins. In fact, the Chinese government and Chinese merchants quickly discovered that printing *huizi* would reduce the demand for coins, letting them export the latter to Japan, which used Chinese bronze coins for its currency, too. The more the government printed bills, the greater the number of coins that could be exported. Within a few decades of their creation, *huizi* notes were decoupled, as a practical matter, from coins; no matter what the bills claimed, they couldn't be redeemed for bronze. They had effectively become what economists call *fiat money*.

Fiat money has no intrinsic value, and is worth something only because a

pieces of paper, dollar bills and euro bills are next to worthless. Yet because they are officially printed by government institutions, people can hand these colorful paper rectangles to grocery-store clerks and walk out with bags of food. The silver pesos that circulated in the Spanish empire, by contrast, were *commodity money*: valuable because they were made of a valuable substance. So were Chinese bronze coins, although the bronze wasn't especially precious.

From a government's point of view, commodity money is problematic, because the government does not fully control the money supply—the nation's currency is at the mercy of random shocks. For example, at the time of Colón's voyages cowry shells were used as currency from Burma to Benin.* Then Europeans shipped in vast quantities of shells from the cowry-rich Maldive Islands, in the Indian Ocean. Governments throughout the region were overwhelmed. A financial system that had been in place for centuries disintegrated in a flash.

This kind of external pressure has no impact on fiat money. With fiat money, the government has near-complete control over the money supply; it determines how many banknotes are needed and instructs the mints to print them. In theory, politicians can expand or contract the money supply to foster better economic conditions.

Fiat money's greatest defect is the same as its greatest strength: the government decides how many banknotes to print. After introducing paper bills, Song emperors made a stunning discovery: they could buy things simply by stamping patterns of ink onto pieces of paper. For several decades the strategy was successful. As the use of paper money expanded throughout the empire, the nation needed to increase the supply of paper bills, and the emperor's outlays were absorbed in the overall rise. In the early thirteenth century the emperor decided to fight enemies in the north—first the Jin, then the Mongols. To pay for supplies and troops, he turned the printing presses on "high." Inflation was the result. The Song lost to the Mongols before they could set off monetary catastrophe. The Mongols, who became the Yuan dynasty, issued their own paper money—lots of it. To them belongs the honor of inventing hyperinflation. By the 1350s Yuan paper money was practically worthless. In the next decade the dynasty fell to the Ming uprising.

Upon taking the throne, the first Ming ruler, the Hongwu emperor, ordered that new coins be issued in his name—no more worthless paper bills! Alas, the Hongwu emperor discovered that the empire had nearly exhausted

* To those accustomed to metal coins, the idea of using shells for money may seem primitive. But they had a signal advantage: unlike the era's coins, which were often debased or

its copper mines. Naturally, the price of copper rose; bronze coins ended up costing more to produce than they were supposed to be worth. It was as if every penny cost two pennies to manufacture. Unsurprisingly, not many coins were issued. Ming coins became rarities, so rarely seen that businesspeople hesitated to accept them—merchants had too little experience with the coins to know whether they were genuine or counterfeit.

Quickly the Ming dynasty, like its predecessors, discovered the virtues of an active printing press. Again inflation exploded; the value of the paper bills fell by roughly 75 percent in about a decade. The Hongwu emperor responded by refusing to produce any more coins. Force people to use paper bills—that was the idea. It didn't work. Shutting down the mints increased the scarcity, and hence the rarity, of the new coins, further eroding their value as currency. It also pushed up the value of old coins, which people trusted and understood. And it dramatically increased counterfeiting. The fake coins were for the most part easily distinguishable from real ones. But merchants were so desperate for some way for their customers to pay them that they accepted the counterfeits anyway, although they demanded a premium.

inflation / weird coinage sprial

As businesspeople snatched up all the old and counterfeit coins they could find, the value of paper bills continued to fall. In 1394 the government banned the use of its own coins—a policy that "flouted economic realities," wrote von Glahn, the UCLA historian, in *Fountain of Fortune* (1996), a fine history of Chinese money that I have been drawing upon here. As one would expect, the policy failed. The emperors kept trying, prohibiting coins in 1397, 1403, 1404, 1419, and 1425. Every time the ban failed, the emperors would again officially permit coins to circulate—until the next ban. Meanwhile the Ming kept printing paper notes at inflationary rates. All of this may sound completely unhinged, and it was. In the feud- and faction-ridden Ming court, government policies were often accidental by-products of ministerial intrigues, enacted with little regard for their actual effects. The result was that by the time *wokou* were terrorizing the southeast coast, the Chinese empire had no functioning currency.

I am oversimplifying. The currency *did* function—intermittently, unpredictably. Each emperor produced coins with his name stamped on the face. When he died, the succeeding ruler would quickly declare that his predecessor's coins were valueless; only new coins minted by the new emperor would be valid currency. Merchants suddenly saw "their capital evaporate in a single day, often silently mourning their losses before committing suicide," according to the *Ming Shi*, the official history of the dynasty.

Needing something to pay with, merchants and their customers would

use old coins from earlier reigns until the new emperor's money arrived; given the lack of copper and dynastic inefficiency, this frequently took years, even decades. Then they would use the new coins until the government suddenly banned them. The result, according to the Taiwanese historian Quan Hansheng, was a constant game of financial hot-potato, with everyone trying to use their coins until just before they lost all value—at which point they would try to unload them onto some hapless sucker.

"Virtually from morning to evening the rules change, and still there is no set policy," moaned one sixteenth-century imperial chancellor. "The people fear that the money they get today will be useless tomorrow and they will no doubt starve. Thus the more the coins change, the more chaos ensues, and the more restrictions there are, the more people panic, so that stores dare not open for business, there is no buying or selling, and cries of anguish ring out."

"Coins received in the morning couldn't be used by evening," explained a central-China gazetteer in 1606. Shopkeepers would suddenly refuse them en masse.

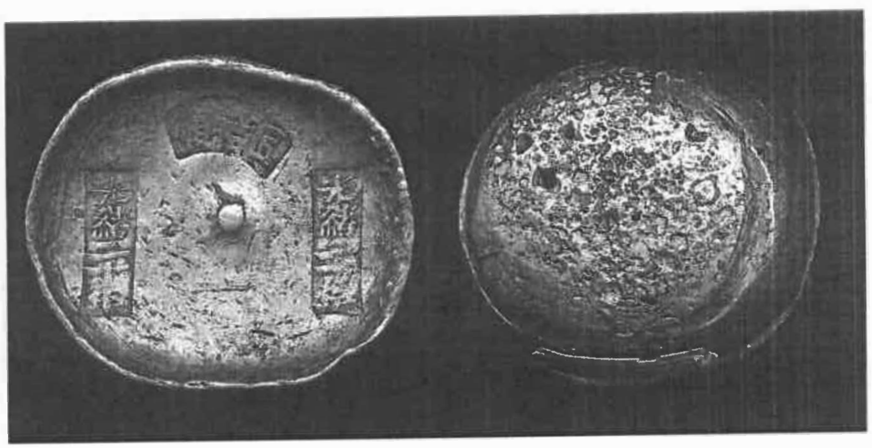
> One person would suggest it, and everyone else would agree. Although such actions were strictly forbidden, they had no regard for the law. Before long, merchants from other regions would come to buy old coins, and they would exchange them at a ratio of three to one and cart them away. This is what you call monopolization at its extreme, the power of devious people. Wealthy merchants and powerful brokers sit back and reap heavy profits while the average person suffers. It never ends.

Were these complaints exaggerated? In 1521 the Jiajing emperor began his reign. Still a young man, he was decades away from his prostitute-fueled pursuit of immortality and fiercely determined to regain control of the nation's money supply. He decided to issue new coins that would be of such high quality that the people would reject the old coins and counterfeits. The results were described a century later by the geographer and historian Gu Yanwu in a grandly titled compendium, *The Strategic Advantages and Weaknesses of Each Province in the Empire.* Gu looked at Zhangpu County, about ten miles south of Yuegang. As the Jiajing reign began, Gu reported, the currency preferred by county merchants was, unbelievably, coins from the Song dynasty—the Yuanfeng reign, to be precise, which had ended more than four centuries before, in 1085 A.D. During the next decade, the Jiajing emperor established mints and punched out coins as fast as possible. The effort made not a jot of difference in Zhangpu County. Year after year, Gu wrote, the preferred money flipped arbitrarily from one Song emperor to another. After each switch, people stuck with the previously favored coins were left high and dry. Not until 1577, five years after the Jiajing emperor's death, did Zhangpu County use legal currency. For the first time in decades, people used coins minted by the current ruler, the Wanli emperor. The reprieve was brief, Gu wrote. "Only one year later, they stopped using Wanli coins."

Silver had long been recognized as a store of value, though rarely used for ordinary, small-scale transactions because it was too scarce and costly. But the uncertainty over bronze coins and paper money grew to the point where desperate merchants took to carrying around little silver ingots, often shaped like shallow bowls one to four inches in diameter. When traders met, they used the ingots to buy and sell, weighing them with jewelers' scales and clipping off needed sums with special shears; to evaluate the ingots' purity, they used *kanyinshi* (silvermasters), who charged a fee for the evaluation and routinely cheated all parties. Awkward as it was, this system was better than using coins that might lose their value at any time. By the end of the *wokou* crisis, one writer complained in 1570, coins were used in fewer than one-tenth of all market transactions. The Chinese government didn't issue the ingots; as if in a libertarian fantasy, the money supply was effectively privatized. Anybody who could lay hands on some silver could get *kanyinshi* to certify it—instant money! Everyone was paying bills with splinters of silver.

privatized money

Grudgingly and gradually, the Ming emperors adopted this system, too.



Called *sycee*, these small silver ingots were used in the Ming and Qing eras instead of coins. The stamps include the mark of the silversmith (difficult to read, but probably Shunxiang Smithy) and the date (the twentieth year of the Guangxu emperor's reign, or 1895).

China's basic tax system—farmers paid a portion of their harvest—hadn't changed for eight hundred years. But over time it had become encrusted with loopholes and extra levies, which created opportunities for corruption. In a series of edicts, Beijing reordered the tax rolls and ordered the citizenry to pay an ever-increasing share of their taxes in raw silver, rather than in kind. By the 1570s, as the Wanli reign began, more than 90 percent of Beijing's tax revenue arrived as lumps of shiny metal.

China was the world's biggest economy. Its "silverization" meant that tens of millions of wealthy Chinese suddenly needed chunks of silver for such basic tasks as paying taxes or running a business. It stoked a voracious demand for the metal. Inconveniently, China's silver mines were just as played out as its copper mines. Businesspeople had trouble laying their hands on enough silver to pay for anything, including their taxes. The sole nearby supply of silver was in Japan. On an official level, China and Japan were not friendly—indeed, the two nations were soon to fight a war in Korea. To get the silver necessary to keep business going, merchants turned to *wokou*. Businesspeople sold silk and porcelain to brutal men with silver, then turned around and used the silver to pay their taxes, which in turn was spent on military campaigns against those brutal men. The Ming government was at war with its own money supply. SK

Unable to reconcile the contradiction, Beijing finally allowed Fujianese merchants to trade overseas without fear of punishment. Now acting in the open, they sent thousands of people—younger sons from extended families—throughout Asia to establish beachheads for later trading or extortion. Even a backwater like the Malay village of Manila may have had as many as 150 Chinese residents in 1571, when Legazpi showed up. Hundreds more apparently resided elsewhere in the islands. The unexpected discovery of silver-bearing foreigners in the Philippines was, from the Chinese point of view, a godsend. The galleons that brought over Spanish silver were ships full of *money*.

"THE TREASURE OF THE WORLD"

How did silver get on those galleons? According to the stories, it began with a man named Diego Gualpa or Hualpa in April 1545. He was out walking at thirteen thousand feet, possibly looking for a lost llama, on a plateau in the Andes Mountains, at the southern tip of Bolivia. (The altitude, amazingly, was not extreme for the Andes, where most of the population lives on high plains that are almost at that level.) No trees, no animals, no crops, no