10: THE MEDIEVAL AND EARLY MODERN CHINESE STATE (10/87; 7/89; 10/94e, 8/95e, 9/96r)

a. What were the major novelties in the international politics of East Asia during each of the major substages of China's second stage of high civilization from Sui through Ming times? In what ways and with what degree of importance was continuity with China's first stage of high civilization retained in East Asian foreign affairs?

b. How did the size, administrative structure, domestic political ambitions and socio-economic forms of the Chinese universal state change during each of the substages of China's second stage of high civilization from Sui through late Ming times? In what ways and with what degree of importance did China retain continuity with its first stage of high civilization in each of these aspects of internal politics?

Preface: China's Second Stage of High Civilization

This chapter covers a considerable chunk of time—nearly a millennium—and seven major (occasionally overlapping) Chinese dynasties. And yet I will devote rather less space to it than I did to the earlier period that witnessed the gestation and efflorescence of China's first stage of high civilization. This despite the fact that far more primary source material survives for the second than for the first stage.

I can do this partly because high civilization's first appearance required more changes than did evolution into subsequent stages of high civilization. I have also deliberately abbreviated my treatment so as to better emphasize the considerable progress, both material and intellectual, that occurred from one substage to the next.

Recognizing these discontinuities renders medieval and early modern Chinese history much more nearly comparable to the medieval and early modern periods of European history, except that the Chinese periods began about half a millennium before the European ones. If you have not yet taken an up-to-date Western Civ sequence and still think of Europe's medieval period as stagnant or backward, seeing how dynamic was China's medieval epoch will prepare you for analogous developments during medieval times in Europe should you eventually (as you should) take such a medieval Europe course.

Since it will prove difficult to distinguish between the players without a scorecard, let me begin by providing a political scorecard for the two stages of high civilization.

CHINA'S 1ST STAGE HIGH CIVILIZATION:
Late Ancient Transition into:
late W. Zhou (9th-8th c. BC)
E. Zhou's Spring-Autumn (8th-5th c. BC)
Efflorescence:
Warring States (5th-3rd c. BC)
Qin Dynasty (late 3rd c. BC)
W. Han Dynasty (3rdc. BC - 1st c. AD)
Crisis of Civilization:
Wang Mang's usurpation (early 1st c. AD)
E. Han Dynasty (1st-3rd c. AD)
W. Jin Dynasty (3rd-4th c. AD)

CHINA'S 2ND STAGE HIGH CIVILIZATION:
Early Medieval Transition into:
Northern and Southern Dynasties (4th-6th c.)
Late Medieval Efflorescence:
Sui Dynasty (late 6th-early 7th c.)
Tang Dynasty (7th-early 10th c.)
Early Modern Continued Efflorescence:
5 Dynasties & 10 Kingdoms (10th c.)
N. Song Dynasty / Liao Dynasty (10th-12th c.)
S. Song Dynasty / Jin Dynasty (12th-13th c.)
Intimations of Crisis of Civilization:
Yuan Dynasty (13th-14th c.)
Ming Dynasty (14th-17th c.)

Set out in accord with ideational determinist conceptualizations, the above scorecard differs somewhat from the historical parallels Confucian historians tend to make between the late ancient and medieval periods. The Confucians have Warring States disunity parallel that of the Northern and Southern Dynasties, Qin's short-lived unification parallel Sui's and Han's long-lasting universal state parallel Tang's. I emphasize the differences.

Confucians are excessively scandalized by the political disunity of what I here call the Early Modern and hence they miss its sharp break from the Medieval pattern and anticipation of the Fully Modern era we and the Chinese are still living through.

In the next few pages I will first sketch in the continuities and discontinuities in East Asian interstate politics during the second stage of China's high civilization. I will then do the same for the domestic politics of China, including shifting trends in the size and complexity of the state and in the composition of China's ruling class. Finally, we will take a closer look at the evolution of China's vision of Heaven up through the first signs of the onset of crisis of civilization.

A. Hollowing Out of the Universal State Abroad

1. The Medieval Chinese State's Foreign Relations

a. a phony universal state's inevitabi l-ity

China's transition into a second stage of high civilization scattered the seeds of Chinese high civilization north and then east and west from China. Elements of the quite different Persian and Indian high civilizations spread into China. Zone A peoples transmitted to China and then Korea and Japan a Persianized new vision of Heaven embodied in Buddhism which energized China's transition into the second stage of high civilization, and Korea and Japan's rise into first stage high civilization.

The result was a much larger but also more diverse East Asian high civilization than ever existed during antiquity. And yet until the 19th century, there was no Chinese word for "China," as a nation state, only names of dynasties that ruled All-Under-Heaven. Sui and then Tang tried to swallow up these newly high civilized states at and beyond their borders, but within a few generations discovered they could not do so. Even then their rulers had to call their state a universal state so as to legitimize themselves to their own people, and to themselves.

The result was a kind of phony Chinese universal state that was really just a very large territorial state. It interacted with other, often equally large or larger

territorial states in Zones A and C that soon reached the same second stage of high civilization as had China itself.

This interaction resembled the intricate balance of power politics of ancient Warring States times in China and early modern times in Europe. Yet Confucian politicians and historians dared not acknowledge the parity of civilizational sophistication as well as of physical-military power of China's Zone A and C East Asian competitors.

b. early medieval foreign policies

In some respects, early medieval China found it easier than its successors to acknowledge this big new fact of foreign policy. There are several likely reasons for this: 1) China shared a Buddhist vision of Heaven with its Zone A neighbors, and 2) The rulers of China shared gene plasm with the rulers of the nearest of the neighboring Zone A states.

Emperor Wen, the founding ruler of the Sui Dynasty. (*Encyclopedia of World Biography*)

The founders of both Sui and then Tang had married into the Toba clan aristocracy of the several Wei Dynasties of the preceding Northern and Southern Dynasties epoch. Princesses from the Tang ruling house were often sent off as brides to various Zone A rulers and played considerable roles in diplomacy. These imperial women did not consider their position as shameful as did Han princesses sent off to be brides of Xiongnu rulers during the preceding stage of Chinese high civilization.

China's rulers still hoped to rule these other states, though they were also willing to appeal to their people as "Heavenly Qaghans" at the same time they sought the allegiance of ethnic Chinese of Zone B as traditional "Sons of Heaven." [1]

The second (and last) Sui emperor became involved in an unwinnable war against the northernmost of the three states on the Korean peninsula, and so overextended his forces that a congeries of domestic rebellions overthrew his dynasty.

Taizong, the second emperor of Tang (*Portraits from the National Palace Museum,* Taipei, 14)

The second ruler of Tang, Emperor Taizong, on the other hand, succeeded in conquering the first Turkish Khanate all the way out in subzone A1. In his style of life he was as much Zone A horseman as Zone B Chinese aristocrat. His Zone A conquests contributed to a quantum jump in Chinese intellectual sophistication. His conquest of the Turks opened up a secure route between China and India that permitted transmission of metaphysical texts from India. Study of these deepened the Buddhist vision of Heaven available to the Chinese during the late medieval period that began two generations after his death.

During his last years (in the 640s) even Taizong felt obliged to take on the northernmost Korean state. Though he failed almost as badly as the second Sui ruler, by this time had stabilized its power sufficiently to survive the defeat.

Taizong's son and the son's wife, the notorious Empress Wu, reached a compromise settlement with Silla, the southeasternmost surviving one of the Korean three kingdoms (cf. chapter 12). This settlement created what became the abiding form of the so-called "tributary system." A tributary state enjoyed virtually complete internal autonomy so long as it used Chinese constitutional forms but ceded control over its foreign policy to its Chinese tributary overlord.

An East Asian tributary was rather more free than a 19th century Western "protectorate." Korea's status vis à vis China was more nearly like the modern Puerto Rico "Commonwealth's" status vis à vis the U.S. Korea's tributary status lasted, with a few intermissions, until the last years of the 19th century.

After her husband's death, Empress Wu reigned on her own until the beginning of the 8th century as China's only "female emperor." She extended the tributary system to several of the more obstreperous peoples of subzones A2 and A3. Her death, which permitted a restoration of the Tang ruling family, may be taken as the boundary between China's early and late medieval periods.

c. late medieval foreign pol icies

Confucian historians treat the first half of the 8th century as the high point of Tang civilization and the late 8th and 9th centuries as the period of its rapid decay and then dissolution.

In fact, however, the whole remainder of the Tang witnessed a burgeoning of technological and cultural influences on China from Zones A and C which helped create an "early industrial" economy (cf. chapter 11), while Chinese military power faded from these regions.

From Western Asia came a variety of new plants, the techniques for turning flour (an earlier import from the West) into pasta, the chair and long-legged table. A variety of products came from South Asia and the Western Pacific via Zone C. These included tea from South Asia and sugar, perhaps originally from New Guinea. Chinese techniques, like paper-making, coal-mining and iron

[1] Qaghan is the Turkic word for supreme sovereign. Cf. on this phenomenon in medieval Chinese foreign policy, Pan Yihong, *Son of Heaven and Heavenly Qaghan: Sui -Tang China and its Neighbors* (Bellingham: WWU CEAS Studies on East Asia, forthcoming).

smelting via the blast furnace began their long trek to the West.

Militarily, however, the exchange was far less even. By the middle of the 8th century, an Arab Muslim army defeated the Chinese at Talas, just west of subzone A1, and inaugurated the long infiltration of Islam into the Chinese-influenced parts of Zone A.

During the next generation, the Chinese had to invite in soldiers from the new Eastern Turkish Uighur state to help it stave off a series of rebellions by border potentates with genetic and cultural links to subzones A2 and A3. Uighur soldiers, merchants and Manichaean priests stayed on until the 830s as privileged guests enjoying the same kind of extraterritorial privileges European imperialists usurped during the 19th and 20th centuries. In effect, late Tang China became a tributary of the Uighurs until a Tibetan kingdom destroyed the Uighur state in the 830s.

A variety of other states grew large, strong and increasingly sophisticated along the boundary zone between Zones A and B in the course of the 9th century. The most powerful and most civilizationally sophisticated of these peoples were the Qidan (frequently spelled Khitan, a variant, Kitai, of their name being perhaps the source of the medieval European name for China, Cathay).

2. Foreign relations of the world's first Early Modern States

a. Song's phony universal state

At the beginning of the 10th century, soon after another Zone A warlord overthrew Tang, the Qidan founded their own dynasty in southern A3 and A2 and northernmost B2. The Qidan rulers, Chinese style, called it Liao after the river which ran through the heart of their territory.

By the 990s, the Tanguts (related to the Tibetans) established a state, which ultimately even developed its own writing system, in the western regions of subzone B1. This Western Xia state tried, with some initial success, to take over additional portions of subzone B1.

The native Chinese Song Dynasty did not arise in Zone B until after another two generations of political disunity in China (the age of the Five Dynasties of the north and Ten Kingdoms of the south). Song's Confucian bureaucrats claimed their dynasty's right to establish a universal state comparable to early Tang's.

In practice, however, Song never came close to achieving dominance over Liao. As for Western Xia, after a century of expensive struggle it managed to contain Xia via an ambiguous cold war stalemate on the border between the two.

Song mobilized enormous resources to wage and prepare for these unsuccessful struggles with these rival states. Its innovations in military technology (more powerful crossbows, gunpowder, proto-cannon, animal-powered river paddlewheeler ships, better maps, elaborate command and control bureaucracies) eventually came into the hands of their enemies. Factionalism within Song's bureaucracy rendered it too incoherent or too slow to respond adequately to foreign challenges.

Korea, then under the Koryo Dynasty, remained as loyal to Song China as it dared in the face of pressures from China's northern rivals. Its allegiance brought little help to China and merely encouraged Song in its unachievable dream to become a true universal state.

b. the Liao & Jin "elder brother" states

Liao and Xia were not only developing uniquely hybrid sedentary-pastoral versions of East Asian second stage high civilization, Liao, at least, could claim chronological priority over Song (907 vs. 960 founding dates). The Liao rulers argued that taking Tang as the metaphorical "father" of both, Liao could claim to be the "elder brother" reducing Song to the status of "younger brother." Confucian filial piety would oblige Song to defer to Liao. In diplomatic terms, Song would have to be the tributary state, Liao the tributary overlord.

Song tried and failed several times to win control over the sixteen prefectures surrounding what is now Beijing. Though it managed to avoid overt tributary status, Song wound up paying substantial annual indemnities to Liao in silver and in silk cloth. Since Song ran a favorable balance of trade with Liao, these indemnities helped by providing greater liquidity to Liao and thereby helped its traders.

In the course of the 11th century, a Manchu-like people called the Ruzhen (traditional spelling Jurched or Jurchen) from the Sungaree River valley of the northeastern part of A3 began to learn high civilization from Liao much as Liao had learned it from Tang earlier. By the early 12th century they were chewing away at Liao's northern and eastern borders.

Song decided, unwisely as it turned out, to ally with the new Ruzhen state (soon given the Chinese-style label Jin 金 (meaning "gold," but also the name of a tributary of the Sungaree) against Liao. Song strategists overestimated Liao's power and underestimated Jin's vigor. Jin destroyed all but a remnant of Liao (which took refuge far to the west), then drove Song out of B1 and B2.

A rump Southern Song took refuge in B3, B4 and the southern half of C (except for Vietnam, which had asserted its independence at the beginning of Song, much like Korea had earlier done against Tang).

A century later, Southern Song repeated the mistake of Northern Song and allied with the rising Mongols against the declining Jin. By 1276 the Mongols conquered all of China, effectively ending the East Asian multistate system. Song had twice violated Shen Buhai's ancient balance of power principle calling for a weak state to always ally itself with a weak nearby state against a strong more remote power.

c. advantages of a multistate system

Despite the ever-present possibility of making such errors, the balance of power diplomacy that accompanies a multistate system has several advantages and they were all realized in China.

A multistate system tends to limit the power of any one state that is temporarily in the ascendancy. Hence over time it tends to limit the power of all the states in the system, not only vis à vis each other but also against their societies' markets. It is surely no accident that foreign trade broke loose from state re-

strictions in the course of the Northern and Southern Dynasties through Tang and that domestic trade and the early industrial style of production (cf. chapter 11 below) that provided commodities for this trade also burgeoned during the period of balance of power diplomacy.

There were also more fundamental causes for these two developments, but the medieval and early modern multistate system accelerated their development.

Unfortunately, the old Confucian vision of Heaven was grafted onto the Buddhist vision and the resulting hybrid vision continued to be re-presented politically onto Earth even during the Northern and Southern Dynasties in the form of the ideal of a universal state. This not only blinded diplomats to the full logic of a multistate system of international relations, it also set up a potentially powerful enemy to an independent market, particularly when a genuine universal state was finally after all once again created.

3. Hollowing out of the early modern universal states

a. Yuan's unsustainable universal state

The Mongols conquered not only the whole of China. They also conquered virtually all of Central and Western Asia. For a short time, the economically most important parts of the Eurasian land mass were all under the control of a single political authority. That represented the most truly universal of universal states that this planet has ever witnessed or likely will witness.

For China, the Mongol state also represented the logical conclusion of the two millennium long evolution of the sedentary-pastoral-nomadism interaction. Each new round of interaction between the two styles of life had culminated in a pastoral-nomad takeover of a larger chunk of Zone B than the previous round. In 1276, the Mongol pastoral-nomad state swallowed all of China-proper and dominated Korea more fully than any Chinese tributary overlord had done.

By that time, however, the larger Eurasian Mongol universal state had proved too multicultural to be sustained and had broken down into four lesser entities focused around southern Russia, Persia, Zone A and China proper, each under their own qaghan. The Chinese mini-universal state called itself the Yuan Dynasty. Even so, it failed to subordinate all of East Asia to itself. It reduced Korea and Burma to tributary status, but failed to conquer Japan or Borneo.

Even the Chinese core proved to be to much for the Mongols to keep down for long. Less than a century after its establishment, rebellions in southern China and internal factionalism about how to govern so obdurately bureaucratic a state as China so discouraged the Mongols that they scurried back to A2, never to return.

b. Ming revives the phony universal state

One of the southern rebels, an ex-Buddhist monk of commoner origin, Zhu Yuanzhang, founded the native Chinese Ming Dynasty. Ming represented a rollback of state size from the unsustainable Yuan super universal state.

It also represented a withdrawal of sympathy from interactions with the non-Chinese-influenced world. Korea returned to its old status as an internally independent tributary under the new Yi Dynasty. Japan, for a time, pretended to be a tributary so as to achieve trade access to China. Vietnam grudgingly came to occupy a tributary status somewhere between that of Korea and Japan.

The Ming rulers encouraged the spread of Tibetan Buddhism to the Mongols in hopes of taming them. Ming diplomats nevertheless remained so fixated on the potential for trouble from the Mongols that they did not notice the rise of the Manchus, originally a branch of the Ruzhen in A3. Partly because of this early neglect, the Manchus were ultimately able to overthrow Ming and take over the whole of the Zone B heartland of China.

Ming accelerated the regression back from a Buddhism-Confucian hybrid vision of Heaven that had begun during Song. Its ever more worldly men of merit became increasingly skeptical of the possibility of markets operating rationally and wholesomely uncontrolled by the bureaucratic state.

They hobbled domestic markets and after a brief fling of overseas imperialism during the early 15th century, they withdrew their high-seas fleet and declared foreign markets illegal, mislabeling their leading merchants as "pirates." They hoped thereby to isolate their phony universal state from the pressures of either internal or external markets.

c. sustained contact with the West

Over the long run, this isolationism merely created. a vacuum into which European seapower could flow when the high tide of the Age of Exploration hit East Asian waters early in the 16th century.

The Europeans showed up at just the point when (in retrospect) it becomes obvious that pastoral-nomad power had entered into a long recession from dominance that is still continuing at the end of the current millennium. The proportion of East-West trade had begun shifting from the land to the sea routes since not long after the fall of Han. It was not so much that the volume over the land route decreased. For some time it increased. It was that the volume of sea-borne trade was increasing at an ever accelerating rate.

By the 16th century, perhaps under Tantric Buddhism's influence, the pastoral-nomads were content to finance their states from the proceeds of the land trade as mediated by Chinese merchants and Mongol Buddhist priests and their monasteries. They had found their niche within the Chinese tributary system.

Seemingly, Chinese diplomats of Ming times could justly consider themselves the servants of a genuine universal state. The merchant-adventurers from Portugal, then Spain, Holland and finally England between the early 16th and late 17th century could be dismissed or isolated as "South Seas Barbarian" who had come from too far away and from places too alien to be assimilated into the Chinese diplomatic system.

They could literally be walled off from China. The Portuguese were given Macao, a town on a peninsula near

Canton. The Chinese authorities literally walled off the base of the peninsula, cutting it off from the rest of China.

For a couple of centuries that tactic worked. Then, beginning around 1800 came the deluge of the full industrial revolution from the West and China was forced into a planet-wide multistate system. (Cf. chapters 25 ff.)

B. Internal Meritization of the Universal State

1. Sui and Tang

a. inverse relationship between size and complexity

During the early centuries of the second stage of high civilization, Chinese statesmen believed that the territory of their state could grow ever larger while its organization became ever more complex and capable of projecting power ever greater distances. During the latter years of the Northern and Southern Dynasties epoch this assumption seemed to gain empirical support.

Over the long run, however, there proved to be an inverse relationship between size and complexity. As we have seen, balance of power politics tended to cut excessively large states down to size. Medieval limitations on the speed of communications made it difficult to sustain states beyond a certain size. It may be that even with electronic communications the complexities induced by having too many possible interactions among bureaucrats as bureaucracies increase in size set a limit to the size of any one state, though perhaps not to truly autonomous markets.

The evolution of an early industrial economy tended to give a premium to territorial states large enough to provide large internal markets but not so large for their political inefficiencies to interfere with markets. As large numbers of fully industrial economies come into existence toward the end of the current millennium, it begins to seem possible that relatively small states may over the long run prove to be the most efficient size. Modern communications permit very broad markets to efficiently cross political boundaries without much state interference (as occurs, for example along the Canada-U.S. and Mexico-U.S. borders even now).

Sui-Tang through Song-Ming China came at the beginning of this industrial age process of mutual adjustment in size between state and market. Hence the shifts in state size.

b. size gives way to complexity

As we have seen, in the face of a multistate system of Zones A and B pastoral-nomad, and sedentary-commercial states, neither Sui nor Tang could sustain the large effective size of their northern territories with which they had begun China's second stage of high civilization. They could retain the larger territories in subzones B3, B4 and C2-3 that the Southern Dynasties had earlier inoculated with Han culture. Only the parts of Zone A recently acquired by Tang had to be gradually given up after the middle of the 8th century.

Tang and Song gained a payoff of greater wealth and control through greater complexity in exchange for the reduction in effective size of the state. Sui abolished the hundred-plus commanderies of antiquity in favor of eight circuits. It created a still larger number of prefectures (with names ending in the suffix -*zhou*), some of them out of former commanderies. Most of the prefectures were created in the newly assimilated south.

Within each prefecture rested a half-dozen or so counties or districts, the local units first established by ancient Chu. Below these rested, as in ancient times, the townships ruled by local commoners appointed by county officials.

Still lower were the villages and hamlets. Villagers ruled themselves, subject to the terror induced by a system of mutual responsibility of fellow-family and/or village-members for each other's good behavior. The terror was enhanced by unpredictability since mutual responsibility was enforced only intermittently by the higher authorities.

This Sui reform was designed to narrow the span of control at each level of the bureaucratic hierarchy. However, rulers at each level could only rarely resist the urge to interfere with office-holders below the level immediately below themselves. The Sui founder and most of his Tang successors obsessively kept control of the appointment of the fifteen-hundred-odd county magistrates in their own hands.

Despite such bureaucratic reforms, overall, the early Sui-Tang ruling class remained aristocratic. The "new" aristocrats formed out of land-grabbing meritocrats during late antiquity's Western Han now constituted an ancient and deeply entrenched class of hereditary landlords.

Han, you may recall, started off with a ruling class consisting mostly of new meritocrats and plutocrats. Most of the old Warring States aristocracy had been killed off or scattered irretrievably from the lands holding their ancestral altars during the devastating civil war of 206 to 196 BC. These new Han meritocrats and plutocrats quickly moved to fill this empty niche in the ruling class.

These parvenus then "aristocratized" themselves. That is, they turned their template of merit into a more abstract version of the ancient aristocracy's claim of descent from the gods in the paternal line.

They also used their powers of office to gain hereditary control over land. Within a couple of centuries, well before the Former or Western Han had been brought to an end by Wang Mang's usurpation, they had turned into a plausible facsimile of an old landed aristocracy.

Their land gave new aristocrats the wherewithal by 23 AD to defeat Wang Mang, who had attempted to challenge their prerogatives on fundamentalist Confucian grounds. This victory further cemented their position. The descendants of these early Han parvenus used the ensuing seven centuries to become a very old, fully entrenched landed aristocracy.

Unfortunately for this old aristocracy, the new and more complex state of Sui and Tang times required personnel who could accommodate themselves to a template of merit far more complex than the men of merit of early Han could have imagined. Also, the Buddhist doctrine of *karma* lent itself to representation onto Earth in the form of a more intensely rational template of

merit. Pulled by both Heaven and Earth, this ancient aristocracy had no choice but to begin to remeritize itself.

That most aristocrats were more Buddhist than Confucian did not interfere with this process since the Buddhist notion of *karma* resembled a cosmic scale template of merit. Piety overcame whatever inhibitions they might have had about threatening their aristocratic status by fitting themselves to a template of merit. By the late 7th century, most aristocrats holding the higher central government offices were men who could also do well with a revived device for applying the template of merit to would-be meritocrats—the written civil service exam.

Dumb aristocrats, or ones who did not display the forms of merit measured by the examination process, had to resign themselves to living off the rents from their estates. By Song and Ming times the aristocratic component of the ruling class virtually disappeared.

Written exams were not yet (nor did they ever become) the exclusive measure of merit in China. For the Tang meritized aristocracy, personal interviews counted for as much as or more than the written exams. Even during the ever more purely meritized regimes of Song and Ming, the best meritocrats urged a system of personal recommendations by meritocrats already in office over the arbitrary results of written examinations. [2] The shrewdest of such advocates recognized the power that could be multiplied simply by controlling the questions asked and determining the politically correct answers.

c. and a new multi-state system

One segment of the aristocracy could not be assimilated into the newly empowered meritocracy, nor could it be ignored or its power usurped. These were the border potentates along the Zone A-B boundary zone.

The official Chinese historians have usually disparaged these men as "barbarians," and declared their territories decadent. And yet they were the seeds of or fertilizers for the later high civilized states straddling the border regions, Liao, Western Xia and Jin.

These states also turned partly meritocratic. The later they were founded the more meritocratic they became. Xia had a more original literary culture than Liao. Jin had a more sophisticated all-paper money system than Liao, and a more efficiently controlled and heavily armed military.

2. Song's triumph of meritocracy

a. geographic shrinkage and internal meritization

Even before the end of Northern Song, aristocratic members of the ruling class normally achieved office by passing civil service exams, even though that might not be required of them. They did so to maintain respectability in the eyes of others who had taken the exam route.

Since most of the great aristocratic families were from the north, the aristocracy almost completely disappeared from the very beginning of Southern Song times. A landed aristocrat who chose to follow the Song court south lost his landed base, guaranteeing that his sons would have to seek office as meritocrats.

b. internal institutional novelties

By late Tang the old "line" bureaus of the central authority had begun to go into business for themselves. "Line" bureaus are the civilian equivalent of the combat units of an army. They are the major central government cabinet offices. The provincial authorities subordinate to them directly carry out the state's business. By late Tang times, the administrators at the central branches of these bureaus stopped paying attention to the interests of the emperors.

The aristocrats running the larger localities sometimes set up what were almost feudal principalities, though they never quite crossed the line from bureaucrat to vassal. Even such proto-feudatories always retained enough connections to the old "line" bureaus at the center so that we need not talk of them moving into even incipient feudalization. This was avoided as an uncouth, un-Chinese practice. Only external barbarians were now thought of as fit to be feudal as tribute-paying vassals.

The worst that a Chinese official might contemplate doing would be to usurp the throne for himself, and in fact this regularly occurred for two generations after Tang's fall during the Five Dynasties on North China.

Even when they remained nominally loyal, independent local branches of the line bureaus made sure that only dribs and drabs of tax money found their way up to the central government. Tang in part fell precisely because of this loss of authority and revenue.

During the two generations after the fall of Tang in 906, several states in succession ruled north China (the so-called Five Dynasties of the north). The founding rulers of each of these could conquer a considerable chunk of B1 and/or B2, but could not pass control on to an hereditary successor of the younger generation. This was mainly because the central and local bureaucrats would not remain under a young successor's still uncertain thumb.

General Zhao Kuangyin, the founder of Song in 960, broke this pattern by doing two things:

First, he moved his capital east from its Tang location at Xi'an in the Wei River valley in southern B1 to Kaifeng in his own home territory near the eastern border of the fulcrum subzone. That allowed him to control the key inland supply routes branching off from the Grand Canal and thereby maintain control of most of Zone B right from the beginning.

Second, he realized that if he used his own "staff" officers—the men who already worked directly for him before he took over the state, rather than those who worked in the old government's "line" bureaus—he could be reasonably sure they would be loyal to him.

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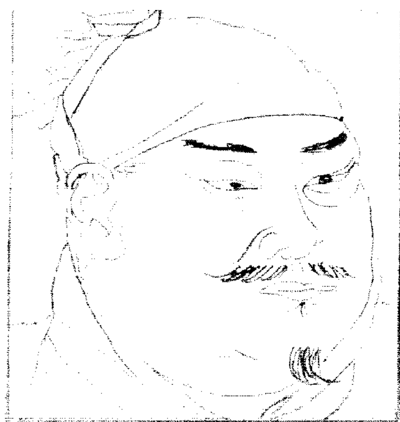
[2] If you are irked at the necessity of taking written exams at frequent intervals, and you think you would prefer looser, oral quizzing, you should realize that you share this preference with the more snobbish of Tang aristocrats. Such a procedure is more archaic and easier to manipulate than written quizzing, and so is more appropriate for aristocrats than the budding meritocrats most of you are.



Zhao Kuangyin, founder of the Song. (after *Portraits From the National Palace Museum,* Taipei)

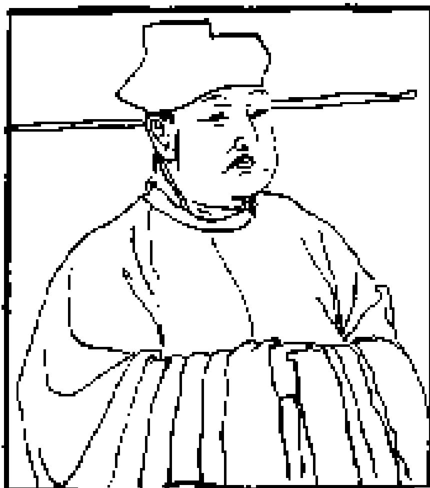
Zhao kept these staff men on his personal staff, but also started to formally transfer "line" authority to them—the authority to go out and collect taxes or enforce peace and good order. Where necessary, he set up new line bureaus for them to run, and reduced the old line bureaus to repositories of honorific appointments. They no longer performed any function, and so could not betray him.

That way he could assure the first succession, because after his death these staff men holding line jobs would remain loyal to his hereditary successor. In Zhao's case this was his very able brother (who had, not by coincidence, been his chief of staff). This got the Song Dynasty past the crisis of the first succession. (I should add that there exist plausible rumors that the chief of staff performed a surreptitious Kevorkian on his big brother to hasten the succession. The shift from staff to line ploy may not, therefore, have been a risk-free exercise.)

All bureaucracies must go through a similar process of replacing old line bureaus with new ones run by the chief executive's most loyal staff members. This normally happens every few centuries.

The U.S. has been going through such a shift since World War II. We are now ripe, perhaps more than ripe, for a new cabinet system headed by the leaders of the president's domestic White House staff and his National Security Council staff. Even President Reagan, who favored return to cabinet government, gave ever more power to his White House staff.

When, as one State Department bureaucrat characterized Reagan's démarche toward Iran of 1985-6, "the President did not have the government behind him on this issue," the President's staffmen took the initiative in trading arms for hostages. They ran foreign policy on the President's behalf without (supposedly) the knowledge of or any control being exercised by the State Department, the relevant line bureau.



Taizong, the second Song emperor. (*Portraits From the National Palace Museum,* Taipei)

If the Chinese pattern is any indicator of what will happen here, it will not be much longer until some president has his staff form permanent new line organizations, and reduces the old line organizations to mere sinecure status.

Such a change is not necessarily a sign of decadence. It can give an old government a new lease on life, allowing it to develop more efficient devices to milk taxes from and/or impose order on an economy and society which have evolved to a degree of complexity with which the old line organizations can no longer cope.

That is precisely what happened during Northern Song times in China. The new dynasty required new bureaus to cope with a market entering the early stages of an industrial revolution.

c. creative tension between state & market

During the period from the 9th through the 11th century AD, China was entering what was the first early industrial revolution in all human history. This is a phenomenon so interesting in its own right and so complicated that I must devote all of the next chapter to the economic and social process whereby this first early industrial revolution came about. All that we can do here is notice that the state had to accommodate itself to even this preliminary stage of the industrial revolution.

The early industrial revolution was mainly a product of the market rather than of the state or its ruling class. Interstate trade by land across Zone A and by sea with Japan and the non-Chinese cultures of the South Seas helped stimulate it.

The Chinese state not only had not created, it could not control this foreign trade. It could tax it, but only if it did so gently enough not to drive the foreign trade merchants away. Excessive or inconvenient taxes could also ruin or at least stunt domestic trade and manufacture.

The supposedly more rational state and meritocratic ruling class members enjoyed only mixed success in adjusting themselves to such limitations. The meritocrats preferred the *Guan Zi* and Xun Zi to Mencius, and so had difficulty accepting a reduced role in the market to fit the new requirements imposed by the early industrial market's logic.

After a century of explosive growth of the domestic and foreign markets, and ramshackle adjustments by the early Song state to meet market requirements, a sense of crisis gripped both throne and meritocracy by the late 11th century.

Finally, the Song Emperor Shenzong turned to one of the greatest of his meritocrats, Wang Anshi, to try to perfect state policies. Wang, however, wanted to do more than adjust the state to the requirements of the new early industrial marketplace.

At heart Wang was a hard Confucian holding a vision of a complex but marketless society derived from one of the old texts manipulated during Han by Wang Mang's intellectuals, the *Rituals of Zhou.* He directed most of his most important reforms toward providing either state replacements for the market or severely interventionist controls over it.

The inevitable failure of these reforms, both while Wang was still in office, and in the hands of a corrupt suc-

cessor during the first two decades of the 12th century, demoralized the meritocracy and left it more susceptible to behaving irrationally in the face of the foreign policy challenges from Zone A during the 12th and 13th centuries.

The habits of intervention reinforced during Song may also have drawn the Ming men of merit deeper into the crisis of civilization that began to appear once the Mongols withdrew from China.

Emperor Shenzong. (after *Portraits From the National Palace Museum,* Taipei)

3. Ming's incipient crisis of civilization: the political level

a. identifying a crisis of civilization

A crisis of civilization occurs when a people's ideas about Earth become more complicated than and are no longer subject to control by their culture's ideas about Heaven. Once such a crisis occurs, so perverse are its effects that men actually take some traits of the crisis as good things, and even give these effects flattering names.

Much of what we have been calling "modernity" for the past couple of centuries actually comprises the bundle of symptoms of the crisis of the second stage of high civilization in the West.

A civilization undergoing crisis usually contains or soon develops, if only off on its mental periphery, the seeds for a new concept of Heaven. Once the crisis becomes deep enough, people start to notice this new concept of Heaven, and it moves from the periphery to the center of men's minds. This new and more elaborate vision of Heaven may not be very new. It may merely give a new emphasis to one aspect of the old Heaven.

How to detect these seeds of civilizational crisis and the new Heaven? This is easier to do after the fact, when the new stage of civilization has arrived, than during the crisis itself. Unfortunately, we and the Chinese are still living through the crisis of the second stage of high civilization. Trying to spot Ming Dynasty China's incipient crisis of civilization may at least be good practice for us to use in trying to identify our own crisis.

b. three views on Ming's nature

There are at least three views of the Ming Dynasty's nature and of the troubles it endured.

1) a Confucian crisis of civilization?

The first view argues that Ming was indeed entering into something akin to a crisis of civilization. Traditional Chinese historians tended to argue along such lines, because they were so dissatisfied with how the Ming rulers treated Confucians and how badly the meritocrats behaved in response, particularly while the dynasty was succumbing to another barbarian conquest.

Ming's commoner founder liked to beat, execute and generally persecute meritocrats. His successors more or less institutionalized such practices. In response, the meritocrats ensnared themselves in ever more mindless factions. Ming ended in the mid 17th century with China conquered by a new bunch of rank and frowzy smelling barbarians, this time Manchus from subzone A3 rather than Mongols from A2. This was a heavy blow to xenophobic Chinese egos. Ming must, Confucians reasoned, have been seriously flawed to have endured this.

And yet, conquest by the Manchus might have been a more normal end than the old Confucian historians were prepared to admit. "Barbarians" had been conquering ever larger chunks of China for the preceding dozen centuries. The Mongol and Manchu total conquests may be seen as merely culminating that trend.

Furthermore, Ming was itself at least partly barbarian. It retained many Mongol political institutions. The third Ming ruler, the Yongle Emperor, was even rumored to have been the son of a Mongol concubine. He moved the capital north from Nanking to Peking (Beijing), its location overlapping the site of the Mongol capital.

2) a normal second stage dynasty?

A second type of interpretation would make the Ming a "normal" dynasty of the second stage of high civilization. Many recent non-Chinese historians of Ming China have taken this view. Song, they argue, was a bit peculiar, if only because it was the first to move fully into the new stage of an early industrial revolution. Ming could poop along as we should expect a dull-normal second stage of high civilization Chinese dynasty to do.

That is, Ming continued at the early industrial stage, but did not go on to full industrialization. It retained a pure meritocratic ruling class, but not one resting upon systematic mobilization of the mass of the people. It behaved like an "early modern" (some use the label "late traditional") but not like a fully modern civilization. Hence, if Ming China was undergoing crisis, it was stuck at an early and virtually undetectable stage of that crisis.

3) crisis with seeds of a third stage

A third interpretation would concede much of what the first two say. However, it would also suggest that though there was at least an incipient crisis, Ming's situation also was one which contained within itself—particularly at the economic level—some of the seeds that an optimistic forecaster would ascribe to the third stage of high civilization, the stage which even now has not yet gone through the formality of actually taking place.

My own inclination is toward this third interpretation, but if pressed hard enough, I would tend to lapse back into the first view, the one that holds that Ming China exhibited at least some of the symptoms of an overt crisis of civilization. Let us consider some of the evidence for this tentative judgment.

b. political consequences of having a pure meritocracy

1) aristocrats, meritocrats & plutocrats

Ming's ruling class was, right from the beginning, very nearly a pure meritocracy, and this meritocracy was soon wracked by a fervid and irrational form of factionalism. This may have been because of the disappearance of an aristocratic component of the ruling class. An aristocracy's function is to set limits based on Heaven's Mandate on the number and content of templates of merit. The aristocracy's characteristic vice, jealousy, will also goad it to limit the number of meritocrats so as to maximize the power in its own hands.

Absent an aristocracy, variant meritocratic templates and the factions defined by these templates will multiply. But the tax base is always finite and hence meritocratic posts are limited in number. Those out of office have grounds to envy those in office, and to join old and new factions which would play an ever more vicious zero sum game in their competition for office. With the disappearance of the aristocrats, the meritocrats' chief vice, envy,[3] is turned loose and creates chaos through runaway factionalism.

Could plutocracy retrieve this sort of situation? Conceivably. As successful participants in markets, plutocrats are usually versatile. Their characteristic vice, their impulse to emulate their betters (i.e. aristocrats and meritocrats) need not destabilize society or state because any plutocratic Thirdson Zhang[4] can create the new wealth to finance his keeping up with the Fourthson Lis.

Normally, meritocrats' envy of their wealth leads them to fear and despise plutocrats, and so they will move Heaven and Earth to avoid accommodating plutocrats. They may even accept a "barbarian" conquest and recognize the barbarians as conquest aristocrats with whom they can ally to keep the plutocrats out of power. That is what happened by the end of the Ming Dynasty in China.

2) the Ming meritocracy's travails

Before condemning all factionalism out of hand, perhaps we must distinguish amongst kinds of factionalism. The Song Dynasty factions, like those in the early American republic, at least fought over real issues, mostly involving alternative ways of adjusting the state to the market (or the market to the state), and also over whether to have an active or passive or in-between "containment" type of foreign policy. These were real issues, and factions based on them may not have been symptomatic of crisis of civilization.

By contrast, Ming Dynasty factional fights, perhaps like more recent American party conflicts, were mostly envy-driven quarrels over the perquisites of office, with substantive differences (when present at all) serving merely as good excuses for factions' grabbing at power and wealth. The appearance of this latter sort of factionalism may be an early sign of the onset of a crisis of civilization.

Ming's founder, Zhu Yuanzhang, was a kind of meritocrat. He came from a poor commoner family. His rise to the throne represented the ultimate in upward social mobility. As you might expect from a meritocrat emperor, he never trusted his fellow non-imperial meritocrats. He argued with them, played humiliating tricks on them as well as on his few plutocrats. He even sometimes had them publicly whipped in his presence.

To keep the meritocracy in line by more institutionalized means, he perfected the censorate, the latest incarnation of the coordinative branch of the government. You may recall that Qin had invented this function to coordinate the civilian and military branches of the meritocracy, but under Ming it enjoyed much greater elaboration of its structure and increase in its power. The founding Ming emperor mobilized the censorate against the rest of his meritocrats. He also warned his successors against using eunuchs for any purpose except as servants in the harem lest they escape from control. Instead, the censorate should be used to watch over the bureaucracy.

However, these reforms did not last. After a few reigns, the founder's successors, less uncouth than he was, tapered off on beating the meritocrats. For a time they continued to make robust use of the censorate, but it turned out to be almost as dangerous in its perfected form as the evils it had been reorganized to stamp out. If allowed true independence and power to go after anybody, it would and did go after the emperors too. So it proved necessary to tame it in turn.

Top: Zhu Yuanzhang (Emperor Taizu of Ming) in a contemporary 14th century popular caricature. Bottom: An official portrait of Taizu. (Charles Hucker, *China's Imperial Past,* p. 290.)

Meritocrats were only permitted to serve 12 years in the censorate. They then had to move into one of the other branches of the bureaucracy. Thereafter, the censors tended to pull their punches. Since they knew they could not make their entire careers in the censorate, they had to be nice to the fellows whom they were supposedly supervising in case they themselves later wound up serving with them.

Their independence compromised, the censors joined the multitude of factions that rendered Ming Dynasty poli-

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[3] The envious person resents what others have. The jealous person fears losing what he himself has.
[4] The Chinese slang equivalent to the "Tom" in "every Tom, Dick and Harry."

tics increasingly unstable.

The emperors soon also began using eunuchs, not just to run the imperial harem, but to supervise both the censors and the other branches of the meritocracy.

By the 16th century, eunuch staff officers began to displace line officers of the regular bureaucracy in certain key tasks. The eunuch "Secretariat," originally the informal palace staff of the emperor, evolved into a line organization, one that actually collected commercial taxes and ran what amounted to the secret police of the dynasty.

This was overdue. The emperors had last shifted line authority to their personal staff in the late 10th century, as the then new Song Dynasty got control over the meritocracy.

Use of eunuchs to get around the meritocracy would not in itself seem to be decisive evidence of crisis. The worst that one could say is that eunuchs tend to be peculiarly pure if not always obedient meritocrats. By late Ming times, they even organized schools for themselves, a sure sign of meritocratic behavior.

3) Ming isolationism

Foreign policy was also affected by meritocratic envy and the mindless factionalism and corruption envy engendered.

Ming started off with an open and expansive foreign policy, partly because its first capital was at Nanjing in the lower Yangzi valley, not far from Southern Song's capital of Hangzhou. Eunuch-led mariners commissioned by the third Ming emperor visited and bullied the Southeast and South Asian maritime world Chinese merchants had long since been trading with. They also explored as far west as the east coast of Africa.

However, within a generation of the decision to move the capital north, meritocrats envious of the rise in status of overseas merchants prodded the regime into isolationism. The meritocrats did not want to allow the richest and most influential of the foreign traders to turn into plutocrats, and there were no aristocrats left to go around these meritocrats to make alliances with potential plutocrats.

The best way for the meritocrats to scratch their itch of envy was make foreign trade illegal. Corrupt meritocrats, like present day New York cops, also preferred to make certain aspects of commerce illegal, so they could then take bribes to allow these illegal doings to continue anyway.

By the mid 15th century, Ming had become rigidly isolationist. However, Ming isolation differed from Tokugawa era Japanese and 19th century U.S. isolationism in that both of the latter were mainly political, not intellectual or socio-economic in motivation and effects, as was the case in Ming China.

Mere political-military isolationism is not necessarily a vice. Tokugawa isolationism kept 17th through mid-19th century Japan clear of the dangers of European balance of power international politics, as did American 19th century isolationism. Japanese and Americans could still absorb external economic and cultural stimuli, and the pressures these generated internally ultimately mightily changed the two nations' societies and states, and eventually helped force reversal of Japanese and American isolation.

By contrast, Ming socio-economic isolationism encouraged China to forfeit both wealth and knowledge. Europe's age of exploration was just getting under way, so Europe continued to learn even more than before from China. China, however, did not learn much from Europe or from Europe's New World experiences.

The end of isolation came during late Ming times only because the state needed the revenues from taxing foreign trade, but this taught the meritocratic ruling class no new lessons. Under the Manchus, China reverted to semi- isolationism.

4) empirical but not inevitable errors

Ming also undoubtedly committed serious errors in its relations with the Northern Periphery peoples, but these errors were not necessarily exclusively caused by the factionalism that plagued its foreign as well as domestic policy. These errors also involved strategic misapprehensions that might have been committed by any kind of government:

All Chinese factions tended to assume that the Mongols of subzone A2 still constituted the main danger from the north. The Mongols had gone home in the middle years of the 14th century without ever having been defeated in the field. They merely wanted to avoid assimilation into Chinese life. This Mongol withdrawal, rather than Ming military prowess, is what had permitted Ming to expand north from its origins as a local warlord principality in the lower Yangtze.

Chinese diplomats understood this, and so kept their attention on the Mongols. As a consequence, they got blindsided a few centuries later by the Manchus coming out of subzone A3. One fatal error in two and a half centuries is not so bad a record for a diplomatic strategy.

Even then, the Ming meritocrats might still somehow have finessed the Manchu threat if they had not been victimized by a serious accident. This accident was the invasion of Korea by the Japanese military dictator, Toyotomi Hideyoshi, in the 1590s. Ming had to respond to this external threat to their oldest and most loyal tributary, but the conflict with Japan nearly destroyed the Korean economy, and weakened China's military power.

As a consequence Korea could not play its traditional tributary role as the loyal and reasonably strong eastern anchor of the Chinese state's defenses against the other peoples of the Northern Periphery. The Koreans could not blindside the Manchus while the Manchus were blindsiding the Chinese. This was more the result of bad luck than of mistaken strategy or irrational factionalism.

Still, China might have survived this bad luck and the strategic error of focusing too long on the Mongols but for some truly weird factional quarrels at court in the 1620s. These all but assured that this bad situation on the northeast frontier would turn into a fatal one.

c. the return of aristocracy

For this and other reasons, the Manchus were able to conquer all of north China by the 1640s, and south China by the 1680s. Their rule lasted until 1912.

This was a big and unpleasant sur-

prise for all concerned on the Chinese side. Unlike the conquest of north China by the Jurched (also spelled Jurchen, Ruzhen) in the 1130s, there arose no stable Southern Ming to retain control over south China as the Southern Song had for over a century from the 1130s through the 1270s. Why did this not happen?

In the 12th century, Song's meritocrats had remained loyal to the native Chinese ruling house. There were still some north Chinese landed aristocrats left. Even in exile in the south in Song's service, they retained the loyalty of the men of merit and of the not inconsiderable number of men of wealth trying to gain entrance into the ruling class. By the 17th century, however, China's aristocrats had long since disappeared.

If there was to be a stable Southern Ming, its meritocrats would have had to agree among themselves to rally 'round it. Then they would have to ally with some of the rich overseas merchants whose ships dominated the waters of Zone C. These merchants provided the only means of linking the isolated coastal enclaves of Song's South China territories with each other and with the wealthy and militarily potent Overseas Chinese world.

Even after Ming declared overseas trade illegal during the 15th century, these merchants were still able to operate, grow rich and powerful. The prospect of drawing tax revenues from their nominally illegal activities proved so tempting to the late Ming eunuch tax collectors that by the late 16th century they finally decided it would be more profitable to end isolationism and relegalize foreign trade.

One Ming prince in flight from the Manchu invaders granted the imperial surname to the richest of these merchants, hoping to rally him and his friends to the side of a Southern Ming Dynasty.

Fearing dilution of their power, such as it was, most of the meritocrats preferred to turn their coats, and go over to the rank and frowzy smelling Manchu barbarians.

The Manchus at least constituted a conquest aristocracy, if not a sacred aristocracy of the ancient type or a landowning aristocracy of Chinese as had been present from late antiquity into early modern times. Even a conquest aristocracy could stabilize the position of the meritocracy by guaranteeing a fixed template of merit to which men of merit could fit themselves.

Indeed, those meritocrats who turned their coats first might be in a position to exclude late-comers. Also, the Manchu aristocrats preferred to deal with meritocrats. Once you controlled their template of merit, you could easily control a meritocrat, whereas a foreign trader plutocrat could easily sail off to some foreign port if you overtaxed or overregulated him and had as many templates of merit as he had potential customers.

This return of an aristocratic component to China's ruling class by way of a deal made by the Chinese meritocracy with a foreign conquest aristocracy may or may not strike you as a sign of crisis or even of decadence. Perhaps it was just the normal dirty dealing to be expected from a pure meritocracy.

Or is the very existence of a purely meritocratic ruling class itself a sign of crisis? I tend to think so, but you may well not, particularly if you have ambitions of joining the equivalent class in our civilization.

C. The Evolving Vision of Heaven & the Crisis of the Second Stage of High Civilization

Spotting symptoms of the crisis of the second stage of high civilization is more difficult than spotting symptoms of the first stage's crisis. For one thing, the first stage and its crisis have long since been transcended for both our own and China's civilizations. Its errors are not necessarily our own, and hence we find it easier to acknowledge them. For another, both the Chinese and we are still enmeshed in the second stage crisis. Asking any of us to recognize its symptoms is like asking a fish to recognize the water that constitutes his universe.

We are as likely to identify symptoms of our crisis as signs of progress as to recognize them for the mortal threats they actually are. We therefore need additional clues and these are most conveniently provided by examining what happens to the vision of Heaven during the second stage of high civilization.

1. Buddhism Co-opts Confucianism, Daoism

Confucianism and Daoism had to discredit themselves during late Western Han and all through Eastern Han before a conceptual space opened up within the Chinese elite's mentality to receive Buddhism. Even so, Buddhism had to reckon with a lingering allegiance to Confucianism and the archaic religion of ancestor worship which lurked under it. This was especially true for the respectable commoners—the independent farmers and urban craftsmen and merchants—who still tended to imitate what their ruling class betters used to believe in. Similarly, many farmers and small town people, especially in the south and southwest, tended to retain a lingering belief in popular Daoist agrarian socialism. Even townsfolk still tended to hire Daoist magi to perform ceremonies involving cure of disease and fertility rituals.

Hence it was a practical necessity for Buddhism to try to co-opt these two ancient faiths as legitimate subsets of its own vision of Heaven. Confucius and his disciples down through the ages became at least Buddhist *lohan* (wise men) and Confucius himself and Lao Zi virtually became Bodhisattvas.

Nevertheless, the weight of the spiritual power remained Buddhist. Yang Jian (Emperor Wen), the founder of the Sui Dynasty advertised his legitimacy by calling himself the Chinese Asoka (the ancient founder of the Mauryan universal state of S. Asia and southwestern Asia). Of course to some extent, he was appeasing his Zone A soldiers and fanatically Buddhist Toba wife.

The Tang founder tried to give balanced support to all three visions, but he and his successors found themselves giving ever more patronage to Buddhism despite the complaints of Confucian officials. Most officials remained Confucians to function in office but became Buddhists to win salvation. A

Confucian/ Buddhist might also consult a popular Daoist magus if his wife was having trouble producing a son for him.

2. A Buddho-Confucian Balance

The reunification itself, no matter how phony the universal state it created, provided an institutional base for an accelerating Confucian revival. The very similarities between Daoism and Buddhism at both the popular and elite levels encouraged the Daoists to steal as much metaphysics and iconography as they needed from their Buddhist rivals.

Hence by late Tang we can see the two native faiths, to be sure influenced both negatively and positively by their foreign rival, converging toward it in degree of influence over Chinese souls. By Northern Song times it is clear that Buddhist-influenced Confucianism had returned to dominance over most of the ruling class, with a similarly Buddhist-influenced Daoism retaining its avocational role among them. The respectable non-ruling classes still tended to imitate their betters. They still did not yet have much of a stretch to do so.

The 12th century Southern Song synthesizer of Buddhist-influenced Confucianism, Zhu Xi, and his disciples attracted hundreds or thousands of respectable urban people to the chautauqua-style popular lectures to expound their ideas they put on in the suburbs of the great commercial cities of the south.

3. A Post-Confucian Vision of Earth

Possibly from Yuan times, but surely well before the end of Ming, a great gap began to grow between the rulers' visions of Heaven and those of the respectable non-rulers. Some at least of the mid-14th century southern rebellions against Mongol rule exhibit many of the millennialist traits of the popular Daoist rebellions at the end of both Western and Eastern Han. Like their Han predecessors' uprisings, these may have been stimulated by the alienation of the ruling class from the old native religions. This turned the masses loose to whore after strange new gods or exaggerated interpretations of old gods.

The pattern of late antiquity, when the followers of Xun Zi converted Confucius's and Mencius's anthropomorphic deity Tian into mere Nature was repeated. The Yuan and Ming men of merit purged the elements of Buddhist theology from Confucianism. They left behind merely a set of faction-feeding husks of a set of manuals for would-be exam-passers.

The Ming philosopher, Wang Yangming, attempted in the early 16th century to restore some of these Buddho-Daoist elements to Confucianism, but within a generation his disciples were being dismissed as "mad Chan (Zen) Buddhists," and the majority within the ruling class drifted into an a-theist husk of the old Confucian orthodoxy, turning the Chinese masses and (more importantly) the respectable non-rulers from whose ranks meritocrats could be drawn, loose to break down the legitimacy of the state and society created by the old Buddhist vision of Heaven.

The parallels between China since c. 400 AD, when the second stage of high civilization first came into being, evolved and eventually entered into crisis by the 16th century, with our Western Civilization's somewhat later stages of development from c. 1000 to 1500, and its vision of Heaven's fall into decadence since the Enlightenment in the 18th century can be discerned even from a Western Civ Survey level of historical knowledge.

D. The Ming Paradox at the Social & Economic Levels: Incipient Full Modernity, Crisis of Civilization or Both?

1. Education and the meritocracy

Because its meritocratic component was coming to so dominate the Ming ruling class, the process of fitting candidate meritocrats to the established template of merit took on greater importance. That, of course, revolved around the system of schools, since schools prepared men for the written civil service exams.

A public school system of sorts began in late Northern Song. For a time its graduates could avoid civil service exams, but such a system did not work out very well over the long run. Students in the upper level Northern Song schools became too disruptive. Their incessant disorder grew worse during Southern Song, when student riots backed one meritocratic faction or another or protested inadequate scholarship moneys. Some riots had no particular motive, and anticipated the issue-free conflicts which would come to dominate Ming politics.

Even during Southern Song times public schools were supplemented and then virtually replaced by a network of private academies—really universities called *shūyuàn* 書院 (literally book courtyards)—run by meritocrats associated with great philosophers like Zhu Xi and his rival Lu Jiuyuan. These academies formed the apex of a spontaneously efflorescing network of local, voluntarily financed village and neighborhood primary schools.

Each locality, or a rich local resident, hired the village schoolmaster. Usually he was some harmless drudge in the initial stages of studying for the civil service exams. Sometimes he was a poor wretch who had failed the examinations often enough to have given up altogether any hope of climbing the ladder of merit any higher. Like schoolmasters (and barbers) everywhere in early and fully modern societies, such men earned salaries roughly equal to the median wage.

This private system of local schools appears to have produced about a 50% male literacy rate in China's densely settled and commercialized eastern regions from Song through Ming and Qing times. Naturally, given East Asian male chauvinist proclivities, female literacy was much lower, running around 10%. The same relatively high male literacy rate seems to have held for Tokugawa Japan and for many places in Europe at a comparable (i.e. early modern and early industrial) stage of development.

Apparently an early industrial revolution tends to make it profitable for around 50% of the males to purchase

minimal literacy and numerous in and for use in the early industrial markets.

A full industrial revolution, even with its compulsory public schools, only raises the literacy rate from 50% male to around 75% male and female. This is only a modest improvement for men, though a considerable leap for women. The shift into a full industrial revolution also tends to insert a secondary level of education between the old primary and higher levels. I will (with some malice intended) hereafter refer to fully modern "higher" education as "tertiary education."

The Mongols' Yuan Dynasty abolished the *shuyuan* because they remained centers of potentially hostile native Chinese factional power. Restored by the Ming, the *shuyuan* soon became even more virulent centers of factionalism than they had been during Southern Song. Out of office meritocrats returned to their regional *shuyuan*, there to rally their forces for a comeback.

The *shuyuan* of Ming China in this respect resembled the state universities of 19th century Prussia or the state universities of post-Civil War America, which modeled themselves on the Prussian institutions. Just as the statist Prussian historian Treitschke could say that the faculty members of the University of Berlin in the 1880s were the "intellectual bodyguards of the House of Hohenzollern," somebody these days teaching at the Kennedy School of Government at Harvard University, could with equal plausibility claim that Harvard's Kennedy School of government faculty was the "intellectual bodyguard of the House of Kennedy." Perhaps, though, his sensibilities might be too delicate for him to be as forthright in his partisanship as was Treitschke.

So too could the faculties of the several important *shuyuan* of late Ming China say they were the intellectual bodyguards of the major factions in Ming Dynasty politics. As a consequence, they caused at least as much mischief for their cultures as have these two more recent Western corps of intellectual bodyguards.

Is China's development of meritocratic education a normal consequence of modernity? Since it parallels developments in America and Prussia (and other places in Europe), I think we can safely conclude that it is. If normal, is it a sign of crisis? I would not wish to do more here than raise this question. To answer it affirmatively, would be something too embarrassing for an American state university professor to do.

2. The lower classes and women

There is a peculiar late medieval and early modern Chinese social institution for which we have tantalizingly little evidence. Some, not a majority (though a significant minority) of the peasantry from late Tang times on may have been legally tied to the land in some way. Contemporaries used several terms for such people, and these are usually translated (usually by scholars under some Marxist intellectual influence) by the question-begging gloss "tenant-serf." At all times, most peasants were free tenants or small landholders. Perhaps because free tenants were the norm, nobody has satisfactorily explained the existence of tenant-serfs.

Chinese Marxists see these tenant-serfs as evidence for a vestigial Slave Society or Feudal Society still existing during late imperial times. Ideational determinists note that tenant-serfs only appeared well *after* the ancient Chinese feudal process ended. They became common at roughly the time of the onset of early industrialization. Hence they may merely have been China's rural "wage slaves" during the first stages of that early industrial revolution, people working on what amounted to horizontal factories—the commercialized farms and rural iron- smelting plantations of late Tang, Song, Ming and early Qing times.

For some reason, in the course of Ming times, the sources gradually refer to such people ever less frequently. By late Ming, they all but disappear from the record. The economic historian Mark Elvin argues that the skilled labor needed on Chinese farms producing for maturing early industrial markets could most efficiently be provided by families of fully free tenant sharecroppers. The Manchu conquerors also seem to have been unwilling to incur popular ill-will by enforcing fugitive tenant-serf laws.

For whatever reason(s), by the late 17th century, most peasants were entirely free, had the legal right to leave the land, sit for the civil service exams, and to marry whom and when they pleased. The resulting earlier average age of marriage may be one reason for the more rapid growth in population during and after late Ming.

In short, social mobility by then extended right down to nearly the bottom of the social hierarchy. That sounds quite modern. So too does the tendency for this social mobility to engender social insecurity. People feared falling down the ladder of merit and wealth as much as they displayed eagerness to clamber up that ladder.

This social insecurity shows up in a variety of forms. It is particularly conspicuous in the Ming and Qing literature of fantasy and social realism, which was read as much by the many more literate members of the middle classes as by the elite.

This nervousness also shows up in the greater frequency of popular rebellions. Even during peaceable times status anxiety affected both peasants and meritocrats. Most officeholders did not have ancestors who had been officials, and would have children and grandchildren who likely would not be officials either.

Was this good or bad? It rather resembles our own contemporary situation, at least in principle. Is our pervasive status anxiety good or bad? Is this a sign of modernity? Of crisis? Of both?

The changing status of women raises disturbing questions. The notorious custom of footbinding was originally a modestly exaggerated fashion in footwear of early Song times. It was hardly worse than our fashionable women's practice of wearing tight spike heel pumps.

By Ming times footbinding turned into something pathological. Girls of four or five would have their feet wrapped so tightly in yards of cloth strips as to crush the several dozen bones of their arches. Such crippled feet supposedly resembled lotus blossoms, a Buddhist sacred symbol.

By the time they grew up, women

were crippled for life, dependent on the support of the bandages that had injured them in the first place. Their hip-twitching walk and the brutally maimed small feet themselves were turned into complex sexual fetishes, the focus for male fantasies, both dippy and morbid.

The impulse toward social mobility spread footbinding from the upper classes all the way down to the masses. In some places, even the wives and daughters of poor peasants had their feet bound.

Can we account for this phenomenon without assuming some social pathology that ran deeper than mere social insecurity?

Even harder to account for are other signs of the decline in the status of females. Up through late Tang times, women of all classes could remarry legally and without loss of social approval. They could also own property in their own names, and even be recognized by the state as the formal heads of their families. From Song times on, however, women of the upper classes (though not always peasant or urban lower middle class women) lost all of these prerogatives.

Was this a consequence of the loss of access to real work for ruling class women in an increasingly urbanized early industrial society? Some social historians give us a similar argument to explain a supposed loss of status by elite women during the 19th century as Victorian England matured its full industrial revolution. So the Song and Ming early industrial revolutions might have had similar effects.

Was woman's fall also linked to the final working out of the full implications of the much earlier completion of the shift from matrilineality to patrilineality during the transition from early into high civilization? Could be.

Did ethnic Chinese become afraid of losing their women to what they called their "rank and frowzy smelling barbarian" conquerors? Were women being hidden away to secure them from Jurched, then from Mongol, and finally from Manchu rapists and concubine-takers from Zone A for 800 years? That could be too.

Late imperial era politics had sexual aspects. Manchu women were forbidden to bind their feet. Chinese men were forbidden sexual congress with Manchu women. But dalliance with Chinese women by Manchu men was tolerated.

Was repression of women one perverse way to assuage the status anxiety being suffered by all those nervous meritocratic Chinese males? Did it make these male wretches feel better to impose equivalent suffering on their women?

If so, why did the formerly so independent Chinese ruling class women hold still for such treatment? Was it because their families were no longer aristocratic and marriage politics had become subordinated to factional politics? Or were they just as neurotic as their meritocratic male relatives in a society drifting fitfully into crisis? That could be too, though I cannot say for sure.

3. The middle classes

How much in crisis were the middle classes? Middle class people were surely the most threatened by the social insecurity induced by possibilities of rapid social mobility. A merchant's son, if not the merchant himself, could move to the very top of the meritocracy, but he (or his son) could fall altogether out of the meritocracy equally fast. If they had spent their mercantile wealth in search of merit, they might fall into the lower classes.

What about the prospects for middle class upward social mobility by the plutocratic route? The meritocrats quickly closed down such possibilities by co-opting successful merchants into the ranks of the meritocracy. A merchant or artisan could directly buy only the lowest meritocratic rank for cold cash. More insidiously, he was tempted to use up much of his capital educating his sons to take the civil service exams.

The meritocrats also directly inhibited the development of markets, particularly overseas markets. The latter would have been the quickest route to plutocratic status because of the independence they conferred on merchants.

4. Signs of crisis and its transcendence at the economic level during Ming

a. an aborted Age of Exploration

At the beginning of Ming, trade with Southeast and South Asia resumed. It had been cut off when Mongol attempts to invade Japan, Vietnam and Borneo resulted in the loss of most of the Song merchant marine. The early Ming rulers went beyond Song practice. Like European rulers a bit later, they added overseas exploration and conquest to their menu of favored state activities.

The seven voyages commanded by the court eunuch Zheng He (pr. Heh), 1407-31, under the auspices of the third Ming ruler, the Yongle Emperor, reduced much of insular and peninsular Southeast Asia to tributary status. Zheng also showed the flag as far as India and even the east coast of Africa. But after Zheng died, the meritocrats ganged up on the remaining would-be overseas explorers and conquerors. They decided that China was not going to do that sort of thing any more. They literally hid Zheng's records when a later emperor showed signs of wanting to renew these expeditions.

There was a time when such behavior would have struck Westerners as astonishing and even decadent. It would be as though a few years after Zheng He's death, during the second quarter of the 15th century, Prince Henry the Navigator of Portugal had suddenly decided to call off Europe's Age of Exploration. Suppose Henry had stopped sending voyages of exploration down the west coast of Africa, and that Portuguese officials later prevented the resumption of such voyages. Portuguese navigators would never have sailed around the Cape of Good Hope to India and China. The whole Age of Exploration would have been canceled.

Of course that did not happen. But even if Portugal had behaved like China, Spain, Holland and England were waiting in line to take its place. Unlike Ming China, a single unitary state did not rule post-Roman Empire Europe.

Zheng He got as far as East Africa. With the technology at his disposal, he could have sailed around the Cape all the way to Portugal. If the Chinese had kept sending out such expeditions after

Zheng's death, a generation later some Chinese admiral could well have sailed into Lisbon harbor.

That did not happen because envy-ridden Chinese meritocrats stopped it. Yet so powerful was the impression made by the Chinese, that when in the 1490s Vasco Da Gama, coming from the other direction, hit Calicut on the southern tip of India, even though he behaved very badly, the overwhelmingly more numerous locals put up with him. This fellow, they thought, might well be coming from China as Zheng He's successor.

Though they no longer had the backing of their state after the 1430s, Chinese merchants continued to trade overseas. Their lack of political backing merely meant that they had to eventually subordinate themselves to European merchants who did enjoy such backing from the European governments. Such subordination to Europeans was easier to take for Chinese merchants since they also suffered from lower social status back in China than their wealth and contributions to the spread of civilization would otherwise have entitled them.

Eventually, by the end of the 16th century, Ming officials had to relegalize foreign trade because they needed the tax revenues such trade yielded. At long last, though only when on its way out, the Ming Dynasty began to turn the leading practitioners of foreign trade into the plutocratic sector of its ruling class.

Contemporary Chinese meritocrats rated this reconciliation with the merchants as a sign of decadence—i.e. what I might call part of the crisis of civilization. But was that the case? Might it not also be interpreted as a premature (and, as it turned out, abortive) move toward achieving the social arrangements of a third stage of high civilization—one whose ruling class was perhaps destined to become predominantly plutocratic?

b. foreign trade

What had begun during ancient times with the opening of the Central Asian silk routes, and then expanded during medieval times through use of the "ship of the desert," the camel, had at last by Ming times metamorphosed into a massive seaborne program of exploration and trade. If China was not destined to bully the people of the rest of the world into multilateral free trade, it would be some of the Europeans who would do so. Was (is) this phenomenon of international trade one aspect of the crisis of civilization?

For someone with my convictions to call foreign trade a symptom of some sort of social disease (however metaphysically defined) would be to betray my most cherished principles. Yet I must concede that modern times is both the period of crisis of civilization and the time when at long last foreign trade came fully into its own. Since there is at least this temporal link between foreign trade and the crisis of civilization, we must consider the possibility that the two are also linked causally.

The presence of such a temporal link does not in itself prove that free trade is one aspect of the disease of modernity, but a case can be made for this position. Foreign trade brings in novelties which create an Earth too complicated for the culture's own old view of Heaven to explain. These novelties may also alienate people from the native aspects of their culture.

It may also be, however, that the new ideas trade brings in can also eventually help to create a new image of Heaven to govern the next stage of civilization. After all, Buddhism first came into China as a consequence of trade across Zone A.

Foreign trade also played a perhaps non-decadent role over the short run during late Ming. The overseas merchants finally got around the meritocrats who for two centuries had tried to stop trade and thereby keep China in unwholesome isolation and in thrall to themselves.

The Chinese meritocrats of the mid-15th century took something which on its face was perfectly innocuous—genuine economic exchange with foreigners—and redefined it as piracy. They could not even claim they were protecting Chinese culture from contamination, since the corrupt wing of the meritocracy quickly began to take bribes—"side payments" if you prefer a social science euphemism—in order to allow people to continue to perform this illegal activity.

Eventually, however, pressure to make this activity legal again proved overwhelming. The late Ming state needed additional tax revenues and almost everybody else by the 16th century wanted out from under the Ming Dynasty's long since turned rotten paper money system.

c. foreign trade and monetary reform

Government-issued paper money was a Chinese invention that first became common in China during Southern Song times. The contemporary Jin Dynasty in the north almost completely replaced copper coins with fiat paper notes. Yuan used a similar totally fiat paper money system all over China.

The Ming system resembled the Jin and Yuan ones. Ming did not even bother making many copper coins during its first century and a half. The monetary authorities feared these might interfere with the circulation of their unbacked paper money, somewhat cynically labeled "Great Ming Treasure Certificate." These notes were not a very great treasure. Like Song and Yuan period paper moneys, they were just pieces of paper made from mulberry bark, printed well enough, but just fiat money, with no backing at all.

Most private merchants (except for those privileged few who got each new issue first, before it depreciated) hated Treasure Certificates, because they caused endemic inflation. Such money could barely serve as a *numeraire*—the *marker* of value. It was no use at all as a store of value or even as a *numeraire* over long periods of time.

The Ming merchants came to prefer silver as high-denomination money. It was much more stable in value than paper. There had been a trend toward full monetization of silver ever since the Tang Dynasty. It was tough, however, to get enough silver in China to allow people to abandon other forms of money, bad though these might be. Low intrinsic value copper coins and iron coins were bad enough. Paper money was even worse, but there seemed to be no avoiding it, if only because China did not produce enough silver and could not acquire enough more through trade.

Japan eventually produced a fair amount of silver. So did Western Asia. But overland trade in that metal was difficult. Silver is heavy. It costs something to mine it and even to bring it over the waters from Japan, and quite a bit more to do so on the back of a camel all the way from the eastern Mediterranean.

The gold-silver exchange ratio in Japan was sometimes perverse, so that it actually paid to export silver from China because you could get more gold in exchange for a given quantity of silver in Japan than you could in China.

But then came the discovery of the New World by Spain and Portugal. The Iberians stole enormous amounts of silver from the Aztecs and Incas and mined still more of it with what amounted to slave labor. Silver came in a flood out of Mexico and Peru. It flowed either into the Spanish colony in the Philippines, where Chinese merchants took it in exchange for Chinese goods, or to Spain itself. There the other European powers snookered it out of the hands of the Spanish via trade or piracy. They then also shipped it off to China to exchange for Chinese goods.

Chinese goods were always attractive to Europeans, but now they were in very wide demand. Perhaps this was because they were directly and easily available for the first time once the sea routes to Asia had been opened, and the Europeans had acquired lots of New World silver. Consequently, lots of Chinese merchants came to the Philippines and elsewhere in Southeast Asia to serve as intermediaries in this trade, even while it was still illegal for Chinese to engage in it.

The pressures to engage in such trade were irresistible on both sides. The Chinese merchants wanted the silver at least as much as the Europeans wanted Chinese goods. Chinese goods were, by hook or by crook, exported to entrepots like Manila or to the several Chinese-dominated trading cities on the Straits of Malacca. At these places such goods were exchanged for New World silver brought by the Europeans. The Chinese merchants shipped vast amounts of this silver back home to China after the mid-16th century.

By the latter part of the 16th century, the Chinese were getting their hands on so much silver that the men of their markets at home could reject government paper money outright and permanently (until this century, at least). No longer treated as money by the markets, government printed paper notes simply stopped being money. Well before the end of the 16th century, the Chinese government itself was no longer accepting its own paper notes for payment of taxes. The Ming meritocracy had paid for its abortive attempt to restrict foreign trade with loss of control of both that trade and of the money supply at home.

With the disappearance of public fiat money during Ming times, we may score one for Society in the ongoing war between State and Society in China, and perhaps in our contemporary society as well. The next time some neoclassical economist tells you that gold is a "barbarous" metal, and that "progress" from metal to paper money is both inevitable irreversible, I suggest you tell him the story of the wholesome role played by foreign trade in the fall of the Ming Dynasty's fiat paper money. This, at least is evidence of transcendence of the forces leading to crisis of civilization.

d. domestic trade

Though Chinese merchants engaged in foreign trade with our fellow Westerners tend to attract our attention first, that much larger proportion of the Chinese middle class engaged in internal trade was much more important quantitatively. They too escaped from the grasp of the state during the Ming period, doing so even sooner and more thoroughly than did the overseas merchants.

The domestic market of early industrial China was by no means helpless in its attempts to evade the state's interventions. The medieval Chinese type of commercial city, called the *zhēn* 鎮, "just growed," like Topsy, during its long and mostly unrecorded history during the centuries of disunity after the disintegration of Han. Such towns grew up spontaneously around Buddhist temples, or inns, or athwart crossroads, or near river fords.

Any modern city that began this way is easy to spot, even from a tourist map, or when you fly over it. Few of its streets are parallel to or at right angles to each other. A formal administrative city is laid out like a checkerboard (or rather a Chinese chessboard, with one square, enclosing the administrative precincts on the north side, inside another larger square).

The external wall of a *zhen* (or the wide beltway avenue which in recent times usually replaces the wall) is also irregular in shape, a vestige of the attempts by the bureaucracy of late Tang and Song times to finally get this weed-like urban growth under control. *Zhen* means "protected town." The men of merit tried to put walls around such "just growed" cities, not merely to keep bandits out, but so they could put gates in the wall, and levy "gate taxes" (*guānshuî* 關稅)—i.e. excise taxes—on the goods coming in and out through them.

During Ming times, such new commercial cities continued to pop up, unbidden, like mushrooms. The most notable of these was Hankow, midway up the Yangtze River. Sometime during the middle years of Ming it oozed into existence as a collection of tax-avoiding warehouses spontaneously thrown up atop the mudflats near the mouth of the Han River, unnoticed by the meritocrats holed up in the nearby walled administrative city, Wuchang.

During Qing, Hankow became the great entrepot of domestic trade, playing a role analogous to that of Chicago in the United States (with the Yangzi acting like the Mississippi, rotated ninety degrees).

Hankow's exfoliation as the entrepot of domestic trade during the 17th and 18th centuries prefigured the enormous growth of Shanghai as the great entrepot of foreign trade during the 19th and 20th centuries. Both were commercial cities which succeeded, at least for a time, in growing outside the grasp of the Chinese state.

Hankow's chief importance was its role as the main supra-regional "hub" in the elaborate hub and spoke network of transportation routes that had been growing at least since late Tang and Song times.

A hub and spoke pattern is the most economical pattern for transportation

routes to take. Small "spokes" feed goods into small local "hubs." Each of these hubs in turn generates a spoke leading to a larger regional hub, and so on up to a few supra-regional hubs.

The hub and spoke pattern merely assures maximum loads for whatever vehicles use their spokes. Each spoke leading out from a lower level hub to a higher one combines goods from the several spokes that led into that lesser hub. This logic makes a hub and spoke pattern potentially universal in its application.

These "spokes" are merely routes. The actual means of transportation could be West African women carrying baskets on their heads, Chinese coolies pushing wheel-barrows or towing canal barges, industrial age men running steam river boats, railroads or even Federal Express Boeing 747s flying into and out of their firm's Nashville hub. The first time I saw the hub and spoke pattern on an airline map in the early 1980s under the new deregulated arrangements, I exclaimed, "Gee, that looks like a roadmap of North and Central China since Song times!"

e. decapitalization in cotton, iron & canals

The hub and spoke transportation pattern contributed to the newly developing cotton trade of Ming China. Cotton is more comfortable than linen or hemp, but requires more labor to grow and process. Fortunately, virtually every housewife owned a simple spinning apparatus and loom and was willing (or obliged to) work cheap. These machines allowed her to produce homespun materials for her own family's use, or thread or cloth for sale.

If the price of spun cotton thread went high enough, a housewife would postpone her chores and spend an hour or so to walk (or if she had bound feet have her husband ride her on his wheel barrow) to a nearby local hub. There she would buy some raw cotton or thread, take it home, spin or weave it, bring it back to that hub, and sell it. The cotton might then go to another local hub to be processed further.

Unlike the later English "putting out" (like our "contracting out") system, the Chinese system for cotton did not require any merchant to "put out" or advance capital to subcontractors to further production. Easy access to markets allowed individual Chinese workers to buy their own raw material as needed, and then process it on simple machinery they already owned, then sell it to some local hub broker. (Something more nearly like putting out was sometimes employed in the silk business, which required more elaborate and expensive machinery.)

Though efficient, such arrangements postponed China's going over to a factory system for cotton even though water-powered multi-spindle spinning machines had been invented by late Song times. Chinese had no incentive to do what English putting-out merchants did in the 18th century when they responded to increased demand by financing centralized factories using large machines which dramatically cut their cost of production and raised their profits.

So long as extra housewife labor remained available, the Chinese hub and spoke system could efficiently deliver raw and semi-finished materials to those housewives "just on time," and produce massive amounts of thread and cloth cheaply, without factories. Mark Elvin calls this a "high level equilibrium trap."

It was not until the last years of the 19th century that full industrial age cotton spinning mills finally reached China, over 125 years after the English began employing them and just under a century after the Belgians and the Americans began following the English lead. Some would consider this lag a serious sign of Chinese economic decadence, but from the perspective of the 800 year long early industrialization, 125 years may not seem so big a lag.

The Chinese also abandoned the coking process in the manufacture of cast iron during Southern Song. Coke is charcoal made from soft coal rather than from trees. The Chinese apparently invented it during Northern Song because they were running out of timber in the main iron mining and smelting area, near the capital, Kaifeng, in the fulcrum subzone.

During Southern Song, the iron-producing area near Kaifeng became a hotly contested border zone between Song and the Ruzhen conquest dynasty of Jin. Iron manufacture there quickly faded out.

By Ming times the center of the iron industry had shifted south and east into the still heavily forested parts of C3, so wood charcoal could replace coke made from coal.

Iron manufacture was probably not restored near Kaifeng after Ming reunified the empire because cooking wood into charcoal in C3 was cheaper than mining coal and cooking it into coke near the fulcrum subzone. This was not necessarily a sign of economic decadence.

Something similar happened on the shores of the Atlantic. During most of the 18th century, it was cheaper to produce cast iron near the coast of Pennsylvania and Virginia, using charcoal made from oak trees (which had to be chopped down anyway to make room for farms) than in England, even after some west country ironmongers had independently reinvented the coking process. "Blooms" of cast iron could be shipped to England at virtually no cost as ballast at the bottom of shipments of tobacco.

The economics of this situation are very close to the situation in China during Ming and early Qing times. In both cases, given the presence of trees near tide water, and the necessity to chop those trees down anyway to make room for other human activities as population grew, it was temporarily cheaper to revert to the earlier technology.

A more serious sign of economic decadence involved interregional canals. The first interregional canals of Sui times used tree-trunk rollers on inclined planes up which laborers would pull barges from one level to another. These were replaced by double canal locks during Song.

In the course of Ming and early Qing, the government chose not keep up repairs on double canal locks. Instead, it gradually reverted to back to the use of inclined planes to move barges from one level of the Grand Canal to another. This in turn required use of smaller and so less economical barges, and the employment of necessarily cheaper (because less productive) labor to haul barges up these inclined planes.

Was this a sign that the men of the market were not saving enough to maintain the capital structure of the canal network? Maybe not. The Grand Canal was owned and maintained by the government. So even if this decline of the canal system is a sign of decadence, it may be more a matter of decadence at the level of the state than at the level of the market. Commercial cargoes (as opposed to tax grain) seem to have preferred to use the coastal sea route whenever the government did not ban high seas transport and subsidize the canals.

Contemporaries among European visitors to China, including merchants, did not characterize either the Chinese state or society as decadent much before the last years of the 18th century, some 150 years after the fall of Ming.

Though the state lost its good reputation after the 1790s, the Chinese merchants continued to inspire the confidence of Western merchants all through the bad times of the 19th century, a time when many aspects of Chinese culture once admired often became the objects of Western contempt. Even then, Western businessmen remained inclined to accept Chinese businessmen as being their equals in entrepreneurial skills and boldness.

At worst, China was only delayed by a century or so in moving beyond the early into the full industrial revolution, either by accident or by civilizational crisis primarily affecting state and meritocracy. By the 1880s, the men of the Chinese market broke these political and social constraints and began to move rapidly toward the threshold of full industrialization.