2 An End to Growth, 600–800

The Creation of a New Political Structure

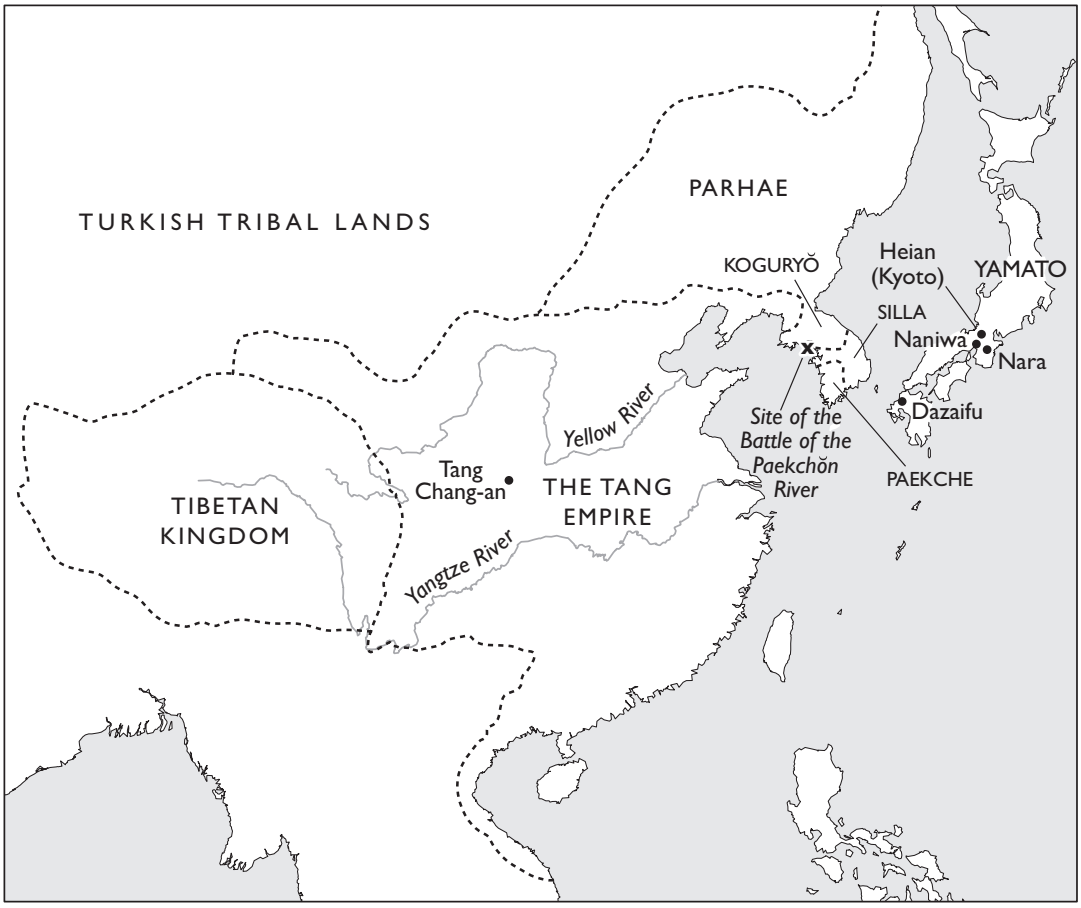
A Looming East Asian Crisis

In 589, Yang Jian, a general of mixed Chinese and nomadic blood, reunited the Chinese empire and the diplomatic situation in East Asia changed overnight. For the last 350 years, China had been divided between nomadic dynasties in the northern China plain and Han Chinese kingdoms based in the south. It mattered that Yang, who named his new dynasty the Sui (589–618), was from northern China because, during the centuries of disunity and strife, his land had suffered continuous upheaval from nomadic incursions, bouts with lethal epidemics, and refugees fleeing to the south seeking a better life.

For these reasons, Yang adopted an aggressive foreign policy designed to pacify the borders and keep China's enemies at bay. In the south, the Sui reestablished control over Viet Nam; to the west, they conquered a mixed nomadic-Tibetan state; to the north, they forced troublesome Turkish peoples to acknowledge their suzerainty. Unfortunately for the Yang clan, Jian's son carried these aggressive policies too far when he tried repeatedly to conquer the stubborn northern Korean state of Koguryŏ in the early seventh century. Giant Chinese armies were so badly mauled that the empire disintegrated and the emperor was assassinated.

There followed a short struggle for power, but once again a general of mixed Chinese and nomadic ethnicity from northern China, Li Shi-min (later the second Emperor Taizong), won; he founded the Tang dynasty (618–907). In many respects, Li followed the policies of the preceding Sui dynasty, including its aggressive, expansionist foreign policy. Eventually, the Tang ruled an immense territory ranging from southern Siberia to Southeast Asia and from the Pacific Ocean to northern India.

News of Chinese reunification and expansionist foreign policy reached the ears of the leaders of the Korean and Yamato monarchies and caused consternation in those squabbling kingdoms. Battles among Koguryŏ, Silla, and Paekche



East Asia during the Seventh Century

had continued during the late sixth and early seventh centuries, with the Yamato court frequently intervening on the side of Paekche and against Silla. What if the Tang decided to invade Korea, too? To forestall attacks previously, the Korean and Japanese states had sent missions to the Sui capital, but, while the Korean states acknowledged Chinese suzerainty, the Yamato ambassadors of 607–608 accepted no titles and insulted the Sui court by claiming equality as "the land where the sun rises."[1]

In 631, Taizong decided to resume the Sui policy of attacking the warlike state of Koguryŏ by sending an expedition to gather the bones of Chinese troops who had perished during earlier campaigns. Tang soldiers also pillaged Koguryŏ villages, throwing that kingdom into an uproar. The presence of massive Chinese armies on Koguryŏ soil also profoundly affected the political outlook in Paekche, Silla, and Yamato. When the Tang assaulted Koguryŏ again in 641, the elites in Paekche, Koguryŏ, Yamato, and Silla panicked. Between 641 and 647, militaristic, centralizing coups rocked each kingdom, as conspirators hoped to assemble the resources and troops necessary to fend off the coming Tang invasion.

In Japan, what is known as the Taika Reform took place in 645, concentrating leadership in the hands of a coterie of disenchanted royals (Princes Naka and Karu) and nobles (Nakatomi, later Fujiwara, no Kamatari). After killing off the Soga before the eyes of a startled monarch during a banquet, the rebels announced their intentions to take control of all the land and human resources of the islands, using institutions modeled after successful Chinese precedents. In other words, the best way to repel the Chinese was to copy their advanced political system and use it against them. Members of the cabal moved immediately to secure all weapons and arsenals, especially in the Kanto, home to the majority of mounted fighters. For the next fifteen years, the leaders of the Taika palace revolution struggled to play local leaders off against each other so as to concentrate power in their own hands.

The conflict in Korea, however, kept forcing its attention on the Taika leaders. After all, Paekche was a Yamato ally and a source of invaluable materials, ideas, and immigrants. Between 621 and 650, Yamato's long-time enemy, Silla, sent envoys to the Tang court, and eventually the two cemented an alliance. Tang wanted the accord because its direct assaults on Koguryŏ were proving no more effective than those of the Sui, and the court needed an ally located at Koguryŏ's rear. Finally, Tang and Silla decided that the best way to destroy Koguryŏ was to first conquer Paekche, a feat accomplished in 660 with an army of more than one hundred thousand. Most of the Paekche royal house fell into the hands of the alliance, but some escaped to Japan.

Beginning in 661, the Yamato court sent flotillas of small vessels to join Paekche guerillas fighting to revive their fortunes. By 663, more than twenty-five thousand Yamato troops were on erstwhile Paekche soil. At this time, a Yamato embassy was visiting the Tang court, but Taizong decreed that he had "determined . . . to take administrative measures in regard to the lands east of the sea, and you, visitors from Wa, may not return."[2] The envoys were locked in prison for months to prevent them from giving away Taizong's plans. Later that year, the Tang navy and Silla army crushed the Yamato troops and Paekche partisans at the Battle of the Paekch'ŏn River. It was one of the most decisive engagements in Japanese history.

Prince Naka and his supporters were now faced with a true emergency. Naka ascended the throne as the monarch Tenji and ordered beacons and Korean-style mountain fortifications erected from northern Kyushu, up the Inland Sea, to the Kinai. He withdrew his court to Ōtsu, guarded by mountains and safer from the looming threat. Meanwhile, the Tang-Silla alliance advanced from victory to victory, smashing Koguryŏ in 668. It is amazing that, although Tenji's centralizing policies had met resistance from the beginning and he was now branded as a loser for the defeat in Korea, he managed to reform the bureaucracy and attempted to implement a census in 670.

When Tenji died in 671, he was unpopular with most local notables because they had lost men in Korea. He pressed his son Prince Ōtomo to succeed him, but Tenji's brother, Prince Ōama, secluded in the Yoshino Mountains to the south, had other ideas. In a brief civil war, Ōama routed his nephew and took the title of Tenmu, "the Heavenly Warrior Emperor" (*tennō*). Born in 631, Tenmu had witnessed the Taika coup as a boy and the Battle of the Paekch'ŏn River as a youth. He knew that to resist an invasion he had to have a strong, stable government capable of calling on the material and human resources of the entire archipelago. If Tenmu needed any further persuasion, Silla, which had implemented modified Chinese institutions, unified the peninsula, and then terminated its alliance with the Tang and chased the Chinese armies out of Korea. Fear of invasion consumed the Japanese court for several decades, and relations with Silla (668–935) were hostile for most of the 700s.

A New Political Structure

Holding unprecedented power as the charismatic victor in a civil war, Tenmu set about centralizing and militarizing his government. He established a new system based on Chinese guidelines for ranking, appointing, promoting, and dismissing members of the old service nobility. Tenmu also abolished and then reorganized the independent economic bases (*be*) of the service nobility so that government officials intervened between wellborn aristocrats and the land and people from which they collected labor and materials. He prevailed over intransigent local notables by playing them against each other and subdividing their jurisdictions with more loyal lieutenants. In 600, there had been one hundred twenty members of a Yamato confederacy; by 700 there were five hundred fifty ranked local officials serving the court. Militarily, Tenmu shipped soldiers to northern Kyushu to resist any invasion.

The "Heavenly Warrior" sovereign died in 686, but his consort Jitō and grandson Monmu helped finish what Tenmu had started. Commencing in 690 under Jitō (r. 686–697), the court implemented its first set of civil statutes written in Chinese. She then carried out a comprehensive registration of the population to draft soldiers and collect revenues. To symbolize the new polity, Jitō finished Japan's first Chinese-style capital built at Fujiwara, due south of Nara (694–710).

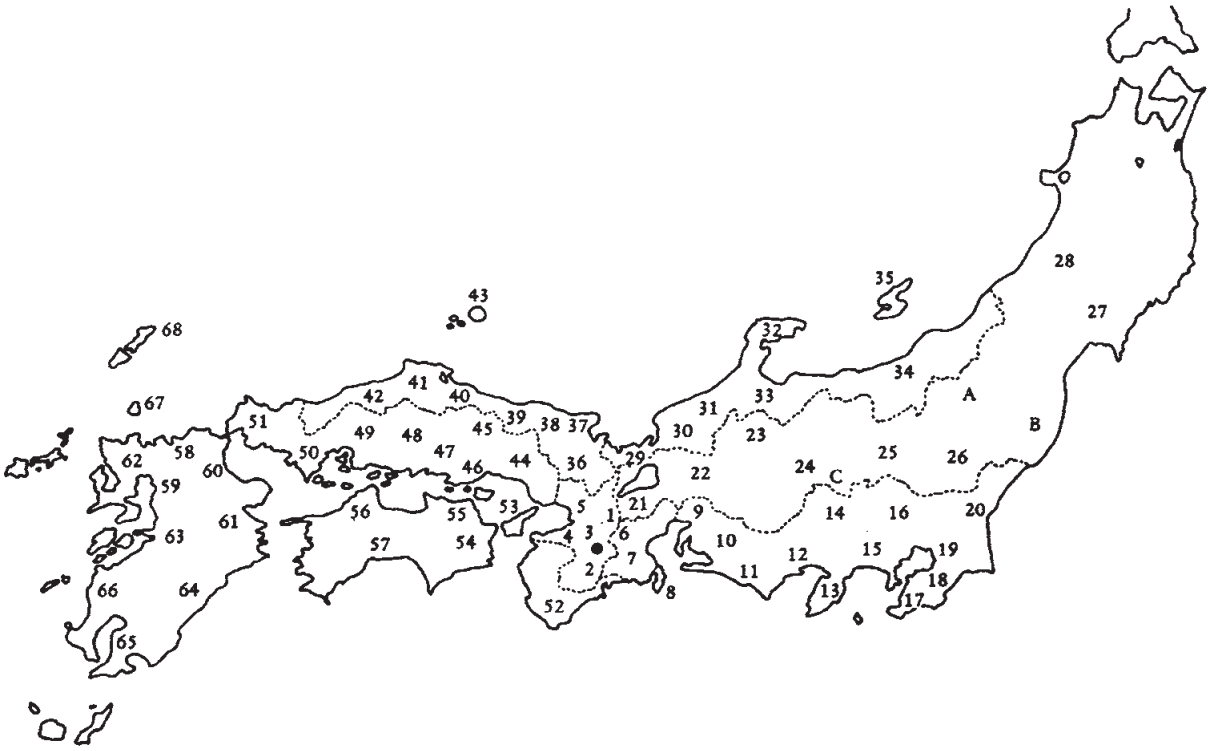
Monmu (r. 697–707) built upon this legacy. He ordered the compilation of the court's first comprehensive set of penal and civil statutes, the Taihō Code of 701, which defined in elegant Chinese the structure, functions, and rituals of the new state. By 710, the court had begun to execute Monmu's plans for a new capital at Nara. Together, the Taihō Code and Nara were the crowning achievements of the new Chinese-style polity.

At the apex of the new government was the Heavenly Sovereign, a sage-king legitimized by the ruler's supposed divine ancestry and Daoist and other theories adopted from China. He was the main actor in a "theater state," implementing courtly rituals for all occasions. A large court bureaucracy numbering seven to ten thousand supported the Heavenly Sovereign, with the Taihō Code stipulating the terms of official employment. The elite of the bureaucracy held the First through the Fifth Court ranks and formed the Council of State advising the sovereign. Almost all officials came to their rank and post through their bloodlines, not by examination.

There were two tiers of local administration: provincial government and district magistracy. Governors oversaw about sixty provinces and were appointed from among the capital aristocracy for four-year terms. While their powers were broad in the abstract, the real kingpins in the local regions were the district magistrates, born and raised in the territory they administered. To co-opt former notables into serving the capital elite, the court granted each several perquisites, such as lifetime tenure, a large parcel of land, and the ability to pass their positions down to an heir. Moreover, their relatives held the chief religious and military posts in each district. In essence, the new polity ratified an alliance between capital aristocrats and local magnates. Without the cooperation of these district magistrates, administration of the countryside was nearly impossible.

To finance the government, the authors of the Taihō Code modified three interrelated Chinese institutions. Officials registered the populace at a fixed residence every six years in a census, granted a minimal area of rice paddies to sustain them for life, and then extracted poll taxes from adult males. The adoption of these three linked institutions was no accident but was drawn from the experiences of the dynasties reigning in north China, where war, disease, and out-migration had made it difficult to locate and tax peasants and other producers. Japanese rulers also struggled to pin down a mobile and often uncooperative populace, and so the new institutions made perfect sense.

This system functioned relatively well until the early ninth century. Between 702, when the Taihō Code was implemented, and 729, strong sovereigns and their relatives were in control of the court. The symbol of the new Chinese-style state was the system of dual capitals located at Nara and the old port of Naniwa. The Tenpyō era (729–749) witnessed the ascendancy of Heavenly Sovereign Shōmu and his Fujiwara consort Kōmyō; their reign was rocked by a severe epidemic and rebellion in Kyushu. Following these disasters, the court desperately tried to encourage agriculture, tightened restraints on migration, and reformed provincial finances. At the same time, they poured even more tax revenues into Buddhist projects such as the grand temple Tōdaiji, petitioning the Buddha to protect their realm. Between 749 and 769, factionalism and strife wracked the court, as it spent



The Provinces of Eighth-Century Japan: *Source:* William Wayne Farris, *Population, Disease, and Land in Early Japan, 645-900,* Harvard Yenching Institute Monograph Series, 24 (Cambridge, Mass.: Harvard University, Council on East Asian Studies, 1985), pp. xvii–xix. Copyright 1985 by the President and Fellows of Harvard College.

KEY:

Kinai:
1. Yamashiro
2. Yamato
3. Kawachi
4. Izumi
5. Settsu

Tōkaidō:
6. Iga
7. Ise
8. Shima
9. Owari
10. Mikawa
11. Tōtōmi
12. Suruga
13. Izu
14. Kai
15. Sagami
16. Musashi
17. Awa
18. Kazusa
19. Shimōsa
20. Hitachi

Tōsandō:
21. Ōmi
22. Mino
23. Hida
24. Shinano
25. Kōzuke
26. Shimotsuke
27. Mutsu
28. Dewa

Hokurikudō:
29. Wakasa
30. Echizen
31. Kaga
32. Noto
33. Etchū
34. Echigo
35. Sado

San'indō:
36. Tanba
37. Tango
38. Tajima
39. Inaba
40. Hōki
41. Izumo
42. Iwami
43. Oki

San'yōdō
44. Harima
45. Mimasaka
46. Bizen
47. Bitchū
48. Bingo
49. Aki
50. Suō
51. Nagato

Nankaidō:
52. Kii
53. Awaji
54. Awa
55. Sanuki
56. Iyo
57. Tosa

Saikaidō:
58. Chikuzen
59. Chikugo
60. Buzen
61. Bungo
62. Hizen
63. Higo
64. Hyūga
65. Ōsumi
66. Satsuma

Islands:
67. Iki
68. Tsushima

A. Iwashiro
B. Iwaki
C. Suwa

more and more resources on Buddhist and other projects. From 770 until 805, reform and retrenchment were the order of the day. The Heavenly Sovereign Kanmu (r. 782–805) was so ambitious that he tried to construct two new capitals, first Nagaoka and then Heian, and launched mammoth expeditions against the residents (*emishi*) of northern Honshu. Mostly as a result of Kanmu's policies, in 805 the central government in effect declared bankruptcy. The days of untrammeled growth were over.

Population and Economy

Population

Between 600 and about 730, Japan's population continued to expand, reaching a high of about 6.4 million. Most people lived in western Japan, concentrated from northern Kyushu along the Inland Sea to the particularly densely settled Kinai. Central and eastern Honshu was more sparsely populated, and for most of this period the northern half of Honshu was beyond court control. At 6.4 million, the Japanese archipelago joined its Asian neighbors China and India as one of most populous areas in the world, easily supporting more people than any medieval European state.

It would be a mistake to think of the archipelago's inhabitants as belonging to a homogeneous ethnic group. Even in western and central Japan, there was undoubtedly considerable variation, although most people probably derived their ancestry from the Wa or Yamato peoples. At least a third were descendants of Korean immigrants. In southern Kyushu, non-Yamato peoples known as the Hayato and Kumaso resided; they may have been remnants of the old Jōmon stock or of Southeast Asian ancestry. In northeastern Japan and Hokkaido, another non-Yamato group, the *emishi,* predominated, giving the Nara court all it could handle in wars fought between 774 and 812. The *emishi* may have been the ancestors of the modern Ainu; skeletons unearthed from Hokkaido for this period are more like the Ainu than the Yamato. The *emishi* were excellent equestrians, and many lived by the old Jōmon livelihoods of fishing, gathering, and hunting as well as agriculture, but they also knew of iron and stoneware.

Eighth-century Japan was still an overwhelmingly rural place. There were three major urban centers in the 700s: Nara, its port/co-capital Naniwa, and Dazaifu in northern Kyushu. Nara was home to an estimated seventy to one hundred thousand, with Naniwa and Dazaifu adding perhaps another fifty thousand.[3] In addition, each of the sixty-odd provincial capitals housed about six hundred officials and other occupants. Numbering about two hundred thousand, urban-

ites amounted to about three percent of the total population. Small though they may seem to us today, these cities played a crucial role in both demographic and economic trends. They provided fertile breeding grounds for microbes and also spurred commerce, with large numbers of consumers. Cities also drew many migrants from the countryside.

Census data from northern Kyushu and central Honshu permit computation of the vital statistics of residents of those areas. Birth rates were very high, meaning that women must have spent much of their time either pregnant or bearing children. Birthing and menstruation were secretive experiences usually taking place in a parturition hut to conceal the woman from prying male eyes. Life expectancy was about twenty-five at birth, mostly because infant mortality for those aged five and under was fifty to sixty percent. Miscarriages and stillbirths were common, and malnutrition and diseases such as dysentery undoubtedly carried away many young. Those who survived infancy could expect to live to about age forty. Such vital statistics may be difficult for modern people to comprehend, but they are in line with the general experience of most ancient and medieval societies: frequent births, high infant mortality rates, and short life spans. For comparison, people living a thousand years later in the Tokugawa era (1600–1868) could expect to survive only to about forty, and Europeans during the Renaissance to ages thirty to thirty-five.

Commencing around 730, however, the dramatic demographic increase that had lasted for sixteen hundred years came to a halt. The population trend shifted from growth to stasis for several reasons. First, immigration from the Asian continent slowed to a trickle. With the end to civil strife in China and Korea and the formation of stable regimes there, continentals had less reason to come to Japan. Instead of relying upon the skills of immigrants, the Japanese court now sent missions to China and Korea to learn the latest in technology and culture.

More significant than the end to immigration was the combination of forces driving the death rate up and the birth rate down. The most lethal of these was epidemic disease, devastating Japan as part of a wider East Asian pandemic. To elaborate, microorganisms have always accompanied humanity, but the types of contagious infections spread by contact between the sick and groups of susceptibles have a relatively recent history, because they require a certain number of hosts for the pathogen to thrive. Infectious diseases were not consistently recorded until the rise of densely populated, civilized states—specifically, the Roman Empire in the Mediterranean and the Later Han dynasty (25–220 CE) in China. Each region sustained its own unique pool of diseases until around the first century CE, when Rome and the Later Han began to trade and communicate along the Silk Roads. Because contact was haphazard, it was not until the second century CE that both Rome and the Later Han dynasties began to exchange disease agents with each

other and suffer from epidemic outbreaks that "took a ferocious toll in human lives."[4]

One cause for the collapse of the Later Han dynasty was disease, as a particularly harsh plague raged during 161–162 CE. Later, in 317, Chinese histories noted the first outbreak of humanity's most lethal nemesis, smallpox. Little did the Chinese know that these epidemics would start a period of depopulation and then stasis lasting until the fall of the Tang in 907. Today these infections—smallpox, measles, dysentery, influenza, the mumps, and possibly the plague—have been largely tamed thanks to modern medicine. For these ancient Chinese encountering the pathogens for the first time without immunity, however, the effect was disastrous, and because survivors could not convey their immunities to their children, it took some centuries before antibodies developed among the Chinese populace and pestilence ceased to take its grim toll.

From China, the deadly mix of microbes eventually spread to become an East Asian pandemic. It seems to have taken several centuries before the infections were consistently conveyed eastward from China, probably because Korean and Japanese contacts with a politically divided Chinese Empire were so infrequent before unification in 589. There were, for example, only fourteen Japanese missions to the Middle Kingdom between 250 and 600 CE, and twelve occurred in the fifth century. Residents of the archipelago had neither the political impetus nor the advanced nautical technology to travel regularly to epidemic-riddled China. And, of course, the Chinese never visited Japan after the third century CE.

Even so, the wars raging in Korea encouraged large numbers of peninsular peoples to migrate to Japan, so it is not surprising that in 552 and again in 585, when the Paekche court introduced Buddhism to Japan, the envoys also brought along smallpox: "Our bodies are as if they were burnt, as if they were beaten, as if they were broken," and so lamenting they died. Old and young said privately to one another, "Is this a punishment for burning the Image of the Buddha?"[5] Unfortunately, these events are virtually our only clues about epidemics in Japan until the late seventh century.

When Tang armies invaded Korea in the mid-seventh century, however, they carried smallpox and other infections into the peninsula directly, setting off plagues among the numerous susceptible hosts there. By 698, the Japanese government had begun to complain frequently about pestilence. The reason for these repeated epidemics was that both Japan and Korea suffered from a similar dilemma: their populations were dense enough to sustain major die-offs concentrated in a few years, but not large and compact enough to allow the microbes to survive indefinitely as endemic maladies. The result was that in both areas an epidemic would rage for a year or two, killing off large numbers of persons of every age, and then run out of the most susceptible members of the population, only to reappear from

abroad a decade or two later, claiming another round of victims. This demographic cycle—a lethal pestilential visitation, followed by gradual recovery, only to lead to another bout with the same infection among a whole new generation with no immunities—obtained in Korea until at least 940, and in Japan until about 1150.

Between 698 and 800, there were at least thirty-six years of plagues in Japan, or about one every three years. The most well-documented epidemic—and to judge by the mortality and its social, economic, and political effects, the most significant—was a smallpox outbreak during 735–737. It started in northern Kyushu, a certain sign of its foreign origin, but by 737 the virus had spread up the Inland Sea and on to eastern Honshu, aided, ironically enough, by the improved network of roads linking the capital and provinces. To its credit, the court tried to apply pragmatic principles to treat the symptoms of the disease, but to little effect. Statistics from various provinces scattered from northern Kyushu to eastern Honshu suggest that mortality was about twenty-five percent, meaning that a million or more persons may have succumbed. As a result of the depopulation, an entire layer of village administration was abolished. Another irony was that the death rate among the exalted aristocracy—living crowded together in the capital at Nara—was even higher, a full thirty-nine percent. At the end of 737, chroniclers wrote,"Through the summer and fall, people . . . from aristocrats on down have died one after another in countless numbers. In recent times, there has been nothing like this."[6] In the wake of the epidemic, government revenues plunged by more than twenty percent, even more draconian measures were implemented to stem cultivator flight from the land, and a guilt-ridden Shōmu approved large expenditures for Buddhist temples, statues, and other religious icons.

Epidemics certainly helped to reverse the long demographic expansion of the last several centuries, but two other factors contributed to population stasis. The first was crop failure and widespread famine, occurring about every third year between the late seventh and eighth centuries. Causes for bad harvests were complex, but various climate data indicate that the eighth century was one of the hottest and driest in Japanese history. In Western Europe, where there was a "medieval warm" at this time, the effect was to dry out water-logged soils and encourage the expansion of agriculture; in Japan, where farmers often depended upon rainfall as the only way to irrigate their paddies, the result was frequent crop failure and hunger. At ten to fifteen percent, mortality from a severe famine was lower than an epidemic, but, like pestilence, malnutrition also reduced fertility. Even in years when the harvest seemed adequate, the populace frequently went hungry in the spring when their supplies of grain were exhausted. More sophisticated means of watering rice paddies may have remedied the problem, but they were either unavailable or not applied.

A second factor leading to population stasis was the ecological degradation

besetting the Kinai, the richest and most financially important region in the eighth century. Altogether, the government sponsored the construction of six capital cities and countless temples, shrines, and aristocratic mansions from 690 to 805. All these structures were built from timber harvested in the Kinai and adjacent provinces, and most had roof tiles requiring baking with charcoal in a kiln. During the second half of the eighth century, the shortage of lumber became so critical that planners began to recycle used timbers and roof tiles from older capitals, such as Fujiwara and Naniwa. When the court left Nara for Nagaoka in 784, for example, they used recycled lumber and tiles almost exclusively.

By the late eighth century, tile bakers were relying upon red pine to fire their kilns, a secondary forest cover that typically grows in nutrient-poor soil. Furthermore, the government began to note that the bald mountains in the Kinai and vicinity produced less rain and more erosion. In essence, the stripping of the forests throughout central Japan exacerbated the effects of the hot, dry climate and encouraged farmers to give up cropping altogether and flee to the seashores and mountains to forage as of old.

Agriculture and Industry

Agricultural technology related to these population trends in complex ways. The government expressed in its law codes and various other statutes a desire to encourage the expansion of arable land, especially for paddy rice. After all, aristocrats preferred polished rice in their diets, and rice sheaves were a unit of administrative accounting. Yet records show time and again that cultivators not only struggled to open new lands, but also had trouble keeping fields productive. Laws stated that farmers had three years to bring wasteland into production, but most could manage to clear only about thirty to forty percent of their stake within the allotted time. Once converted to cultivated land, moreover, untended fields typically accounted for twenty to forty percent of all farmland; some have seen a fallow system in these figures, but no one knows how it would have operated. In sum, peasants struggled to open paddy fields and maintain them in continuous production. It was a cycle that mirrored the repeated demographic ebb and flow: rice farmers opened fields and cropped them for some years, and then paddies returned to wasteland.

The reasons for this agrarian cycle were manifold. Epidemics, famines, and erosion killed off or chased away cultivators. In the wake of the 735–737 epidemic, for instance, the government tried to return abandoned fields to cultivation by allowing peasants to hold in perpetuity any fields that they might bring into production, but the results seem to have been ephemeral. The new temple, Tōdaiji, took advantage of a 743 law to claim wilderness for conversion into paddies throughout

Japan, but even from the beginning of the projects in the 750s familiar problems troubled farmers. Along the Japan Sea littoral in Etchū Province, cultivators could not clear even half their stakes and untended fields accounted for a quarter of all arable land.

The primitive state of wet-rice technology also made farming difficult. There were many methods for growing rice, ordinarily using natural or artificial irrigation. Most fields were naturally watered—that is, they depended upon seasonal fluctuations in the water table to provide moisture for the crop. Typically, these fields were low-lying and swampy and had poor yields, or they were located in the small, flat stretches of Japan's innumerable mountain valleys. Because rainfall was the only means employed to water these fields, the hot, dry climate of the eighth century led to frequent crop failure; drought caused as many as two-thirds of the bad harvests between 676 and 800. Many rice paddies listed as abandoned or uncultivated probably became so when precipitation was inadequate and rice plants withered and died.

Those farmers watering their fields artificially struggled to master the engineering skills necessary to the task. Some ditches became clogged or were engineered incorrectly and failed to run downhill as they were intended to do. The ponds of this era were small and simple, constructed using a minimum of labor by damming up one end of a valley to catch the run-off. These "valley ponds" remained full all year round and mainly irrigated the same type of landform as naturally dampened fields—tiny, isolated parcels located in mountain basins or at the edges of larger plains. In essence, Japan's farmers had not yet learned how to exploit broad alluvial fans, river bottoms, or coastal plains, where the soil was most fertile and yields apt to be the highest. The importation of the waterwheel in 829 was evidently meant to encourage the irrigation of just such lands, but the device never caught on. Frustrated, some hungry commoners even tore holes in their "valley ponds" just to catch and eat the fish.

In addition to these engineering bottlenecks, there was at least one other technological problem. From the late Yayoi period, cultivators had fitted iron blades to their shovels, hoes, and sickles. Because Japan is iron poor and southern Korea had plentiful supplies, all of Japan's iron was imported from the peninsula until about 500 CE, and Korea probably continued to supply a great deal of the valuable ore to Japan thereafter. During the late seventh century, when Yamato's enemy Silla unified the peninsula, however, access to a major source of iron was reduced or severed. As a result, iron for farming tools became harder to acquire; by 800, as few as five percent of farmers possessed iron tools. Without iron tools, it was more difficult to cut and turn the earth and impossible to harvest rice stalks at the root with sickles. Despite the beginning of rice agriculture 1,600 years earlier, Japan was still a long way from becoming a rice-centered agrarian society.

Because paddy agriculture required hard labor, was the object of tax collectors, and depended upon the possession of iron tools and mastery of advanced irrigation techniques, it should come as no surprise that would-be rice farmers turned to other more familiar and easier livelihoods. Some persons preferred to remain cultivators, but instead of rice paddies they cropped dry grains such as millet, wheat, soybeans, barley, and buckwheat. Productivity of these unirrigated parcels was much lower than that of wet rice—only about a third as much. The great advantage of dry cropping, however, was that the government did not collect revenues on these fields, and so it would not be surprising if many resorted to this livelihood.

Slash-and-burn agriculture was also an effective means to elude the tax collector and support a family. In swidden farming, as it is also known, the cultivator went into the mountains, cleared away the forest and underbrush, and then burned the vegetation to produce ash for fertilizer. These farmers then planted beans, millet, or other crops for the few years that the mountain soil was productive, later moving on to another location, where they began again. Slash-and-burn cropping is associated around the world with low population densities; in Japan it was most common in northern Honshu, southern Kyushu, and other sparsely settled mountainous regions. The popularity of this occupation was undoubtedly one reason that the government found it so difficult to locate peasants and limit them to a fixed residence.

Finally, subsistence techniques that had started out as Jōmon livelihoods remained prominent. Hunting was still widely practiced, and the gathering of nuts, tubers, and berries must have been an important way to subsist. People undoubtedly employed these survival tactics even more readily when crops failed or other natural disasters struck.

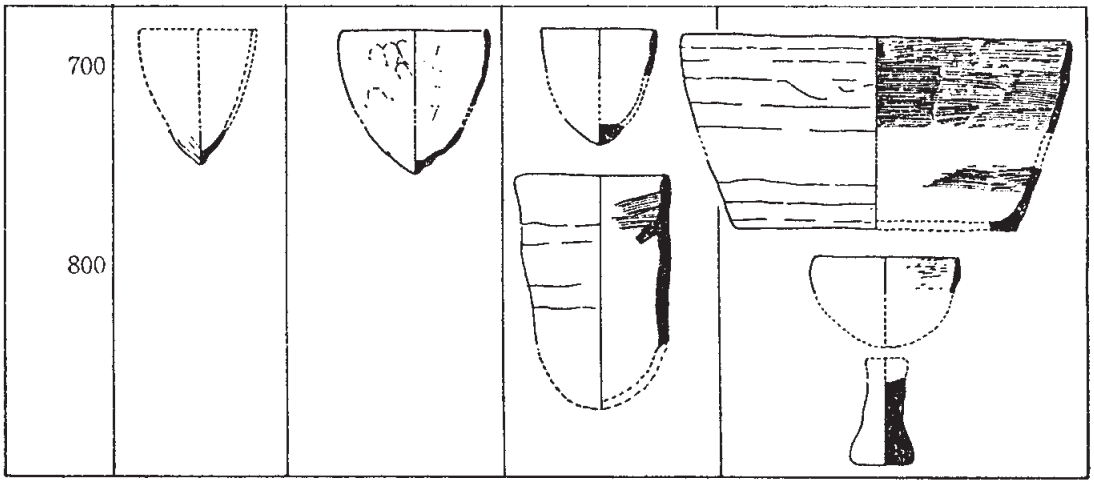
Fishing was a major livelihood during the Jōmon period, but little is known about this occupation during later centuries. "Sea people" appear only occasionally in records. The list of local products sent from the provinces to the court as tribute items shows, however, thirty-one different kinds of fish, crustaceans, mollusks, and seaweed. Furthermore, day laborers building the cities and temples of the eighth century always partook heartily of fish, seaweed, and salt—"the riches of the sea." There is no doubt that fishing represented a major occupation, but, like so many aspects of life in eighth-century Japan, lawgivers gave it little attention.

The progress of industry during 600–800 was mixed, with most of the advances coming while the population was still expanding. One major accomplishment, for example, was the unification of land transportation. This occurred during the late seventh and early eighth centuries when the government was able to muster a large supply of day laborers. By the mid-700s, workers had completed a set of roads connecting every province and district to the Kinai. In western Japan,

roads were either dirt or covered with sand, while in eastern Honshu they were gravel. Travel times from the capital were dramatically reduced to as little as fifteen days to northern Kyushu and twenty-four days to the northern tip of Honshu. The government also constructed post stations and provided officials with mounts and packhorses. Such a major improvement in transportation and communication helped promote commerce, the diffusion of microbes, and the movement of tribute items and corvée gangs.

By all accounts, the workers who ferried miscellaneous tax goods along these roadways faced harsh conditions. Often they did not carry enough food to return home and fled to new surroundings. Edict after edict complained of roads littered with the corpses of dead corvée laborers. To mitigate these hardships, workers carried prayer slips to donate to shrines along the way. Apparently, however, these were of little help, as these unfortunates were known as "tormented demons" in common parlance.[7]

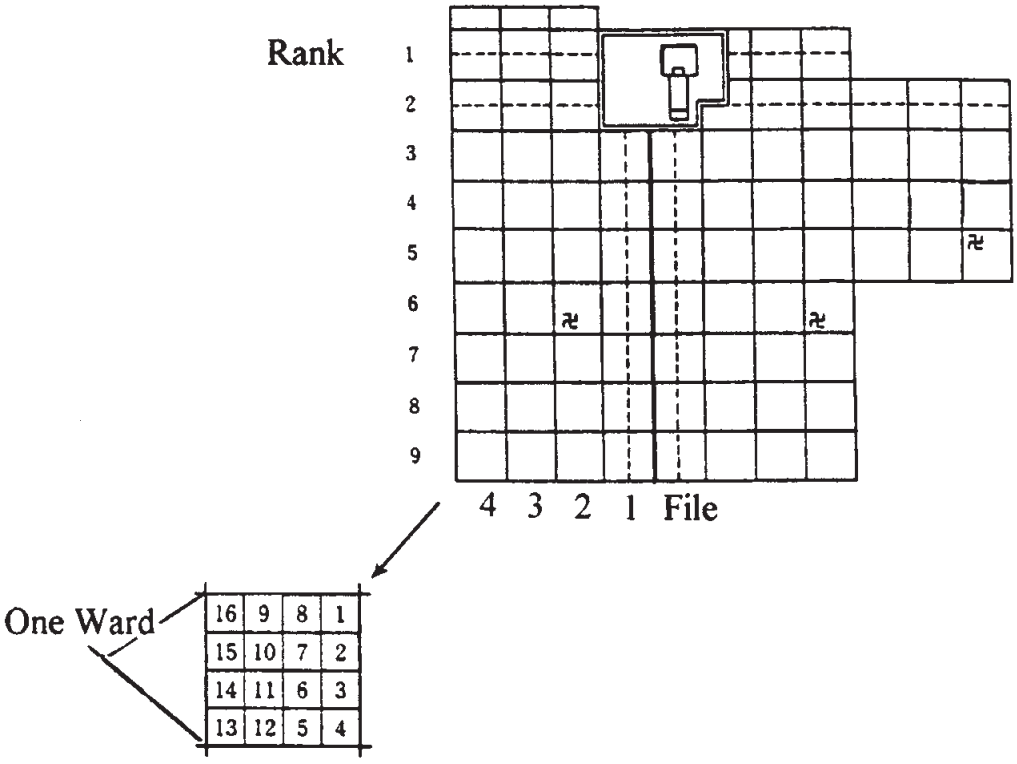
Salt making and ceramics were industries remaining virtually unaffected by demographic trends. Just as in the Jōmon era, inhabitants of the archipelago manufactured salt by evaporating seawater in small clay pots over an open fire. By the eighth century, pots might also be made of stone. Enterprising salt makers hastened the process by draining the saline solution over seaweed to thicken it and aid in the formation of crystals. This process required intensive labor, but until 800 it remained the primary means to make salt. The spread of stoneware (Sue ware) to many households was another sign of technological progress in the 700s.



Salt-making was a major enterprise in eighth-century Japan and pots such as the ones sketched above were essential to the process of boiling seawater. *Source:* Kanō Hisashi and Kinoshita Masashi, "Shio tetsu no seisan to kōnō," *Kodai no chihōshi 2 San'in san'yō nankai hen*. (Asakura shoten, 1977), p. 176.

Not all sectors, however, exhibited continuous growth. Greater production of silk thread and cloth was a high priority in the early 700s, as the court eagerly adopted the latest Chinese technologies, including silk reeling. Silk manufacture spread to the provinces, but by 800 the experiment had apparently proved a failure, as the court protested bitterly and frequently about the tardiness and poor quality of silk products.

Construction is the most obvious example of industrial boom-and-bust during 690–800. The court undertook the construction of six capital cities, many temples and shrines, and lavish aristocratic mansions during these years. For instance, the capital at Nara, occupied almost continuously from 710 to 784, was a symmetrical city laid out along the points of the compass, measuring 5.5 kilometers east-west and 4.5 kilometers north-south. It contained dozens of roads and alleys measuring from 5 to 37 meters in width, most flanked by ditches, some spanned by bridges. Moving and leveling the earth and raising the buildings for a city of its size must have been an immense undertaking, requiring large inputs of labor and materials, and Nara represented only one such project.



The layout for Nara, the most important capital city during the 700s, took its inspiration from Chinese models. *Source:* Kishi Toshio, "Nihon no tojō sei sōron," in Kishi, ed., *Nihon no kodai* 9: *Tojō no seitai* (Chūō kōron, 1987), p. 33.

As the eighth century progressed and disease, famine, and ecological devastation took their toll, however, healthy workers became more difficult to find and employ and construction projects ground to a halt. From 690 until 745, the court built four capital cities, as well as refurbishing Nara at least once. From 745 to 805, the government attempted two capitals—Nagaoka and Heian—and finished neither. The deforestation of the Kinai and environs was partially responsible, but so was the lack of healthy laborers. The court tried various means to assemble workers, including paying corvée gangs and impressing those not responsible for service. By the early 800s, the government complained that "emergency conscriptions [of workers] are many, while corvée adults are few" and that "people are few although deterioration [of government facilities] is increasingly widespread."[8] A rise in daily wages, from ten coins around 720 to fifteen or more by 800, also probably indicated that workers were becoming scarce, although inflation generated by coinage debasement may also be partly to blame. For the average laborer, ten coins could buy five melons or two and a half sheaves of soybeans.

Some artisans attempted to adapt to the demographic decline by shifting to labor-saving technologies. In the case of ironworking, smiths moved from a low, rectangular, box-shaped furnace complete with blowpipes and bellows, to a half-submerged vertical shaft furnace located on a slope. Instead of requiring the former devices to supply oxygen, the new furnace merely relied on up-drafting winds to fan the flames. Although simpler and more primitive than the older version, it needed no workers to operate bellows, thus saving on labor.

Domestic and Overseas Trade

With thousands of consumers located in cities, an improved network of travel arteries linking capital and province, and the constant movement of tax goods, it follows that a complex, three-part commercial system developed within Japan. First there was the most developed region (the Kinai), with official markets in the capitals and scattered throughout the region. Markets also opened for business in outlying provinces; those in western Japan were much busier than those in the Kanto and northern Honshu. Finally, medium- and long-distance trade connected buyers and sellers from the northern tip of Honshu to Kyushu.

The chief merchants were lower-ranking government officials, subject to some degree to the vagaries of the market. One bureaucrat, for example, made a whopping seventy percent profit shipping surplus lumber from a temple project. Another lost his shirt trading in cloth and was required to make up the deficit out of his own pocket. Even in the 700s, these merchant-officials almost always made attempts at comparison shopping, just as modern consumers do. Officials comprised the overwhelming majority of traders because they had access to tax goods

to offer, government connections to wealthy courtiers, and numerous opportunities to cut a deal in all the construction projects ongoing at that time.

To facilitate commerce, the court minted copper cash beginning in 710. Greedy for revenues from the beginning, however, the government set the nominal value of a coin far above the actual value of copper. With copper so cheap and the coins priced so high, counterfeiting became common. Then the smallpox epidemic of 735–737 occurred, and the disarray in markets was so great that inflation ensued. In the 760s, the government minted a new issue of coppers, trying to offset the general decline in revenues by debasing its coins. As the supply of money expanded, inflation worsened and by 805 coins began to lose their value. Eventually, government-issued currency became all but worthless.

Overseas trade among the various states of East Asia operated behind the cover of official Chinese diplomacy. In this system, the Chinese court envisioned itself as the center of the world and allowed various "barbarian" governments to come to the Chinese capital at Chang-an and pay obeisance. One means of offering subservience to the grand Chinese monarch was to give him gifts. The Chinese especially prized spices, medicines, and horses, while Japanese envoys took home silk and books. The Chinese wrote of one eighth-century Japanese diplomat that "[e]verything given him by the court was used to purchase books."[9] Outside of the tributary system, the Tang court severely limited commercial opportunities, keeping foreigners in ghettos and requiring permits for nongovernmental trade.

These information-hungry Japanese embassies arrived in a new type of ship. Until about 650, boats had been made of hollowed logs with boards attached to the sides to make them more buoyant. Oars were the primary means of propulsion. The boats measured about two by fourteen meters and could hold as many as twenty-five people and two horses. These small vessels remained adequate for sailing in the waters around the archipelago and even to and from Korea.

Beginning in the 700s, however, the court assigned immigrant shipwrights to build Chinese junks for the dangerous crossing from northern Kyushu to the mouth of the Yang-tze River. Junks were superbly seaworthy vessels, because they had flat bottoms complete with transverse bulkheads and holds, woven bamboo sails, and huge masts. They held a complement of 120 passengers, along with provisions and trade items for the Tang court. Chinese technology made an impact on Japanese navigation and ship building, but it turned out to be short-lived.

Residents of the islands also participated in other overseas exchange networks. Despite sour relations, the Japanese court traded with Silla for spices, fragrances, medicines, cosmetics, pigments, gold, iron, and tableware and furnishings.[10] Parhae, a kingdom located in modern Manchuria, also engaged in commerce with Japan. Altogether, however, overseas trade was a tiny fraction of the increasingly diverse eighth-century economy.

Society: Class, Family, and Women

Class

During these two centuries, Japan's class structure became more elaborate than that of the Tomb age, resembling a pointed pyramid, with wellborn aristocrats at the top and commoners and slaves at the bottom. Aristocrats were defined as those holding one of the top five court ranks; in the 700s, they usually numbered about 150 individuals, an infinitesimal proportion of Japan's total population. Most occupied exalted offices and advised the sage-king, and enjoyed imported Chinese culture; for their labors, they were amply rewarded in lands and tax commodities. A highborn aristocrat essentially possessed resources equivalent to a small province. For example, Prince Nagaya (684–729), a grandson of Tenmu, held the Third Rank and was quite a political power in his day. His household included sixty attendants, twelve acres of rice paddies, and 200 or more "sustenance households" providing him with goods-in-kind. His estate contained thirty buildings, and he had four wives, eighteen children, and four wet nurses. The feeding and clothing of his family required a small army of cooks, rice-wine brewers, yogurt makers, firewood collectors, seamstresses, potters, dyers, tanners, movers, plasterers, weapons makers, bronze casters, sculptors, and many others. Nagaya also used people to care for his dogs, horses, and falcons, and employed doctors to look after the sick. He had an ice storage house, a charcoal-firing center, and a lumberyard. Moreover, household administrators assigned to him by the court operated Nagaya's system of interest-bearing rice loans and collected tribute items from thirty provinces.

The key to Nagaya's royal treatment was his ancestry reflected in his high rank, but it would be a mistake to assume that this sort of wealth and power were the birthright of men only. During 690–800, women occupied the throne more than half the time, and contrary to popular belief, they were not simply pawns for male politicians. Jitō and Shōtoku (r. 764–770) were particularly powerful, essentially dictating the formative policies of their respective reigns. Prince Nagaya took Princess Kibi as his wife, who had a brother and sister who became sovereigns. With such exalted bloodlines, Kibi held a rank higher than her husband and was permitted an even more elaborate household staff. Consort Kōmyō (701–760), the wife to Shōmu, held immense political and economic power in her day, spending lavishly on Buddhist temples such as Kōfukuji and numerous sutra-copying projects, as well as orphanages and medical clinics. Kōmyō provided the power base for her nephew, Fujiwara no Nakamaro (706–764), and once she died, Nakamaro fell from power and was beheaded. All these royal and aristocratic women came by their power through legal means, as the authors of

the Taihō Code specifically granted such women court rank and all the emoluments going with it.

Male and female aristocrats occupied the apex of the social pyramid, but those who did not achieve promotion to the coveted Fifth Rank were much more numerous, did most of the actual paper-shuffling, and led dreary lives. Numbering several thousand, these low-ranking bureaucrats virtually lived in their offices. They did such work as sutra copying, paper making, and proofreading. They were required to present monthly reports when they received their meager stipends. A sutra copyist, for example, was paid five coins for every sheet he transcribed and worked at his job in shifts of twenty nights or days. They were fed twice a day—white rice, a bowl of soup, and side dishes of seaweed and vegetables, and this average diet deteriorated as the government fell into straitened circumstances after 750. The court knew that the lot of lower-ranking bureaucrats was demanding: it always allotted them numerous bottles of rice wine. They constantly requested vacation time and received it occasionally. One official asked for leave in 771 to nurse an ailing son, but the boy died while the father commuted from work to his home.

These lower-level bureaucrats suffered many hardships. Often their stipends were so low and the government so ravenous for revenue that their superiors

Sutra copyists led hard lives, but their work was considered essential to ensure the Buddha's protection of the realm. The Imperial Household Agency and the Shōsōin.

forced upon them loans at usurious rates—thirteen percent per month. Chances for advancement were nil. For instance, Takaya no Muraji Yakamaro was stuck at the lowest Initial Rank at age fifty; it would have taken him decades of consistently good evaluations to come even close to the Fifth Rank. In essence, Prince Nagaya and his ilk rode a "bullet train" straight to the top, while Takaya and his fellow functionaries were stuck in the lowest reaches of the bureaucracy for life.

The clergy comprised an important but unique adjunct to the ruling class. Buddhist monks and nuns were the most common religious figures. They were exempt from taxation, a perquisite carefully restricted by law, and their religious organizations received from the government tax revenues, large tracts of land, and other gifts. The reason for government support was that the Buddhist clergy was in charge of rituals designed to protect the realm as well as the body of the sovereign. Because conducting these ceremonies gave them special powers, the government clamped strict controls on Buddhist clerics. The court placed them in an official hierarchy, ordered them to study to receive state-sanctioned ordination, and prohibited them from interfering in politics or whipping up fervor by preaching or begging among the people without permit. Nor were Buddhist clerics allowed to marry. These ecclesiastics became more numerous as the eighth century unfolded, reaching at least 18,520 by 784.[11] More than 200 traveled to China for instruction between 668 and 882. A few headed powerful temples, monasteries, or nunneries, but most were lowly commoners following their faith (or seeking to avoid taxation). In particular, women took orders as nuns, becoming prominent in ceremonies and religious good works.

Dōji (?–744) and Gyōki (668–749) are two famous Buddhist monks.[12] Dōji studied in China and gained the support of Prince Nagaya. He advised the court on such matters as the compilation of court histories, the correct interpretation of *The Lotus Sutra,* and on the invitation of monks from China. Gyōki, by contrast, broke all the rules by going out among the populace to proselytize and beg. He conducted social work, overseeing the building of bridges, shelters, and irrigation ponds. Later, he redeemed himself in the eyes of the court by helping to raise funds for the erection of temples, most notably Tōdaiji. He was the subject of adulation as he traveled from town to town spreading Buddhist teachings. Women adored him.

The native cult (often mistakenly called Shinto) was charged by the court to carry out thirteen different types of rituals nineteen times a year. Its prelates—primarily Nakatomi, Imibe, and Kataribe—blessed the crops in the spring and celebrated good harvests in the fall. They also performed purification rituals to remove impurities responsible for natural disasters and plagues. The most important shrines were those at Ise, Izumo, and Usa in Kyushu.

Local notables, who usually served as district magistrates, encompassed a

fourth class. Living in one of Japan's 550 districts, these men and women were the key to control of the provinces and the collection of sufficient revenues to keep the government going. The court treated them generously, granting them lifetime tenure, a sizable parcel of land, rank and office for their offspring, and appointments for their relatives as the district's military and religious officials. For example, district magistrate Hi no Kimi Ite lived in northern Kyushu in 702. Although he held lowly civilian and military rank, his household encompassed 124 members, including 4 spouses, 31 children and grandchildren, 26 dependents, and 37 slaves. He supported these persons with sixty acres of rice fields and extensive salt- and hemp-making operations. Or consider Ikue no Omi Azumabito, living along the Japan Sea littoral in 755. He held at least thirty acres of rice fields in addition to his official parcels and loaned out a total of about eight thousand rice sheaves at fifty percent interest to control the neighboring farmers renting his parcels. Most local notables, including Hi no Kimi and Ikue no Omi, were superb horsemen because they had the wealth and leisure to master the equestrian arts. In 792, when the court abolished the draft amid a declining population, it turned to this class of local magnates to provide them with mounted archers to keep the peace. At that time, the court was able to recruit about three thousand such fighters from this class.

Of course, the overwhelming majority of people were unranked commoners. Most lived in pit dwellings, just as their Jōmon-, Yayoi-, and Tomb-period ancestors had. They cooked with the boiler in western Japan but could manage campfires only in eastern Honshu. Beginning around 700, earthen floors were laid at ground level; residents led their daily lives in the center of the house and spread straw or grass at the edges to sleep. Such a house was probably cramped, drafty, dark, and prone to fire. Rural houses were scattered over the landscape, just as in the Tomb age. Typical villages included the solitary homestead, the small hamlet, or larger units of twenty to thirty dwellings, interspersed with wasteland, fields, and other topographical features. Little is known of the social organization of these rural settlements.

Besides living in a dispersed pattern, rural people changed residence frequently. Lawgivers sought to bind them to the land through various means, but in the course of the 700s, the court ran out of alternatives, changing its policy a bewildering seven times. Contrary to expectations, the typical migrant was female, traveled in groups, and was often wealthy. People moved for numerous reasons: to avoid the tax collector, clear or abandon fields, find jobs in an increasingly tight labor market, fish or practice slash-and-burn cropping, or to live with a partner. Mobility was part and parcel of commoner life, and the government could do little to stop it.

In other respects, commoner lives were much as they had been in the Tomb

age. Clothing was woven of hemp or ramie. Diet was just adequate in the best of times, as revealed by the tiny size of armor for soldiers. People ate brown rice, wheat, barley, salt, seaweed, bean paste, vinegar, melons, and always consumed lots of rice wine. Some probably supplemented these foods with mushrooms, chestnuts, and local fish or game. The typical toilet was a hole in the ground spanned by two planks over which the user would squat. When the toilet became full, a new one was dug. In the cities, highborn aristocrats such as Prince Nagaya availed themselves of advanced toilets that washed away the droppings. Urban toilets reveal that intestinal parasites afflicted even the wealthiest defecators.

At the bottom of the pyramid was a small class of slaves. They accounted for about five percent of the population, and were owned by temples, officials, the government, and other wealthy individuals. Slaves had no surname and were essentially held in no higher regard than livestock. They could be bought or sold, with a good slave fetching about the same price as an ox. Masters could break up families through sale or inheritance, and the standing rule was that children always

These "pots with human faces" depicted the epidemic demon and played a role in ridding the afflicted cities and villages of disease. *Source*: Kaneko Hiroyuki, ed. *Ritsuryō ki saishi ibutsu shūsei* (Nara: Nara kokuritsu bunkazai kenkyūjo, 1988), pp. 92–93.

accompanied their mother. As labor became scarce after 750, the enforcement costs for slavery rose, and masters began to manumit their slaves. Their numbers declined by 805.

As differentiated as the social pyramid was, people of all classes shared similarly practical religious beliefs. They petitioned for the safe delivery of a child, gave thanksgiving for a bountiful harvest, and prayed for long life and prosperity. These fundamental urges were just as much a part of the Buddhism of the time as the native cult. The hot, dry weather gave rise to numerous temples devoted to rain-making liturgies, such as those employing horses or straw dragons. Such cosmological creatures were thought to influence the forces of nature and were employed at temples such as Murōji in Nara. People also believed that a spirit dwelt in their bodies as long as they were alive, and even when the spirit departed, it floated about and might for a few days be recalled for resuscitation. The custom of cremation was imported into Japan in the early 700s, but most people were simply buried in a hole in the moors or mountains. Spirits of the dead, it was believed, ended up in the mountains, but some believers also envisioned the departed as going to the sky, islands, or even across the seas.

The fear of disease apparently haunted everyone. Archaeologists have excavated thousands of wooden figures, clay horses, miniature ovens, and "pots with human faces" attesting to this fact. They were part of a purification rite (*ōharae*) performed during epidemics and natural disasters. Perhaps most interesting are the "pots with human faces," many of them gruesome to behold. According to custom, the victim blew his or her breath into the open dish, which was thereupon given a lid. As the pestilence played out, persons collected the pots from the sick and dumped them into streams or sewers, apparently to wash the disease spirit away. These artifacts have been discovered all over Japan, but they are particularly common in cities. They began appearing in the late seventh century, just as plagues were becoming severe.

Family and Women

Despite the enormous gulf between aristocrat and slave, people of all classes shared similar kinship, marital arrangements, and even gender relations. Among people of all classes, kinship remained bilateral. This meant that a family could trace its lineage through either the mother's or the father's side; no distinction was made between one's father's and mother's relatives. Unlike patrilineal or matrilineal kinship, bilateral relations are highly flexible; sometimes the male would move to his current love's village, and sometimes the woman would change her residence. Or, if they lived close to each other, the man and woman might have maintained separate homes. Such a kinship system encouraged high mobility and

a smoother distribution of people over farming units. Japan's bilateral kinship arrangements flew in the face of the Taihō Code, which tried to establish the Chinese patriarchal clan in high-sounding prose. It was another topic on which lawgivers expressed their desire to emulate China, to little effect.

There was considerable variety in the size and composition of the family. Of course, high-ranking aristocrats and local notables often had large, extended families, but doing so was not possible for most commoners. Their pit dwellings ranged from fifteen to fifty square meters, with the smaller ones probably holding two or three residents and the larger about eight. Most peasants lived in nuclear families consisting of one or both parents and their children. Some had enough wealth to build more spacious homes or even occupy more than one residence. Those families with property divided it equally among all heirs, both male and female, suggesting that there was little or no pressure on available land resources.

Relations between children and their fathers were distant or even nonexistent. A huge volume of eighth-century poetry portrays all sorts of human emotions, but fathers almost never expressed their feelings about their children. To the contrary, in bad times they sold their offspring for food; and if a person survived to old age, the government had to provide them with a means of support, probably because their children were unwilling or unable to do so.

Sex and marriage during these centuries were consistent with high fertility, because males and females were free to engage in virtually unrestricted intercourse. Among all classes, young people began to pair off after puberty, exchange love poems, and then have sex. Typically, the man made a nocturnal visit to his love's house, sometimes under the watchful eyes of her parents. The "marriage" continued for as long as the visits did. If the pair produced offspring, the man might move in with his spouse and children. To get a divorce, the man simply stopped visiting, either of his own or his partner's volition. Men might visit more than one woman and women might entertain more than one man. In other words, none of these relationships was exclusive or lifelong. Members of the same family could even "marry" as long as they had different mothers. A man could also inherit his brother's widow as a wife. In fact, sex was so free that villages engaged in orgies, condemned by the government in 797 because such behavior did not maintain "the [proper] distinction between men and women."[13]

When it came to marriage, the prospective "bride" had an advantage. Marriages are essentially arrangements about having children and controlling property, with gifts of land and other items frequently changing hands between newlyweds. In the Tokugawa period, the bride provided a dowry to her husband's family, but during the seventh and eighth centuries, men gave what is called *bridewealth* to women. Especially in the case of a rich family, males competed for the hand of the woman, and gave her (and not her family) property to secure the option to

have children with her. There are actually cases in which duplicitous females accepted bridewealth from more than one suitor and refused any refunds.

Even though most of them also had multiple partners, married their kin, and raised their children in the mother's family, some members of the elite tried to formalize their unions through various customs. To symbolize a new marriage, they might have the prospective husband light a fire in his fiancée's family's boiler, or force him to eat rice cakes browned at her house. Aristocrats had considerable property and needed offspring to name as heirs and prospective rankholders, engendering the need for the wellborn to make some nominal marital arrangements.

Equal inheritance rights, the custom of bridewealth, as well as the right to name and raise children suggests that women had high status and wielded considerable political and economic power at this time. We have already examined the cases of aristocratic females such as Princess Kibi and the Consort Kōmyō, but the same assertion can be made for women of all classes. In fact, commoner women may have been even freer than those in the aristocracy or local nobility. For example, when lawgivers established the system to allocate rice paddies to all persons for their support, women received their land not as wives—as in China—but as females. They raised silkworms and produced silk textiles, managed agricultural lands, and owned houses, cattle, and slaves, all of which they took with them when there was a "divorce." They managed loans, especially in rice or money, and made sake, sometimes carrying all these enterprises to excess: "[One woman] . . . made great profit by selling rice wine diluted with water. On the day when she made a loan, she used a small measuring cup, while on the day she collected, she used a big measuring cup. . . . She did not show any mercy in forcibly collecting interest, sometimes ten times and sometimes a hundred times as much as the original loan. . . . There has never been anybody so greedy."[14] Women served as soldiers and district magistrates, and were leading devotees of Buddhism.

Why did women have so much power and wealth? Of course, this question assumes that oppression has historically been the natural state of women. Nevertheless, several factors gave women of this age social, economic, and political advantages. Because most men and women had multiple sexual partners during their lives and paternity tests did not exist, the only sure way to trace an offspring's descent was through the mother's line. It is little wonder that the mother's family usually named and raised the children and that the husband might choose to live with his in-laws. This must have been especially important for the capital and local nobility, who needed heirs for their huge patrimony.

The law of supply and demand favored women, too. Because high-ranking aristocrats and local notables frequently chose to keep more than one wife, the supply of eligible women was reduced. Female mortality in childbirth had the same

effect. Commoner men were left to compete among themselves for the remaining females, and as part of that competition, the custom of bridewealth undoubtedly arose. Finally, women's high status derived directly from a labor shortage that grew more acute as the eighth century wore on.[15] As noted above, females worked in the fields and at most other occupations, thereby gaining wealth and power. Taken together, these diverse factors help to explain the prominent status of eighth-century women.

Class, family, and gender placed countervailing pressures upon Japan's population during the era 600–800. Class was the most important of these three, as the social and economic gulf between a wellborn aristocrat and a commoner was enormous. Family was a fluid concept, having great variety and not much cohesion. And both men and women could and did hold considerable political power, high social status, and far-reaching economic power.

Toward a Society in Stasis: Who Wins and Who Loses?

Because modern people have lived during a capitalist age when growth is the watchword, it is hard for most members of the industrialized world to imagine a time in which the population or economy did not expand. In fact, through most of the human past, stasis has been the rule, and decline and decay have also occurred. The living conditions in which a sizable minority of the world's populace now lives—plenty to eat, long lives, and freedom from infectious disease—have developed only over the past century or so and may not last.

Even so, stasis should not be equated with stagnation or equally bad times for everyone. By the end of the eighth century, some were prospering while others suffered. Certainly victims of famine and epidemics lost out, but survivors often found themselves better off than otherwise could have been expected. The aristocrat who reached high office or greater wealth because his rival died of smallpox, the peasant who benefited from the labor shortage through higher wages and more opportunities, and the women who held high status in a society that needed their heirs and skills—they all prospered. It is axiomatic that growth never goes on forever and that stasis may bring prosperity to many.