

## China 5<sup>th</sup> Installment

Saturday, May 29<sup>th</sup>, 1999, our 9<sup>th</sup> day in China:

We were twelve hours upriver from Wuhan when we woke up and had breakfast. The river was still broad and the land fairly flat. The weather was beautiful, but the sky was hazy with smog.

Jeff lectured in the morning on the topography of China:

Sixty million years ago, the Three Gorges area divided the Yangzi into two rivers, one flowing to the southwest and the other one to the east. About forty million years ago, the Indian plate rammed into the Asian, created the Himalayas, and raised Western China. The southwestern branch of the Yangzi reversed course, picked up a new source high in the Himalayan plateau, and carved a path through the Three Gorges.

The Yangzi is only called that at its mouth. It is more universally known as Chang Jiang (the long river), and in its upper reaches it is called Jinsha Jiang (river of golden sand). The river is brown with silt all along its course. Wuhan is 700 miles inland as the Yangzi flows. Our cruise from Wuhan to Chongqing would cover 841 of the 3,900 miles the river flows from the Tibetan highlands to the sea near Shanghai. The river drops 90% of its 5,800 meter elevation before it reaches Chongqing.

When we looked at a topographical map of China, Chongqing and the whole Sichuan Province reminded me of Wizard Island and Crater Lake. The Province is a large (extremely fertile and mineral rich) depression surrounded on all sides by mountains. The Yangzi, and its passage through the Three Gorges, is the only obvious outlet to the other population centers of China.

The Yangzi watershed covers 700,00 square miles, 20% of China's total. The area covers 25% of the cropland. Only 11% of China's land is arable compared to the United States' 30%. The Yangzi discharges 350 cubic miles of water and 600 million tons of mud and silt each year. The Yangzi is the world's second longest river, behind the Amazon.

China's climate is influenced by the world's largest landmass and the largest ocean. Only three main rivers drain the content, and flooding can be caused by both mountain snow melt and monsoon rains. As the lakes of the Yangzi basin have filled in, from natural and man-made causes, their ability to contain the floodwaters has been significantly reduced.

We spent most of the first day sitting in the bow watching the countryside roll by as the Princess Jeannie worked her way up the Yangzi toward the Three Gorges. By noon the river had narrowed considerably and some hills could be seen off to the south. We passed barges carrying logs, coal, rocks, and sand. We saw sand and sacks of what we believed was cement being off-loaded on the riverbank.

Jeff gave a second lecture in the afternoon, on Chinese burial practice and ancestor worship.

Prior to 500 BC, ancestor worship took place in an ancestor temple. Even in a modest home, there was a place set aside for an altar. The things associated with the dead themselves were alien to the living. Death was a "negative image" of life. The living didn't want anything to do with the dead other than recognize their memory with a tablet in the home. The dead lost their lineage or identity. In Neolithic times, the skin and muscle were scraped away, leaving an anonymous



Early Saturday morning, fishingboat on the broad Yangzi



Rocks being unloaded from barge

skeleton. It was believed that when you died, you went to the Yellow Springs. All clothes were given up, and hair could not be braided. There were no patterns. (The Chinese word for civilization and pattern are the same.) The Chinese concept of death was similar to those of Greece and the Middle East in terms of the nakedness of the people in Hell.

Five hundred BC represented a turning point in ancestor worship and burial practices. After 500 BC, the focus in ancestor worship shifted from the alter to the tomb. The tomb became a shrine or monument to the dead and was carefully tended. Tombs prior to 500 BC were sometimes quite elaborate, but had no above ground architecture. For some reason, the relationship between the living and the dead had changed.

Mencius, a Confucian philosopher in 400 BC, believed that people began to want to treat the dead more humanely. At this time, the Chinese were exploring their realm and the others around them. They wrote ethnographies that were definitely biased, but contain some accurate descriptions of their neighbors. They noted that foreigners were naked and wore their hair long. To prevent their dead from becoming “foreigners”, the Chinese developed more elaborate burials so that they could keep the netherworld civilized. Thus the Chinese extended civilization downward as well as outward.



Sunday morning, tugboat on Yangtze, hills are closing in.

Confucius recommended treating the dead as you treated the living. Many Confucians became morticians. Mozi, a utilitarian philosopher rebutting and criticizing Confucius, accused him of getting work for his followers by focusing on burial. Mozi recommended very frugal burials. Archaeological evidence indicates that Mozi lost the argument. The Marquis Yi of Zeng’s tomb is the most elaborate and richest of its time (433 BC) that has been found so far. It is an example of the vast expense the living went to in providing a complete home for the afterlife.

A philosophical text written on the eve of Qin unification mapped out what the empire should look like. It contained a description of the controversy and the debate over the cost to the people of the elaborate burials, and recommended restraint in funerals. It was presented to the first Qin Emperor in 239 BC. He rejected it out of hand. He was buried with his terracotta warriors.

In the evening the crew entertained us with a review, the Crew Follies. They sang songs, played musical instruments, danced, and modeled clothing. It was more fun than we expected.

Sunday, May 30<sup>th</sup>, 1999, our 10<sup>th</sup> day in China:  
The morning started cloudy and cold, and it rained off and on all day. We arrived at Yichang after breakfast and went through the lock of the Gezhou Ba (Gezhou Dam). It is 26 miles down-stream from the site of the Three Gorges Dam. Gezhou Dam was built in 1981. At only 20 meters high, it is small compared to the Three Gorges Dam, but it is currently the largest in China. We were in the lock for 45 minutes. The lock is 34 meters wide and 280 meters long. Our boat was 16 meters wide, so there was still room and we had to wait while another cruise ship joined us. It did not take very long at all once the gates were closed.



Gezhou Dam lock, Yichang

As we continued on towards the Three Gorges Dam, we passed a large industrial area with steel mills, rolling mills, and cotton mills all fueled by the soft coal that comes from local deposits. The use of soft coal is one of the major contributors to the smog along the river. The majority of the barge traffic in this area seems to contain either limestone rocks or coal, although we also saw lumber (possibly from

the highlands of Tibet) and small vans manufactured in Chongqing. We also passed a small shrine at the water's edge, with an orange-roofed pagoda marking the spot.

After working our way up-stream for 38 hours, we finally entered the Xiling Gorge, "the longest (42 miles) and historically the most dangerous of the Yangzi gorges." Most of the dangers were removed when wind and human power were replaced by steam, and when, in the 1950's, most of the rapids were cleared with dynamite. Even so, there are still places where the channel is narrow enough that one-way traffic is enforced. At more than one point, the river narrows down to 100 meters.

The cliffs that crowd the river are grayish-white limestone, with black and yellow streaks from mineral deposition. A dense mat of shrubs and trees covers all but the steepest faces of the rocks. The trees are both conifer and broadleaf. The government has used aerial seeding of horsetail pine to control erosion. Wherever farming is possible, the hillsides are terraced.



Shrine and pagoda upriver from Yichang

We saw mostly rows of corn, but there was also winter wheat and some citrus trees. The farmers grow their own vegetables and the small farming communities are usually self-sufficient.



Entrance to Xiling Gorge



Coal barges in Xiling Gorge

The advertised focus of the tour was a boat ride through the Three

Gorges of the Yangzi before the Three Gorges Dam eliminates all of the beauty and excitement from the trip. (That is partly advertising hype. The gorges will still be spectacular; the boats will just be 70 to 120 meters closer to the tops of the cliffs.) The dam is either the most audacious improvement to man's control over nature, or the greatest natural disaster in the making, depending upon whom you listen to. By every definition, it is the most expensive project ever undertaken by the Chinese—current estimates are \$28 billion.

The project has four goals: flood control, power generation, improved transportation, and irrigation. The project has something for everyone (except the farmers, villagers, and city dwellers in the path of the rising dam reservoir who are being moved from their homes and fields to higher ground): Chongqing will become a seaport (only 1,500 miles from the mouth of the Yangzi); the middle and lower reaches of the Yangzi will have reduced danger from flooding; the country will have lots of not-too-expensive electricity; and, most improbable of all (and projected to cost as much as the Three Gorges Dam), the North will get irrigation water when the Southern Waters North Project pumps reservoir water over and through the mountains to the Yellow River.



Locks of Three Gorges Dam

The dam was started in 1993 and is scheduled to be completed in 2009. The dam is sited at one of the few places in the Three Gorges area where the exposed rock is granite instead of limestone. The reservoir is scheduled to be full enough in 2003 that fourteen turbines can start generating 9,800 megawatts of electricity (and \$6 million a day in revenue).

Construction will then begin on another twelve turbines.

The river currently falls 150 meters through the three gorges. As proposed, the dam will raise the water level a maximum of 120 meters. The reservoir will stretch upriver for 370 miles, raising the water level all the way past Chongqing.

The accountants argue that the flood in 1998, which destroyed the homes of one million people, caused more damage than three dams would cost to build. The Yangzi flooded again in 1999 after we had left China.

The nay-sayers argue that there are too many negatives in the design of the dam. Farmland and uninvestigated archaeological sites are being irretrievably lost to the rising waters of the reservoir. The dam will cause an absolutely devastating flood if it is ever breached. The lack of the flushing action of the free flowing river and the flooding of abandoned cities and factories will increase the pollution of the upper Yangzi to toxic levels. The reservoir will quickly fill up with silt and eliminate the power

generation and irrigation values of the project. One to two million people, countless villages, and two cities of 500,000 population are being moved.



Western end of Xiling Gorge

immense. There are 20,000 people continuously working three shifts. The ship locks, one for upriver traffic and one for down, will allow 10,000-ton boats to traverse the dam in five stages, taking a little over two hours. They are also building a ship elevator for smaller boats. It will raise a 3,000-ton boat in only a half-hour. (To get a sense of scale, the Princess Jeannie was just a little less than 6,000 tons.)



Ba coffins in cave

When we left the dam site, we entered the western end of the Xiling Gorge. On one bank, above the new high water mark, we could see a new road with its bridges and tunnels. We passed an old town, which had been abandoned, and saw the new one higher in the hills. There were fishermen at water's edge casting large nets into the river. Wherever feasible, and in many cases where it did not look so to us, the hillsides were terraced, with rows of crops running down hill. Every once in a while there would be two large plaques on the hillside showing



Curious worker in straw Hard-hat, open-toed shoes, Three Gorges Dam shopping opportunity



Fisherman and son on red rocks between Xiling and Wu gorges



Dick outside Wu Gorge



Loading coal at Badong

where the new low and high water marks will be. Usually these plaques were higher than the currently cultivated areas.

Boats going upstream rarely passed us. Usually we were tooting at small boats to get out of our way. But, as we entered the western end of Xiling Gorge, a small hydrofoil taxi passed us. It is the white dot in the “Western end of Xiling Gorge” picture on the previous page.

We saw, carved into the walls of the gorge, narrow tracker’s tow-paths where rows of men, tied together, walked while pulling the boats through the rapids before the arrival of steam power. At one point, we saw two Ba coffins in a cave high on the cliff side. The Ba are a little-known people, constituting one of the Warring States of c. 400 BC, who lived in the gorges area. It is their unexamined archaeological record that will be reduced, if not lost, by the rising reservoir. No one knows why they placed their coffins high on the gorges’ cliffs. It is not even known how they were able to get them there.



Captain supervising raising of anchors outside Wu Gorge

After we exited the Xiling Gorge, we entered a wider, 40 mile long section of the river before we reached the second of the three gorges, Wu Xia (Witches Gorge). We passed Badong (Coal City), one of the major sources of air pollution in the gorges. It is the site of a major cement factory and also a coal-barge loading dock. Workers shovel the coal from large piles left by dump trucks at the edge of the cliff into chutes that direct the coal into barges in the river below.



Entrance to Wu Gorge

Jeff gave a slide lecture on Chinese painting. I will make no attempt to repeat it here.

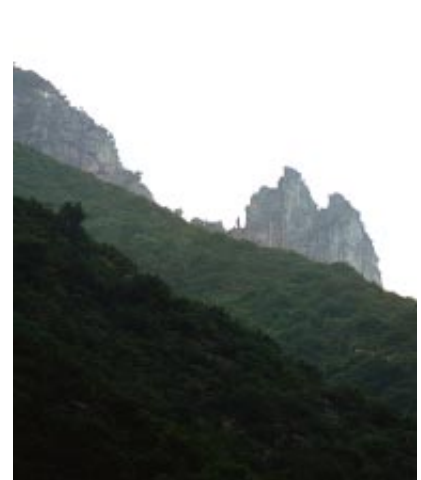
Our destination for the evening was Wushan, but just before dinner the captain announced that we would stop outside the entrance to the Wu Gorge, because of the drizzly weather, the lateness of the day, and the heavy down-river traffic through a one-way section of the gorge. After dinner, we decided



Small shrine in Wu Gorge



Goats on tow-path



Shennu Feng (Smallest Peak)



High-water markers, Wu Gorge

to skip a video presentation on the Boxer Rebellion and went to bed early.

Monday, May 31<sup>st</sup>, 1999, our 11<sup>th</sup> day in China: We set the alarm for 5 o'clock so we could see the sunrise and the boat raise its anchors. The captain said that we would enter the Wu Gorge at 5:45 and that is exactly what we did. The weather was beautiful, but the river was so foggy-hazy that the auto-focus on my camera would not work.

The 25-mile-long Wu Gorge is known for its 12 peaks, although they are more often than not covered in mist and clouds. The most famous is Shennu Feng (Goddess Peak), which has one small monolith standing next to a much larger one. In the narrower sections of the gorge, we



Sampan fisherman, Wu Gorge

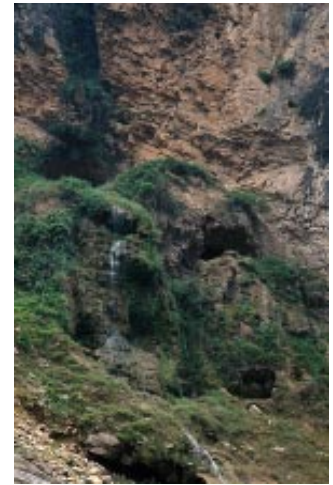


Danang River, Dragon Gate Gorge

saw more tracker tow-paths carved into the cliffs, and a small Ming dynasty bridge (called Bei Shi) built to fill a gap between two of their paths. In the wider places, we again saw fishermen, farmers, small villages, and coal loading docks.



In Dragon Gate Gorge



Cliff with plank boardwalk holes, Dragon Gate Gorge

We exited Wu Gorge about 9 am and docked at Wushan. There we transferred to a small, 40-person, motorized sampan for a side trip up the Danang River and the Three Lesser Gorges. The boat barely had enough power to move upstream through some of the rapids. Two boatmen, with long bamboo poles, stood at the front and pushed us away from the rocks, and, straining on their poles, helped push us forward through the strong currents of the rapids. The whole effect was as if we were in a sailboat being pulled by trackers up the Yangzi.



Villagers offering goodies in baskets to tourists, Danang River

The first gorge we entered was called Dragon Gate Gorge (Longmen Xia). It is spanned by the Dragon Gate



Poling sampan in Danang River rapids

Bridge, which will have to be replaced before the Three Gorges Dam reservoir is filled. On the left cliff wall (heading upstream) was an almost continuous series of two inch square holes that held the beams for a plank walkway that extended some 180 miles up the river. The walkway was first constructed in the Han dynasty and is mentioned in the 246 BC Annals of Wushan County. It, and similar walkways on other tributaries, were important roads to the north, since the major rivers all flow west to east. The walkway was destroyed in the 17<sup>th</sup> century by the Ming imperial army after it was used in a peasant uprising.

When the water level is lower, some of the rapids become portages. Waiting along the paths around the rapids were semi-permanent shopping opportunities, with umbrella shaded stands. We did not have to stop at any of them, so the local young men ran (or just slowly walked) in their bare feet on the slippery rocks along side of our struggling boat and displayed their wares from long poles with a basket on the end. Mostly, they were selling polished rocks. To our amazement, a member of our tour bought one.

When our boat had gone as far up the Daning as it was going to take us, it stopped at a sandbar so we could stretch our legs. Seemingly out of nowhere, two local sampans arrived, full of salespersons with baskets of items for the tourists. The return trip was an hour shorter than the trip upriver. This time, the two boatmen manned a long tiller that they attached to the front of the sampan and worked to keep the nose of the boat in the channel and out of the rocks. We were back on the Princess Jeannie at 1:30, in time for lunch.

Jeff gave a lecture on Buddhism and its introduction to China in preparation for our tour of the Buddhist caves at Dazu:

Buddhism was developed in 500 BC in reaction to the dominant religion of India. The original Buddha rejected the violence and animal sacrifices, but retained the notions of karma—that every action had consequences—and reincarnation, and the belief that karma affected reincarnation. He taught that life is painful and that the cause of the pain was desire. Desires and attachments lead to bad karma. Enlightenment, and the end to suffering, comes from detachment from worldly things and the rejection of desires. The ultimate goal was a passage to nirvana and the end of reincarnation (and hence the end of suffering). The original followers of the Buddha rejected all family ties and lived a monastic life.

Buddhism entered China in the 1<sup>st</sup> and 2<sup>nd</sup> centuries AD, during the collapse of the Han dynasty. Its ideas were alien to the native Chinese beliefs, which stressed strong family ties and ancestor worship. Buddhism arrived with merchants traveling the Silk Road and became the religion of foreigners, including the non-Chinese dynasty that was now governing Northern China.

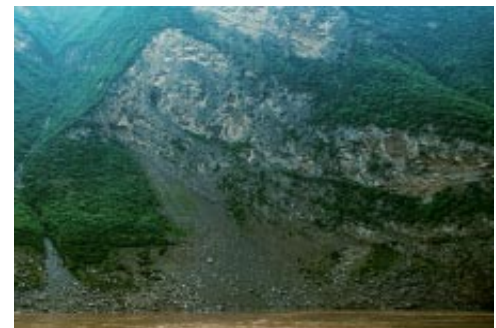
By the time Buddhism reached China, it had split into two main branches. The Lesser Vehicle, or the doctrine of the Elders, was the branch that more closely followed the ascetic, and god-less, teachings of the original Buddha. The more successful branch was called the Greater Vehicle. It had absorbed ideas and cults from other religions, and developed a great body of god-like Buddhas and Bodhisattvas (enlightened beings who rejected nirvana so



Using bow tiller going downstream, Daning River



Entrance to Qutang Gorge



Twisted rocks of Qutang Gorge

they could stay and bring others to enlightenment). The concept of the Bodhisattva shifted the emphasis from enlightenment through one's own effort to salvation through the strength of others. The Greater Vehicle Buddhist monks gained followers by dispensing medical help to whoever needed it. The concept of universal charity was unknown to the Chinese for whom charity was strictly a family affair.

The first Indian monks that came to China said that they had come looking for the land of the Qin (ch'in), which they described in fantastic and Utopian terms. They said that they had not come to proselytize, but to do homage. This was the period when the Han Dynasty was collapsing and China was again breaking up into warring states. The Chinese couldn't figure out what the monks were talking about. So they figured that they were looking for a "Greater Qin" or Shan gri La. The Chinese thought that that was where the monks came from. The monks picked up on this and the idea of a "better place" took hold.

Buddhism changed again when the Buddhist sutras were translated into Chinese. Chinese is a very concrete language and has no abstract terms. Hence the Buddhist "essence" was translated as "pupil of the eye." In Buddhism, women were equal to men. In Chinese there was no way to translate that, so a woman still had to "follow and obey her husband." The Indian monks had an understanding of linguistics, which they taught to the Chinese and thereby made it possible for us to study and understand the changes in the early Chinese language.

By the 5<sup>th</sup> century AD, Buddhism had started to attract aristocrats as well as merchants and peasants. It appealed because of its ethics, the monk's superior medical knowledge, and because it had a strong similarity to Daoism. Buddhism reached a peak at the beginning of the Tang Dynasty (618 AD), but was actively suppressed by the end of the dynasty. Nevertheless, it became, and remains, one of the major Chinese religions.

We passed through the five-mile-long Qutang Gorge in the late afternoon. The sky was dark, the clouds were low, and it had started to rain. The Qutang Gorge is the shortest of the three and took only a half-hour to traverse, including a long stop waiting our turn in a one-way section. The rocks in the cliffs of Qutang Gorge were twisted, folded, and tortured. In one case, it looked like the rock was turned in a spiral. Just before we exited the gorge, we passed a small shrine hanging on the southern cliff with a plank walkway leading to it.

As we went to bed, the Princess Jeannie was working its way towards Wanxian.



Tracker tow-path in Qutang Gorge



Plank boardwalk on cliff to shrine, Qutang Gorge