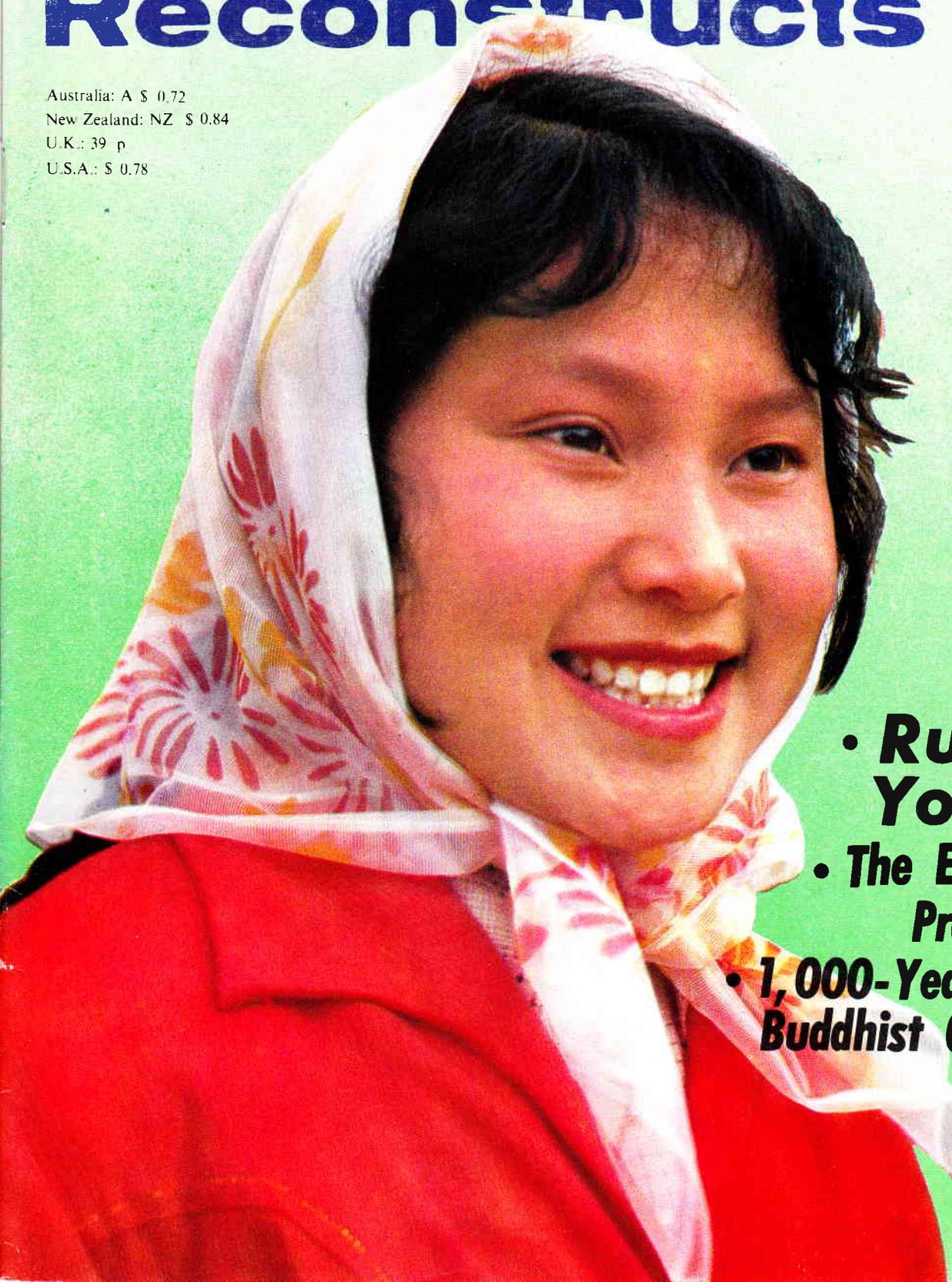


# China

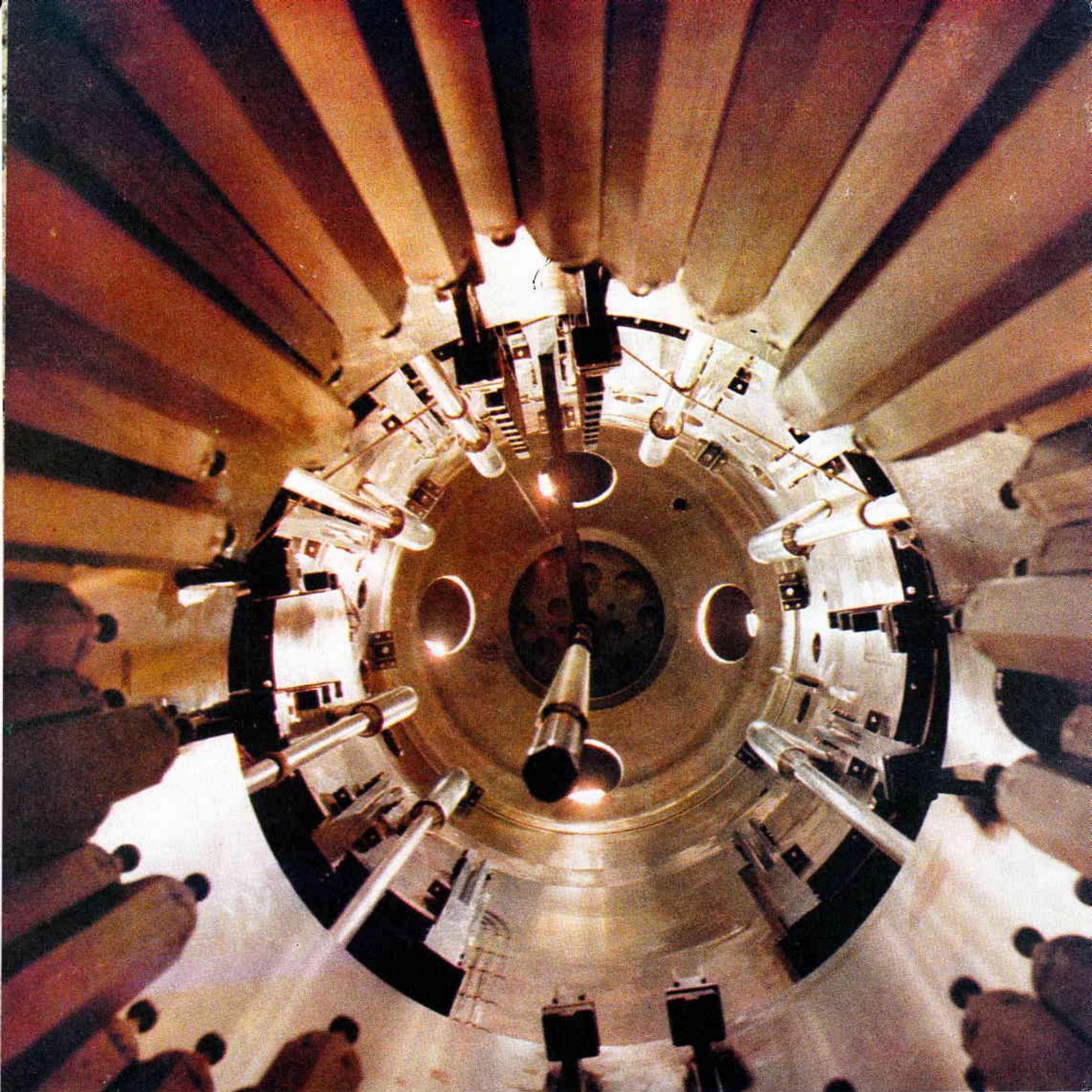
## Reconstructs

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- **Rural Youth**
- **The Energy Problem**
- **1,000-Year-Old Buddhist Grotto**



China's first high-flux nuclear reactor goes into operation. Here, the reactor core is being installed.

*Photo by Liu Zhibin*

VOL. XXX NO. 6

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## Articles of the Month

### Young Folks in the Country

Eighty percent of China's young people live in the countryside. A series describes their current mood as they work to change the face of China. Page 5

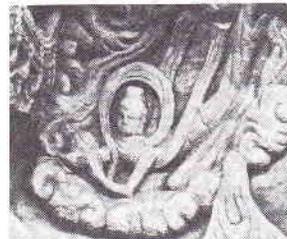


### The Energy Problem

Industrial production rose 8.4% in 1980 while output of energy declined slightly. Conservation, energy efficiency, and new resources are the answer. Page 34

### The Youth Art Exhibition

How some of China's best young artists tackle new themes and new styles of expression. Page 30



### Treasures of Dazu

A thousand-year-old treasure trove near Chongqing in Sichuan province contains 50,000 stone carvings; it's now open to the public. Page 50

### Xiamen (Amoy) Special Economic Zone

"Special economic zones" for foreign investment in coastal cities are a feature of the new economic plan. How do they work? Page 68



### Tighten Your Articles

You should tighten your articles. You waste a lot of words.

I am happy to see that statistical comparisons are often made, comparing one year to the year before. I have seen too many comparisons referring to the years before 1949. I don't care what happened before 1949 as far as economic statistics are concerned. I only want to see what improvements are made from year to year.

ERIC W. LIEN

San Francisco, California; U.S.A.

### Narcissus

My husband just recently started subscribing to *China Reconstructs*. When the February issue came I was taken by your article on the narcissus in China.

As a young girl growing up on a dairy farm in the San Joaquin Valley in California, my mother had these sweet-scented flowers growing in our yard. When they started blooming I always felt an excitement, an anticipation knowing that spring would soon follow.

So when I read that the Chinese decorate with these fragrant flowers and had a Spring Festival in late winter, it brought back many warm memories of my childhood. It surprised me to know that my feelings were shared by many people in another country.

Thank you for the memories and the education in that article.

MRS. E. L. IRWIN JR.

Tulare, California, U.S.A.

### To Guard Against TV

I have just read your March 1981 issue and the article by Lu Zhenhua informs me that two-thirds of the families in the Beijing area have TV now. This shows that China is gradually climbing out of poverty.

But as a friend of the Chinese people, I would like to tell you that you must guard against it. Because it is like the tongue as described by Aesop: it gives expression to men's thoughts, and those are by turns the best things, and worst ones as well.

PIERRE AND SIMONE  
BELLANGER

Paris, France

### Court and Army

I am so glad to read the article on the special court carried in your February 1981 issue because I am working in a court. I hope you will carry articles on your army.

*China Reconstructs* is good. But it would be better if you changed it into a weekly magazine. A month is too long to wait for the next issue.

NDUWIMANA FRANCOIS

Kibungo, Rwanda

### Articles with Ideas

I appreciate your articles very much for their simplicity in style and variety of theme. I also like to read those articles with the writers' personal ideas and experiences because they can help us understand the Chinese people's way of thinking and life.

FRANCOISE MEDIAVILLA

Colombes, France

### Can Ear Read Words?

I read with great interest the article "Parapsychology, Is It Real?" that appeared in your January 1981 issue. From it I learned that not only ears but also other parts of some young people, like armpits and feet can read words as well as recognize the color of ink. I am looking forward to reading an article on the Parapsychology Forum in Shanghai.

FAUSTINO BARDALES LÓPEZ

Lima, Peru

### Bridge of Friendship and Understanding

*China Reconstructs* really is a bridge of friendship and understanding between the peoples of China and other countries. The articles' rich contents help us learn your country's system. Your Spanish edition helps readers understand the articles on different subjects through its simple, accurate and humorous form of expression. The color pictures in your magazine are the most beautiful I have ever seen. Through your magazine I know the important people in every field and the cultural tradition of China that complements and influences ours. I enjoy China's culture and religion very much.

GUILLERMO GONZÁLEZ ZAYAS  
Ponce, Puerto Rico

### You Don't Avoid Self-Criticism

I was fortunate to have a chance to make a three-week visit to your

country in 1978 as a member of the Switzerland-China Friendship Association. From then on I have been a warm-hearted reader of *China Reconstructs*. The magazine has deepened and expanded my impressions of China and I hope to visit it again.

The one and a half hour film I shot during my stay in China received favorable comments in a film lecture I gave. I am glad to see that your magazine reports China's new developments frankly and doesn't avoid self-criticism. Your reports on China's religious activities are the clear proofs of this.

W. BOESCHENSTEIN

Mannedorf, Switzerland

### Print Chinese Characters

I am studying Sinology and East Asian art history at college. I think your articles are interesting, especially the news reports, which are always in concrete terms (e.g., "Historic Trial" in your February 1981 issue).

I would be pleased if you gave the Chinese characters for the names of important people, places, and organizations.

At present I still can't read Chinese newspapers and periodicals due to my limited Chinese level, so I can hardly find the Chinese names for persons which haven't been collected in some ordinary reference books. I hope you will consider and accept my suggestion.

INGRID SCHUH

Bornheim, West Germany

### Short Articles with Summaries

I propose that you should carry some short articles with bold-face summaries for those readers who don't have much time to read. Please use more pictures, if possible, because they communicate better than words.

It would be good if you gave short summaries to the articles "Recalling One of Our Founders", "Festival of Minority Song and Dance" and "Giant Project on the Changjiang" that appeared in your February 1981 issue.

HERWING BRANDSTETTER

Graz, Austria

### "Language Corner" Answers

Your magazine is good, both the design and the contents. If you gave answers to the "Exercises" in the "Language Corner" on the following issue, it would help those people who are studying Chinese by themselves.

THOMAS STOJCK

Bobenheim-Roxheim, West Germany

**Wit and Barbs**



He only picks what he wants.  
Zhang Zhengti

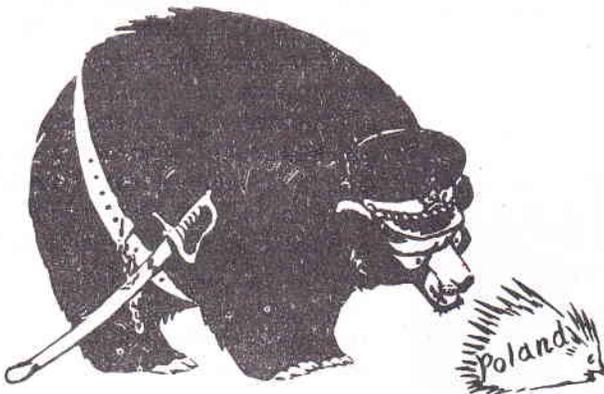


Contradiction.

Zhang Qinzhe

Bear meets porcupine.

Wang Yu



Ancients confer  
(Too many over-age people in top jobs).  
Qiu Chengde

# Home on the Range

HUANG YOUFU



Yurt mobile homes on the Inner Mongolian grassland.

Yurts with electric lighting in a settlement on Hulun Buir grassland.

Lu Jinfa

THE vast and beautiful grasslands of Inner Mongolia cover more than half of the autonomous region's 1.4 million square kilometers. The white felt yurts of the Mongol herdsmen dot the range like sailing ships becalmed on a sea of green.

The yurt is a dwelling intimately adapted over thousands of years to the nomadic life on the northern plains. More than a tent but not quite a house, it can be assembled and disassembled in hours. The typical yurt has a dome, or *uni*, 2.5 meters high, and

a circular wall, or *hana*, three to four meters in diameter, all made of wicker fastened with leather thongs and covered in felt. There is a one-meter-diameter skylight that also accommodates the stovepipe. The frame is erected on a base of earth and stones raised a few inches above the ground.

The interior has no partitions. Cabinets and furniture are arrayed around the wall, with the stove in the middle. Rugs or low wooden beds are arranged on three sides of the stove, with the

master of the yurt occupying the center, the men of the household on his left and the women on his right. Large families may have two or more yurts.

In the Mongolian language, the yurt is called *mongol ger*, or *erge ger*, "movable house". The Han Chinese have adapted the old Manchu form, *monggo boo*, to *menggu bao*. ("Yurt", originally a Turkic word meaning "home", comes to the English language from the Russian, via German.) Ancient Chinese literature had many names for the structure: In the Tang dynasty (618-907 A.D.), it was *qionglu*, "vaulted house"; other names, such as *zhanmu*, *zhanzhang*, *zhanfang*, and *zhanbao*, derive from the Han word *zhan*, meaning "felt". It was also called *baizi zhang*, "hundred son tent", for the hundreds of wickers used in its construction. Interestingly, during the Tang dynasty, many Han people in the north held weddings in yurts in the hope of having many sons.

The Mongol herdsmen are warmhearted, straightforward, and hospitable. Any traveler is welcome at any time to stay for a meal and a night's rest before continuing his or her journey. But guests are expected to follow the rules of the house — men on the left, women on the right. □

Tourists visiting the Ulan Tuge People's Commune can put up for the night in a yurt.

Yang Shenhe



HUANG YOUFU is a researcher at the Central Institute for Nationalities in Beijing.

# Young People of a Rural Brigade

YOU YUWEN

IT was early spring, and in north China it was still very cold. Though the winter wheat had begun to turn green, the Shandong landscape all along our route remained a stretch of gray. But suddenly there were bright colors, and I knew we'd arrived at Zhongshahai. Young girls in colorful jackets and scarves and dynamic young men were on their way to work in the fields or at their brigade-run factory. Our host, seated next to me in the car, told me these young people had played an important role in improving their village's prospects, transforming it from a poverty-stricken backwater to a prosperous, modernizing rural community.

## Poor and Backward

Three years ago Heze prefecture in southwestern Shandong was one of the province's four poorest and most backward areas. Lying on the alluvial plain of the lower Huanghe (Yellow) River, 40 percent of its cultivated land is saline-alkaline or sandy. In the old days, when there was famine, the peasants had to sell their daughters or sons, or abandon their homes to find work or charity in other places. Liberation brought an end to this, but not to poverty. Until 1977, grain rations averaged only 150 kg. per person, and in some places it was as low as 50 to 100 kg. Cash wages averaged only 30 yuan per person annually. Many communes and brigades depended on the state for food and the money to maintain production. Every spring, when the grain was almost gone, many people left their villages to find



Some of Zhongshahai's young men.

whatever work they could to support themselves and their families. In Zhongshahai, for example, until the early 1970s, 40 percent of the 2,900 brigade members had to find work elsewhere every year.

There were various reasons for this situation — natural calamities, a low starting point, and incompetent leadership at different levels.

But the crucial problem was ultra-Left thinking. In some places, commune members already undernourished were told to "resolutely cut off the tails of capitalism" which given local conditions meant, "don't raise chickens at home" or do anything else to provide for oneself. If they disobeyed, they would be criticized. So at that time the peasants' faces would turn pale at the mention of "getting rich", and thus the initiative of the masses and rural cadres was strangled.

With the Party's adjustment of agricultural policies in 1978, Heze quickly showed improvements.

Last year, for the first time, Heze not only overfulfilled the state production target, but had surplus to sell; it produced altogether 190,000 tons of grain. In addition, Heze sold to the state 90,000 tons of cotton, 10,000 tons of peanuts and 9,400 tons sesame. Last year, average grain rations and cash income for the members of the Zhongshahai brigade were 360 kg. and 280 yuan. There was not a single grain-deficient household in the village, and 80 percent of the peasant families had bank deposits, ranging from several hundred to more than 2,000 yuan.

## Going Toward Prosperity

From the changes at Zhongshahai we can get some idea of the changes throughout Heze.

It is not that, even in the period of ultra-Left influence, the people of Zhongshahai did not try hard to improve their lives. In 1968, aware that farming 300 hectares wasn't enough, they resumed their

YOU YUWEN is a staff reporter for China Reconstructs.



Sha Deli



Ma Xixian



Zhang Hongjun

traditional leather processing business which had been forced to close in the late 50s under the slogan "grain is the key link". In 1974, they succeeded in trial-processing gray kidskin and since then their products have been sold not only at home but also abroad. The brigade could have distributed the profit among the peasants, but the policy then was to invest an excessive part of the earnings in the expansion of production, so very little of the money actually got to the people.

Things are quite different now. In 1978, Zhongshahai instituted a system of individual responsibility in fieldwork and awards and penalties in tending the collective's livestock. In the brigade-run industrial and sideline production units, piece work is being practiced. Also, the peasants are encouraged to engage in household sideline production, like raising cattle, sheep, chicken, ducks, rabbits and bees. The peasants made more money and the collective gets more organic fertilizer.

As life gets better, the peasants of course no longer need to go elsewhere for work, and even those who abandoned their homes long ago are coming back. Sixty-four-year-old Sha Daojia, who left at the age of 12 with his mother to lead a beggar's life, has recently returned to Zhongshahai with his family.

There's a lot of worried talk now about China's situation, and especially about the younger generation, whom some call "a lost generation". But the young people of Zhongshahai seem to have found themselves.

### Seven Under a Quilt

Guo Xianke, a worker at the brigade's leather processing factory, is tall and thin, with big, bright, piercing eyes. He appeared in my room as I was about to go to bed, my first night in Zhongshahai, and asked, how many quilts I usually used. "If you want another one," he said, "I'll bring it to you right now." Pointing to the two thick quilts with red silk covers piled on my bed, I thanked him and said, "I think I need only one, and I've already got two." "Ten years ago I wouldn't have been able to make the offer," he said. "At that time our family of seven people had only one quilt."

He found a 20-year-old girl, Sha Dehua, to keep me company. We lay awake talking girl-talk, and I was surprised to learn that such a young girl had 1,000 yuan in the bank. That's a lot of money even for people in the cities. At first I thought this might be the savings of her whole family. But she told me proudly this was her own money, and that her mother had only 600 yuan in the bank.

It took me a long time to fall asleep that night. I kept wondering how it was possible that, in a village where not too long ago a family of seven had only one quilt, a girl of 20 could now have 1,000 yuan bearing interest in a bank. Who were these people who had come so far so fast?

### Stubborn Young Man

All along, there have been young people in Zhongshahai determined to modernize the place. Sha Deli is one of them. Now 25

years old, he's short but stoutly built, quick-witted and thoughtful. He once planned to go to college or join the army and then return to the village. But as it turned out, he had no opportunity to do either, and after graduating from senior middle school, he went right to work in the fields.

Twice, some solicitous villagers spoke to his mother about arranging a match for him, but both times the girls' parents rejected the match because Deli's family was too poor. Deli decided he wouldn't marry a Zhongshahai girl; when the village became prosperous, he would find an outside girl and bring her to Zhongshahai.

Deli, as the oldest of six children, has had to help support the family since he was very young. The hard life tempered him and endowed him with a strong character. He refused to believe that he had to remain poor all his life. When he finished school, he was determined to change Zhongshahai, and also his own fate. He got several of his schoolmates together and formed a shock team, which tackles the heaviest and dirtiest work in the fields. Evenings, they studied together, pointing out each other's shortcomings and finding ways to do their work better. Deli keeps a diary, in which he examines himself and encourages himself to struggle on.

Overwork brought on a two-week illness. But soon after he recovered, he plunged into a new project — building the Youth Experimental Farm. For his hard work and organizational ability, he was elected general secretary of the Zhongshahai branch of the Communist Youth League. Under his leadership, League members have in the past few years put one hectare of land to growing reed, leveled roads, dug drainage ditches and performed other services for the villagers.

Deli is now engaged to a woman from a brigade 50 km. away. He is raising several head of cattle, and when he sells them to the

state (they'll bring about 1,000 yuan each) he'll build a house and get married.

### A Girl Who Stayed

When Ma Xixian graduated from senior middle school in 1975, she thought of finding a job in the city. Working in the countryside, she thought, would not give full play to her talents. But at last she decided to stay and use what she'd learned to help transform the village.

Farm work, she soon realized, was not as simple as it looked. Pruning cotton plants, she often cut off boll-bearing branches. Seeing premature cotton bolls being shed, she couldn't tell whether it was the result of insects or lack of fertilizer. She consulted books and agricultural technicians. "Now," she says, "standing at the head of the fields I can tell whether the plants need water or fertilizer."

Because she demonstrated concern for the collective, the brigade leadership put her in charge of women's affairs. As an unmarried woman, Ma was uncomfortable doing family-planning work, but her sense of responsibility urged her not only to do it, but to do it well. She bought some books on birth control and explained them to the women. She went to the homes of young mothers who ignored birth control to persuade them to have only one child. If a woman wanted to be sterilized, Ma would accompany her to the hospital.

Ma shows special concern for old people who live alone. With other young women, she often helps them with housework and attends them when they are ill. The old people affectionately call her "our girl".

Like Sha Deli, Ma found her fiancé in a nearby village. As she does not want to leave, the young man will come to live in Zhongshahai.

### Fine Young Couple

Some insensitive people might wonder why Fa Guoqin, who is

rather pretty, would marry Zhang Hongjun, who is crippled with polio. Several years ago when Fa's mother was seriously ill, Zhang, a brigade bare-foot doctor, tended her day and night until she died. The young man's dedication moved Fa Guoqin, and gradually she fell in love with him.

At Spring Festival in 1979 they were married. Even on their wedding night they were awakened by loud knocks at the door: A villager's child was having convulsions. Fa Guoqin, remembering how anxious she had been when her mother was ill, let him go without a word.

A few days later, an old woman passing through Zhongshahai suffered a heart attack. Zhang Hongjun gave her emergency treatment and placed her in the brigade clinic for observation. Fa Guoqin brought the old woman the couple's new quilts, helped her take medicine, and cooked special food for her, as if she were her own mother.

Zhang Hongjun is a young man never content with himself. He spends almost all his spare time reading, and has rapidly improved his skills. A commune hospital offered him a job, but he turned it down. He's determined to dedicate the rest of his life to Zhongshahai and its people who have brought him up. The brigade is going to build a hospital this year and has asked him to prepare a list of the equipment it will need. Zhang Hongjun says he has much to do in Zhongshahai, and his future is bright.

### Future Plans

I talked with many young people about their plans, and it appears they all have lofty ideals, but a down-to-earth sense of how to achieve them.

Some told me they want to build more new houses and arrange them in rows so the village will look neater. Sha Deli plans to construct a sluice gate in the Zhushui River to generate electricity, and then grow apple trees on the river banks and grapes on the

slopes. Sha Deshe, who works at the dyeing shop of the leather processing factory, wants to find ways to better treat waste water. Sha Qixin, a tanner, has plans for bringing in advanced equipment. Film projectionist Guo Zenghai intends to automate the brigade's broadcasting facilities. Cotton grower Sha Taoyuan hopes to produce a manual on how to get a higher yield of cotton. Ma Kaoliang of the Youth Experimental Farm said a new strain of wheat is being cultivated there and they hoped in the near future to have a big laboratory. Ma Xixian, who has some talent as an actress, wants the brigade to sponsor an opera troupe of its own.

"We are getting old," said brigade head Ma Xinlian, "but we'll do whatever we can for the young people". Within two years, the brigade intends to build a hospital, a home for the aged, a kindergarten, a flour mill and a cinema. The Youth Center will be enlarged and the main roads of the village will be blacktopped. The rest, he said, will be left for the young people to do.

The young people in Zhongshahai have felt their heavy responsibility and are working hard to live up to the expectations of their elders. Their honesty, simplicity and stubborn character left a deep impression on me. I believe they have the stuff to build China into a strong and prosperous country. □

The wheat fields of Zhongshahai.  
Photos by Liu Chen



# The Youth Experimental Farm

ZHI EXIANG

**T**HE Youth Experimental Farm, 1.5 kilometers east of the village, occupies 48 hectares — one-sixth of Zhongshahai's cultivated land. Forty-four of its 59 staff members are under 25.

It used to be a wasteland that the peasants called "the Eastern Wilderness". In the early 1950s, people tried to grow winter wheat there, but they reaped less than they had sown. Later, people tried to drain the water-logged fields and reduce the alkalinity of the soil. But nothing worked.

In the winter of 1977, the Zhongshahai branch of the Communist Youth League mobilized 200 young people to fill two old river courses,

tried to improve the water-conservancy installations to enlarge the area under irrigation. At that point, the brigade appointed some of the young people to keep the place going, and named it the Youth Experimental Farm — "experimental" because of its work to improve the soil, popularize an improved variety of wheat, and do crop experiments.

Guo Xufu, 32, a deputy leader of the farm, said that grain output has increased year by year. Last year, the yield of wheat was 6 tons per hectare, up from 2.6 tons in 1978. Total annual output of grain (including wheat, maize, and soybeans) was 160 tons. They have

built 75 sheds for the 105 head of cattle and 300 Angora rabbits, and run an 8-hectare apple orchard with 2,500 trees. They've also planted 10,000 other trees. Almost all work on the experimental farm is now done with the aid of machinery.

Sha Qiqian, 24, graduated from senior middle school four years ago and was assigned to the then new experimental farm. In the spring of 1978, he and his co-workers set up a research unit. At first, they experimented with maize hybridization on one hectare of saline-alkaline soil. That was his first crop experiment. At first, they were hesitant, because they were afraid they would fail and lose face. In the heat of summer, they went deep into the field, where the maize was taller than they; streaming sweat and breathing with difficulty, they artificially pollinated each maize flower. Working more than ten hours a day for twelve days, they bred a new, high-yield, alkali-resistant variety of maize. The next year, they popularized the hybrid throughout the brigade. The yield was 4.5 tons per hectare in 1979, up from 2.2 tons the year before. Later, they experimented with different strains and density of planting. Each year they test and appraise more than 20 varieties of crops for 50 properties. They have contributed to popularizing the improved varieties throughout the brigade.



Sha Qiqian and a co-worker working in the laboratory.

Mechanic Sha Qiwang.

level more than 33 hectares of land, cart away 20,000 cubic meters of alkaline soil and build 6 hectares of fertile farmland within 3 months. Meanwhile, to increase the quantity of available manure they built two cattle farms and

ZHI EXIANG is a staff reporter for China Reconstructs.



## All-Round Stockman

Ma Yongtao, a strapping stockman on the cattle farm, isn't quite 20 years old. When he graduated from junior middle school in 1976, he was reluctant to be a stockman. He thought it was a job for old



Building a canal.

A model breeder of Angora rabbits.



A newly-married couple.





Wushu, a favorite pastime of young people in the countryside.

Workers at the Zhongshahai Leather Processing Factory.

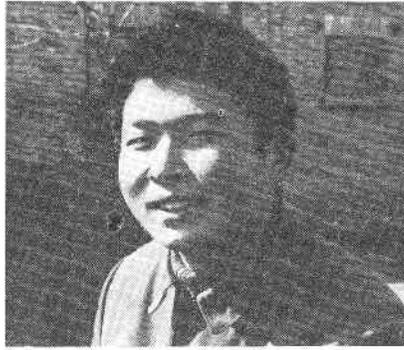
Morning in the countryside.

*Liu Chen*



peasants and would cause him to lose face. He also feared it would be difficult for him to find a wife if he were a stockman. Later, when he understood that one cow could provide manure for 2.5 hectares, he changed his mind.

Ma is in charge of 14 cattle. He feeds them twice a day, cleans the cattle-sheds once, and collects two cartloads of manure. He's been known to stay up all night tending a sick cow. According to the new system of individual responsibility, a stockman makes more or less money depending on how well he does his job. Every season, the Youth Experimental Farm has an awards meeting, and almost every time, Ma Yongtao is given an award. Last year, his cattle were rated best. His cows produced 5 calves last year. Ma got 5,100 workpoints for the year, earning 561 yuan and 637 kilograms of grain, plus 270 yuan in awards. He was named a model stockman.



Stockman Ma Yongtao\*  
Photos by Liu Chen

### Way with Tractors

Sha Qiwang, a tractor driver, had only 4 years of schooling. But he's learned to operate and repair the farm's water pump, sheller, hay cutter, seeder, tractor, and other equipment.

He's been a repairman since 1978. The brigade leadership

started him out driving a tractor. He often went to learn from the mechanics in the tractor station. "He dug into his job very much," deputy leader Guo Xufu said. "He was not afraid of hard work, dirt, or fatigue. When he was intent on a job, he wouldn't eat or sleep until it was finished."

While we talked with Sha Qiwang that day, a young man ran up and said, "Go quickly and take a look, there's something wrong with the water pump." Qiwang carefully examined the old 12-horsepower diesel engine and said, "It doesn't matter, there's something wrong with the throttle." He rolled up his sleeves, squatted, and in less than half an hour he had it fixed. Washing the grease off his hands, he said with a smile, "This engine was produced in the 1960s. It's too old. We've ordered new equipment; soon we'll have an electric motor instead of this diesel engine. . . ." □

## Country Youth—III

# Into the World Market

ZHENG SHE

AT the 1974 Export Commodities Trade Fair in Guangzhou (Canton), a young man — from the north Chinese countryside to judge by his appearance — carefully examined an elegant coat of gray goat's fur in one of the fair's offices. The soft, light coat had been pieced together from about 40 or 50 kidskins, and was obviously quite expensive.

It wasn't, however, so much the price of the coat that interested Sha Qifeng, as the young man was named, as the fact that the skins originally came from his native village, Zhongshahai in Shandong province. The pelts, known as Tsining Gray Kidskin on the international market, were of a special type of goat bred only in the southeastern part of Shandong,

since the quality of the fur inevitably changed if the goat were raised in a different environment. But these skins had not been dressed in China: They had been exported raw and processed abroad. The coat had been brought to Guangzhou by a foreign businessman who wanted to know if orders could be placed for similar articles in China. The Chinese export firm had then asked the Zhongshahai production brigade to send someone to see if they could handle the job, and that is why Sha Qifeng was there.

Sha Qifeng looked at the coat speculatively. He himself worked at a tanning workshop in Zhongshahai, small and ill-equipped and lacking the know-how for this kind of work. But the offer was tempting. Such a line of production could be highly profitable, for his country as well as for his



Sha Qifeng.

hometown. Could they do it? It would take months, perhaps years, to work out the needed formulas and processes, with possible failure in the end. But Sha decided to give it a try.

### From Scratch

After returning to his village in Shandong, he brought the matter up with the leaders of the local production brigade. They backed his proposal and agreed to divert funds for the project. "Do your best," they said, "and don't worry about the financial side. We'll cover the losses if it doesn't work out."

ZHENG SHE is a reporter on the editorial staff of China Reconstructs.

The tanning workshop at Zhongshahai had been set up in some old temple buildings in 1968. Most of the workers were young and inexperienced. For lack of money they made do with the simplest equipment, mainly a few earthen jars and some wooden tables donated by the villagers. With guidance from an old tanning worker, they dressed goat and dog skins, and did a bit of dyeing and cut-out work for ornamental skin picture-rugs.

Sha Qifeng's experience in the trade was limited to what he had learned from his father who had occasionally tanned a few skins using simple indigenous methods. Qifeng himself was only a tanner's assistant at the workshop. He had little education — having stopped at junior middle school — and no reference books on modern tanning techniques. The difficulties seemed enormous.

The brigade leadership helped him form a five-man experimental team and then sent him to factories in the cities of Jinan, Qingdao and Shanghai to learn their methods. He was impressed by their modern equipment, but knowing that his brigade could not afford such things, he decided to work out a program on the basis of what they already had, which was pitifully little. All the

workshop possessed in the way of "modern" instruments was a thermometer, a balance and densimeter. Most measurements were done by sense of touch, sight and smell. As Sha Qifeng used to joke, "I've all my instruments on me, I always carry them along."

Sha Qifeng and his family lived on a meager budget, but he scrimped and saved to buy books and reference material on skin-dressing. Every night he would check the experiments he had done in the daytime against relevant data in his books. Then he would prepare the next day's work plan, chemical formulas and technological processes for discussion in the experimental group the following morning. He read voraciously, often forgetting to eat or sleep. Sometimes his wife would wake up in the small hours to find him still jotting down figures by the light of a kerosene lamp. She knew it was no use telling him to go to bed, so she would simply drape a jacket over his shoulders against the cold.

Short on theory, Sha relied heavily on experimentation. During some experiments, he and his co-workers stayed seven days and nights at the workshop eating and sleeping there. Their eyes became bloodshot, their cheeks fell in. But they kept at it. After ten months of hard work, they were ready.

Although they had hundreds of successful experiments behind them, members of the group held their collective breath on the first day of mass production. But when the first kidskins were spread out for examination, they knew they had won; they had lived up to the expectations of their fellow villagers.

### Recent Development

The gray kidskins processed at Zhongshahai soon appeared on the world market. The factory itself has grown from year to year, particularly in the last three years. Starting with 54 people, it has now 520 on its payroll, of which 460 are young people under 30. The old workshops have been replaced by new ones twice as large, and construction on a new two-story factory building was completed in April.

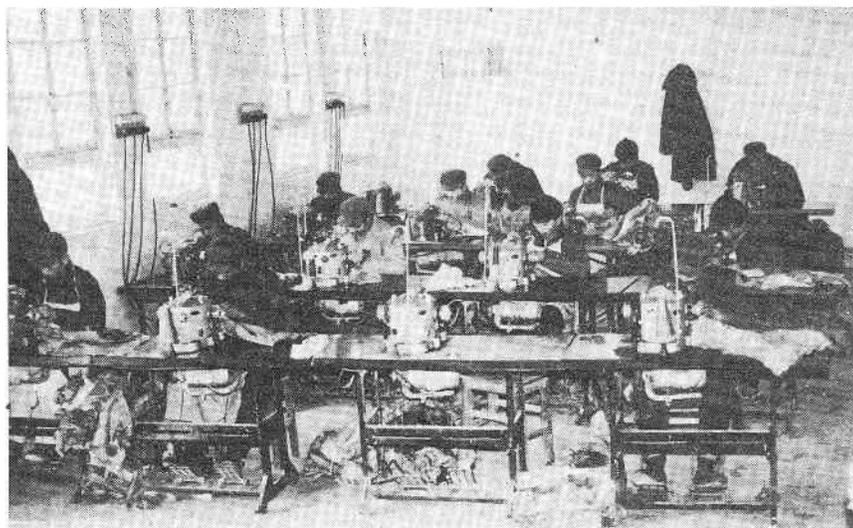
Facing the factory gate is a spacious open ground for drying skins. South of it is a basketball court; north of the ground stands the Young People's Club equipped with a library, a room for table tennis and a broadcasting studio, as well as an assortment of balls, musical instruments and chess games. Further south is the dressing shop, in which a set of new machines will soon go into operation. The old "laboratory" is still being used by Sha and his workmates for experiments. They have recently developed a new variety of kidskin with white-tipped dark-gray fur which they call Frost on the Grass. They are now experimenting on another new variety, half gray and half brown.

Today, Sha is known locally as an expert on furs. He has invented five new processes for skin-dressing, winning a provincial science research award. His original pioneer team has grown, with ten young workers from the tanning shop enthusiastically assisting him in his experiments.

The brigade's original investment has paid off handsomely. The factory now accounts for nearly 60 percent of its total income, and it is contributing to Zhongshahai's growing prosperity. □

Kidskins are cut, matched and sewn in this workshop.

Photos by Liu Chen





# More Marriages in Zhongshahai

YAN QING

**I**N poverty-stricken Zhongshahai village in Shandong province girls often ran away to find husbands elsewhere. The parents of girls who did stay at home had to lower their expectations for their sons-in-law. Zhongshahai girls would say, "I'll marry a pockmarked man or an older man as long as he can support me." Girls from other towns also refused to marry Zhongshahai men, whose undesirability as mates thus became not the least of poverty's burdens. True love often had tragic consequences.

Today, the improved economic situation in Zhongshahai has greatly relieved these frustrations. Seventy-two young couples in this 620-household village were married within two days during Spring Festival last February. Cars, bikes and other vehicles clogged the main north-south road, as joyful celebrants brought dowry items including tables, chairs, cupboards, trunks and quilts. Only half of the brides were Zhongshahai girls; outsiders are now willing to marry Zhongshahai boys.

*China Reconstructs* talked with some of the newlyweds:

Sha Deyong, a shy young man who works in a furrier's shop had been engaged by his parents

several years ago to a girl in another village. However, he fell in love with a Zhongshahai girl named Ma Jingai. According to local custom, after the engagement is arranged the two families exchange presents during festivals. So Sha was sent by his parents to take a present to his fiancée's home. On the way he thought, why should I marry a stranger instead of the girl I love? He turned back and distributed the presents among his friends. Eventually, he persuaded his parents to let him break off the engagement, and after some twists and turns his dream came true. When he married Ma Jingai, everyone said, "It's a marriage of love."

Bride Yang Juting, whose home is near the county town, looks quite like a city girl, pretty and with an easy manner. Her two sisters also married Zhongshahai men some years ago.

**I**N 1970 her elder sister, Yang Lanting, fell in love with an accountant at the village's supply and marketing co-op. Lanting often remarked, "If he weren't so handsome and upstanding, I'd never have considered marrying anyone from such a poor place!" Life was difficult for her after

marriage, but she worked very hard without complaint. She believes that concerted effort can change a place. Her ideas influenced her sister to find a husband in Zhongshahai. Their marriages were very uncommon then, but both sisters are strong-willed.

Yang Juting thought her two older sisters should not have married into Zhongshahai. She herself hoped to find a job in the county town, but by chance she met Guo Songhai, an electrician in Zhongshahai. She fell in love with him, as he mirrored her own cleverness and vigor. By that time, too, the village had changed for the better. And of course her sisters encouraged her to marry him and join them in Zhongshahai.

**T**HE village young people place high value on freedom of marriage. Once engaged, young lovers will never change their minds. The fiancée of Sha Deli, general secretary of the Communist Youth League in Zhongshahai, was once badly injured by a tractor while working in the field. Unwilling to be a drag on him, the young woman suggested that Sha find someone else. But Sha said soothingly, "Even if you're crippled for life I'll take care of you."

During Spring Festival the villagers were all in a cheerful mood, talking about the weddings. But it takes a long time to change habits and customs. Making a date in the village still must be kept private. The lovers will meet at night at the riverside, in a hayloft, or in a wheat field. Once a boy and a girl decide to get married, they find an "introducer" before announcing their engagement. The introducers, unlike the former matchmakers, are not paid for their services. Only the form remains, as a sign of young people's respect for their parents' habit. The older people also know that time has changed, and are learning to turn a blind eye to the young people's conduct. □

# New Hope for Nephritis Patients

LI LEISHI and XIE ZHUFAN

**N**EPHRITIS, or glomerular nephritis, is rather common among children and young people. Its main symptoms are edema, high blood pressure, and protein in the urine. Chronic nephritis often results in kidney failure or fatal uremia. Although there has been much progress in the study of kidney functions and diseases since the 1940s, chronic nephritis is still difficult to treat.

Since 1960, medical workers here have been experimenting with combinations of Western and traditional Chinese medicine to find a more effective treatment. Clinical practice has demonstrated the soundness of this approach; we have achieved higher recovery rates and less recurrence of the disease than when using either traditional or Western techniques alone.

## The Problem

Edema was identified and treated by Chinese physicians in ancient times. Two classics, *The Canon of Internal Medicine* (Nei Jing, written in the Warring States period 475-221 B.C.) and *The Synopsis of Prescriptions of the Golden Chamber* (Jin Kui Yao Lue, A.D. 219), both describe the treatment of edema, emphasizing regulation of bodily functions according to the conditions of different patients and their reactions to the medicine.

In 1955, researchers at Beijing Medical College began using variations of the traditional edema treatment for edema from chronic nephritis. Clinical results revealed a diuretic effect, and in a few cases, urinary protein disappeared and the patients recovered. Many other hospitals reported similar

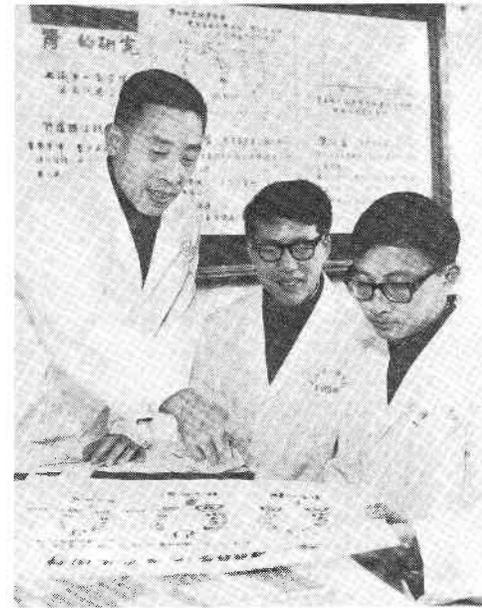
observations in the next two or three years. However, as traditional Chinese medicine was not based on laboratory research and etiological study of the disease was lacking, better results in treatment were not achieved. One survey at the time showed that while the edema symptoms were eliminated in 65 percent of nephritis patients, only 12 percent were really cured. The result was far from satisfactory.

The Western approach to nephritis is based on the theory of immune injury to the kidney, and it is regarded as a disease of the immune system. Thus Western doctors stress readjustment of the patient's immune response. Since the 1950s, immunosuppressive agents such as cytotoxic drugs and corticosteroids have been in use.

About the same time, Chinese physicians began to prescribe these drugs, on which great hopes had been placed. There was no doubt that short-term effects were obtained. However, longitudinal studies proved that the treatment was beneficial to only some patients; many suffered relapses after they stopped taking the drugs, and quite a few failed to respond to treatment at all or even developed serious complications caused by the side-effects of the drugs. Although new drugs similar to the immunosuppressive drugs were later produced both in China and abroad, the situation has not completely changed.

While it has been proven that nephritis results at least in part from imbalance in the immune system, the lack of uniformly effective drugs and the strong side-effects of the drugs that were available made this treatment unsatisfactory. Some Western specialists, in fact, concluded that it makes no difference whether chronic cases are treated or not; as a result, many patients are given only palliatives until the last

stage — kidney failure. At that point, a kidney transplant or hemodialysis is indicated, both pro-



Associate professor Shen Ziyin (left) and his graduate students at Shanghai Medical College No. 1 Huashan Hospital. Prof. Shen has achieved good results combining Chinese and Western medicine to treat nephritis.

cedures being difficult, expensive, and thus rare.

Kidney transplants and hemodialysis were introduced in China in the 1960s. But as a developing country with a population of one billion, China lacks the facilities and skilled personnel to adopt these methods for thousands of nephritis patients. Thus, our task now is to catch the disease at an early stage and prevent its development.

## Preliminary Experience

In the early 1960s, we began treating chronic nephritis with combined traditional and Western techniques, in the hope that they might produce synergistic effects — better than either technique used separately. This hypothesis has been proved correct.

**LI LEISHI** is head of the department of medicine in the General Army Hospital in Nanjing.

**XIE ZHUFAN** is head of the department of traditional Chinese medicine at the Beijing Medical College Hospital No. 1.



Pathologists at the General Army Hospital in Nanjing check a patient treated by the combined method.



Doctors at the hospital test the herbal medicine *Tripterygium Wilfordii* on a laboratory animal.

The marked advantage of this combined method is that it greatly lessens the side-effects and complications resulting from the use of corticosteroids and cytotoxic drugs.

For instance, obesity, acne, and diabetes, common side-effects of corticosteronic therapy, can be prevented or ameliorated by certain Chinese tonics. Overuse of corticosteroids that inhibit the immune response easily leads to dangerous and sometimes fatal bacterial infections whose symptoms (e.g., fever) are often masked by the effects of the drugs; but Chinese medicines that relieve "internal heat" reduce these complications. Cytotoxic drugs like nitrogen mustard often cause unusual reactions of the digestive system and the inhibition of the white blood cells. Chinese medicines can remedy these side-effects.

Prolonged use of corticosteroids often brings fatigue, chills, loss of appetite, and even collapse and shock, because they produce atrophy of the adrenal cortex. Shanghai Medical College No. 1 has discovered that *radix rehmanniae* and *rhizoma anemarrhenae* can be used to reduce such effects. Moreover, use of tonics like *radix aconiti praeparata* and *radix astragali* ensures that less trouble will be caused in the withdrawal of corticosteroids.

For best results, traditional and Western medicine are used at different stages of the disease. If the patient is very weak, immunosuppressive agents often prove of

no effect and can easily lead to undesirable side-effects. Under such circumstances, Chinese medicine is used first to improve the patient's resistance, and the immunosuppressive drugs are used afterwards. If the patient has improved after corticosteronic therapy, Chinese medicine is then employed to reduce the possibility of relapse. Many Chinese hospitals now use Western medicine to induce remission, followed by Chinese medicine to reinforce the curative effect. A common indication involves the common cold. Since the cold can lead to recurrence of nephritis, Chinese medicines to prevent colds are used.

### Deeper Understanding

In combining traditional and Western medicine, Chinese researchers have obtained a deeper understanding of nephritis. Our pathologists found that chronic nephritis may be caused by what is called "blood stasis" in Chinese medicine—slow flow or stagnation of blood, and that while bacterial infection is not the direct cause it is closely related to the disease. Therefore, the Shanxi Provincial Institute of Traditional Chinese Medicine treated the disease with blood-invigorating and stasis-removing therapy and antipyretic methods, with good results. Then other hospitals successfully used the same methods to handle cases involving high blood pressure, blood in the urine, and poor kidney function.

In 1978, the Shanghai No. 3 People's Hospital, reported that

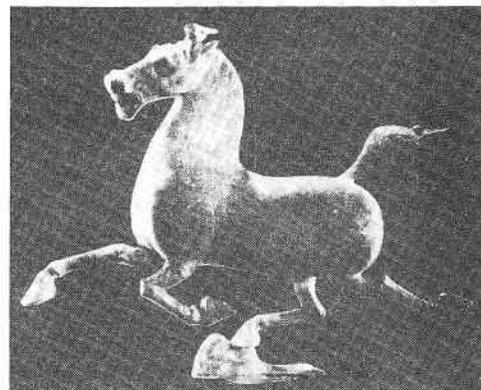
using the combined method, it treated 93 cases, in which Western medicine alone had proved useless, with remarkable results. Many other hospitals reported that the recovery rate for adult patients suffering from nephritis with nephrotic syndrome (edema all over the body and large quantities of urinary protein) was only 60 percent using Western medicine alone, but was over 80 percent using the combined method. A Nanjing (Nanking) hospital made a comparison of the efficacy of Western medicine alone, Chinese medicine alone, and the combined method. The most severely afflicted patients were in the group treated by the combined method, but their recovery rate was as high as 95 percent.

In the past two years, the General Army Hospital in Nanjing discovered that a medicinal herb, *Tripterygium Wilfordii*, was effective in treating nephritis. It grows in shady and moist places in the hills of the southern Changjiang (Yangtze) valley. The hospital used its root and an extract from the plant to treat skin problems associated with nephritis. *T. Wilfordii* functions like a corticosteroid, but without the side-effects. However, it is still not clear why the preparation works as well as it does, and research is continuing.

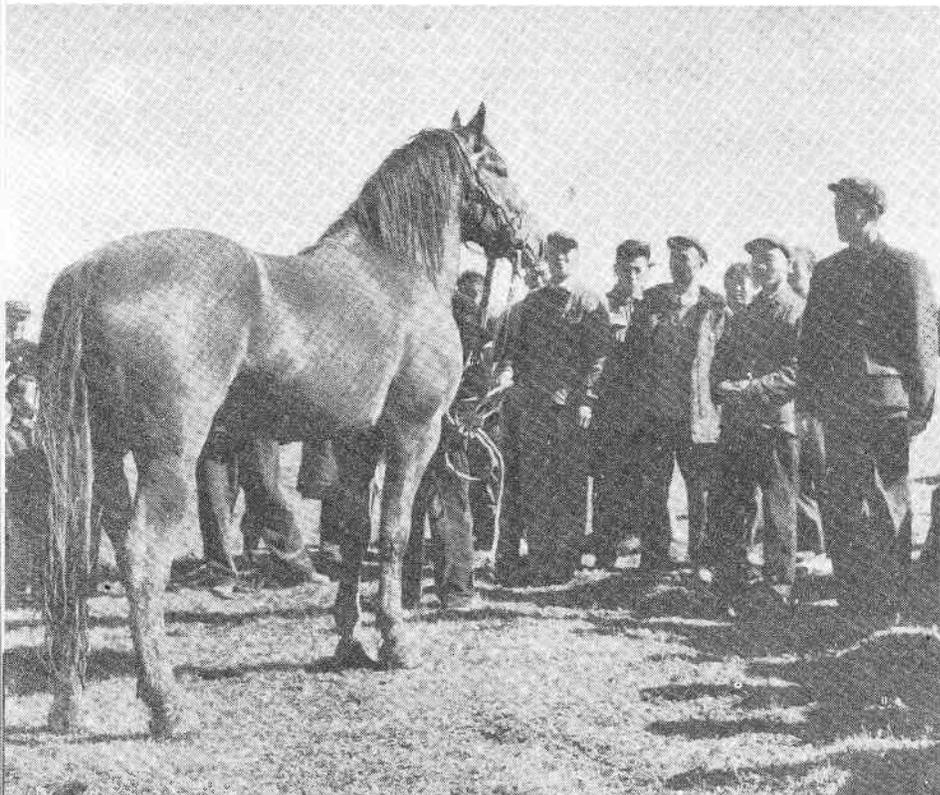
There are still many problems to be solved, but the combination of Western and traditional Chinese medicine offers us many avenues to explore, and we believe the results will be of great benefit to patients. □

# The Horse of the Future —and the Past

LI WEI



Breeders are trying to achieve the perfection of this 2,000-year-old bronze horse poised in flight with one hoof resting on a swallow.



Professor Cui Yuxi (first right) testing an animal bred for both saddle and draft use.

**T**HE bronze horse poised in flight with one hoof resting on a swallow looks swift as the wind. The 2,000-year-old statuette, unearthed in 1969 from the tomb of General Ma Yuan, an officer of the Eastern Han dynasty (A.D. 25-220), is now doing the work for which it was originally intended — providing a model for horse breeders.

The most striking feature of the horse depicted in bronze is that its swiftness is represented not in full gallop, but at the pace, which is an intermediate gait for most horses.

LI WEI is a staff reporter for the *Guangming Daily*.

At the pace, a horse moves its legs in lateral pairs, the two left legs rising and falling in unison, followed by the two right legs. The horse's center of gravity thus shifts right and left, rather than up and down, so that a rider sways in the saddle as if in a cradle.

Another aspect of the bronze that has intrigued horsemen is that the horse's chest, back, and haunches are relatively stout, like those of a draft horse, while its head, neck, and legs are relatively sleek, like those of a saddle horse — in effect, a horse for all seasons.

Telebiao, one of the six famous horses carved in relief for the

tomb of the 7th-century Tang emperor Taizong, appears to have been the same kind of horse. (See "For Your Reference.")

Horse breeding was already highly developed in the Han dynasty. At that time, 36 horse farms were established in the northwest frontier regions, breeding 300,000 horses. To improve the quality of the horses and thus increase the military strength of the empire, General Ma Yuan had bronze models made in Luoyang, the capital, to represent the ideal horse. The 34 × 45 cm. bronze excavated from his tomb in northwest China, near the Silk Road in Wuyi county, Gansu province, was one of those models.

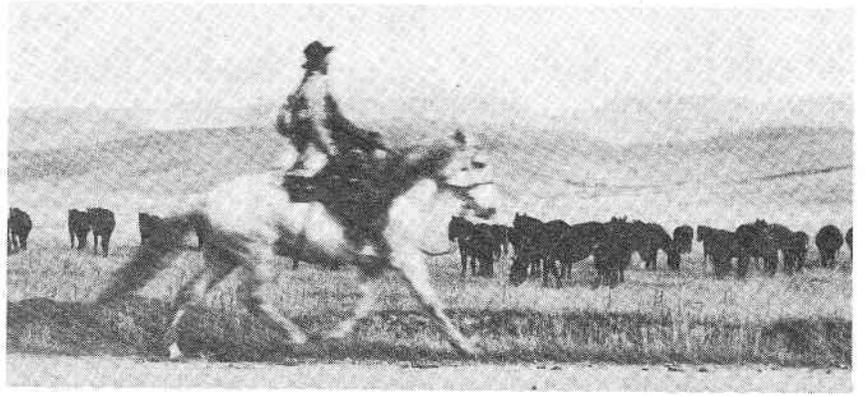
## Lineal Descendants

The Gansu Corridor, the southern slopes of the Qilian mountains, and the areas around Qinghai Lake have been the major breeding grounds for horses in China. The principal local breed, the Haomen horse, bears some resemblance to the bronze. It is used as both a saddle and draft animal, and runs at the pace. The pacing characteristic is a dominant one, and the offspring of a Haomen mare and a stallion of another breed will inherit it. Of the hundreds of extant varieties of horse, only the Haomen possesses this characteristic. Horse-breeding experts have thus concluded that the Haomen is a lineal descendant of the horse depicted in bronze.

But the breed had obviously deteriorated. The Haomen is smaller and not so well-formed as its ancestor. An experiment to improve the breed was begun in 1955 at the Menyuan stud farm in the Haibei Tibetan Autonomous Prefecture in Qinghai province. Crossbreeding was done to emphasize the desired traits, but the breeders had no specific goal until the discovery of the bronze in 1969. In 1973, a stallion closely resembling the bronze was selected from among the second-generation hybrids. Its progeny are now being mated to fix the new breed.

Cui Yuxi, professor of animal husbandry at Gansu Agricultural University, was the first to point out the similarity between the Eastern Han bronze and the contemporary Haomen horse, which he had previously identified as a separate breed. He's been an advisor to the Menyuan breeding project since 1963 and has visited the stud farm nine times.

Professor Cui's dedication to the project is legendary. His colleagues tell the story of a 1973 conference at Menyuan at which he was to deliver two papers — one



The improved strain of Haomen horse.

summarizing the project's experience, and the other laying out suggestions for future work. After delivering his first paper, he received a telegram informing him that his wife was seriously ill. A jeep was sent to take him home to Huangyang in Gansu province, and when he arrived the following day the doctors told him that although her condition was still serious, she had passed the crisis. But this news merely shifted his worries from his wife back to his conference, and he asked Mrs. Cui if it was okay for him to return to Menyuan. Mrs. Cui said to her

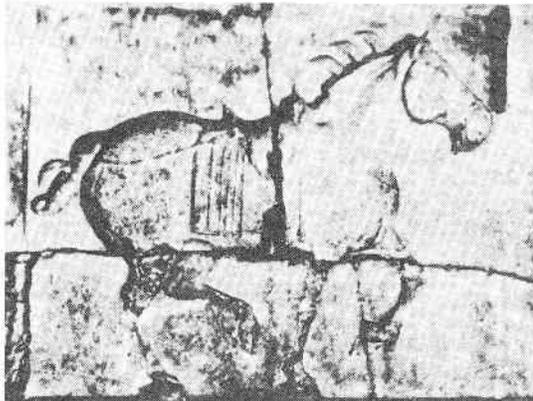
two daughters, "Let your father go back to his work. He knows I'll be all right with you here." Professor Cui appeared on the Platform at Menyuan the next day, more or less as scheduled, to talk about his dream horse.

A few months ago, Professor Cui and his assistants were at Menyuan once again, testing another generation of hybrids one by one in the piercing wind on the grasslands. Observing the animals, the old man said confidently, "The horse with one foot resting on a swallow will be reborn on the soil of China in five to ten years." □

### For Your Reference

## Six Horse Reliefs for an Emperor's Tomb

Telebiao, one of the six famous horses carved in relief for the tomb of Tang Emperor Taizong.



Professor Duan Xizhong of Nanjing Teachers College recently donated to the state his collection of rubbings of the six horse reliefs carved for the tomb of the Tang Emperor Taizong (Li Shimin), which he had kept for more than 50 years.

To commemorate his military exploits, Tang Taizong ordered craftsmen to carve reliefs of the six horses he had ridden in battle. The reliefs were placed in front of his tomb on a hill northwest of Liquan county in Shaanxi province. Each stone tablet, 1.6 × 2.0 m., pictures one of the emperor's horses, and each is shown in a different posture.

Unfortunately, the 7th-century relic was broken by thieves in 1914 and two of the tablets were taken to the United States. The remaining four are now on display in the Shaanxi Provincial Museum.

In the 1920s, Professor Duan bought a set of rubbings in Xi'an that had been made before the reliefs were broken. They show no cracks or other disfiguring marks and are thus presumed to be perfect representations of the "six war horses" of Tang Taizong.

# The Overseas Chinese University

MIAO MU

**T**HE campus of the Overseas Chinese University lies on a green-blanketed hillside in the city of Quanzhou in Fujian province. Its 40 large buildings cover 40 hectares. Since its reopening in 1978, 800 students from Hongkong and Macao and from Korea, Japan, Thailand, the Philippines, Indonesia, Vietnam, Burma, the Seychelles, and the United States have studied here.

## A Science University

Yang Zengyi, 71, is a vice-president. A graduate civil engineer from Qinghua University in Beijing, he took part in building the bridges on the Beijing-Hankou Railway and the Zhejiang-Jiangxi Railway. He has taught at Beijing and Qinghua universities.

The government opened the Overseas Chinese University in 1960 as an arts and sciences institution. Before being closed in 1970 as a result of the "cultural revolution" it trained 2,300 overseas Chinese from 17 countries. These men and women made great con-

tributions at home and abroad, and to scientific and cultural exchanges between China and other countries. It was reopened as a science university with six departments: mathematics, physics, and chemistry, and civil, mechanical and chemical engineering.

It is a state policy that overseas Chinese may settle down and work in China if they wish or return to the countries they came from. To help student applicants, both the Overseas Chinese University and Jinan University, an art university in Guangzhou (Canton) begin their enrollment work early, select their own examination topics and choose students according to how they do on their examinations.

## Repair and Enlargement

For the university's reopening in 1978 the government granted 5 million yuan for repair, expansion and equipment. Patriotic overseas Chinese also donated funds. The mathematics, physics, chemistry and library buildings,

and the swimming pool and athletic field were redone. Six new dormitory buildings were built. A chemical engineering department and a memorial hall to Chen Jiageng (Tan Kah-kee), the noted patriotic overseas Chinese, are now under construction. The hall, covering an area of 7,500 square meters, will be the university center. It will contain a 3,000-seat auditorium and a number of meeting rooms. An exhibition on Chen's life will be on the second floor. In addition a building for the department of mechanical engineering will soon be underway.

## Laboratories and Library

Every department has its own laboratories. In a laser laboratory, Prof. Lin Xing, vice-chairman of the physics department has led experiments on a dye laser with an argon ion laser as a pump. There are three laser laboratories in the university. The laser teaching group has done successful work on practical applications of ruby lasers and helium-neon lasers. A computer center housing ten microcomputers occupies the underground floor of the mathematics building.

The laboratories for organic chemistry, electrochemistry, spectrum analysis and physical chemistry are all newly equipped. Third-year students doing experiments in the physical chemistry lab spoke of life at the university. One of them, a girl named Lin Yuzhang from Macao, said, "In the two years since I've studied here, I have felt as though the university were a big family. Teachers and students get along well. Our teachers and university leaders are carefully concerned for our study and life." This girl is one of 17 students from her school in Macao. A good student, she is in charge of liaison

One of the students' favorite games.



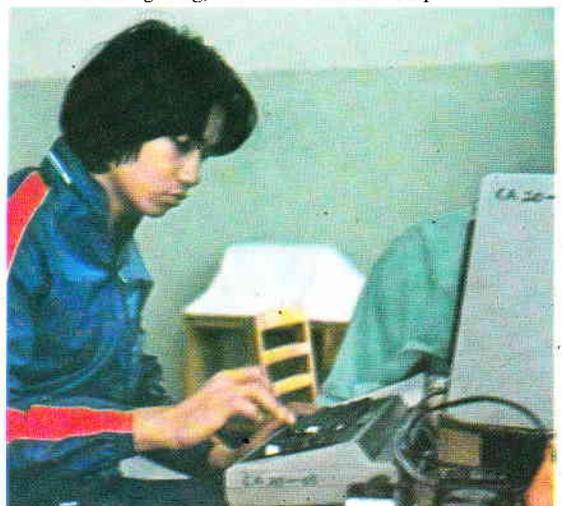


Prof. Yang Zengyi (right), vice-president of the university, and Prof. Li Congshen of the civil engineering department discuss the teaching plan.

Teachers prepare a laser experiment for the students.



Wei Chieh Chen, a first-year student from Hongkong, works at a microcomputer.



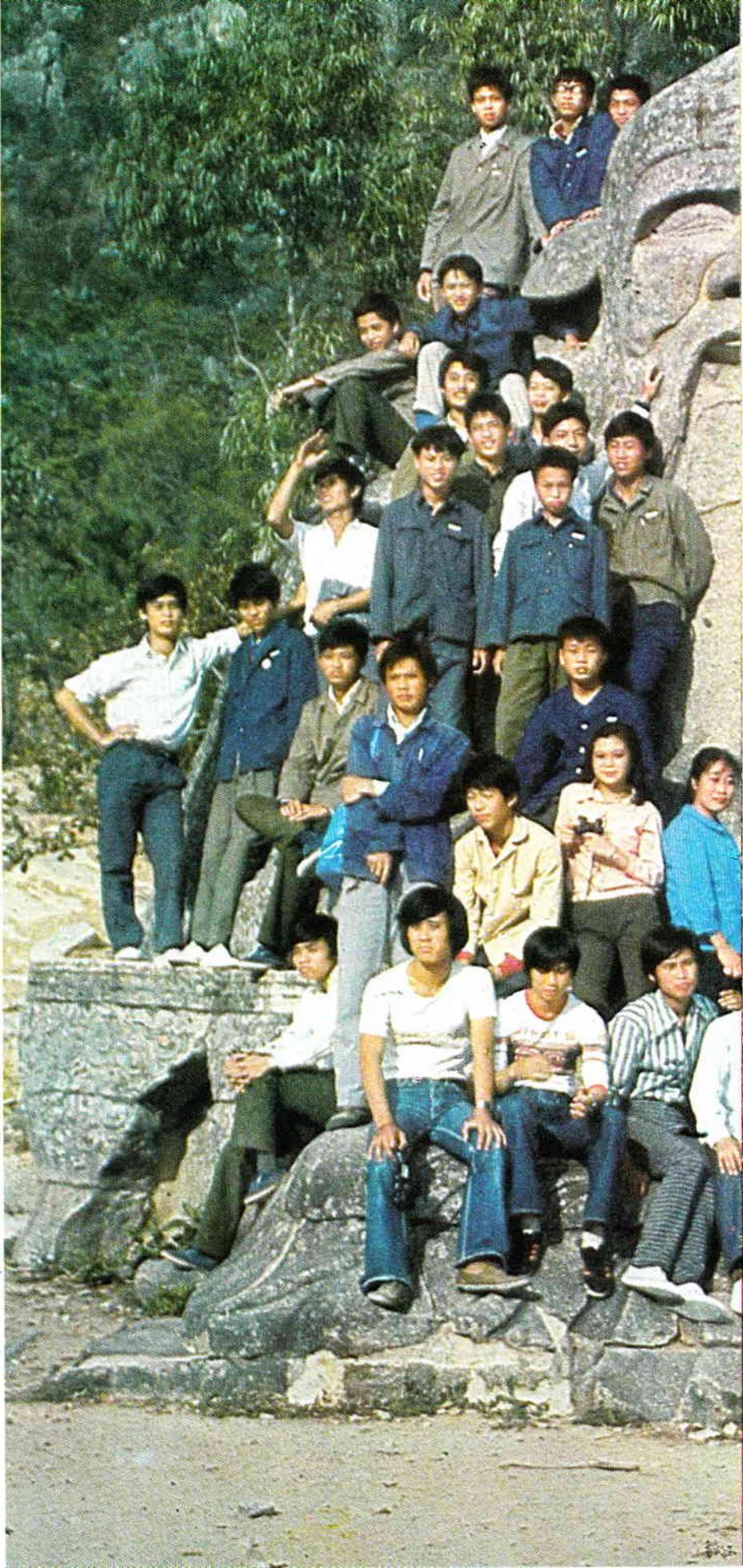


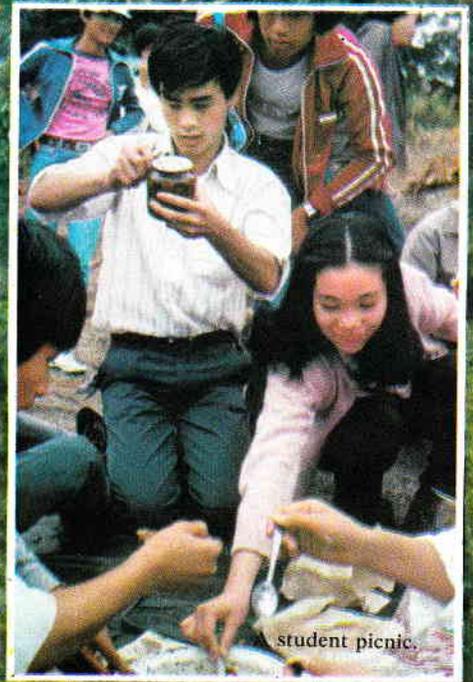
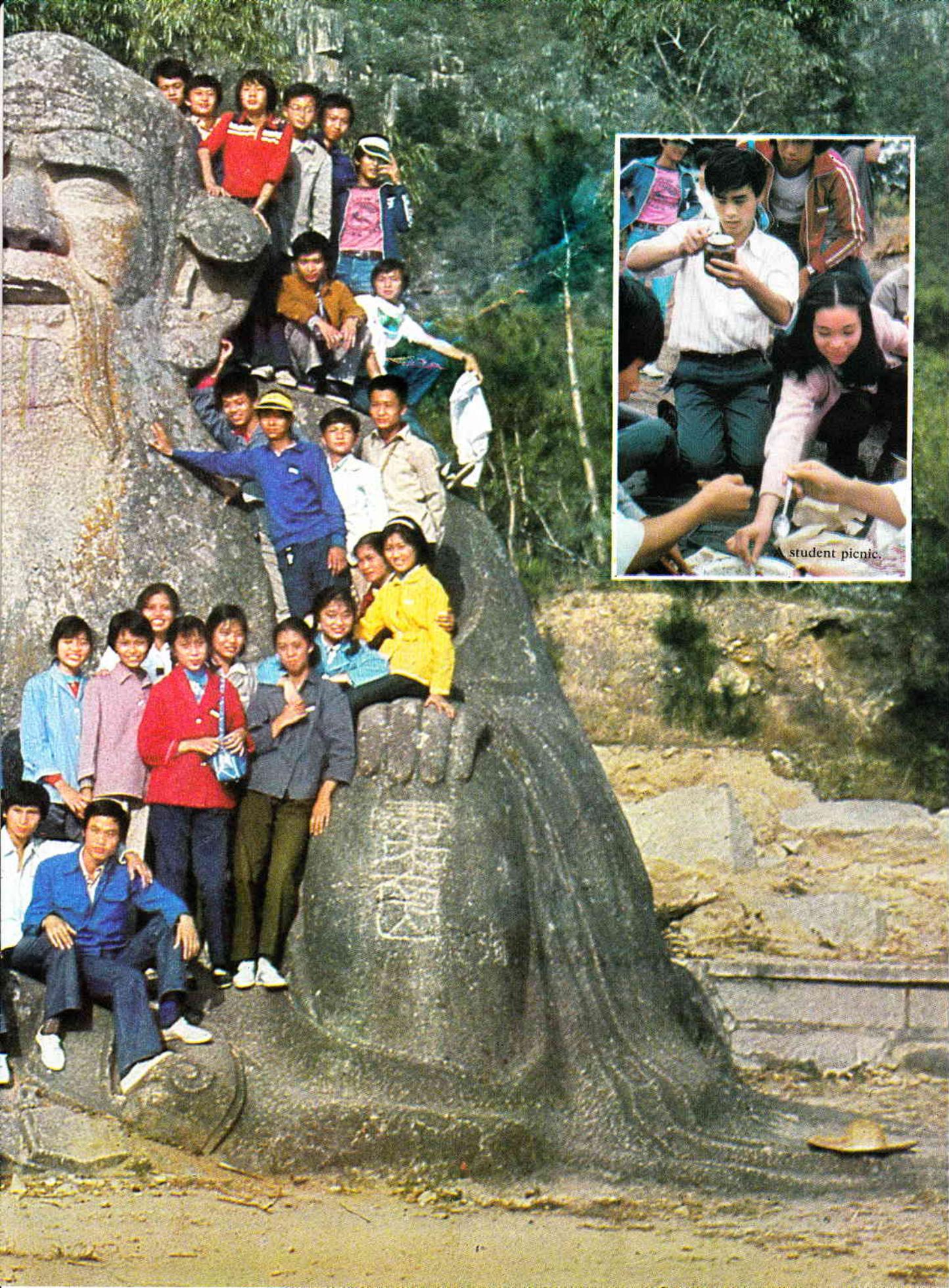
A canteen for the students.



The girl's dormitory.

Sightseeing on Sunday.





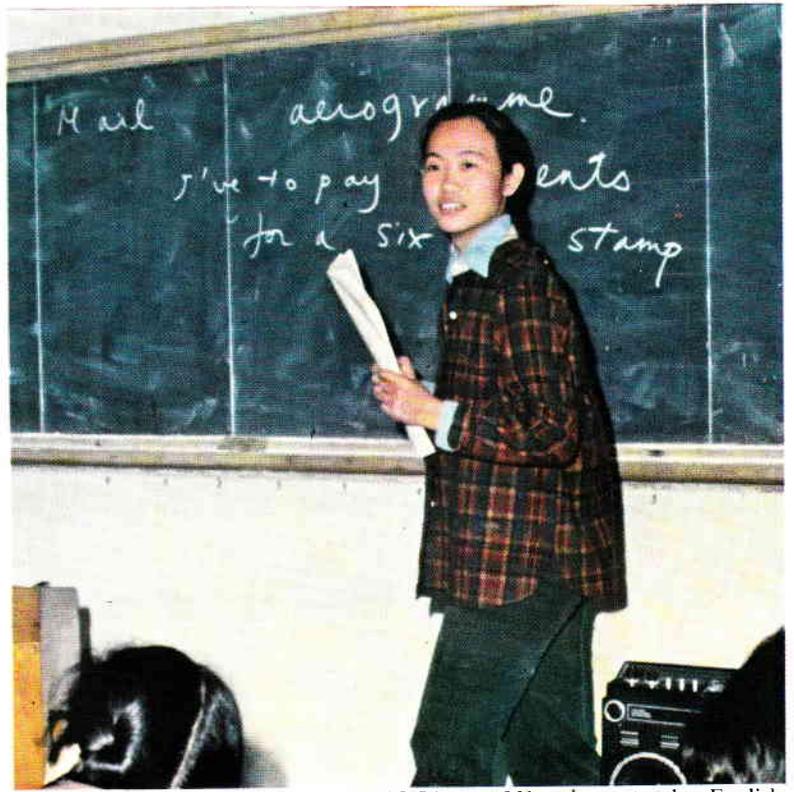
student picnic.



Students intent on classroom work.



In the reading room.



Y. Y. Liang, of Hongkong, teaches English.

*photos by Huo Jianying*



work for the student union. In 1979 she represented the university at the 19th national conference of the China Student Union. Andrew Arthur Liu Nan, a second-year civil engineering student from the Seychelles, knew no Chinese when he came, but a teacher was assigned to teach him the language, his professors coached him and Prof. Mai Shuliang helped him with difficult problems. He studies hard and has made rapid progress.

### Teaching and Research

The library has 200,000 books and 2,000 periodicals. There are reference rooms and reading rooms.

Lei Ting, a vice-president of the university, is responsible for teaching and research. "To improve teaching quality," he said, "the university carefully considers the educational background of the students and the fact that most of them will return to work in their countries after graduation. On this basis we make our teaching plans, compile and choose teaching materials and decide on teaching methods. In some courses big classes are divided into small ones. Special attention is paid to teaching foreign languages, especially professional terminologies. Theory is stressed, but experiments, practice, and training the students to apply basic theory to practical work have been strengthened." Examinations show that these students are somewhat more successful than students in regular universities in China.

The Overseas Chinese University often invites famous experts and professors at home and abroad to lecture. In the last two years these have included Dr. Norman C. Li of chemistry from the University of Pittsburgh, Prof. C. L. "Dominic" Huang of mechanics and Dr. Kaiman Lee of architecture from the University of Kansas, Dr. Mateo L. P. Go of civil engineering from the University of Hawaii, Prof. Y. C. Chen of mathematics from the University of Fordham, Dr. Boon-Keng Joo from Bell Laboratories and Lin Lanying, vice-director of the Semi-

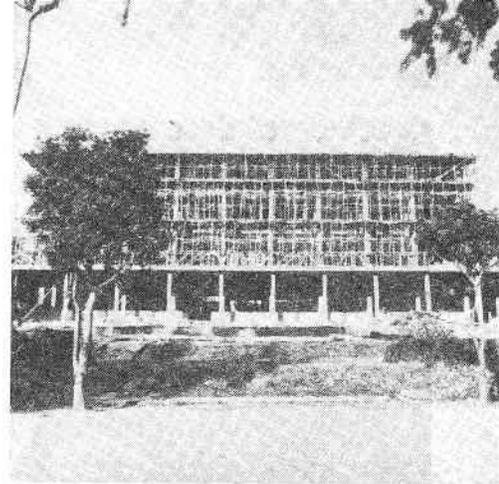
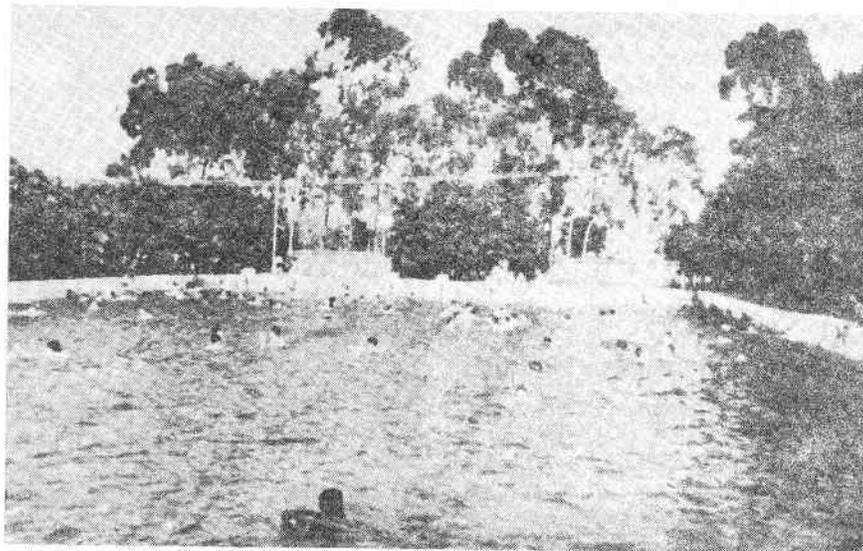
conductor Institute of the Chinese Academy of Sciences.

In scientific research the chemistry teachers have taken a successful step in the researches on synthesis of high sensitive organic reagent and researches on anti-cancer polysaccharides — separation and structure of branched polysaccharides. The department of chemical engineering succeeded in extracting lysine from molasses waste. Assistant professor of mathematics, Lai Wancai, has done much in his research on the exact value of Hayman's constant in Landau's Theorem, and thus concluded the studies of the problem of Hayman's constant by Hayman, a British mathematician and J.A. Jenkins, an American expert on schlicht function theory. His work was cited at the last national scientific conference.

### Extracurricular Life

Football, badminton, table tennis, basketball, swimming and other sports meets are held regularly at the university. The athletic field becomes very lively every afternoon after four o'clock. Many students are good at sports. Tang Zhaoliang from Hongkong, majoring in civil engineering, broke the records of the 400-meter run, 800-meter run and 1500-meter run for higher institutions in Fujian province. Zhang Zuoyi

The university swimming pool.



The Tan Kah-kee Memorial Hall under construction.

from Korea, a physics student, is a good long-distance runner.

Evening parties, concerts, lectures on literature and all kinds of games are organized to enliven the academic life of the students. On holidays they climb mountains, picnic and visit historical spots.

The university used to have two canteens for the students. A third one was set up recently especially for overseas Chinese, and two returned overseas Chinese cooks were hired. Food costs average 20 yuan per month. Those who cannot afford it can get subsidies from the university. A system of scholarships was set up this year. The university also has a free clinic, bathhouses, a grocery, and a sewing shop. □

Photos by Miao Mu and Huo Jianying

# Xiao Youmei, Pioneer in China's Music Education

LIAO FUSHU



Xiao Youmei in 1927.

his father when he was small. They lived next door to a Portuguese priest who had an organ in his house, and this sparked the boy's interest in western music. In 1898 he entered the Canton (Guangzhou) Shimin School, one of the first western-style schools in the country. In 1901 he went to Japan to study singing and piano in the Tokyo Music School. Around him Chinese students were eagerly studying western philosophy, political science and sociology. Xiao decided to help awaken the spirit of the Chinese people with music. At one time, he called himself Xue Peng, for the similarity of sound to the name of Chopin, the great

and patriotic Polish composer who was an inspiration to young Chinese at the time. In 1906, he joined Sun Yat-sen's Revolutionary League in Japan. The Chinese imperial court of the time demanded the deportation of Dr. Sun and when the Japanese government ordered his arrest, Sun Yat-sen hid in Xiao Youmei's rooms. Here he continued to meet his co-workers, Xiao Youmei standing guard at the door because the police seldom suspected musical students. When thus standing near the door, Xiao often carried in his arms the baby son of Liao Zhongkai, one of Sun Yat-sen's close collaborators. That baby,



Part of Xiao Youmei's works.

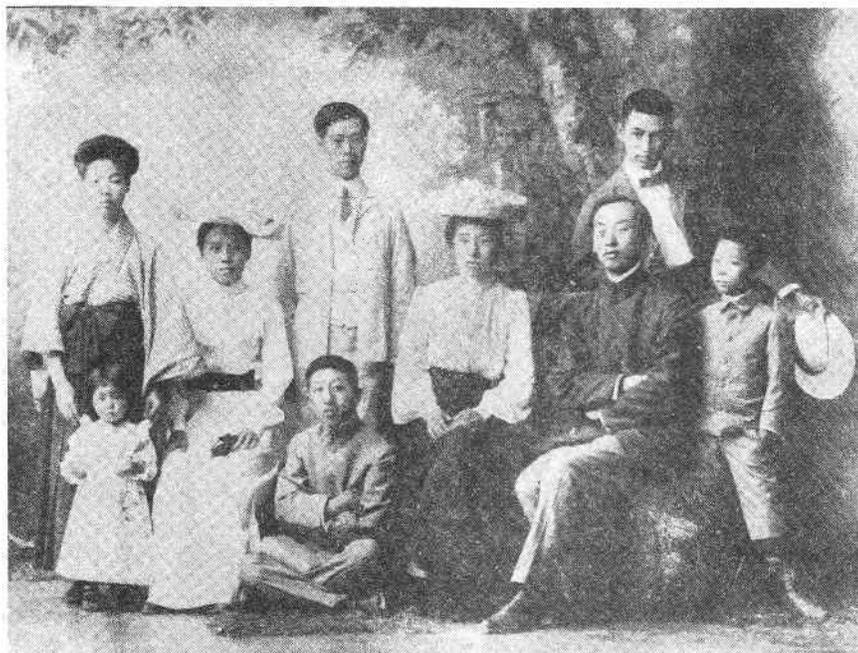
Xiao Youmei (second right), Liao Zhongkai (sitting on floor), Liao's wife He Xiangning (third right), in Tokyo, 1907.

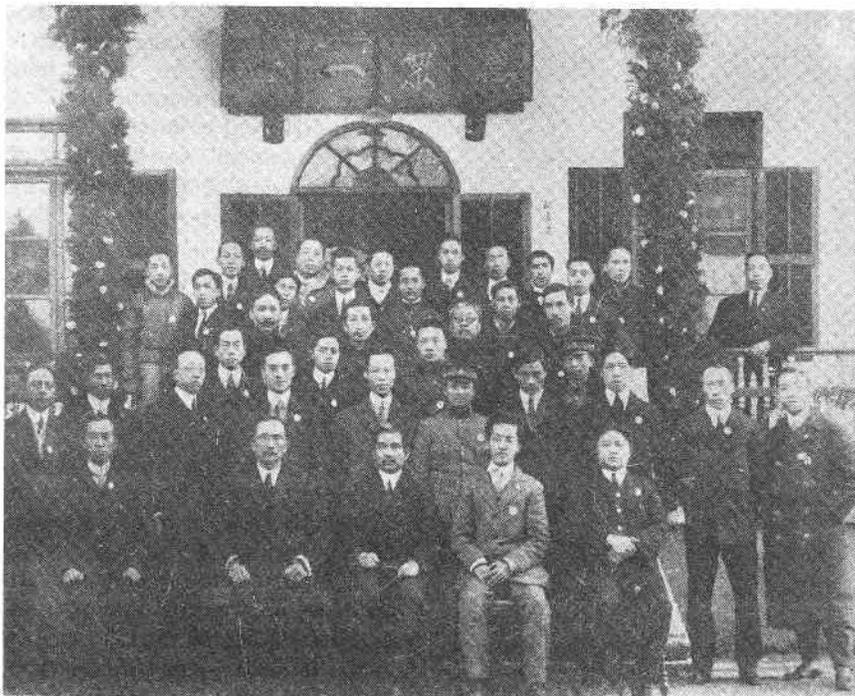
**T**HE history of contemporary music in China is inseparable from the work of Xiao Youmei (1884-1940), pioneer of her modern musical education. A patriot and progressive in politics (he was an early adherent of Sun Yat-sen, founder of China's first republic) he was also the first Chinese to make music and instruction in it his entire life's work. Few indeed are the older living Chinese musicians who did not study under him.

## Education in Modern Music

Born in Guangdong province, Xiao Youmei went to Macao with

LIAO FUSHU is professor of musical history in the Central Conservatory of Music in Beijing. He was Xiao Youmei's secretary for many years.





In 1912 Xiao Youmei (left front) was secretary of the provisional parliament of the republic. Sun Yat-sen is center front.

Liao Chengzhi is now a prominent member of the Chinese Communist Party, active in the country's affairs at the senior level.

Xiao graduated in philosophy at the Imperial University in Tokyo in 1909, at the same time finishing his studies at the Tokyo Music School. One year after his return to China the Revolution of 1911 overthrew the last of China's emperors. Sun Yat-sen, now president of the provisional government of the Republic of China, appointed Xiao Youmei his secretary. When the unscrupulous warlord-politician Yuan Shikai intrigued his way to power and drove out Sun and his followers, Xiao lost his position. In 1912 he went to Germany where he studied music at the conservatory in Leipzig and other subjects at Leipzig University. Unable to return home because of World War I, he attended the Friedrich Wilhelm University in Berlin, and did research on composition, orchestration, conducting and the reading of ancient music in the Berlin Conservatory. In 1916 he wrote his thesis, a historical

treatment of Chinese orchestral music of the 17th century.

### A First Symphony Orchestra

When Xiao Youmei returned to China after the war, he first worked as an inspector for the Ministry of Education and at the same time was dean of the Experimental Elementary School attached to the Beijing Higher Teachers Training School. In 1921, Cai Yuanpei, the famous progressive president of Beijing University, invited him to lecture on harmonics and the history of music in that institution's Music Research Society. At Xiao's suggestion, this society became open to the public. It formed China's first symphony orchestra and chose Xiao as its conductor. Small as it was, it brought western classical music to Beijing.

A shortage of music teachers and instruments handicapped music education in China. Xiao Youmei repeatedly asked the Beijing warlord government of the time to permit a conservatory of music, but was turned down. Finally, in 1927, the first national con-

servatory was established in Shanghai. Xiao Youmei became its president one month later and remained in this post until his death in 1940.

It was hard to keep the conservatory going. The building was rented. All the space was used for classrooms and Xiao Youmei's office was out on an enclosed balcony. The piano practice room had to be in the basement (equipped with a grand piano, which he had bought, instead of a car for himself, as other school principals did).

A system of credits for studies was adopted that allowed students to graduate whenever they had earned enough points, thus giving full weight to ability, not just the time spent in study. A teacher training department was set up to help solve the problem of the shortage of music instructors. The students could choose their own teachers, a system that helped both do better work.

The achievements of the school's graduates gradually won public recognition. The level of those who continued their studies abroad surprised their foreign teachers. Still, Xiao was not satisfied. The unbalanced economy of China at the time was widening the cultural gap between city and country, and music education was almost unknown in far rural areas. Xiao Youmei proposed to the Ministry of Education that it ask the provinces to send students to his school. It was far from a solution, but in those days of an almost-non-existent music education it was an innovation.

### The Composer

Xiao Youmei felt that music could best reflect the spirit of the times through a wise combination of China's own musical heritage with the musical theories and techniques of the west. In this he was guided by a question he liked to ask of a new piece of music: "Does it sound pleasant to the ears of the Chinese audience?" Moreover, he struggled against the tendency to call everything Chinese "national" — particularly



### Anniversary Commemorated

**D**ECEMBER 31, 1980 was the 40th anniversary of Xiao Youmei's death. Special meetings were held in Shanghai and Beijing.

Over 600 people from musical circles gathered in the auditorium of the Shanghai Conservatory of Music which Xiao established in 1927 (it was then the National Conservatory of Music, and somewhat later the National Special School of Music). He was its head until his death in December 1940. Ding Shande, his former student, now vice-president of the conservatory, presided. He Luting, president of the conservatory and a famous composer, also Xiao's former student, spoke about his teacher's contributions to China's music education. Prof. Liao Fushu, Xiao's one-time secretary who now teaches at the Central Conservatory of Music in Beijing, spoke on Xiao's life.

The meeting in Beijing, held in the Sun Yat-sen Memorial Hall in Zhongshan Park, was jointly sponsored by the Chinese Musicians Association and the Central Conservatory of Music. Lu Ji, president of the association, and Zhao Feng, president of the conservatory, spoke.

At both meetings music by Xiao Youmei was played and photos and memos of Xiao Youmei's revolutionary activities with Sun Yat-sen and his musical career were shown. Xiao Qin, Xiao Youmei's painter son, came for the commemoration from Italy where he now lives. □

when this was applied to education in the phrase "national learning". "National learning", he said, tended to stick to the old against the new. He helped organize the "Friends of Music" and the "Society for Reforming National Music".

Xiao Youmei believed that besides content and form, per-

forming technique was also an essential part of music. Students must be trained in all three, he thought, in order to be able to express adequately the people's spirit, ideas and feelings and to build their works on a foundation of traditional music. He advocated the improvement of traditional Chinese musical instruments and

the introduction of western instruments. Most musical instruments anywhere, he said, had evolved from a combination of those in different countries. Xiao's own pedagogical works of the period included *A Comparison of Chinese and Western Music*, *The History of Chinese and Western Musical Scales* and *An Introduction to the Evolution of Chinese Music*. He also wrote textbooks for teaching voice, piano, organ, violin and the theories of harmony and music.

In the past China had many traditional popular songs but up to the 1920s there were few new ones. Xiao Youmei set about composing some. Many were collected in *Collection of Today's Songs and New Songs*. One of them ("Auspicious Clouds") was made the "national anthem" of the warlord government of north China. Among his other compositions were "Blossoms in the Moonlight at Spring River", based on a famous Tang poem; a piano piece, "Dance in a Rainbow Skirt and Feather Shirt"; a solo song, "Willow Catkins"; a piece for cello, "Love in Autumn".

Xiao Youmei (left) and his schoolmates in Leipzig, 1914.



When China began to face the menace of domination and occupation by Japan, Youmei turned his abilities toward fighting this threat. On May 3, 1928 Japanese troops massacred 5,000 Chinese in Jinan in Shandong province. Xiao promptly organized musicians to write protest songs and published them in a special booklet. Three of his own songs were included: "Song of National Calamity", "Song of National Humiliation" and "Song of National Revolution".

When the Japanese suddenly began their armed seizure of northeast China on September 18, 1931, he and his students organized the anti-Japanese National Salvation Society, printing patriotic songs, collecting money and organizing concerts to raise funds for anti-Japanese volunteers in the northeast. He composed a "Song of the Volunteers". Each issue of the music school's periodical contained at least one new patriotic song.

In 1936, Hidemaro Konoe, brother of the prime minister of Japan, came to conduct the orchestra of the Municipal Council of the International Settlement in

Shanghai. He offered a piano to Xiao Youmei — who indignantly refused.

When the all-out war against the Japanese invaders broke out in 1937, Shanghai became isolated. Xiao Youmei asked the Kuomintang government for permission and help to withdraw the music school to the hinterland, but he got no results. Later, when a puppet regime was set up in Nanjing by Wang Jingwei, Xiao Youmei was invited to cooperate. He firmly refused.

Too busy with music education, Xiao Youmei did not get married until he was 49. But hard work had brought on tuberculosis and he was hospitalized. The hospital was poorly equipped and he was seriously ill. Yet his last words were about conditions for the students at the music school — he was concerned about a crack in the door of the piano room, through which the freezing winter wind could enter, and wanted to know if it had been repaired. A day later, on December 31, 1940, the heart of this tireless pioneer for modern music education in China, stopped. But he has not been, and will never be, forgotten. □

China's first symphony orchestra, Beijing University, 1923.



## Humor

### It's Simple

**MUSEUM Guide:** "This corpse is 2,004 years old."

**Visitor:** "How do you know its age so exactly?"

**Guide:** "It's simple. They told me it was 2,000 years old, when I came to work here four years ago."

### Installing an Electric Bell

**A** cadre moved to a new home. He asked an electrician to make an electric doorbell for him. The workman put the bell in the usual place at the front gate.

The cadre said, "No, no. I want it at the back door." The electrician moved it to the back door, fixing it at the usual place.

"No, no, that's not right," said the cadre.

"Then where do you think it should be?" the workman asked.

Pointing to the bottom corner of the doorframe, the cadre ordered, "Put it there." Astonished, the electrician asked, "How are people supposed to press the button?"

The cadre said, "My guests always use their feet, since their hands are full of presents."

### Death Scene:

"Hello! Is this the film studio? If you please, we're going to send a dying man to you."

"Why would you call a film studio for that? Are you out of your mind?"

"We know it's unusual. He's been turned down by all the hospitals. We thought you'd have some way to cure him."

"Why would you think so?"

"We often see in your films that a dying man makes a long speech and struggles to accomplish tasks difficult even for healthy people. So we think you must have some secret skill."

## A Drowning Girl Saved

**E**IGHT-YEAR-OLD Wu Aili is in the second grade at the Qinghua Street Primary School in Beijing. She has short hair and plain clothes. Her recent return to her classroom was the end of a harrowing story.

Beijing winters are often bitterly cold. One afternoon in February, Wu Aili finished her homework, left her house and wandered along a nearby river. The water rippled and she picked up a stone and threw it into the river, enjoying the splashes she made. As she threw another, she slipped and fell into the water.

Wu Aili struggled but the current was too fast. In her fright, she suddenly saw someone on the railway bridge not far off. "Help! Help! Save me!" she cried. The man on the bridge was Wang Youxian, a veteran worker on patrol duty. He heard the girl but could not leave his post because of an approaching train. He shouted to the girl, "Don't be afraid, we'll save you!" He ran to get a rope to throw to her. At the same time, he called for help.

A young man on a bicycle

answered and quickly pedaled to the bank, ripped off his padded overcoat and plunged into the ice-cold water. After pushing the girl closer to shore, he began to sink himself.

Tian Jiyao, a retired leather goods factory worker with heart trouble, arrived and jumped into the river without taking off his padded jacket. Holding the girl tightly, he headed for the bank with all his effort. But he couldn't breathe and had to stop. The girl and the old struggled desperately.

At this critical moment, two other workers arrived, jumped in and pulled Wu Aili and the exhausted old man to the bank. Passersby gave them their padded clothes to warm them.

But one young man was still in the water. Workers from a nearby factory, policemen and the armymen reached the spot. But when they pulled the young man out, his heart had stopped beating. From one of his pockets, an employee's card was found. He was Gao Yuntao, 31, a worker in the Capital Machinery Plant.

The old man was sent to a hospital by ambulance. When he regained consciousness, he asked, "How is the girl?" Hearing that she was all right, he smiled. "Don't worry about me," he said. "I'm so old that it wouldn't matter much if I went." That night he too died, even though the doctors did what they could.

This spirit of giving their lives to save others was highly praised by people. Ni Zhifu, chairman of All-China Federation of Trade Unions went to express his sympathy to the families of Gao Yuntao and Tian Jiyao. On February 21, the Beijing municipal government held a meeting to confer on them the title "revolutionary hero" and called on the people of the city to learn from them.

Wu Aili recovered quickly. In the hospital, her teachers, classmates, headmaster and leaders of education came to see her. Aili's parents, who work in the Xiangyang Machinery Repair Factory, were moved to tears. Aili is their child, but she also got great love from the people of the big socialist family. □



Wu Aili expressing her sadness to Gao Yuntao's mother, Zha Xiuzhen, and his widow, Yang Aijun (second right). Grandma Zha tells the saved girl to study hard and to make great contributions to the people when she grows up.

Students of the Qinghua Street Primary School see Tian Jiyao's widow, Wang Daliu (second right), saying that they should learn from Grandpa Tian to be good successors to the revolutionary cause. Photos by Wang Zhenmin



# Gone Are the Days of Lawlessness

— Comment on the book “A Great Trial in Chinese History”

WEN CHAO



THE trial of the Lin Biao and Jiang Qing cliques ended in January, but people abroad who are concerned about China's development still show keen interest in it. Some Western media pictured it as a political trial; others said it was a show trial. Still others portrayed Jiang Qing as a "courageous woman" and said she was being unjustly prosecuted.

Our friends abroad want to know the plain truth, but they need a great deal of material to make an informed judgment. For this, the book *A Great Trial in Chinese History* (234 pages, plus 12 pages of on-the-spot pictures) published by the New World Press in Beijing will prove invaluable. It gives an overall picture of the trial from the opening session to the verdict. Without imposing their own viewpoint, the editors of this book provide facts and background information that enable readers to draw their own conclusions. After all, facts are the best argument.

Those who say this was a political trial have operated on two misconceptions. One is that the accused were tried for their views rather than for crimes defined by law. In fact, while their acts took place in a certain political period, one salient feature of the trial was strict separation of the legally criminal from the political. Another refrain was that the trial was directed at the late Chairman

Mao Zedong. The Chinese people will always remember Chairman Mao whose contributions to the country were immense and will live forever in history. True, in his later years he also made errors, especially in launching the "cultural revolution." But this is something entirely different in nature from the acts of the Lin-Jiang cliques whose proven aim was to seize power in the Communist Party and the state, by criminal means which included attempts to murder Chairman Mao himself and stage an armed rebellion.

As against all allegations that this was a "show trial" without adequate basis in legality, the facts are that it was conducted in accord with the Criminal Law and the Law of Criminal Procedure of the People's Republic of China. The book quotes the legal provisions pertinent to each charge. There has been comment in different countries that some do not conform to foreign laws and procedures. But it is axiomatic that the standard of legality in China, as in any other nation, must be its own laws.

THE trial was an open one. The book records that sixty thousand representatives of the public from all over the country and from all sections and strata of Chinese society attended it. The newspapers gave extensive coverage —

sometimes 10,000 words a day. Television coverage sometimes ran to more than an hour a day. True, foreigners were not permitted to attend, but this was necessary because state secrets might have been disclosed during the trial.

The defense lawyers did what they could for their clients. As the "Goebbels" of the gang of four, Yao Wenyuan, who had been in charge of its propaganda apparatus, had been listed in the indictment to be one of the principal conspirators of the Shanghai armed rebellion, but on the basis of the defense plea the court determined through careful investigation that there was insufficient proof of this charge, so it was dropped. Wu Faxian, former commander of the Air Force, seemed eager to plead guilty without reserve and take responsibility even for things that were really not under his direction. His lawyer argued convincingly that he should not be liable for the latter. The court accepted this.

Some foreign comment was to the effect that it was difficult to distinguish the role of a judge from that of a prosecutor. Under Chinese law, they coordinate with each other as well as check each other. Take the "Changsha Accusation" for example, referring to the gang's false charges against Zhou Enlai and Deng Xiaoping presented by Wang Hongwen to Chairman Mao at Changsha. After thorough examination, the court decided that this act did not

WEN CHAO is a long-time journalist.

constitute a crime under law, and so did not cite it in the final judgment.

The defendants were given ample opportunity to speak, as the example of Jiang Qing makes clear. While arguing on her own behalf, she ignored her crimes proved by evidence, such as giving orders for illegal detentions and arrests, the ransacking of homes, extorting confessions by torture and persecuting people to death. She shouted at the bench: "I am without law and without heaven," and indeed was defiant of all morality and law. In spite of her provocations, the court gave her two hours to speak for herself.

ONE of the judges, the renowned Professor Fei Xiaotong, wrote a preface for the book, and this plus the opinions of a few jurists will help clarify some of the questions brought up in foreign media. The full texts of the indictment and the verdict are included in the book.

It was in June, fifteen years ago, that that tempest, the "cultural revolution", began its sweep across the land. Now the storm is over and the whole nation has begun, sore at heart, to review those ten years of turmoil. How could it have happened? It is worth pondering. The Chinese Communist Party is making a summing-up.

The trial was not intended to solve this problem. Its purpose was to examine and judge the crimes of the Lin-Jiang cliques, and thus to help promote justice and restore the rule of law.

The years of lawlessness have ended and China is determined never to let such a tragedy happen again. The sky has cleared and a socialist law is taking shape in China. In this sense, the trial was a demarcation line, a milestone. □



For Tomorrow

Han Liying and Zhang Yongdian

## National Exhibition by Young Artists

HE RONG

THE "cultural revolution" has left young Chinese with deep wounds. Now, as the country takes off at last toward the goal of the four modernizations, they can see its future, and also their own. They are no longer naive children without clear purposes. Freed from the fanaticism whipped up by the gang of four, they have begun to face reality, however painful. This is what they have demonstrated in the Second National Youth Art Exhibition, held last December in Beijing.

"For Tomorrow", an acrylic painting by Han Liying and Zhang Yongdian that took a second prize, portrays people waiting for a bus in the snow. The icy wind cuts them to the bone. Among those waiting are young mothers taking their children back to nurseries and kindergartens after the

weekend. It seems the bus hasn't come for a long time and the crowd at the bus stop keeps growing.

On the surface the painting is simply a comment on China's overloaded public transportation; but from their theme, "For Tomorrow", the artists' intention is clear: for a better tomorrow, there must be sacrifices today. China has a lot to do and many problems to solve before she can modernize. The artists selected a scene from everyday life to depict this big theme, which all Chinese are concerned about. They have avoided using artistic images to preach.

"Roadblock", an oil painting by Zhou Shilin and Ma Yuan, brings out this subject even more clearly. People hurrying to work in a heavy rain have been stopped at

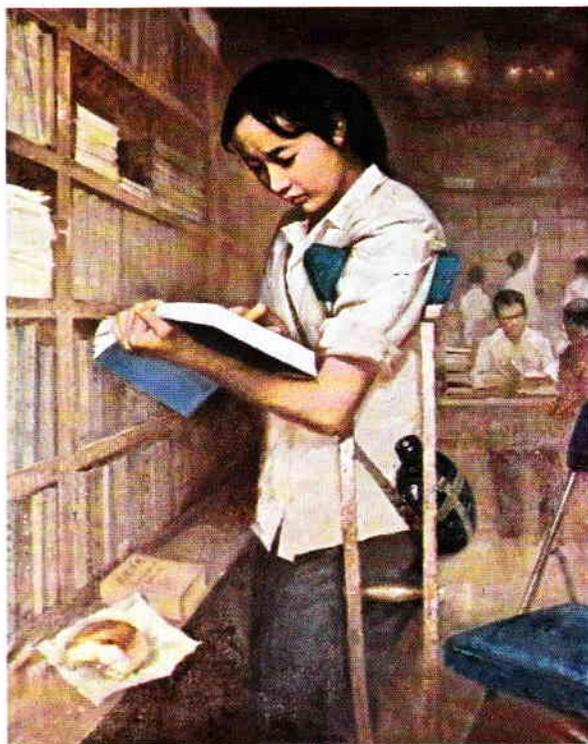
"Soong Ching Ling with a Child",  
Chinese traditional painting.

*Ren Jianguo*



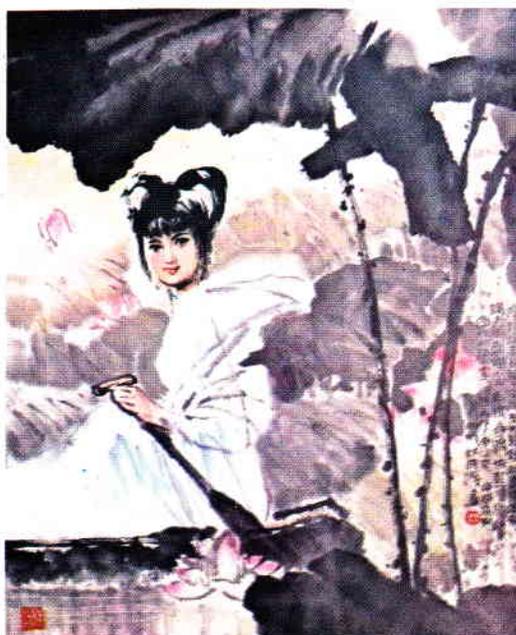
"With High Aspiration", oil painting.

*Ai Xuan*



"In a Lotus Pond", Chinese traditional painting.

*Lin Congquan*





"Father", oil painting.

*Luo Zhongli*

a railroad crossing and are waiting anxiously for the train to pass. This "roadblock" is a symbol of old things that should have been abandoned long ago.

"Not Afraid of Death", a second-prize oil painting by Li Bin and Chen Yiming, shows the late Marshal Peng Dehuai, one of China's veteran proletarian revolutionaries, upholding his dignity though under attack from some misguided Red Guards. But in his eyes we see his pain. The two artists, in creating this work, sought not to expose the naiveté of the young people who under the influence of ultra-Left thinking attacked the old revolutionaries, but to use this extreme, irrational confrontation between old and young to record one aspect of the turbulence of the disastrous decade.

"Farewell, Village Road!", an oil painting by Wang Chuan, took a third prize. A school graduate who went to the countryside to "remold her world outlook" is saying good-bye to the village road that has become so familiar to her, bidding farewell not only to the village, but also to the political turmoil that destroyed a generation. At the same time the girl is reluctant to leave, for she has left her footsteps and experienced joys and sorrows there.

Now our young people have opened their eyes much wider. In those eyes there is still pain, grief and uncertainty, but they see farther and more clearly. The countless wreaths and turbulent sea of people mourning Premier Zhou Enlai in 1976 helped them see clearly the true face of the gang of four. An oil painting, "Awakening — Vigilance Sharpened by Tears of Blood" (part of a series, "Endless Path") by Zhang Pingjie, Wang Jiong and Wang Xiangming, vividly depicts this subject by employing the technique of symbolism.

What do the young artists see with their opened eyes? They see real people, not gods; people whose labor has nurtured China and with which it will develop

further. The exhibition's first-prize oil painting, "Father" by Luo Zhongli, is a portrait of a sun-bronzed peasant that reminds viewers of the tribulations of their own fathers, and of their responsibility to struggle to change the destiny of a nation.

The young people also see their responsibilities. "Sacred Duty", a poster by 16-year-old Sun He that was first runner-up in the competition, pictures the earnestness and dedication in a medical worker's eyes. What the artist wants to extol here is the kind of spirit every revolutionary should possess.

The young people see clearly the bright future of China. Yang Qian's oil painting "Hands", a third-prize winner, not only eulogizes the creativity of the ancient Chinese working people, but also expresses the desire of people today to build China into a prosperous and powerful state. The work is notable for its use of symbolism and pointillist technique.

The exhibition displayed 544 works — including oils, engravings, sculptures and Chinese traditional paintings — of which 153 won prizes: two first prizes, 36 second prizes and 115 third prizes. An awards ceremony was held in January.

The exhibition was proof that China's young artists are now maturing, with many promising artists coming to the fore. Young



Sacred Duty

Sun He

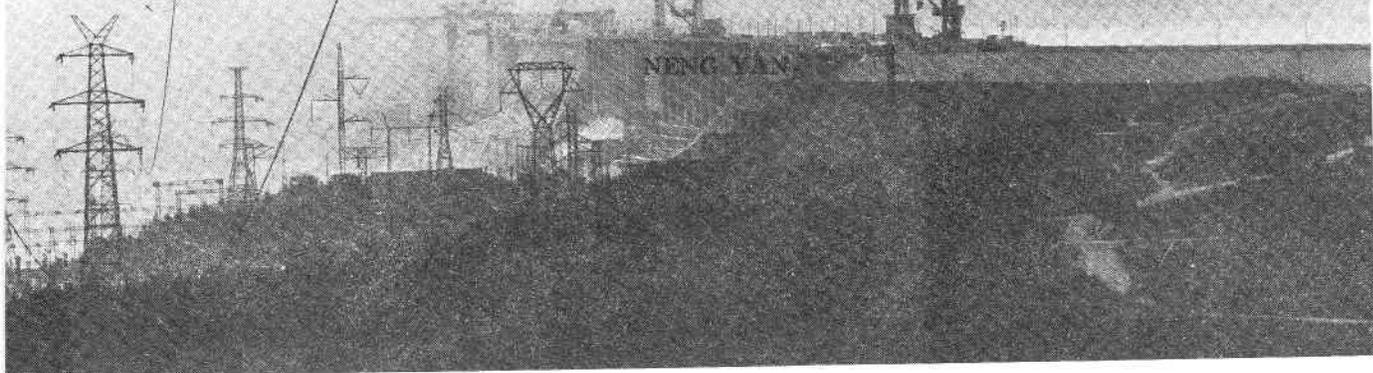
as they are, we can see, from the ways they observe and present things, that they have achieved a profound understanding of our society. They are more adventurous intellectually than the artists of middle age or mature years. They have adopted a serious artistic attitude — no lies, boasts, or idle talk, but straightforward presentation of what is really on their minds. There has been a notable improvement in skill since the First National Youth Art Exhibition in 1962, and a new boldness in conception and technique. □

Farewell, Village Road!

Wang Chuan



# Energy Saved Means More Production



The Danjiangkou in Hubei province, one of China's biggest water control projects, generated record amounts of electricity during last year's flood.

**A**LTHOUGH China produced slightly less energy in 1980 than in 1979, industrial output actually rose by 8.4 percent, mainly due to better energy efficiency.

Much of Chinese industry is of 1950s vintage, and some equipment, including trains and motor vehicles, dates from the 1930s or earlier. Management techniques are also outdated, leading to the waste of energy. Experts estimate that for each one-percent increase in energy efficiency, China would save the equivalent of 13 million tons of coal annually.

Modern technology and management are being introduced to help solve this problem. Industries using heat-treatment processes, like textiles and printing and dyeing, last year saved 800 million kilowatt-hours of electricity by introducing far infra-red equipment.

Nanjing, the capital of Jiangsu province, has set up two special heat-treatment centers that have reduced the amount of electricity used to make one ton of heat-treated products from 3,000 to 900 KWH — thereby reducing costs by 150 yuan (U.S.\$100).

In the oil industry, China's annual production of 100 million tons of crude can be stretched by adding hydrogen in the refining processes for gasoline, kerosene,

and diesel fuel. If widely used this year, the method will produce the energy equivalent of an additional 20 million tons of crude.

Altering the ratio of light industry to heavy industry in the national economy can also save energy. Since light industry uses less energy than heavy industry for the same value of goods produced, the government last year increased the proportion of light industry, thereby saving 10 million tons of coal. This year, an additional one percent increase in the proportion of light industry is expected to save an additional 6 million tons.

A great deal of energy is wasted by the use of coal that has not been washed — 83 percent of all the coal used in China. One kilogram of washed coal (i.e., coal that has been separated from rocks and other impurities) yields 1,000 kilocalories more heat than an equal amount of unwashed coal. So Shanxi province, a major coal producer, is building more coal-washing facilities.

In addition, efforts have been made to produce more efficient industrial boilers, improve the power systems of trucks and tractors, and discard obsolete equipment as new models become available. To encourage work units to get rid of inefficient equipment, gasoline supplies for trucks built before 1930 — over 100,000 of them are still on the

road — have been sharply reduced. Bonus systems to encourage drivers to save gasoline have had good results; one motor-transport garage in Tianjin reported a 320,000-litre reduction in gasoline consumption last year.

## No Energy Crisis

China is trying to save energy because of a temporary shortage of supply, not an energy crisis. The country's 4.2 million square kilometers of sedimentary rock and more than 1 million square kilometers of continental shelf promise vast oil and gas deposits. Coal reserves are 600 billion tons, third-largest in the world. And China has so far exploited only 5 percent of its hydropower resources, which are among the largest in the world.

In the early years after liberation, exploration and development of energy resources failed to keep pace with construction, resulting in the current shortage. For the next few years, conservation efforts will be emphasized, but not to the exclusion of the development of new resources, including coal mines, oil fields, and non-fossil fuels. Construction of coal mines is under way in the Huaihe River valley and Yanzhou county in Shandong province, an important industrial area. The Huolinhe Open Pit on the Korqin Grasslands in the Inner Mongolian Autonomous Region is also working up to

**NENG YAN** is an energy research worker.



The heat-treatment workshop of the Nanjing Technological Equipment Plant.

its designed annual output of 20 million tons of coal. Twenty-one old mines, each with annual capacity of 5 million to 10 million tons, are upgrading equipment and methodology to maintain stable output.

Plans have been made to build 12 hydropower stations, each generating 2 million kilowatts, to supply energy-deficient areas via high-tension wires.

The output of China's 160 oil fields ranked 9th in the world last year. The current plan calls for maintaining production from old wells by more intensive pumping while opening up new fields. New wells went into operation last year in the North China, Daqing, Shengli, and Karamai fields. High-yielding wells drilled in 1979 and 1980 in the Zhujiang (Pearl River) estuary in the South China Sea augur well for continued development in the area. China has signed contracts with French and Japanese oil companies for joint exploitation along the coast.

### New Energy Sources

Exploitation of renewable energy resources is also in the initial stages of development.

Some 200 windmills were installed last year on the Inner Mongolian grasslands, generating power for home use and for electrified fences around grazing areas.

Five tidal-power stations built along the eastern coast have operated for more than a year with satisfactory results.

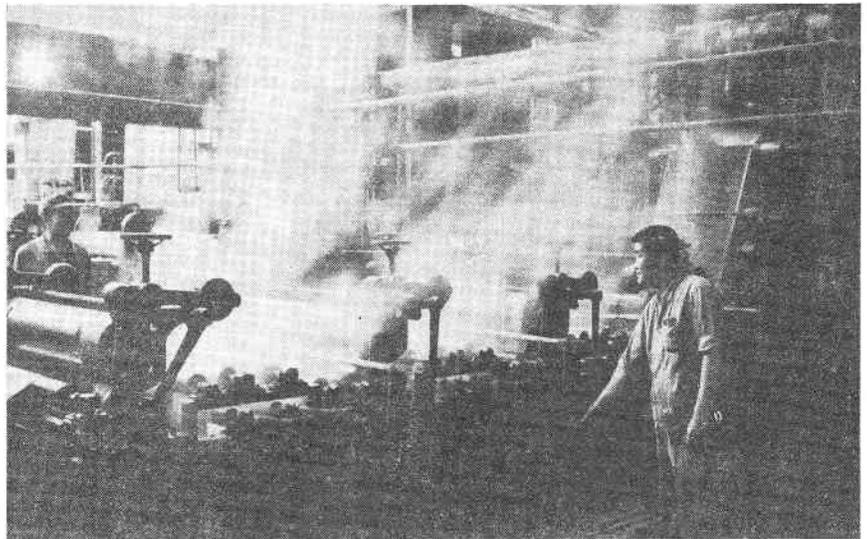
Researchers have found over 2,000 hot springs with temperatures near 80°C. Six experimental power stations have been built to convert this heat for use in medicine, agricultural research, and domestic activities.

Methane, or marsh gas, is the first "new" energy source to be widely used in China. It supplies

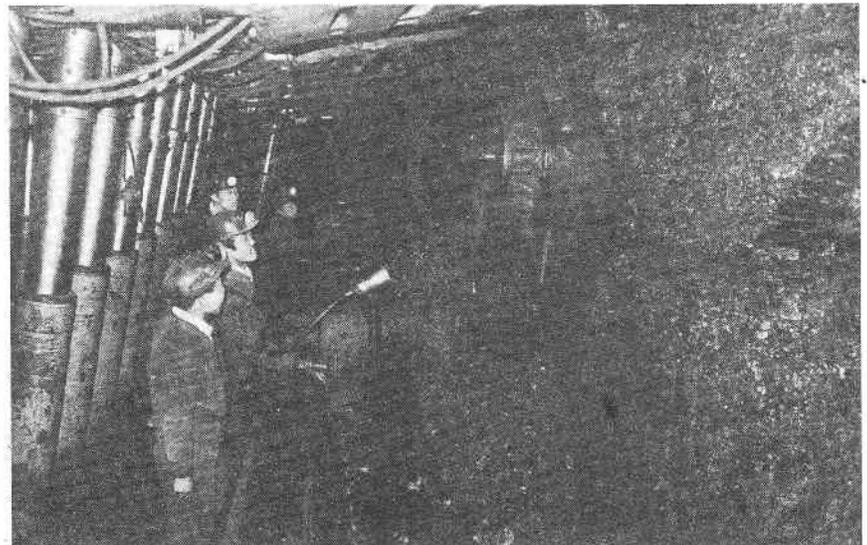
electric power in the rural areas and is important in the treatment of sewage in some cities as well.

Solar cells are being used to light buoys and power lighthouse signals. Solar cookstoves are being used in some villages.

China is also exploring the possibility of developing nuclear power. Chinese energy specialists have put the development of all these forms of energy on the agenda of the modernization program. □



Beijing Guanghua Dyeing and Weaving Plant. To save energy, it utilizes natural underground hot water to rinse fabrics.

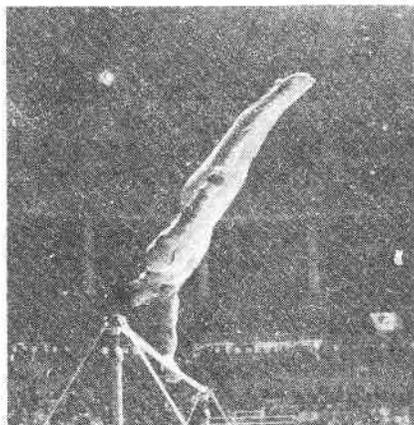


The comprehensive mechanization mining team of Yangzhuang Coalfield in Huabei at work. Photos by Xin Hua

## World Cup Volleyball Preliminaries

THE Chinese men's and women's volleyball teams both won the championships in the World Cup Volleyball Preliminaries. Both teams will represent Asia at the Tokyo World Cup Volleyball Tournament next November.

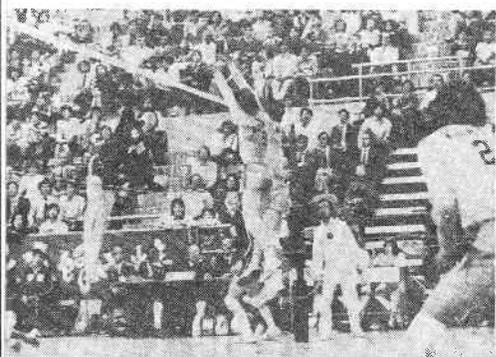
Men's teams from eight countries participated in the Asian Zone World Cup Preliminaries, held in two series, in Hongkong in March. In the first stage of the match China and South Korea took first places in their respective



Tong Fei performs on the horizontal bar at the Sino-American gymnastics contest.



Wei qi (Go) champion Shao Zhenzhong. Photos by Li Qirong



China's Xu Zhen smashes the ball during final match against South Korea.

Luo Yuhe

series. The decisive battle was held on the evening of March 20th. The South Korean team took a quick lead by winning the first two games. The Chinese players rallied and won the next three games 3:2 and the title. They won all six of the matches. On the afternoon of the same day, the Chinese women's team defeated its last opponent, Hongkong, and came in first, winning all three matches. Among the top volleyball players receiving awards at the end of the tourney were four Chinese players — three women and one man.

## Chinese Gymnast in Paris

NINETEEN-YEAR-OLD Chinese gymnast Tong Fei finished second in the men's all-round individual competition and captured

six individual events at the Sixth Grand Prix Gymnastics Tournament held March 6-8 in Paris. He was awarded 3 gold medals, one silver and one bronze. Twenty-eight gymnasts from 15 countries participated in the competition, Tong Fei being the only Chinese. Tong Fei, who is from a southern province, Jiangxi, was the champion of last year's national all-round individual competition. Though he was injured in a traffic accident in Paris shortly before the competition, he persisted in training and taking part in the competition, capturing the title in the men's floor exercises, the

men's rings and parallel bars events.

## Wei qi (Go) Championship

IN an exciting 7-hour final game, Chinese *wei qi* (go) whiz Shao Zhenzhong defeated compatriot Ma Xiaochun to win the Third World Amateur *Wei qi* (Go) Championship in Tokyo on March 14. The two Chinese finalists defeated South Korea's Park Sang Don and Japan's Bunsho Murakami in the semi-finals on March 13. At the prize ceremony Shao Zhenzhong was honored with the title of Seventh Dan by the Japanese Go Association. □

The Shanghai International Friendship Bridge Tournament finals on March 11th: Tokyo B team (front left and opposite) vs. Rotterdam. Zhang Liu Ren



# Invitational Bridge Tournament in Shanghai

YAN SHIXIONG

I'M surprised by the high skills of the players," said Dorothy Hayden Truscott, an American Grand Master, after participating in the Shanghai Friendship International Invitational Bridge Tournament in March. A total of 150 players from New York, San Francisco, Houston, Rotterdam, Karachi, Bangkok, Manila, Singapore, Tokyo, Hong-kong, Macao, Shanghai and Beijing took part, among them such world-famous players as Grand Master Michael Lawrence, World Master Katherine Wei, and J. Th. M. Kreyns, leading member of the Rotterdam team, who had won the World Pair Championship in 1966.

At Shanghai, the Tokyo B team won the championship, Rotterdam took second place, and the New York B team came in third.

This time none of the teams achieved a no-loss record, even the famous skilled New York A team losing three games to take third place in group A. With excellent skill and sportsmanship, the New York B team won one game after another in the first seven rounds, but lost the 8th round to the Shanghai A team and the 9th round to Manila, with a great disparity of scores and only got three victory points.

The Tokyo B team played with a steady hand, strong defense and tenacious spirit. They had only 49 victory points until the fifth round, ranking fifth in the group. But because they played with great care, whether the opponents were strong or weak, they successively beat the Singapore, Karachi, San Francisco and Rotterdam teams with high v.p. scores.

The newly formed Shanghai A, B and Beijing teams showed surprisingly high skills. For example, the Shanghai A team tied the Tokyo B team—the title holder; beat the New York B team by 18 to 2 (victory points) and placed

third in group B. The Shanghai B team beat the New York A team by 13:7 (v.p.), tied with the Rotterdam team 10:10, and beat the Houston team 15:5 (v.p.) winning fourth place in group A.

Wang Junren, 33, of the Shanghai A team became known as a promising young player. "We should have played better, but we

lack experience in international matches," he said. "We were nervous playing before so many experts, so we did better in the closed room than in the open room. As we were not used to playing late at night, our scores went up and down in night matches. And some of the foreigners told us we weren't devious enough. So it's really a test of our skills."

This was the first international tournament held in China, but it was well-organized—among other things, players got their scores within 15 minutes—and many of them said they would play here again. □

## Grand Coup

WANG RUYANG

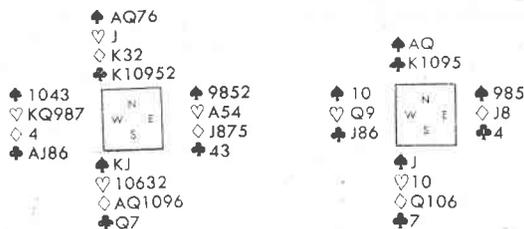
Wang Junren, the mainstay of the Shanghai A team, used the Grand Coup tactic to accomplish a very difficult 5 diamond contract, this enabling his team, which was behind by 35 IMP, to turn the tide and obtain a tie.

The crucial hand is as follows:

No. 14 Neither Vulnerable

E-Dealer

end-play



The Tokyo B team, with Hiroshi Hisatomi (West), led the king of hearts followed by the 4 of spades. Wang first responded with the king of spades, to ruff hearts, then played the queen of clubs which was killed by West's ace of clubs. West played a very fierce hand the 7 of hearts. Wang responded with the king of diamonds! (This was a crucial hand to prevent E's over-ruff.) Then with full confidence he finessed East's jack of diamonds. After cashing in the ace of diamonds, he figured the distribution of trumps to be 1-4, so after careful deliberation he adopted the Grand Coup to make the contract. (See the diagram above right.)

Wang played the 7 of clubs, dummy played the king of clubs, and returned a club which Wang ruffed. He then played the jack of spades, to which dummy responded with the ace of spades and played the queen of spades discarding Wang's 10 of hearts. (This is another crucial hand, a subtle hand to make "substituting trump".) Dummy again played the 10 of clubs, so Wang could play his queen and 10 of diamonds to kill East's jack and 8 of diamonds. Thus, he succeeded in making the difficult 5-diamond contract. □

# World Ice Hockey in Beijing



Fans in Capital Stadium respond to play on the rink.

**S**PIRITED competition marked the 1981 Ice Hockey World Championship for Pool C teams held this month at Beijing's Capital Gymnasium. At the end of the tournament, both the Austrian and Chinese teams qualified to advance to Pool B and will take part in the Pool B championship next year.

This was the first ice hockey tournament held in China since the world games first started in 1920. The eight Pool C teams taking part in the competition from March 7 to March 16 were: Austria, Denmark, Hungary, France, Bulgaria, Britain, Korea (DPRK) and China.

The tourney was not only a competition for the right to move up to the next category but also

Foreign players learn to use chopsticks at welcoming banquet.

Photos by Xie Jun



a good opportunity for players of different countries to exchange experience, each team demonstrating its style and skills.

The Austrian team proved to be the strongest, winning all seven of its matches. Their victory was attributed to their discipline and adoption of a combined attack-defense style. The Hungarian team played a polished game, showing exceptionally good teamwork. The Danish players' amazing individual skills; France's all-out attacking style; the daringness and tenacity of the Bulgarians and Koreans; and the British pucksters' fine sportsmanship and conscientious spirit impressed the spectators favorably. After 28 matches, Austria and China came out a convincing first and second, followed by Hungary, Denmark, France, Bulgaria, the Democratic People's Republic of Korea, and Britain, in that order. The British players garnered the sportsmanship award. Six top players were honored at the end of the tourney — 3 Austrians, 2 Chinese and 1 French.

Ice hockey in China started only in the 50s, and has therefore a thin foundation. The Chinese team has participated in five world championships since 1972. It finished third in 1972, fifth in 1973, sixth in 1974 and fourth in 1978.

Twenty players and two coaches were selected from the northeastern provinces and the People's

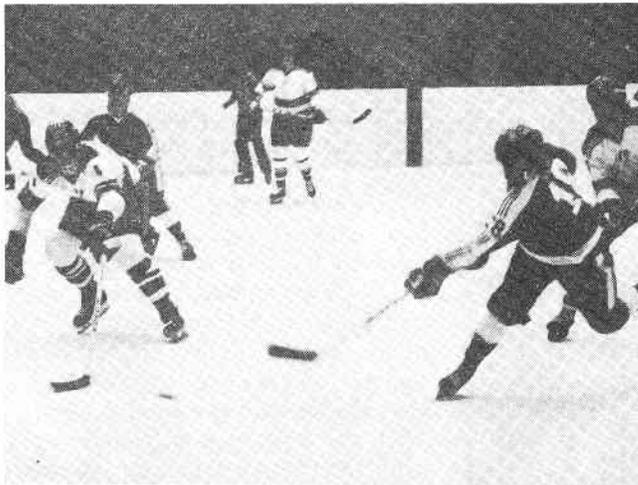
Liberation Army's August First Team. The players averaged 23.7 years old, 1.75 meters in height and 72 kgs. in weight. They impressed their competitors and spectators with their tenacity, speed and agility. China opened its winning streak with a spectacular win over Denmark 5:1 and went on to defeat Bulgaria 6:2. She beat Britain 12:2, with the highest tournament score. Though beaten by the powerful Austrian team 0:3 on the 11th, the Chinese players were not discouraged. On the 13th they overpowered and outmaneuvered the Hungarians 3:1 in a crucial battle, taking them one step nearer to second place. Instilled with new confidence, China defeated France 10:3 the following day. In the last game on the 16th, China won over Korea, 10:2. Altogether China scored 46 goals, with only 14 allowed against them. Winning six and losing one, the Chinese came in second and are now among the world's sixteen best teams. Hailing the tournament as a big success, Curt Berglund, treasurer of the International Ice Hockey Federation, said the Chinese team had made surprisingly fast progress. However, further improvements would have to be made on the maneuvering of the stick, racing technique, and passing and carrying the puck, he added, if China is to keep its position in Pool B. □



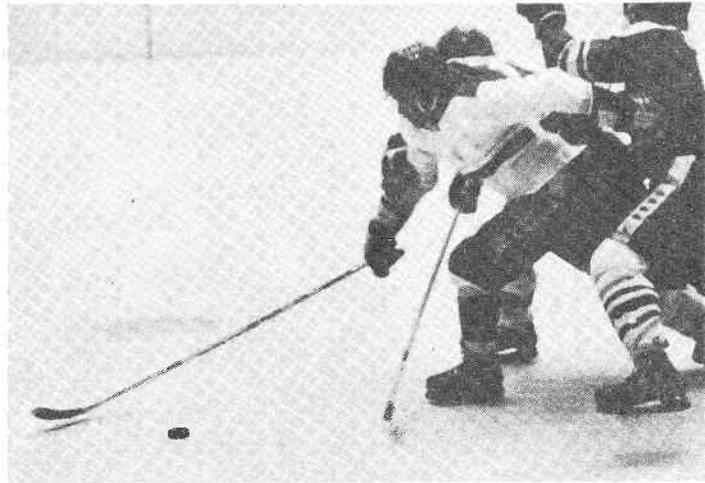
Austria vs. China.



China vs. Hungary.



Austria vs. France.



Bulgaria vs. Denmark.



Korea vs. England.



Awards ceremony.

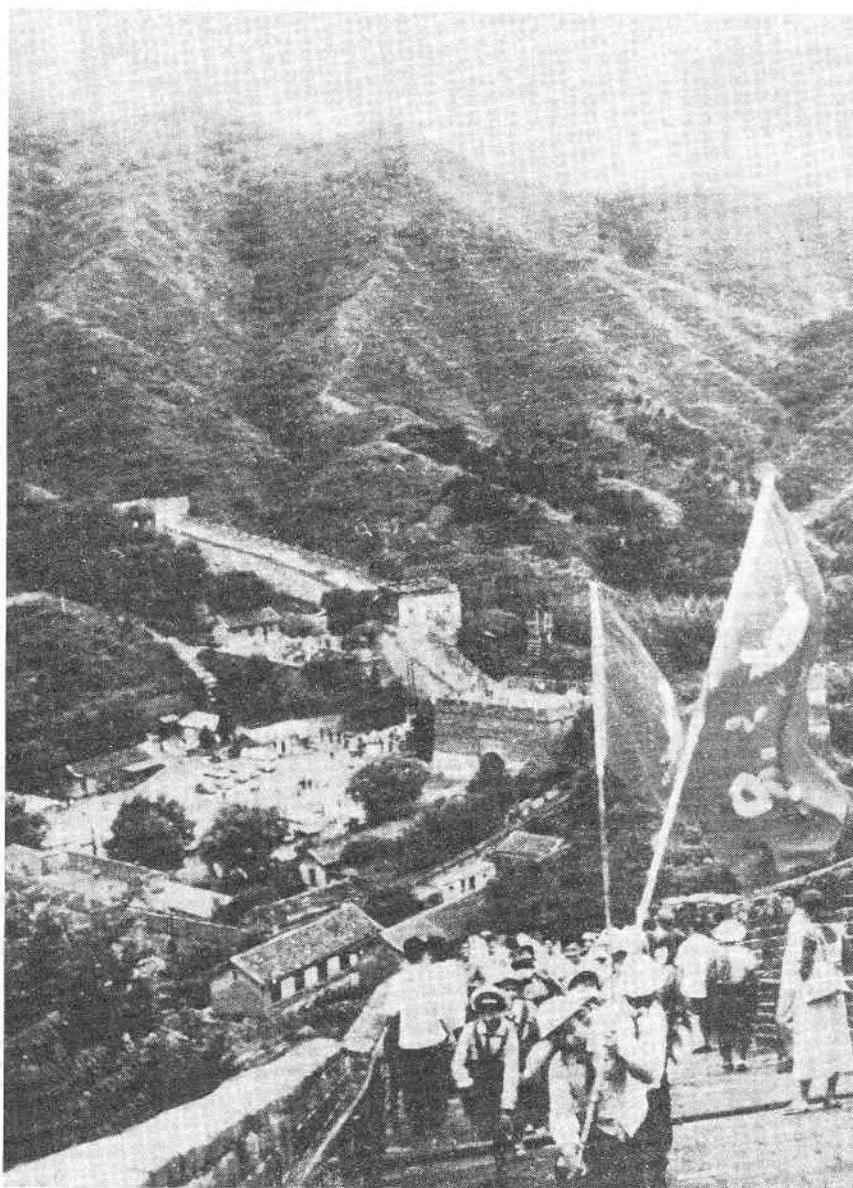
*Liu Chen*

# Memories of China

GERDA KUNZ

**Editor's Note:** *Early in 1979, Gerda Kunz, an amateur photographer, came to Tianjin for a ten-month visit with her husband, Heinrich, an engineer with the West German firm Krupp-Koppers GmbH. During their stay in China they toured Beijing, Tianjin, Hangzhou and Beidaihe and took many significant pictures. She also made many Chinese friends and kept in contact with them. She sent this note to C.R., with some of her camera work.*

Young Pioneers climb the Great Wall.



Gerda Kunz

I AM sending you a report about some of my experiences during the ten months I stayed in Tianjin.

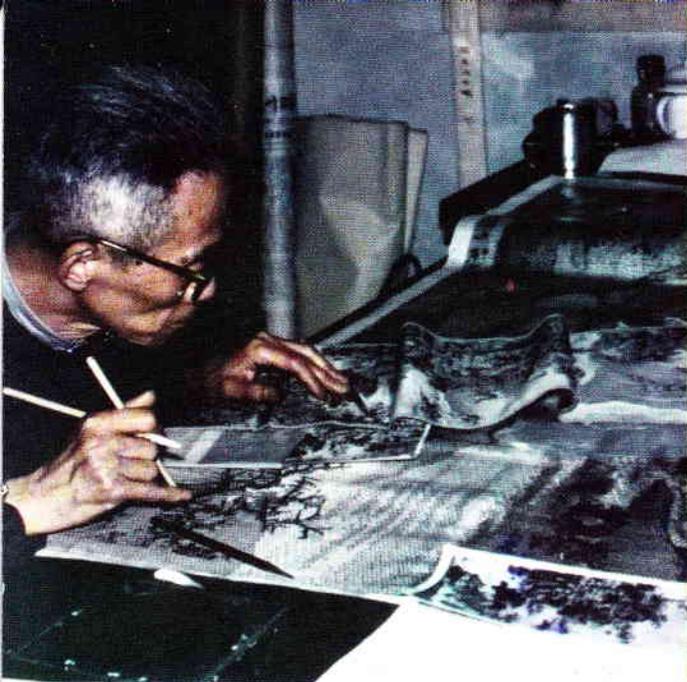
Never had I thought of having the chance to get to know this far-away country. There were many things that I—being a European—was not used to: Chinese cuisine, for instance, or the masses of bicycles in the streets (with no lights at night!) or the crowds of people in the city and in the well-stocked shops. However, I want to point out how hospitable people were. I still correspond with many of them.

I'd like to take this chance to express my gratitude to the unknown Chinese, one a soldier and one a civilian, who helped me when I unluckily fell in the Palace Museum and broke my arm. It was no problem that we couldn't speak the same language. In a very short time I found myself in a physician's care and later was treated in a Tianjin hospital by Dr. Kong till the fracture healed completely. The plasterless method he used is really effective.

The few Chinese phrases that I had learned before leaving Germany didn't hit it off. Nobody understood me. I didn't notice that the tones were totally wrong. With the help of our friendly and kind interpreter I learned at least what I needed for shopping, and with polite comments here and there I was somewhat successful.

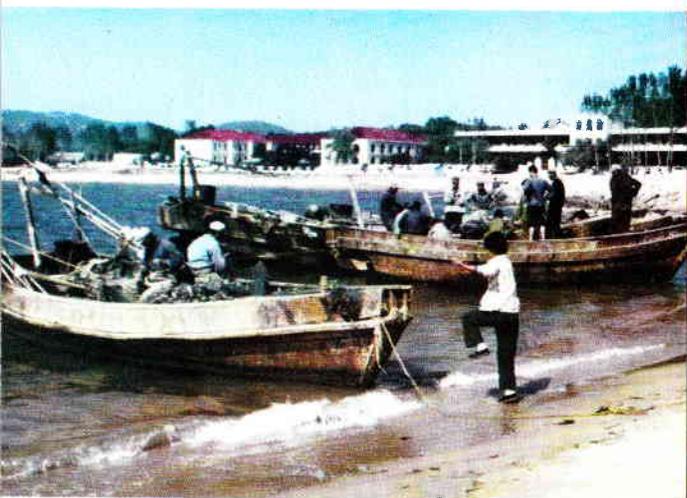
I was glad that on the way back home I could say good-bye to the pleasant conductress whom we had met a couple of times on the Beijing-Tianjin line. I will always remember the wonderful days I spent in Beidaihe and in Hangzhou, where I visited a tea plantation, a silk factory and the 24-meter Buddha—all unforgettable impressions. And then the 25-hour train ride back, across the great Nanjing bridge, and the view of the Changjiang (Yangtze) River. Unforgettable too were the Great Wall and the Ming Tombs.

Now, back home, we are immersed in beautiful memories whenever we look at the slides we took and listen to Chinese music. □



A veteran artist of the Hangzhou Silk Factory designs patterns for tapestries.

*Gerda Kunz*



Fishermen on the Beidaihe coast.

*Gerda Kunz*

The writer buying fruit in Tianjin's Park on the Water.

*Heinrich Kunz*



Commune members from south suburban Tianjin transplant rice seedlings.

*Gerda Kunz*

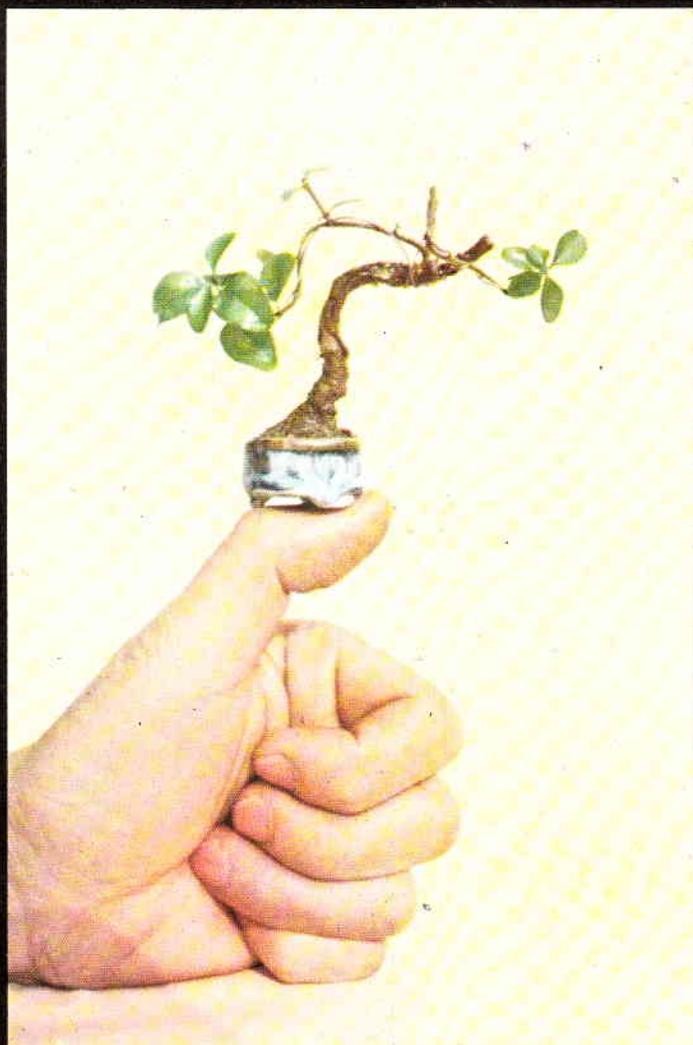


Sampling Chinese food in a Tianjin restaurant.

*Heinrich Kunz*



# The Art of Miniature



*Miniature potted landscapes in China fall into three categories: Large, medium-sized and small. In the accompanying picture we see one of the smallest, made by minigarden artist Shen Yinchun. He uses pots ranging from hand-size to only several centimeters across, some no bigger than a thumb nail. But the midget trees grown in them are so well-proportioned they produce a sense of grace and beauty, and even weathered grandeur. Like the full-size species they blossom in spring and summer and bear fruit in autumn.*

*Minigardening has been traced back to the 7th-century Tang dynasty. To this day tiny potted landscapes are valued as household decorations and works of art.*

Ren Shiyin

# Engraving on a Hair

CHANG YI

**I**N ancient times highly skilled craftsmen were admired for their ability to write a thousand words in a tiny space or carve a poem or essay on a piece of ivory the size of a grain of rice or the head of a nail. Today, Shen Weizhong, a young man at the Artcraft Research Institute in Suzhou, Jiangsu province, is using human hair as material on which he inscribes Chinese characters.

As a child Shen showed an aptitude for calligraphy and painting. During middle school he learned to carve seals. Later when he became a moulder in a typewriter factory, he went on to carving on tiny pieces of ivory. Finally he could engrave a 300-word poem on a piece the size of a grain of rice. His work was exhibited and acclaimed in Suzhou.

Last year he was transferred to the Suzhou Artcraft Research Institute where he went on developing his skill. One day he read a newspaper story about an artist abroad who put a miniature tractor and two trailers on a section of a



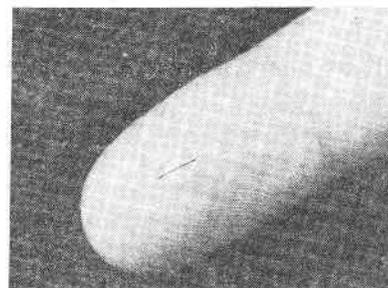
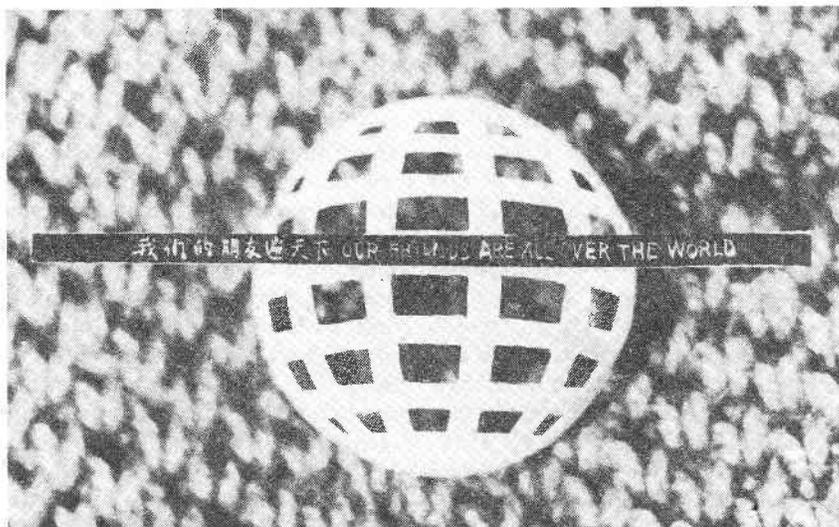
Artist Shen Weizhong. Shen Weizhong's work of miniature ivory-engraving. Detail of a miniature ivory engraving, enlarged.

human hair. Shen decided to have a try with the same material.

But it was much more difficult to work on a soft hair than on a tiny piece of hard ivory. An ordinary burin wouldn't work on hair — a soft fibrous tube with an extremely thin covering. With much quenching and grinding, he finally succeeded in making an engraving tool that would work.

Several months of hard practice made him skillful enough to work on hair. He engraved each of two

four-millimeter-long black hairs with the phrase "Our friends are all over the world", on one in Chinese, and on the other in English, and set them in a miniature globe he carved from ivory the size of a matchhead. Later, on a five-millimeter white hair, he engraved the Tang dynasty poet Zhang Ji's famous verse "A Night Mooring near Maple Bridge". It can be read only with a microscope. □



The hair engraving "Our friends are all over the world." Engraved words appear under the microscope.

Photos by Xu Xin

# YMCA Seminar Tour from U.S.

ZHANG SHUICHENG

I'D have welcomed any assignment that took me from Beijing to Guangzhou in December, but I thought this picture story on a U.S. YMCA seminar would be especially interesting; the 40 people in the group represented many fields of interest and ranged in age from 13 to 80.

Old or young, most of them had considerable experience with their respective YMCA organizations. The oldest, Dorothy (Mrs. Arthur) Dome, now 80, had sailed to China in 1921 with her late husband, who served with the International Committee of the YMCA. They spent a couple of years in Hongkong, Shanghai, Beijing and Beidaihe, helping to popularize physical education among the Chinese. When Mrs. Dome recalled Chinese scenes of sixty years ago, she was saddened. She said she'd been pulled long distances by rickshaw men who were sometimes so hungry and exhausted that they fell. In some places, a sedan chair was the only means of transportation, and Mrs. Dome said she hated to be carried by men much older than she was.

Still good natured and in good health, Mrs. Dome sprained her ankle just before her recent trip to China, but she insisted on coming with the group. She wanted to visit the places she had seen so long ago and to see what changes had been made.

## First Impressions in Guangzhou

In Guangzhou, the YMCA people visited a middle school which enrolls 2,000 students. They were struck by the participation of hundreds of students in physical exercise between classes. Thirteen-year-old David Stockton, a sports fan and swimming champion, was

ZHANG SHUICHENG is a staff photographer for China Reconstructs.



Nicholas Goncharoff (left) and Fred Carl (center) meet with their Chinese colleague Li Shoubao at the Shanghai YMCA headquarters.

moved to say that he never did that at his school, but thought he might when he returned. In a music class, when the students sang "Edelweiss," which is now very popular in China, the Americans were so caught up they joined in the chorus—a good start for their visit.

During a discussion of educational policy with the school leaders, Vice-Principal Dai Tsuibing, 36, answered questions raised by our inquisitive friends on curriculum, school regulations, athletic activities and so on. Fred Carl, executive director of the armed services department of the National Board of YMCAs, said he was impressed by the good discipline of the students and by the capable young vice-principal herself. From the very beginning of the visit, I found that our friends had an intense interest in education, which is part of the YMCA's work. During the discussion in the school, many people took notes. Later, I learned that group mem-

bers who made detailed notes had been assigned to prepare a report for future discussion. These assignments were taken by people in turn. Clearly this was a serious delegation, faithful to its title: "Statesmanship Project X: YMCA Educational Seminar."

## Shanghai, China's Largest City

An exciting aspect of the tour was that the Americans' visit coincided with the reopening of the Shanghai YW-YMCA. News of the reopening was broadcast on the Shanghai radio. Li Shoubao, the Shanghai Y's associate general secretary, told the Americans the YMCA had arranged successful meetings for young people with popular film stars, on filmmaking, and with economists, on problems of China's modernization. Some activities, he said, were sponsored solely by the Y but in others they cooperated with the All-China Youth Federation. There have been two language classes, in English and Japanese. A 70-member YMCA

delegation from Japan visited Shanghai last June and promised to send their Chinese colleagues a video recorder, to improve the language teaching. The Americans asked about religious activities, and Li explained that there weren't many. Most church property has been put to other uses. Some buildings have been converted into schools and others into factories, though some of them may be restored. But in 1979, Li said, hundreds of people attended Christmas services and celebrations. (Shanghai's 1980 Christmas celebration had people humming "Jingle Bells" well into January.)

Youth palaces, where children can spend after-school hours learning to dance, sing, play an instrument, assemble radio and TV sets, do handicrafts, and so on are very popular in China. The Yangpu district youth palace is one of a dozen in Shanghai. When our visitors arrived there in the late afternoon, activities were in full swing. Teenagers in a ballet class were practicing in front of a big mirrored wall under the watchful eye of their ballet mistress. In another room, an orchestra of Chinese instruments played "Do Re Mi," like "Edelweiss" from the sound track of *Sound of Music*, and a flautist and a harmonica duo played some old American favorites to which the U.S. visitors sang along. Before leaving, David Stockton, on behalf of the group, gave the youth palace a collection of story books and his own frisbee.

"We are not merely tourists. We've come to learn from you and to share with you some of our experience," said Dr. Nicholas Goncharoff, director of Statesmanship Project X, executive director, international education and cultural affairs for the International Division of YMCAs, and currently permanent representative to the United Nations for the World Alliance of YMCAs. The group members lost no opportunity to go deeper into the life of China. During a boat trip along the Huangpu River, Judge Li Haiqing of the Shanghai Supreme Court joined them. N. Conover English, chair-

man of Statesmanship Project X and himself a lawyer, Richard Thornell, a Howard University law professor, Ann Baldwin, a law student at the University of Pittsburgh, and some of the others talked with Judge Li about the development of the law in China and problems of juvenile delinquency in both countries. Some said they felt the exchange of views on topics of common concern meant much more than the sight-seeing.

John Trammell of the Hudson Institute is a specialist in economic growth in Asia. When he visited an American friend who teaches at Fudan University in Shanghai, students gathered to discuss problems of modernization. Some students were disappointed to hear him say that it will take China a long time to become strong and rich. When asked why Japan should have been able to prosper in such a short time if China could not, Trammell, who is not much older than the students, replied, "Each country has its own problems. One should not and can't follow someone else's pattern. You have to seek your own way to prosper. It takes time. I would rather go slow and straight than go fast and zigzag." It made sense to me.

### Ancient Capital — Xi'an

Xi'an, in northwestern China, was the country's capital for 1,000 years, hosting eleven dynasties from the 11th century B.C. The city itself and the towns nearby are treasure-houses of cultural relics. Among the spots the Americans hit, the Qin Shi Huang tomb was most attractive. Despite the cold, they lingered at the on-site museum for more than half an hour. "Wonderful", "marvelous", "amazing" — were some of the adjectives they used when they saw the array of life-size pottery warriors standing in formation in the pits. Florence Morelli, an art lover and daughter of an American YMCA secretary in Brazil, said to me that she had been to Egypt,



Americans applaud the students' singing during a visit to Guangzhou No. 32 middle school.

Photos by Zhang Shuicheng

but hadn't seen anything quite like this.

In the Shaanxi provincial museum, the Americans were much impressed by the Sui and Tang dynasty artifacts from the early 10th century and through the explanation by the Xi'an Travel Service interpreter. Jana Goncharoff, an interior decorator, said the stone carvings were "fascinating". Eleanor English, who has studied architecture, said "The architecture has much more color here". Lynette Taylor, a management consultant with interests in art and archeology, added, "I admire your effort in preserving these relics so well."

In this ancient city, Mr. and Mrs. Goncharoff went out one evening for a stroll, stopping at a stall to have a bowl of soup. It was a unique experience for the two Americans as well as for the crowds of Xianese who gathered to watch them. The Goncharoffs talked with the local people in sign language and a few phrases,



YMCA visitors at the Huaqingchi Palace in Xi'an.



Beth Baldwin shows kindergarten children a Polaroid picture she has just snapped.



Dwight Call makes a choice of carved jade animals in a shop.

YMCA group attends a Sunday service at the Moore Memorial Church in Shanghai.

Photos by Zhang Shuicheng

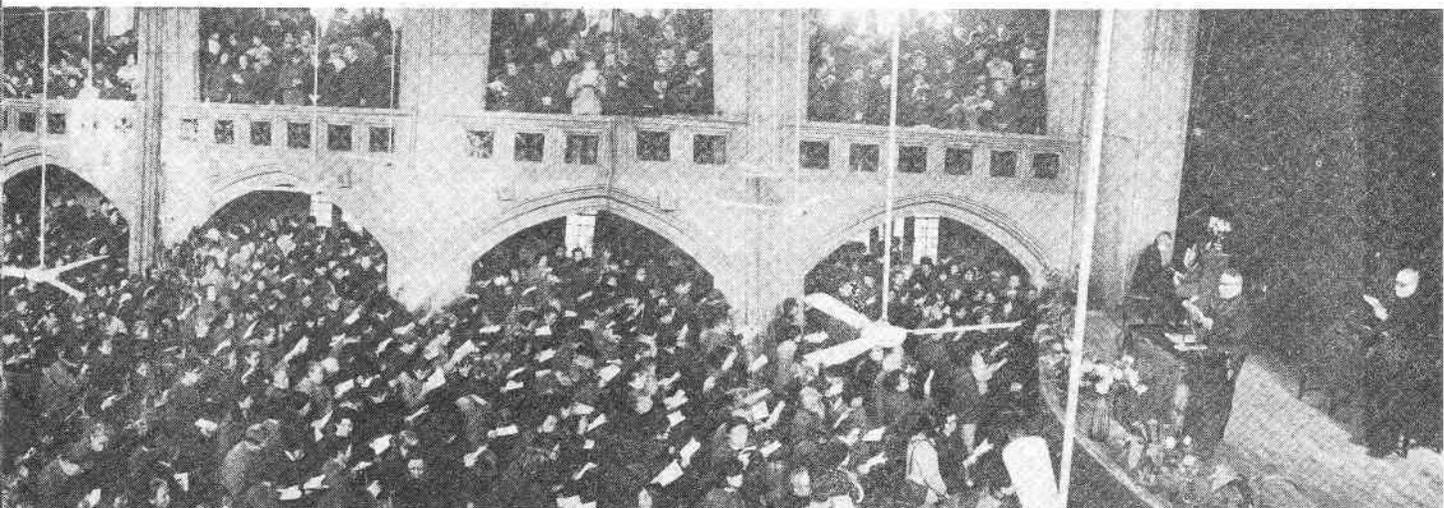




Robert Baldwin (left), Carrell Leiper (center) and Jana Goncharoff talk with a young English-speaking worker at the Shanghai Jade Factory.



Visiting a Shanghai worker's family.



and said later that they and the locals had understood each other and it turned out to be a pleasant evening.

Travelling from sub-tropical Guangzhou to the dry plateau around Xi'an, some of the visitors came down with colds or sore throats. Luckily there were two doctors in the delegation, Walter Balzer and Dale Wilson. When I, too, caught cold, Dr. Wilson produced from his pocket a small bottle and handed me a pill. I doubted that this one small pill would do anything for me, but after a good night's sleep the cold was gone.

### Three Days in Beijing

A light snow welcomed the Americans to Beijing. Carrell Leiper Hall was impatient to fulfil a life-long desire to renew her childhood acquaintance with China and hurried on, with her husband, Homer, to Tianjin, giving up two scheduled days in Beijing. "While it was still dark and freezing cold", she told me later, "we taxied to the Beijing train station. We were armed with a 1920 map of Tianjin in English and a brand new one in Chinese. In 1918, I arrived in China at the age of a year and a half with my parents. We lived in the Xigu area of Tianjin where my mother, Eleanor Cory Leiper, who was called Li Tai Tai in Tianjin, founded an industry—the Yu Min Women's Factory. The women did beautiful sewing, embroidery, and appliqué. My mother created the designs for the lovely table doilies, bags, smocks and dresses, which were sold primarily in the U.S. My father Henry Smith Leiper, who was called "Missionary Li," was director of the Tianjin School for Boys, taught at Nankai College and served on the governing board of the International Famine Relief Committee from 1919 to 1922.

"After some patient searching, Homer and I found the site of my old house, but the building had been destroyed at the time of the Japanese invasion in 1937. Next we looked for my mother's factory. I asked our driver to find a

Protestant church because the factory was either in it or close by. At last we saw a church building. A Chinese woman passing by heard us say 'church', looked at us and took off on a run down an alley. But an old woman who had been accompanying her came up to us. I asked the older woman if she had known my mother, Li Tai Tai. She answered me by asking 'Li-per Tai Tai?' This was astonishing! She had remembered my parents' name for sixty years even though the Chinese usually used only the first syllable. It was a moving moment. It made me feel truly accepted in China. The old woman was Mrs. Qu; she was ramrod straight and very hale for an 80-year-old. Meeting her was worth my whole trip to China."

Dwight Call, executive director of the General Convention of Sioux Indian YMCAs in Dupree, South Dakota, is a rather quiet, gentle young man. He starts every day with an early-morning run, and on his first morning in Beijing, when he went jogging with David Stockton, they lost their way. "People wanted to help and tried to give us directions," Call said. "Finally a policeman got us on a bus and paid our fare. The people were so nice. It was an unforgettable experience."

Call had some other impressions of China as well. Pointing to the padded curtain hung over a doorway, he said, "That's a good idea. I call it a 'green banana'." I asked why, and he explained with a story: "A Westerner was driving a car in the wilds of Africa, and found that his gas tank was leaking. Just as he was about to give up, an African brought him a green banana and plugged the leak, which enabled him to drive on to a place where he could get his car repaired. Every country has its own 'green banana'—a unique way of solving universal problems with local materials. Now that I've seen these padded curtains, I'm going to try to make one for my own house. It gets cold in South Dakota."

A trip to the Great Wall is a much-anticipated part of nearly

every Beijing tour program. It's a long way from town, and I took advantage of the bus ride to pick up snatches of conversation and to ask people for their impressions of China.

John Stockton, an urban-economics consultant in Rochester, New York, said he was "struck by the industriousness of the people and the ambitious construction projects in evidence almost everywhere we visited, especially since they're being done without benefit of sophisticated equipment."

Clifford Woerner, an investment builder from Austin, Texas, noted something rather different: the contradiction between the colorful costumes in the opera and the drab garments most Chinese wear for daily life. "A sea of blue is not desirable," he said. "You need more variety in clothes, more cheerful clothes."

Nicholas Goncharoff said he'd been impressed by the "good order in the streets, in school and in other public places," and by the good behavior of children in the nursery. He said he thought China was advanced in culture and in some other fields, "and most important of all, you're beginning to sum up your experience. That's good."

Jana Goncharoff was struck by China's egalitarianism. "As far as I can see, people in China are equal," she said. "Maybe there are some differences, but they're not obvious." She'd formed some loftier impressions, too: "From the plane I could see that almost all your farmland is plotted beautifully. It shows good organization and hard work."

The road proved too slippery because of a recent snowfall, and we failed to get even a glimpse of the Great Wall. The next morning, we tried and failed again. "If we fail to reach the Great Wall we are not men, we who have already measured twenty thousand li," Chairman Mao wrote during the Long March in 1935. So I think our friends will come to China again. They are people of determination, and I'm sure the Great Wall is theirs for the taking. □

# Talitha Gerlach's 85th Birthday



Children offer their congratulations to their Grandmother Geng and present her with their own painting of a bowl of peaches.

*Xu Yugen*

**A**FTER all, it is only once in a lifetime that a person lives to be eighty-five! I hope to live to be one hundred so as to fulfill my glorious international responsibility in work for women and children and in particular to cultivate and educate the new generation." So said Talitha Gerlach, an American working at the China Welfare Institute, on March 6, her 85th birthday. A close friend of the Chinese people, Miss Gerlach has spent for most of the past 45 years in China, and now lives in Shanghai.

She first came in 1926 as a member of the China branch of the U.S. National Young Women's Christian Association. Early in the War of Resistance Against Japanese Aggression (1937-1945) she joined the China Defense League, organized by Soong Ching Ling to aid China's resistance. In 1947, during the War of Liberation which led to the founding of the Chinese People's Republic in 1949, Miss Gerlach returned to the United States where she continued to work in the U.S. Na-

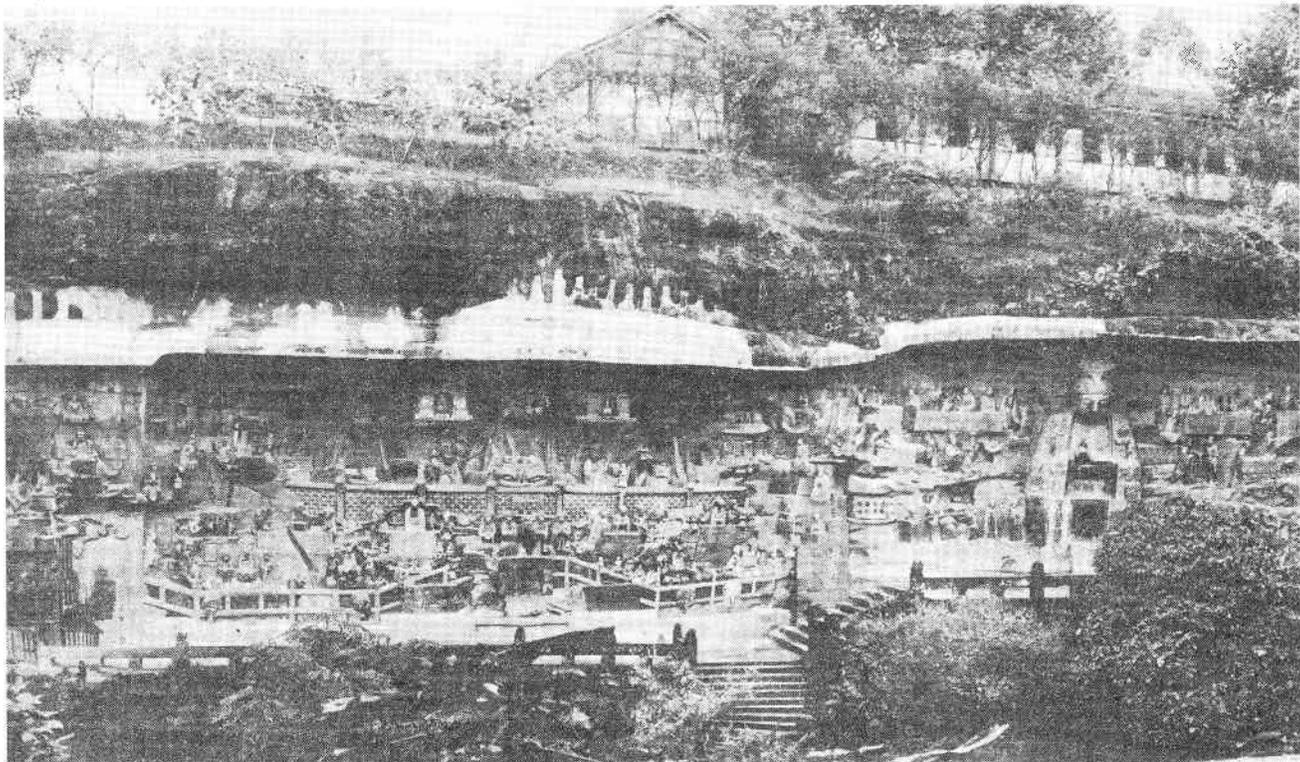
tional YWCA until it was made impossible for her to continue because of her support for the Chinese revolution. In 1952, she came back to China to work at the China Welfare Institute, the successor of the China Defense League, upon Soong Ching Ling's invitation.

In her nearly 30 years at the institute, Miss Gerlach has devoted most of her time to children's education, chiefly at the institute's kindergarten and Children's Palace in Shanghai. The children call her Grandmother Geng (her Chinese surname is Geng). Every year on June 1st, Children's Day, she is invited to the palace to spend the day with the children there. An advisor to its English study group, she brings the children books and records sent to her by friends abroad.

On Talitha Gerlach's 85th birthday, visitors flocked to her house all day long. She was especially pleased when, in the afternoon, children came from the palace and kindergarten to sing

"Happy Birthday" in English and present her with some teacup mats, a toy panda and some pictures, all their own work. Miss Gerlach entertained her young visitors with cakes and candy, which she strung together with red and green thread in the Chinese manner. The children sang a Chinese song, recited a poem and did a dance.

In the morning, Shen Cuizhen, Secretary-General of the China Welfare Institute, brought Talitha Gerlach a basket of flowers on behalf of Soong Ching Ling, Vice-Chairman of the Standing Committee of the National People's Congress. Speaking at the dinner given by the Institute in Miss Gerlach's honor the same evening, Han Zheyi, Vice-Mayor of Shanghai, acclaimed her contributions to the friendship between the peoples of China and America. At the dinner were close friends of Miss Gerlach's, including the New Zealand writer Rewi Alley and the American doctor George Hatem (Ma Haide). *China Reconstructs* cabled its greetings. □



Big Buddha Crescent at Baoding Shan.

## The Dazu Treasure-House of Carvings

ZHANG JIAQI

OF CHINA'S many storehouses of ancient Buddhist grotto carvings, three are well-known throughout the world — Dunhuang in Gansu province, Longmen near Luoyang in Henan province and Yungang near Datong in Shanxi province. But a fourth set on a par with them in artistry has been relatively unknown. These are the Dazu grottoes situated in the hills 160 kilometers northwest of the city of Chongqing in the western province of Sichuan. Their remote location kept people from knowing about them, but also made it possible for the carvings to remain unmolested and in a good state of preservation.

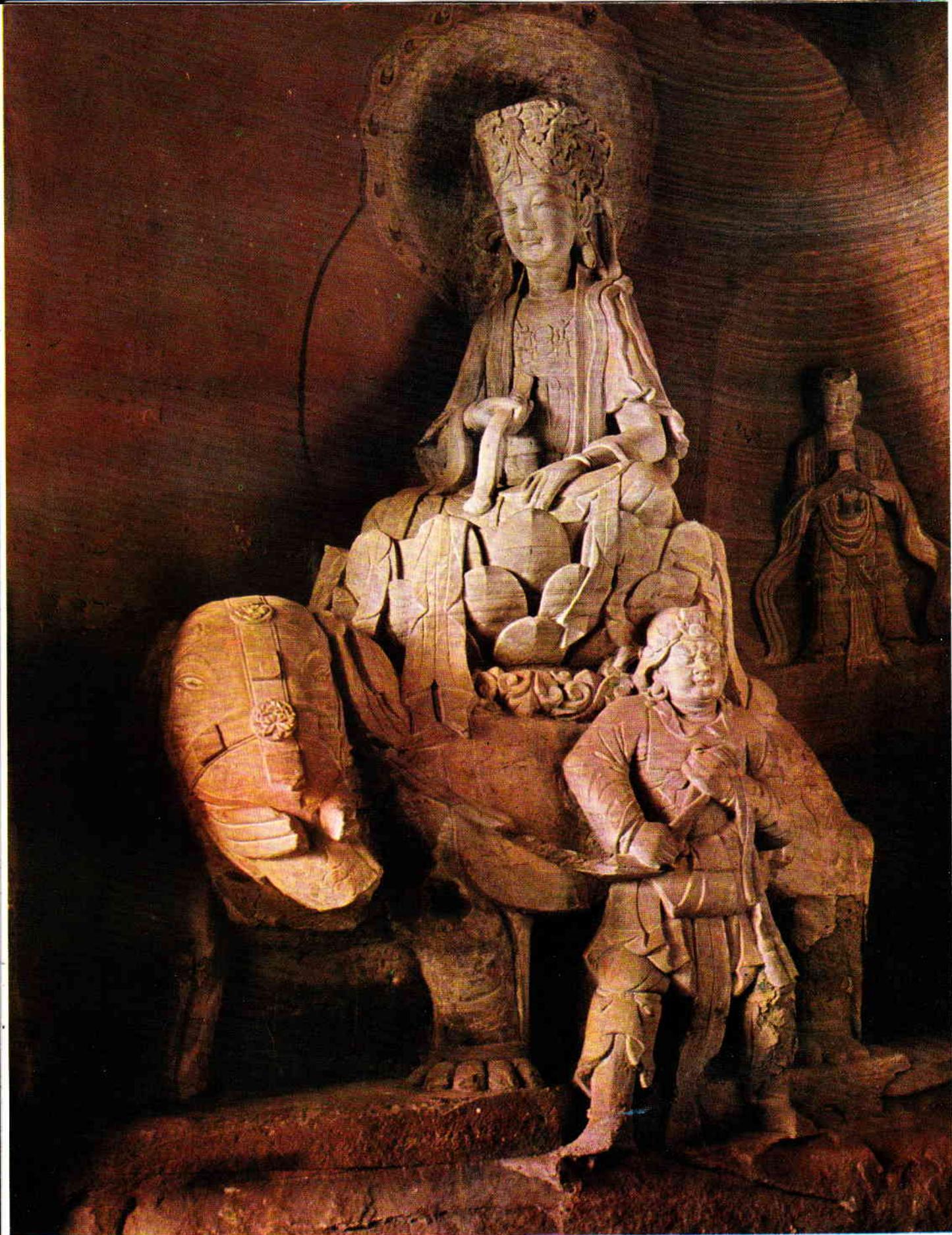
ZHANG JIAQI is an editor of the China Travel Publishing House.

The 50,000 figures there were made between the end of the Tang dynasty (9th century) and the end of the Song dynasty (13th century). They are spread over 40 different spots, with the majority of them at Beishan (North Hill) and Baoding Shan (Treasure Peak Mountain), both now under national protection as cultural relics.

BEISHAN, also known as Long-gang Shan (Dragon Mound Hill), is two kilometers from the Dazu county town. In 892 Wei Junjing, the chief military official in eastern Sichuan, started building a stronghold there for storing arms and grain (the place is sometimes known as Yongchang — Forever Prosperous), and set

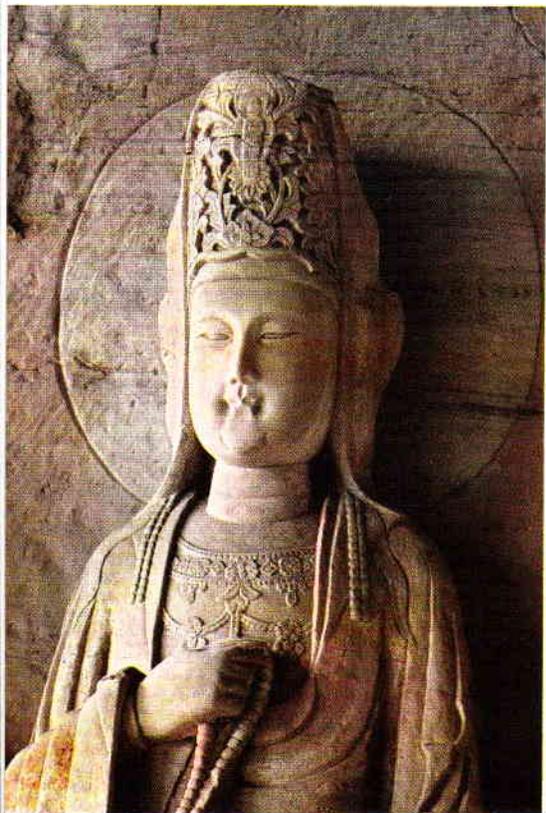
men to making the first Buddhist shrine on a cliff within the huge enclosure. Here and elsewhere in the area these were added to over the centuries at the behest of other wealthy people.

The main feature of Beishan is Buddha Crescent, a 250-meter-long indentation in the mountain with 290 niches, each containing several figures. Niches 3, 5, 9 and 10 are typical of late Tang work, with dignified, well-developed figures in simple dress executed in flowing lines. The middle section of the crescent contains beautiful examples of Song dynasty (960-1279) figures with compact yet intricate composition, smooth, distinct lines and delicate, well-chiseled features.

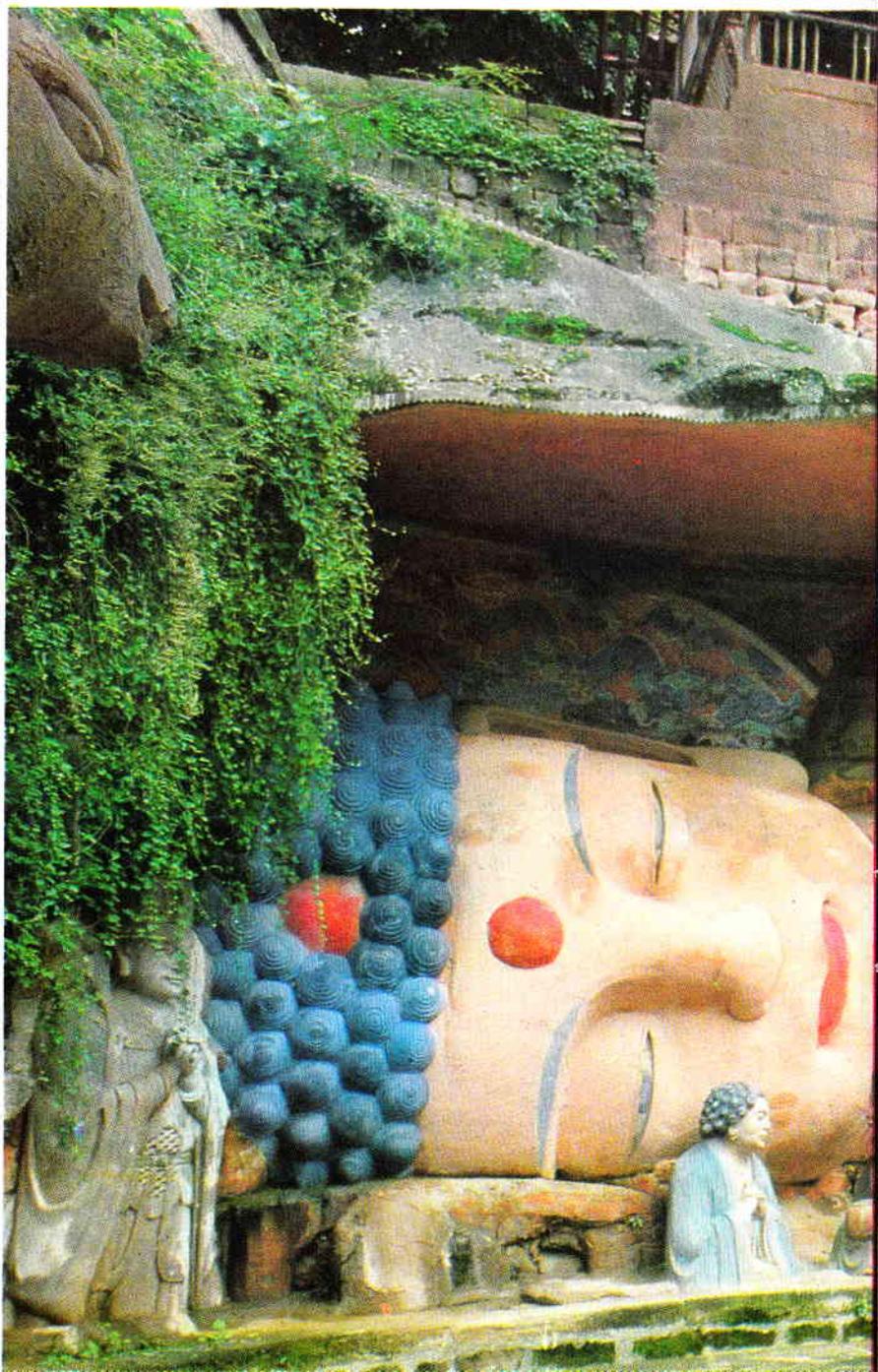


The bodhisattva Pu Xian.

Flying heavenly creatures.



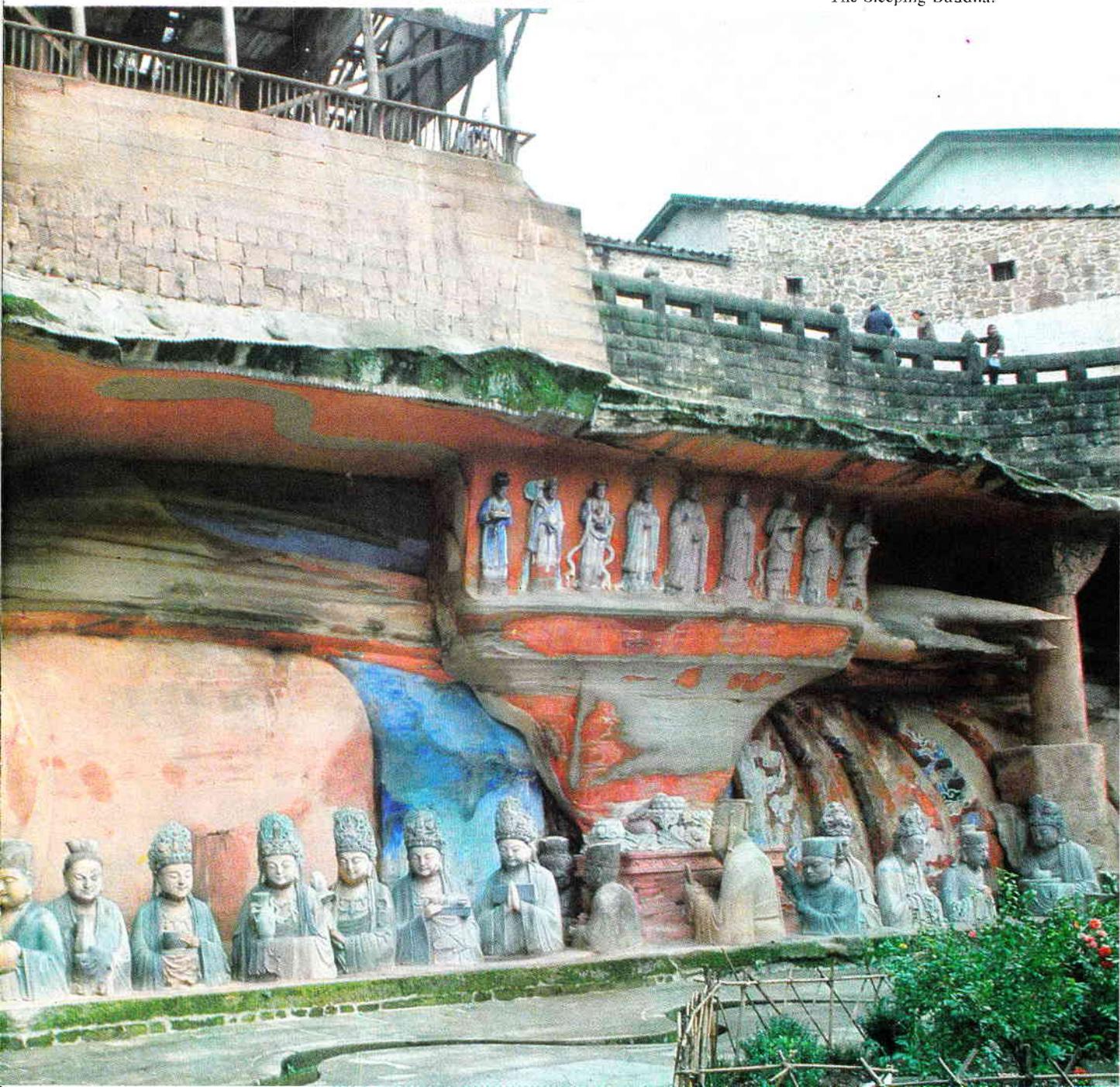
The bodhisattva Guanyin.





Cowherds.

The Sleeping Buddha.





Guanyin of the Thousand Hands.

Bodhisattva seated on a peacock.

*Photos by Zhang Jiaqi*



The outstanding feature of Beishan is Niche 136. In the center is what at first sight seems to be a pillar reaching to the ceiling, carved into eight small pillars half way up, forming a round cage. Inside this space manuscripts of the sutras were stored. The lower part is a coiled dragon and the upper part with carvings of multi-tiered pagodas. However, this is only the beginning. Recent investigation has disclosed that the central part of what seems a pillar was once actually movable. It moved in a carved stone track and in turning symbolized the cycle of man's life and the limitless power of Buddhism. It has been called the "wheel of the universe".

Among the 20-some bodhisattvas and devotees carved on the wall of this grotto is the bodhisattva Pu Xian (Samantabhadra), which though of stone is carved with such care it might be jade. This work has been honored with the title "Venus of the East" for the way it typifies oriental beauty, with a round, full face, finely-chiseled eyes and eyebrows and well-rounded body.

Another gem is the statue in Niche 125 of the bodhisattva Guanyin, sometimes known as the Goddess of Mercy, with her hands clasped in front of her holding prayer beads. It is in reality the portrait of a graceful woman with an almost-human smile and her drapery fluttering in the breeze.

Tang dynasty Niche 245 almost incredibly manages to fit into its 2.6 m. width about a thousand figures from stories in the sutras, along with pagodas and temples, musicians and orchestras, and imaginatively-conceived heavenly creatures floating in the clouds, sparrows dancing, phoenixes rowing boats and dragons and snakes pulling chariots.

**B**AODING SHAN, 15 kilometers northeast of the town of Dazu is another center of carving. There more than ten thousand figures were created in the 70 years between 1179-1249. Biggest and best-preserved of its 15 locations is Big Buddha Crescent.



Wheel of the Universe.

Unlike Beishan, where figures were created more or less haphazardly, Big Buddha Crescent was a carefully-planned project, executed first in miniature by a monk, whose scale model still stands.

The horseshoe-shaped collection of cliffs stands four to fourteen meters high over 500 meters. It contains 31 groups of imposing giant-size figures, 24 stone inscriptions of legends about them and two carved stone stupas. The nineteen major groups of sutra-story reliefs come complete with captions like a picture-story book.

**I**NGENUITY in making use of whatever natural assets exist is one of the talents of China's ancient sculptors. In creating the large-size reliefs in particular, mechanics, natural lighting and perspective had to be taken into account. The three seven-meter-high bodhisattvas, which have remained surprisingly intact through the years of weathering, are an example. In hands extending out half a meter from their bodies each holds a pagoda weighing 500 kilograms. They are supported by nothing but a portion of the outer vestment draped loosely over the arms. With a few bold lines the

sculptor's skilful hands have made the soft folds of the vestment appear perfectly natural. The reliefs are not carved against a straight wall; the figures lean slightly outward from the top to reduce the distortion which would otherwise occur when viewed from ground level. Other reliefs are done on other angles according to the height of the cliff.

**O**NE of the most extravagant displays is the Yuan Jue (Total Awakening) Grotto, nine meters wide, 12 meters deep and six meters high. It has 16 images on its front and side walls, each elegantly dressed and wearing carved-out crowns and silk-like belts that seem to float in the breeze. The texture of their clothing can almost be felt.

In this cave lies a huge sleeping Buddha. Only the upper part of the body is visible and that reaches a height of 5.5 m. over a length of 31 m. By presenting it in this way, the sculptor moves the viewer to recreate in his mind the rest of the figure stretching off into space, and creates an impression of the infinite largeness of the Buddha.

The remaining surface of the cave walls are covered with carvings of temples, trees, mountains, rivers, clouds, flowers and heavenly beings. Because the light from the entrance alone would be insufficient, a huge window was made above the door. It lets in a

Yuan Jue Cave. Photos by Zhang Jiaqi



beam which illuminates every corner and reveals the outlines of the sculptures with an almost stereoscopic effect.

Most amazing is the drainage system for removing water that drips through the cave when it rains. You can hear its trickling but no pipes are to be seen. But if you look closely you will find that hidden under the clouds, branches and pagodas is a complete drainage system that leads all the roof water to a big bowl on the head of a devil figure under the biggest drip, and from there out through an underground conduit.

**B**REAKING AWAY from exclusively religious subjects, some of the Dazu sculptors made figures from everyday life. One long relief of ten cowherds with their cows depicts scenes of country life: the cows asleep in the shade of a tree or drinking from a mountain spring with uplifted head, a cowherd clapping and dancing, another chasing the cows uphill.

Eleven groups in relief which have been given the title "Parental Love" show a couple praying to the Buddha for a son, the woman's pregnancy, birth of the child, nursing the baby, washing and feeding him, the child playing on the mother's lap, and finally sending the son off into the world. Another relief shows a peasant woman, apparently pleased with her chickens as she opens their basket early in the morning.

In 1979 the government allocated 60,000 yuan for restoration at Dazu. Roads have been built connecting the various locations and a highway from Chongqing so that it is possible to visit Dazu on a one-day excursion from that city. □

#### Correction

In the article "What's This 'Taiwan Question'?" which appeared in CR's May 1981 issue, the first sentence of the third paragraph in the first column on p. 51 should read "In the 31 years since its founding, the People's Republic of China has established diplomatic relations with 125 countries. . . ."

## The Making of a Young Science Writer

WU YAN



*Wu Yan is a senior at Beijing's Dengshikou Middle School. He has published a dozen articles on scientific subjects that have proved popular with young readers, and last August, at the age of 17, he was invited to attend the National Forum on Science Writing.*

— Editor.

**I**T WAS my cousin Huang Chaolong who got me into this. Although Huang Chaolong is two years older than I, we've done everything together since we were very little. As he was a bookworm, so was I, and as his preferred books were on science, so were mine. Some of these books described experiments, which we tried to do — unsuccessfully, as it turned out, until one lovely afternoon when I was in the third grade.

Huang Chaolong had been reading the Soviet writer Nechayev's *Stories About the Elements*, and he proposed that we try another experiment, the electrolysis of salt. We prepared salt water, a battery, graphite rods and copper wires, connected them up, and waited. And waited. After what seemed like a long time, the water around one electrode started to change color, and bubbles of chlorine appeared around the other. Eureka! Our first successful experiment!

Nechayev recounts how Sir Humphry Davy, who first decomposed caustic soda in this way some 170 years ago, made a record of the event, so we too, on a small

wooden board, wrote "remarkable experiment" — the words Davy had used.

As Huang Chaolong wrote down the details of our experiment, I held Nechayev's book in my hands, entranced. The book and our "remarkable experiment" made me know what I wanted to do in life.

#### Hard-to-Find Books

There is plenty of knowledge in books, but it was hard for me, a third-grader, to dig it out, even when I could dig up the books in the first place. This was the early 1970s, and most books, including "juvenile" titles, were on politics, not science. But even during the "cultural revolution" the "back door" could be opened, and my parents had friends who were able to get me some books from a library that had been closed. I struggled through them, using dictionaries and consulting teachers frequently; later, my science teacher opened his own small library to me. Every day I haunted a neighborhood bookstore to see whether any science books had

come in. Sometimes, when I wasn't able to get a book for myself, I'd copy it down, and so I built a collection of "manuscript" editions of children's science stories, science fiction, even poems on scientific subjects, like "Song of the Mammoths along the Yellow River." I also clipped newspaper stories dealing with science, and made frequent visits to the Beijing Planetarium, the Museum of Natural History, and the Geological Museum.

### My First Article

At school, no matter what subjects my Chinese teacher assigned, I managed to turn my composition toward science — winter snow, autumn leaves, morning fog, Einstein, Edison, China's ancient bridge at Zhaozhou, the world's first double-arch bridge, were grist for that mill. In 1976, after the terrible Tangshan earthquake, I wrote a "crosstalk" dialogue on the nature of earthquakes, and presented it in public with a schoolmate.

After a while, I was able to discriminate among the various science writers. My favorite was Ye Yonglie, whose children's story "Small Bees with Red Eyes" I found especially vivid and descriptive. I wanted to write him a fan letter, but didn't know where to send it, so I wrote instead to Gao Shiqi, a science writer known throughout China, who is now in his late 70s and whose address I was able to get from a neighbor. To my great surprise, I got a reply in a few days, advising me to write directly to Ye Yonglie. But I still didn't know where to find him. Finally, I wrote an article, "A Unique Style — The Writings of Ye Yonglie", and sent it off to the *Guangming Daily*.

A few days later, an editor of the paper came to my school with galleys of the article, and so, in May of 1978, my first article was published. I was so excited I determined then and there to devote my life to science writing.

### Learn from Ye Yonglie

One evening, after my article had appeared, a man in his 40s

wearing black-rimmed glasses showed up at our house. "You're Wu Yan, aren't you?" he said. I nodded and he said, "I'm Ye Yonglie."

It's hard to describe my state of excitement. Imagine — a boy's own hero comes knocking at the door to offer encouragement. He asked about my studies, and that wasn't too bad, but then he asked to see my writing. Even now I blush with embarrassment at how bad the stuff was. But Uncle Ye read everything carefully and gave me some tips on how to write better. He said we needed more writers who could popularize science, so I should study hard and join their ranks as soon as possible.

I did start to write, and got many encouraging responses from readers. The one that moved me most was from Gao Youcheng, a worker at the No. 17 Toy Plant in Shanghai. He wrote to say he liked my work, and regularly sends me the magazine *Junior Science*, published in Shanghai.

My family, too, has been very helpful. My father, mother, and sister are my first readers and best critics. In the evening, they all sit and listen to whatever I've written that day. Father's criticisms are sharp and to the point. My sister, I thought, offered gratuitously negative views of

everything I wrote — but I found out later she was really proud of my progress. Mother has been perhaps too generous and partial to me.

### The Work to be Done

In 1979, *Junior Science* published two of my articles — "Eyes for the Blind" and "Special Methods of Mining" — and a short story, "Adventures of an Iceberg". Also in 1979, my article "I Love Popular Science" took second prize in a competition sponsored by *Beijing Children* magazine on the 30th anniversary of liberation.

Last year, I published a few more pieces. But it's clear to me I have a long way to go before I can consider my work adequate. In recent years, I've read and collected hundreds of science books, and subscribed to half a dozen journals, including *Science Year* and *Science News* from the United States. I've also gotten into the best Western science and science-fiction writers, like Isaac Asimov, Arthur C. Clarke, Ray Bradbury, and Jules Verne. Nor have I neglected general literature, classic and modern, Chinese and foreign: To be a good science writer, one must first be a good writer.

The Chinese people need to raise up a generation imbued with the spirit of science, and I hope I can do my part in achieving that. □

Wu Yan's physics teacher gives him some help on a problem.

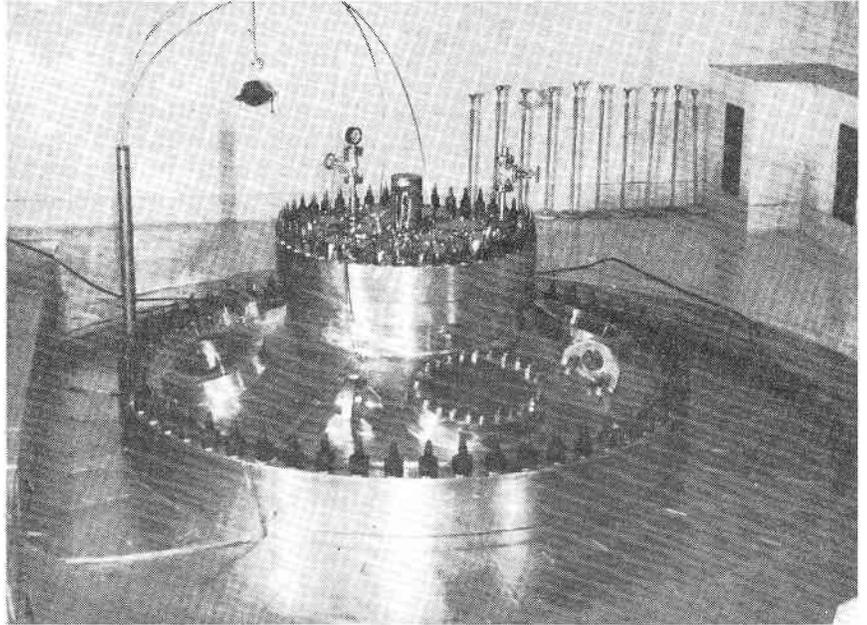
Photos by Zhang Jingde



# China's First High-Flux Reactor

**T**HE first high-flux nuclear reactor entirely designed and built by China (all its 50,000 parts were made within the country) went into high-power operation on December 16, 1980.

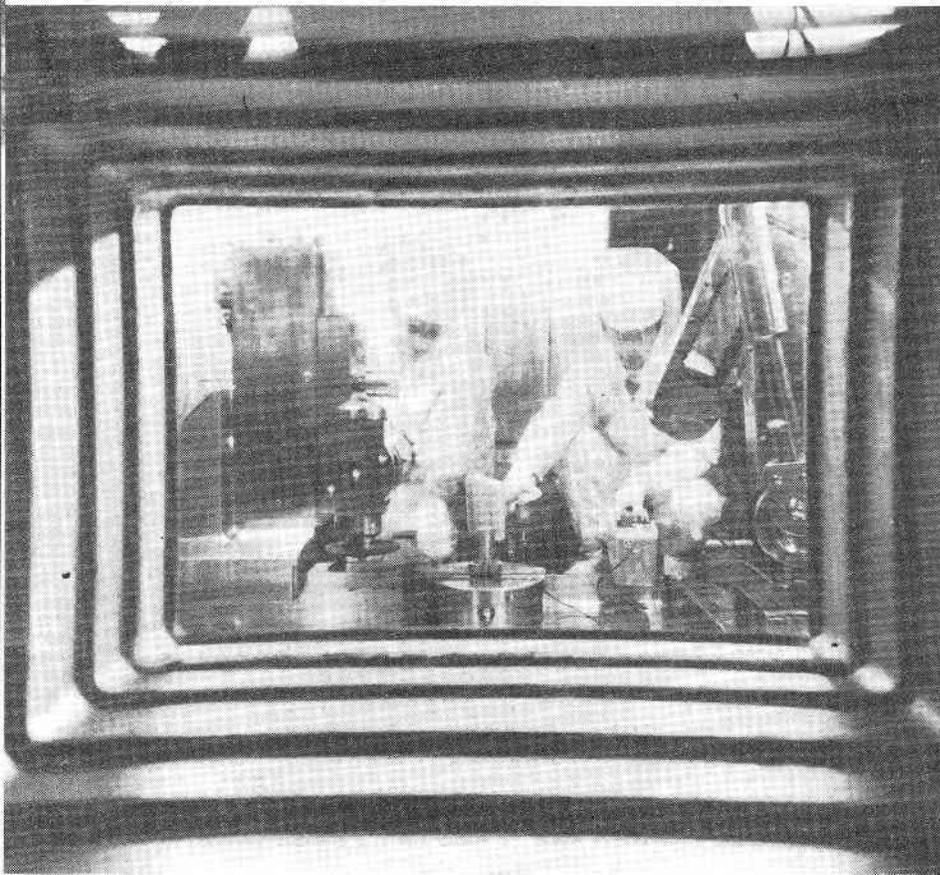
Reactors of this type are built to obtain neutrons for research in basic sciences and engineering technology. This test reactor has a thermal power of 125,000 kilowatts, and a maximum thermal neutron flux of  $6.2 \times 10^{14}$  neutrons per square centimeter second to the 14th power. Its high neutron flow makes possible irradiation at a rate faster than by ordinary reactors. It is estimated that among the 400 or so test reactors in the world today, only about twenty have a neutron flow in excess of  $3 \times 10^{14}$  neutrons per square



The first high-flux reactor designed and built by China.

Technicians in inflated protective suits measure radioactivity and overhaul equipment.

*Photos by Liu Zhibin*



centimeter second to the 14th power. High-flux reactors, up to now, have been found only in the United States, the Soviet Union, Britain, France, West Germany and Japan.

According to Director Zhou Shengyang of the Southwest China Reactor Engineering Research and Designing Institute, this reactor has a fairly strong irradiation capability and is equipped with a wide range of means and installations for tests and research on reactor engineering and technology. A multipurpose installation, it produces several different types of radioisotopes and transplutonium elements simultaneously. It can also be used for activation microanalysis and for research and production of single-silicon neutron transmutations. Thus it is expected to help raise the technical level of the nuclear power industry and related sciences and technology.

Construction of the reactor began in 1971. Now, ten years later, it is operating at high power.

### History

As long ago as 1958, China wanted to build a 50,000-kilowatt high-flux reactor. But this became the butt of sarcastic comments from foreign quarters. One such person remarked: "If you want to jump high, you'll have to do so from our shoulders."

China's first atomic bomb test explosion in 1964 encouraged her scientists and technicians to begin independent designing of a high-flux test reactor with Chinese characteristics. In October 1970, the preliminary research and design were completed. More than 200 factories undertook to manufacture the required non-standard parts and equipment. By spring the next year all the designers had left Beijing for the reactor's site in southwest China to join in building it.

The designing and construction coincided with the ten years of turmoil of the "cultural revolution", but the builders stuck to their task. Chief Engineer Xu Chuanxiao, already 40 years old in the early 60s, whose previous experience was in thermal power stations, set out determinedly to learn reactor techniques. He and his colleagues spent ten whole years on the work-site.

### Strong Safety Factors

The reactor is supplied with electricity from two separate power grids. For added safety, there are two standby generators which can automatically go into operation in case both power grids fail. These precautions guarantee normal operation of the cooling system under any foreseeable conditions and prevent temperature rising in the reactor core which might lead to heat damage to the fuel elements.

Also provided are a reliable set of safeguards and installations for the disposal of waste gas, water and materials, to protect the operators, people living in the vicinity and the environment. A health physics division regularly measures the internal and external irradiation dose to which the reactor's personnel are exposed.

### Youth of the Builders

The technicians and workers who designed, installed and are now operating this 100 percent Chinese reactor are mostly young people. Nine-tenths of the scientists and engineers graduated from colleges or technical schools in the early 60s. In 1970, the year the designing was completed, their average age was 32. For the operating personnel, the present age average is 30. For nine out of ten of those engaged, it was the first time they had ever taken part in building a reactor.



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# The Guangzhou Stamp Exhibition

ZHAO WENYI

A big stamp exhibition was held at the Cultural Park in Guangzhou (Canton) from February 5 to 25. Sponsored by the Guangzhou Philatelic Society, the city's Federation of Literary and Art Circles, and the Cultural Park, it presented collections by 126 philatelists from different parts of China, and from Hongkong, Macao and Thailand.

The exhibition, divided in three sections, displayed 30,000 stamps, Chinese and foreign, on 58 subjects, and included first-day covers, "entires", post cards, maximum cards, postmarks, and philatelic books and periodicals.

An inscription by Soong Ching Ling, Vice-Chairman of the Standing Committee of the National People's Congress, written last year when the best stamps in the thirty years of the People's Republic were chosen, was hung in the middle of the hall. It read: "Spread philately, enrich cultural life, develop friendship."

The first section of the exhibition held the thirty best sets of stamps\* chosen by the public last year for subject, design, engraving and printing. Here, too, were the first "dragon" stamps (1878) of the Qing dynasty (1644-1911); "red" stamps (1929) of the Jinggangshan revolutionary base area; and the first commemoratives, specials and airmails (1949) of new China.

HOW did officials of the Qing dynasty deliver their documents before China had stamps? Tu Songjian, 72, a philatelist in Shanghai answered the question with two large envelopes called "log form" and *huopiao*. In those feudal times, the bigger the envelope the higher the official rank of the sender. Only those



Four special postmarks for the First Stamp Exhibition in Guangzhou.

above the rank of county magistrate could use them. The "log form" was sent by a school inspector by the name of Long (today equivalent to the head of a provincial education department) from Jiangyin county, Jiangsu province to the governor-general of Jiangsu and Zhejiang provinces at Jinling (Nanjing). The letter passed through four posts with some details written on the back. The *huopiao* was sent by Yuan Shikai, Minister of War in the last Qing court, to Zhang Zhidong, governor-general of Hunan and Guangdong. Though both were dated fairly long after 1878, they were surviving examples of the old forms.

THE second section exhibited foreign stamps, such as the first British "Penny Black" stamp

(1840), the U.S. stamps commemorating its astronauts' first landing on the moon, Sharja's stamps on *Pinocchio*, and stamps on clothes and women's hair styles the world over. A large number of animal stamps attracted young stamp lovers.

Rare stamps from Sierra Leone, Tonga and Nepal could also be seen in eagle, banana, pineapple, cocoa bean, palm nut, hexagon and octagon shapes. Visitors were particularly interested in a double-image plastic stamp issued by Manama which shows a high-speed electric train from the front, but the earliest steam locomotive from the side. There were Mexican luminous stamps, Bhutan's gramophone stamps, and the Marshall Islands' biggest stamps (160 mm. x 110 mm.).

THE third section showed many first-day covers, maximum cards and many philatelic periodicals. People were most interested in a U.S. set of first-day covers of coins of all nations, on the left a coin inset and on the upper right a coin-like stamp with a postmark of the country. These are new items for international philatelists. About 150 countries are issuing them.

Luo Huasheng from Chongqing in Sichuan province collected many precious stamps personally signed by famous people, among them Zhu De, Dong Biwu, Soong Ching Ling, Guo Moruo and Wang Guangmei.

During twenty days, 150,000 people came to the exhibition from many cities, including Hongkong and Macao.

The Judging Committee awarded cups and medals to the best exhibits. Five collectors shared the first prize, ten the second, and twenty the third. Prize winners included three philatelists from Hongkong and one from Thailand. Participants who did not get awards received mementos.

From now on the Guangzhou stamp exhibition will be held every year. Both Chinese and foreign stamp collectors may participate. □

\* See *China Reconstructs* January issue, 1981.

# Pan Gu Makes the World

FENG TANG

A Chinese legend tells how Pan Gu created the world.

In the beginning heaven and earth were still one and all was chaos. The universe was like a big black egg, carrying Pan Gu inside itself. After 18 thousand years Pan Gu woke from a long sleep. He felt suffocated, so he took up a broad ax and wielded it with all his might to crack open the egg. The light, clear part of it floated up and formed the heavens, the cold, turbid matter stayed below to form the earth. Pan Gu stood in the middle, his head touching the sky, his feet planted on the earth.

The heavens and the earth began to grow at a rate of ten feet per day, and Pan Gu grew along with them. After another 18 thousand years, the sky was higher, the earth thicker and Pan Gu stood between them like a pillar 9 million *li*\* tall so that they would never join again.

When Pan Gu died his breath became the wind and clouds, his voice the rolling thunder. One eye became the sun and one the moon. His body and limbs turned to five big mountains and his blood formed the roaring waters. His veins became far-stretching roads and his muscles fertile land. The innumerable stars in the sky came from his hair and beard, and flowers and trees from his skin and the fine hairs on his body. His marrow turned to jade and pearls. His sweat flowed like the good rain and sweet dew that nurtured all things on earth. According to some versions of the Pan Gu legend, his tears flowed to make rivers and the radiance of his eyes turned into thunder and lightning. When he was happy the sun shone, but when he was angry

The first in a new series featuring ancient legends and interesting stories from history.

black clouds gathered in the sky. One version of the legend has it that the fleas and lice on his body became the ancestors of mankind.

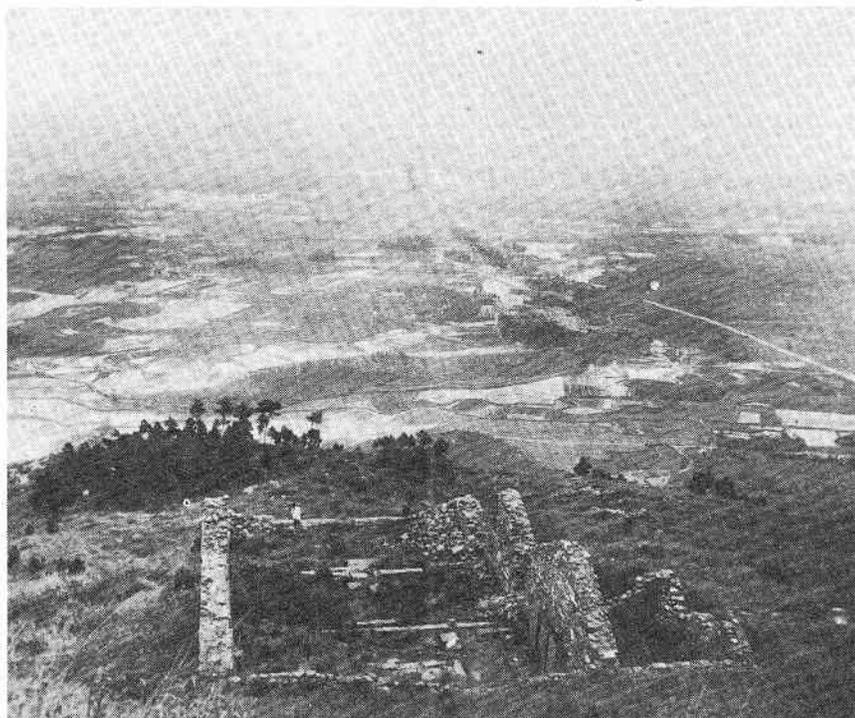
Although the Pan Gu story has become firmly fixed in Chinese tradition, and there is even an idiom relating to it: "Since Pan Gu created earth and the heavens," meaning "for a very long time," it is a rather latecomer to the catalog of Chinese legends. First mention of it in written literature is in a book on Chinese myths written by Xu Zheng in the Three Kingdoms period (A.D. 220-

265). Some opinions hold that it originated in south China or southeast Asia.

There are several versions of the Pan Gu story. Among the Miao, Yao, Li and other nationalities of south China, a legend concerns Pan Gu the ancestor of all mankind, with a man's body and a dog's head. It runs like this:

Up in Heaven the god in charge of the earth, King Gao Xin, owned a beautiful spotted dog. He reared him on a plate (*pan* in Chinese) inside a gourd (*hu*, which is near to the sound *gu*), so the dog was known as Pan Gu. Among the gods there was great enmity between King Gao Xin and his rival King Fang. "Whoever can bring me the head of King Fang may marry my daughter," he proclaim-

Ruins of a Temple of Pan Gu on the outskirts of Guilin, Guangxi Zhuang autonomous region.  
Feng Xiaoming



\* A *li* is 0.6 km. or 1/3 mile.

ed, but nobody was willing to try because they were afraid of King Fang's strong soldiers and sturdy horses.

The dog Pan Gu overheard what the king said, and when he was sleeping, slipped out of the palace and ran to King Fang. The latter was glad to see him standing there wagging his tail. "You see, King Gao Xin is near his end. Even his dog has left him," Fang said, and held a banquet for the occasion with the dog at his side.

At midnight when all was quiet and the king was overcome with drink, Pan Gu jumped onto his bed, bit off his head and ran back to his master with it. King Gao Xin was overjoyed to see the head of his rival, and gave orders to bring Pan Gu some fresh meat. But Pan Gu left the meat untouched and curled himself up in a corner to sleep. For three days he ate nothing and did not stir.

The king was puzzled and asked, "Why don't you eat? Is it because I failed to keep my promise of marrying the princess to you? How can a woman marry a dog?" To his surprise Pan Gu began to speak. "Don't worry, my king. Just cover me with your golden bell and in seven days and seven nights I'll become a man." The king did as he said, but on the sixth day, fearing he would starve to death, out of solicitude the princess peeped under the bell. Pan Gu's body had already changed into that of a man, but his head was still that of a dog. However, once the bell was raised, the magic change stopped, and he had to remain a man with a dog's head.

He married the princess, but she didn't want to be seen with such a man so they moved to the earth and settled in the remote mountains of south China. There they lived happily and had four children, three boys and a girl, who became the ancestors of mankind.

In south China Pan Gu is known as King Pan, and temples and pavilions were once built in his honor. □

## In Guangzhou's Orchid Garden

LU JUN

**I**N the shade of green groves at the foot of Yuexiu Hill on the northern outskirts of Guangzhou (Canton) lies an exquisite little garden with some 10,000 pots of orchids gracing its paths, pavilions and greenhouses. This is the favorite haunt of orchid lovers — the Guangzhou Orchid Garden.

If the peony has won fame in China as the "monarch of flowers" for its gorgeous colors and magnificent beauty, the orchid is reputed to have a "kingly fragrance". The orchid most commonly found in China is the species called *Cymbidieae*. Although less spectacular than foreign species, cymbidia are unequalled for their charming jasper-like leaves, their graceful pistils and above all their characteristic delicate but lasting fragrance.

Many Chinese government leaders have been orchid lovers. The late Dong Biwu, Vice-Chairman of the Standing Committee of the National People's Congress, once wrote: "Orchids are unrivaled for their refreshing scent, quiet colors, elegant bearing, and refined charm." Zhu De, the late Chairman of the Standing Committee of the National People's Congress, never missed a chance to collect wild species during his long years as army commander-in-chief during the revolutionary wars. In fact, many of the orchids displayed at Orchid Garden were cultivated personally by Zhu De.

One of the many reasons cymbidia are so loved by the Chinese people is that these seemingly gentle, delicate plants possess staunch and hardy qualities. Growing on remote mountains and in

secluded valleys amidst weeds and wild artemisia, exposed to frost and biting wind, they stand firm and erect and indomitable. When winter is spent, their buds burst into bloom, spreading fragrance far and wide and heralding the coming of spring. In ancient China the cymbidium was often called a *junzi* (gentleman, man of virtue) or *yashi* (man of refinement and culture.) In fact, it became a symbol of loyalty, purity and nobility. Good essays or other literary works were known as *lan zhang* (orchid writings); true and pure friendships were called *lan yi* (orchid friendship); genealogical records exchanged between sworn brothers were termed *lan pu* (orchid register). Daughters were named *Rulan* or *Ruolan* (like orchids), a name still popular today. Qu Yuan, the great patriot-poet of the Warring States period (475-221 B.C.), had a particular penchant for this flower. He often compared himself to the orchid in his immortal poems. He once wrote, "My disposition, like the orchid, will never change; my heart, like the orchid, remains steadfast."

**O**RCHIDS are perennial herbs or vines occurring in great diversity. Earlier counts came up with about 500 genera and 10,000 species. But even these figures may be a bit conservative. The latest estimates tend to place their numbers at 800 genera and about 30,000 species, and new varieties are constantly appearing, what with the discovery of hitherto unknown species in remote mountains and valleys and the increase in hybrids. Some scholars have observed that orchid classification is in itself a highly complex branch of learning.

LU JUN is an editor of the *Yangcheng Wanbao* (Guangzhou Evening Post).



Song Mei (Song Family Plum Blossom), an orchid that looks like a plum blossom.



A corner of Orchid Garden.

Where visitors are received.



Cui Gai He (Jade-Topped Lotus), an orchid with petals shaped like those of the lotus.



Doulan (Pocket Orchid), with one of its petals forming a sack.



Hu Tou Lan (Tiger Head Orchid).

*Photos by Zhang Shuicheng, Liang Boguan and Nong Guoying*



and that one could devote all one's life to it without exhausting the subject.

Although there are many species of orchids in China, only a couple of hundred are commonly cultivated for decorative purposes. The Guangzhou Orchid Garden has a hundred or so varieties. Some of the most valuable are the *Yingwu Molan* (Parrot Black), *Huizhou Molan* (Huizhou Black), *Da Feng Wei* (Big Phoenix Tail), *Jinbian Renhua* (Golden-Edged Orchid from Renhua), and *Yinbian Dahuang* (Silver-Edged Yellow). Incidentally, "silver-edged" and "gold-edged" often refer to markings on the leaves, which in addition to the blossoms themselves are objects of appreciation among Chinese orchid-lovers.

Orchids are divided into two main groups — epiphytes and terrestrials. Epiphytes have aerial roots and, although not parasitic, anchor themselves to other plants or on rocks, as for example the *Cattleya* of the South Seas and South America and the *Dendrobium nobile*. Terrestrials are those which grow in the ground. The cymbidia belong to this second group. These are distributed over the high mountain ranges in east, south and southwest China, chiefly in the provinces of Jiangsu, Zhejiang, Anhui, Fujian, Sichuan, Yunnan, Jiangxi, Taiwan and Guangdong, and on Hainan Island.

Many of these orchids are quite valuable. Such species as *Jinsi Ma Wei* (Golden-Thread Horse Tail) sell for up to a hundred yuan per *chang* (three leaf blades count as one *chang*) on the international flower market. Not uncommonly, one pot of a rare variety may be sold for over 1,000 yuan. Even the most common ones like the *Mo Lan* (Ink Orchid) are priced at five or six yuan per *chang*.

**C**ONTRARY to popular belief, orchids are not sought merely for their decorative value. The flavoring in ice cream and desserts is made from the fermented fruit of the vine-like *Vanilla* orchid. It is said that long before Columbus discovered America the Indians of



Orchid and Chick, painting in traditional style by Li Jianyu.

Mexico knew how to make this flavoring from native species of wild *Vanilla*. Most of the vanilla sold on the market today, however, is synthetic. The orchid's unique fragrance has also inspired various scents and perfumes.

Many orchids are well-known for their medicinal properties. Among these are *tian ma* (*Gastrodia*), *bei mu* (*Coelogyne*), *shi xian tao* (*Pholidota*), *bai shi hu* (*White dendrobium nobile*) and dozens of others.

Some orchids make beverages and delicacies. Flowers of the fragrant *Jian Lan* (*Cymbidium*

*ensifolium*) and *Suxin Lan* (*Cymbidium soshin*) serve to make scented teas, which are said to have a better aroma than the celebrated jasmine tea. In eastern Fujian province these flowers are pickled in honey and then soaked in hot water, which is then drunk as a refreshing beverage. In Kyoto, Japan, on the other hand, the flowers are salted. People living in the Indian foothills of the Himalayas make a curry with the tender pseudo-bulbs of the *Himipilia*. Considered a special delicacy, it is reserved for honored guests. □

Orchids flowering in autumn.

Liang Nong

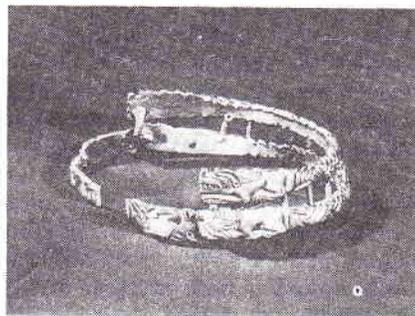


# Tombs of the Huns in Their Homeland

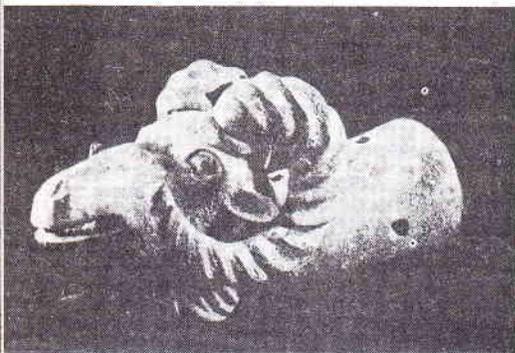
WU EN



Xiongnu leader's crown.



Gold circlet with animal designs.



Bronze cart ornaments.



**A**N eagle with outspread wings and claws was the symbol of might among the ancient Xiongnu, known in Europe as the Huns, as far back as the 4th century B.C., as shown by a crown from the grave of one of their leaders. The Xiongnu were nomadic herders who rose to prominence in the third century B.C. after they had developed a strong tribal confederation and controlled a large territory north of China.

By the first century B.C., internal dissension had caused the Xiongnu to break up into two branches. One moved north into Mongolia and gradually began a westward expansion which was to lead to their invasion of eastern Europe in the 4th and 5th centuries A.D. The southern branch migrated to the plain inside the bend of the Huanghe (Yellow) River. Their culture gradually became assimilated with that of the Han people, so that by the end of the Eastern Han dynasty (A.D. 25-220) they no longer existed independently. They played an important role in the formation and development of China's multi-national state. In their imaginative animal designs they left their mark on the art of the period.

A number of Xiongnu tombs excavated since 1949 provide indications of the level of their tribal organization before the height of their power — and that their leaders had cultivated a love of luxury. Many strikingly beautiful ornaments showing a high level of goldsmithing were found in graves of tribal or lesser chieftains. Later silks from China became an item much wanted by them.

The eagle crown is one of 218 gold articles weighing a total of

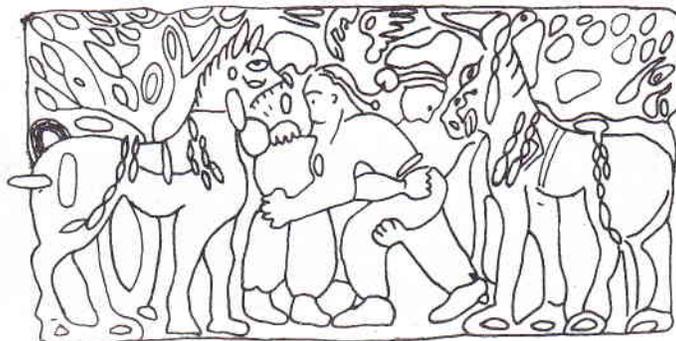
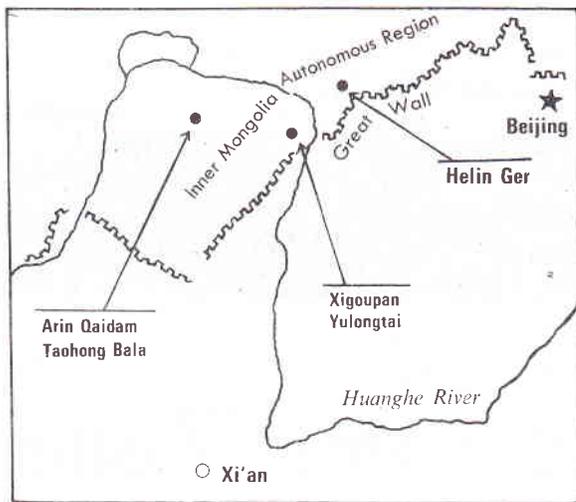
four kilograms found in the tomb of a fourth-century B.C. Xiongnu leader at Arin Qaidam in Inner Mongolia. The head of turquoise, fixed to the body with wires of gold, moves left and right. A design of a wolf devouring a lamb is tooled on the crown.

Other objects included three crownlike gold circlets, with a tiger, a horse and a ram at the ends, a rectangular plate with a design of four tigers devouring an ox, a plate with a tiger and bird design inlaid in precious stones, and necklaces, ear pendants and buttons. There were also five objects of silver and a string of 45 stone beads.

Similar objects were excavated from tombs of other Xiongnu leaders of the period in Xigoupan and Yulongtai also in Inner Mongolia. The man in what has been designated as Tomb No. 2 in Xigoupan wore a gold necklace and earrings, and a bronze mirror and a round gold plaque with a deer design lay to the left of the head. Beneath the right hand was an iron sword in a wooden sheath covered with gold leaf. Other objects included many silver flowers, once attached to the robe, a round bronze plaque and a long pointed gold "thimble", apparently worn as a finger ornament.

Most striking are two gold plates picturing a fight between a tiger and a wild boar. Designs of animals fighting are typical of Xiongnu art: those of a tiger fighting a boar, an ox or a donkey are frequent. The designs, naturalistic yet with economy of line, also include mythical animals such as an eagle with a horse's head, or other animals with an eagle's head. More realistic animal images cast in bronze were used as decoration atop the upright poles of carts or, at the ends of the shafts. Dozens of

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China's oldest picture of wrestling, sketch from bronze plate from Shaanxi tomb, second century B.C.

Bronze dagger from late period.



these have been found: horses, oxen, sheep, antelope, cranes, ducks and hedgehogs. More elaborate are those from the Yulongtai tomb. Among them are a sheep with great horns executed in simple, robust lines, and a deer with large antlers.

### Earlier Cemeteries

Earlier Xiongnu cemeteries dating from the 6th to 4th centuries B.C. were found in Inner Mongolia's Taohong Bala and Helin Ger. In these, funerary objects were mainly of bronze rather than gold. Among the animal designs is a piece of bronze openwork with three horses and a crouching tiger, executed with the primitive simplicity of those early days.

The Taohong Bala tombs reveal local funeral customs: the body was laid in the rectangular-shaped pit with the head toward

the north. Live horses, cows and sheep were buried with him. One grave had 49 animal skeletons.

A bronze dagger either flat or with a ridge down the middle, was found in almost every tomb. The handles give some indication as to whether the grave is an earlier or later one. The hafts of the former were frequently cast in the shape of a pair of birds or animal heads facing each other, or with the ends of the cross-guard curved toward the blade. The later weapons are wider and more businesslike, lacking such ornamentation but with ridges on the handle which permit a firm grip.

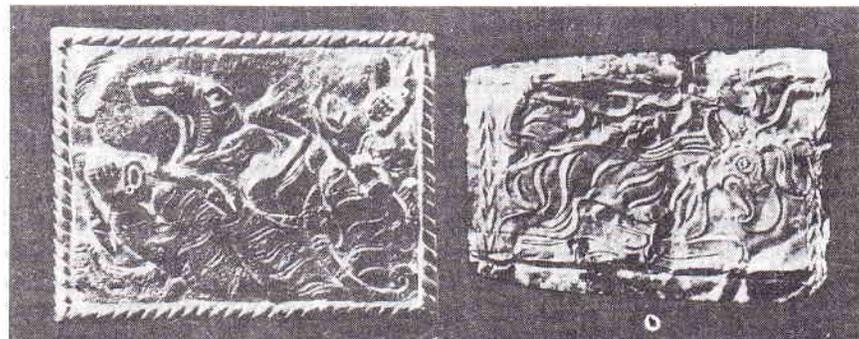
Very few purely Xiongnu tombs from the period after the split have been found in China, probably because the southern Xiongnu adopted Han customs and the political center of the northern group moved to north of the Inner

Mongolian border. Only two have been excavated, dating from the early days of the second century B.C. One of these is located near the Han dynasty capital Changan (today's Xi'an) and the other in Liaoning province. In A.D. 50, after the split the Southern Xiongnu sent an emissary to Changan to pay homage to the Han dynasty rule, and it is possible that the occupant of this tomb, given a Xiongnu burial with considerable ceremony, was some sort of envoy. A number of finely-tooled bronze plates with symmetrical designs of oxen, camels, horses and wild boars were found in both tombs. They also show mounted men going out to battle, scenes of capturing horsemen, and many geometric designs. In the Changan tomb was a pair of bronze openwork plates with a wonderful real-life scene of two men wrestling, their horses tethered to trees.

More typical of the later Southern Xiongnu tombs is one dated between the 1st and 3rd century A.D. found in Qinghai province in 1977. The funerary objects are almost the same as those from Han tombs. One significant thing was a square bronze seal such as was used by local officials. It is possible that this Xiongnu was an official in the Han government there. □

Gold plate with horse fighting tiger.

Eagle with horse's head.





# Xiamen Special Economic Zone

LIU HONGFA

**I**N JULY 1979, the Chinese government empowered Guangdong and Fujian provinces to set up special economic zones where foreign trade and investment are granted broader facilities than elsewhere in the country. The two areas were chosen because of their advantages which are outlined below. To give readers an idea of what has been done in these past two years, our reporter interviewed Lu Zifen, a vice-chairman of the preparatory office and administrative committee of the Xiamen (Amoy) Special Economic Zone in Fujian province.

So far at least, this decision has benefited the province's economy. In 1978 Fujian took in 270 million

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**LIU HONGFA** is a staff reporter for *China Reconstructs*.

The Xiamen Garment Factory makes clothes with imported materials. Here, workers iron clothes before delivery.

*Li Fen*



dollars (U.S.) in foreign exchange. In 1979 it earned 350 million and this rose to 516 million in 1980.

In 1980 the province continued to expand its imports and exports. Half of them were handled directly by the province. Meanwhile it also imported technology and absorbed foreign investments in various forms, such as joint ventures, compensatory trade, manufacturing or assembling with raw materials or components supplied by foreign firms, production with cooperation on personnel, capital and equipment, and through foreign bank credits.

Contracts for eight of the major import items under discussion were signed. Example: The Fuzhou Fiberboard Plant bought equipment from the United States for making several medium-density types.

Twelve joint-venture items were signed. Of these, the Quanzhou Silk Flower Factory, Xiamen fishing grounds and four other ventures have been started.

Manufacturing and assembling with imported materials covered by 413 contracts have worked out well, with knitwear as the main item. Quanzhou and Zhangzhou have done a good job on this.

Fifty-one compensatory trade contracts were signed. Foreign funds, including those of Chinese living abroad, are being attracted for the province's economic development. For example, Fujian obtained a 38-million-dollar credit



Lu Zifen answers a question. *Li Fen*

from the Bank of Chicago. Among purchases with foreign funds were six freighters and one passenger ship, a soda plant with a yearly output of 160,000 tons and a plate glass plant with an annual output of 30 million cubic meters.

At present Fujian province is speeding up its construction in the Xiamen Special Economic Zone. What has changed here? What broader measures have been adopted? Are special economic zones only a temporary pragmatic measure? Lu Zifen answers:

**Q: What is the purpose of the Xiamen Special Economic Zone?**

**A:** The decision to open the two provinces as special economic zones is an important one in Chinese economic readjustment and reform. Although China's policy has always been self-reliance, this does not mean closed-doorism. With self-reliance as its guiding principle, the special zone carries out a less restricted policy

aimed at promoting economic cooperation, technical exchange and stimulating modernization. It differs from other export-processing zones, border industrial zones and economic promotion areas in many countries.

Our decision was partly prompted by successes achieved by developing countries in setting up processing zones, with resulting acceleration of their economic development. The zones are a special organizational form under China's socialist system limited to a given area. In this area attention must be paid to doing well in basic construction, offering preferential treatment and encouraging foreign investment to set up factories turning out products for the international market in order to expand exports and promote economic growth. They concentrate on manufacturing and assembling with imported materials and also develop residential construction and tourism. In short, activities in the special area cover a wider range than those in processing districts elsewhere in the world. The economic forms are more varied. The land remains Chinese. It can be rented but not sold. Foreign citizens and their enterprises must observe Chinese laws and regulations. Its methods of operation and less restrictive policies differ from outside the special zones.

**Q: Why was Xiamen chosen as a special economic zone?**

**A:** We chose it because:

**First**, it is near Hongkong, Macao, Taiwan and Southeast Asia, and thus easier for developing seaborne trade.

**Second**, Xiamen is a natural deep-water port. At present a passenger ship makes the round-trip to Hongkong once a week. Freight is shipped direct to Hongkong, Singapore, Canada and Japan. A new port, Dongdu, is under construction with two deep-water berths, one for 50,000-ton, the other for 15,000-ton ships. It will be in use by the end of 1981. Xiamen's two airports, which once served lines to Hongkong, Taiwan and the Philippines, are being expanded. Xiamen is the terminal of

Yingtian-Xiamen railroad which connects with the rail system of the rest of the country. There are through trains to Shanghai and Fuzhou. It is well served by highways.

**Third**, Xiamen's hinterland has abundant resources. It can provide part of the necessary raw materials, agricultural, special and native products, and has the technical capacity to process some factory parts and components.

**Fourth**, the city has a sound industrial foundation and a large work force. It has five universities and 19 scientific research institutes.

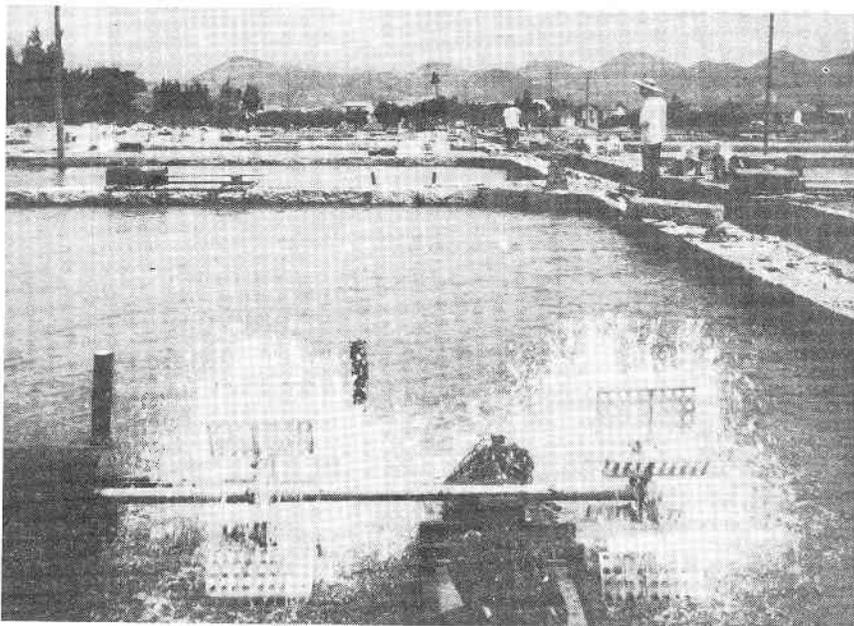
**Fifth**, a temperate climate, beautiful scenery, sites of historical interest, beaches and hot springs make Xiamen a pleasant place for foreign business people and an ideal spot for developing tourism.

**Sixth**, the city is the home town of at least 200,000 Chinese now living abroad — mostly in Southeast Asia. Many of these people contribute to construction here. Xiamen can benefit from their commercial and industrial experience as well as their investments.

**Q: What are Xiamen's present situation and prospects?**

**The large Nanwan Fishing Grounds in Fuqing county, set up under a compensatory trade contract.**

*Xu Yiming*

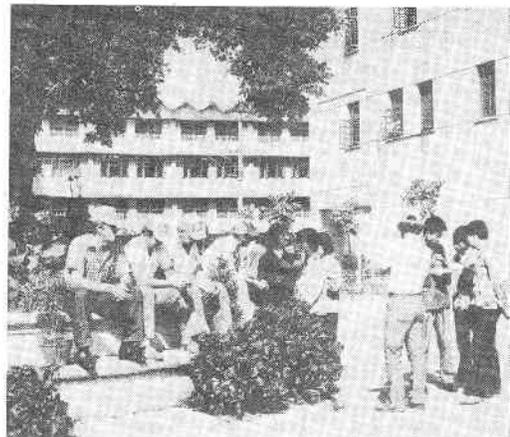


**A:** On the principle of obtaining quick results with little investment the State Council has instructed us to set aside a 2.5-sq.-km. district northwest of Xiamen as the starting point for construction in the special economic zone. We plan to concentrate first on 1.1 square km., leveling the ground and putting in water, electricity, residential quarters and recreational centers. At the end of 1981 a wharf will be completed.

*(Continued on p. 72)*

**Chinese workers and American technicians take a break at the shop of the Xiamen Tobacco Plant set up in cooperation with a U.S. tobacco corporation.**

*Li Fen*



## Lesson 6

## The Stone Lions of Lugouqiao

卢沟桥是一座石桥，长二百  
 Lúgōuqiáo shì yí zuò shíqiáo, cháng èrbǎi  
 Lugou Bridge is a stone bridge, long two hundred  
 六十六点五米，在北京近郊区，  
 liùshí liù diǎn wǔ mǐ, zài Běijīng jìnjiāoqū,  
 sixty six point five meter, at Beijing's near suburbs,  
 已有八百多年的历史，是著名  
 yǐ yǒu bābǎi duō nián de lìshǐ, shì zhùmíng  
 already have 800 more year history, is famous  
 的古迹之一。  
 de gǔjī zhī yī.  
 ancient site one (of).

卢沟桥上最引人注意的，  
 Lúgōuqiáo shàng zuì yǐn rén zhùyì de,  
 Lugou Bridge on most attract people's attention  
 是桥栏杆石柱上雕刻的那些  
 shì qiáolángān shízhù shàng diāokè de nà xiē  
 is bridge railing stone columns on carved those  
 狮子。每个石柱上有一个大  
 shīzi. Měi ge shízhù shàng yǒu yí ge dà  
 lions. Every stone column on has a big  
 狮子，大狮子的上下左右有  
 shīzi, dà shīzi de shàng xià zuǒ yòu yǒu  
 lion, big lion's above below left right have  
 好多个小狮子。最小的只有  
 hǎo duō ge xiǎo shīzi. Zuì xiǎo de zhǐ yǒu  
 many small lions. (The) smallest only have  
 几厘米。它们有的在大狮子  
 jǐ límǐ. Tāmen yǒude zài dà shīzi  
 several centimeters. (Of) them some at big lion's  
 头上、背上；有的在大狮子脚下  
 tóushàng, bèishàng; yǒude zài dà shīzi jiǎoxià  
 head, back; some at big lion's foot under  
 或怀里。有的只露半个头；  
 huò huáilǐ. Yǒude zhǐ lòu bàn ge tóu;  
 or bosom in. Some only show half head;  
 有的只露出一张嘴。生动活泼，  
 yǒude zhǐ lòu yí zhāng zuǐ. Shēngdòng huópō,  
 some only show a mouth. Vivid, lively,  
 坐卧起伏，姿态各不相同。  
 zuò wò qǐ fú, zītài gè bù xiāngtóng.  
 sit lie stand crouch, posture each not same.

北京民间流传着一句话：  
 Běijīng mǎnjiān liúchuánzhe yí jù huà:  
 Beijing people among circulate a saying:

“卢沟桥上的石狮子——数不清。”  
 “Lúgōuqiáoshàng de shíshīzi shùbuqīng.”  
 “Lugou Bridge on stone lion uncountable.”  
 特别有趣的是关于石狮子的  
 Tèbié yǒu qù de shí guānyú shíshīzi de  
 Especially have interest is concerning stone lion's  
 传说。有的说：石狮子中有一个  
 chuánshuō. Yǒude shuō: shíshīzi zhōng yǒu yí ge  
 story. Some say: stone lion among have one  
 总在晃动着，看不真，没法  
 zǒng zài huàngdòngzhe, kàn buzhēn, méi fǎ  
 always swaying, see not distinctly, no way (to)  
 数；有的说：有几个狮子是  
 shù; yǒude shuō: Yǒu jǐ ge shīzi shì  
 count; some say: have several lion are  
 藏起来的，看不清，数不着。如果  
 cángqilai de, kàn buqīng, shù buzháo. Rúguǒ  
 hidden, see not clear, count cannot. If  
 真的数清了狮子的数目，全  
 zhēn de shùqīng le shīzi de shù mù, quán  
 really count (up) lions number, all  
 桥的狮子就会跑光了。虽然  
 qiáo de shīzi jiù huì pǎoguāng le. Suīrán  
 bridge's lions will run (away). Although  
 这是传说，但桥上的狮子也  
 zhè shì chuánshuō, dàn qiáoshàng de shīzi yě  
 this is legend, but bridge on lions also  
 真多，过去确实没有人数清过。  
 zhēn duō, guòqù quèshí méiyǒu rén shùqīngguò.  
 really a lot, (in the) past really not have people (who) count (up).  
 直到一九六一年，文化部门才  
 Zhí dào yí jiǔ liù yí nián, wénhuà bùmén cái  
 Until 1961 year, cultural departments finally  
 把它们数清了，一共是四百  
 bǎ tāmen shùqīng le, yí gòng shì sì bǎi  
 them count (up), altogether is four hundred  
 八十五个。  
 bāshí wǔ ge.  
 eighty five.

## Translation

Lugouqiao, (Marco Polo Bridge), a 266.5 meter-long stone bridge in Beijing's outskirts has a history of more than 800 years. It is one of the city's famous historic sites.

What interests people most about Lugouqiao are the stone lions carved on the columns of the bridge railing. Each column

is topped with a big lion surrounded by many smaller ones. The smallest is only a few centimeters high. Some of them stand on the heads or backs of the bigger ones; some lie under their feet or nestle in their embrace. Others reveal only half a head, or only a mouth. Vivid and lively they are depicted in different postures — sitting, lying, standing or crouching.

A saying in Beijing goes: "The stone lions on Lugouqiao Bridge are too many to be counted." The stories told about them are most interesting. One says that one of the lions is always swaying so that it can't be seen clearly and counted. Another says that it is impossible to count the lions exactly because some are hidden and can't be seen. And if an exact count were really made all the lions would run away.

It was not until 1961 that the cultural offices ascertained their exact number as altogether four hundred and eighty-five.

### Everyday Expressions

- 露 **lòu** show, reveal  
露出头来 **lòuchū tóu lai** show (one's) head
- 流传 **liúchuán** (circulate, spread)  
流传一种传说 **liúchuán yì zhǒng chuánshuō**  
a legend circulates  
流传着一句话 **liúchuánzhe yí jù huà**  
a saying goes  
流传着很多故事 **liúchuánzhe hěn duō gùshi**  
many stories circulate
- 数 **shù** count (vt.)  
数数儿 **shǔ shùr** count (vi.)  
数...数目 **shǔ ... shù mù** count (the numbers of) ...  
数清楚 **shǔ qīngchū** count to get the number right, make an exact count
- 藏 **cáng** hide  
藏起来 **cángqǐ lai** go into hiding  
藏起...来 **cángqǐ ... lai** hide (something)
- 数不了 **shǔ buliǎo** can't count (it)  
吃不了 **chī buliǎo** can't eat (it)  
走不了 **zǒu buliǎo** can't go

### Notes

- Saying 'some' with 有的 (yǒude).  
Examples: **Yǒude shīzi zhǐ lòu bàn ge tóu** 有的狮子只露半个头 (Some lions only show half a head).  
When **yǒude** 有的 is used this way it must come first in the sentence. One can say: **Yǒude shīzi wǒ xǐhuan** 有的狮子我喜欢 (I like some lions).  
The noun after **yǒude** 有的 may be omitted if it has been mentioned. For example, **Lúgōuqiáo shàng de shíshīzi hěn duō, yǒude dà, yǒude xiǎo.** 卢沟桥上的石狮子很多, 有的大, 有的小 (There are many stone lions on Lugou Bridge. Some are big, some are small.)

## 2. Numbers.

The decimal system is used for counting in Chinese.

(1) The figures between one and one hundred are read like this:

|            |            |          |          |         |         |       |       |             |     |
|------------|------------|----------|----------|---------|---------|-------|-------|-------------|-----|
| 一          | 二          | 三        | 四        | 五       | 六       | 七     | 八     | 九           | 十   |
| yī         | èr         | sān      | sì       | wǔ      | liù     | qī    | bā    | jiǔ         | shí |
| one        | two        | three    | four     | five    | six     | seven | eight | nine        | ten |
| 十一         | 十二         | 十三       | 十四       | 十五      | 十六      |       |       |             |     |
| shíyī      | shíèr      | shí sān  | shí sì   | shí wǔ  | shí liù |       |       |             |     |
| eleven     | twelve     | thirteen | fourteen | fifteen | sixteen |       |       |             |     |
| 十七         | 十八         | 十九       | 二十       |         |         |       |       |             |     |
| shíqī      | shíbā      | shíjiǔ   | èrshí    |         |         |       |       |             |     |
| seventeen  | eighteen   | nineteen | twenty   |         |         |       |       |             |     |
| 二十一        | 二十二        | .....    |          |         |         |       |       | 三十          |     |
| èrshíyī    | èrshíèr    |          |          |         |         |       |       | sānshí      |     |
| twenty-one | twenty-two |          |          |         |         |       |       | thirty      |     |
| .....      |            |          |          |         |         |       |       | 一百          |     |
|            |            |          |          |         |         |       |       | yībǎi       |     |
|            |            |          |          |         |         |       |       | one hundred |     |

(2) The way to read figures larger than one hundred.

The counting units are: **shí** 十 (ten), **bǎi** 百 (hundred), **qiān** 千 (thousand), **wàn** 万 (ten thousand), **shí wàn** 十万 (hundred thousand), **bǎi wàn** 百万 (million), **qiān wàn** 千万 (ten million), **yì** 亿 (hundred million).

123 is read **yībǎi èrshí sān** 一百二十三 (one hundred and twenty-three).

4321 is read **sìqiān sānbǎi èrshí yī** 四千三百二十一 (four thousand three hundred and twenty-one).

36405 is read **sānwàn liùqiān sībǎi líng wǔ** 三万六千四百零五 (thirty-six thousand four hundred and five).

4789536 is read **sìbǎi qīshí bā wàn jiǔqiān wǔbǎi sānshí liù** 四百七十八万九千五百三十六 (four million seven hundred and eighty-nine thousand five hundred and thirty-six).

- 好多 **hǎoduō** (many) is used in colloquial speech.

### Exercises

- Answer the following questions in Chinese:
  - Give a brief description of the Lugou Bridge.
  - Why are the stone lions on the Lugou Bridge so remarkable?
- Read aloud the following numerals in Chinese until you can do it fluently:  
18 79 358 2564 47653 576316 43215678
- Translate the following sentences into English:
  - 那些矛有的锋利, 有的不锋利。
  - 卢沟桥上的狮子, 有的大, 有的小。

(3) 我有好多位中国朋友。

(4) 北京有好多古迹都很著名。

4. Read the following dialog:

A: 小张, 你去过卢沟桥吗?

B: 去过。那座桥是著名的古迹之一。

A: 在什么地方?

B: 在北京的近郊区。

A: 有多少年的历史了?

B: 有八百多年的历史了。

A: 那座桥很长吗?

B: 不太长, 只有二百六十六点五米长。

A: 那里最引人注意的是不是石柱上雕刻的狮子?

B: 对。北京民间流传着一句话, 就是“卢沟桥上的石狮子——数不清”。大大小小的狮子多极了。

A: 那里的狮子真的数不清吗?

B: 当然(dāngrán of course)不是。因为狮子多, 最小的只有几厘米, 有的只露半个头, 有的只露一张嘴, 不容易(róngyì easy)数清楚(qīngchū accurately)。

A: 现在也没有数清楚吗?

B: 一九六一年文化部门就数清楚了。

A: 一共是多少?

B: 一共是四百八十五个。

## SPECIAL ECONOMIC ZONE

(Continued from p. 69)

By 1982 some factories will go into production. By 1983 the entire area will be built up. With the exception of a few locations for joint-venture enterprises, the area will serve factories run by foreign businessmen, who can rent factory buildings and land, or build factories themselves on land rented from us.

**Q: How do the special measures and preferential rights adopted by the Xiamen Economic Special Zone differ from those in other places in Fujian province?**

**A:** The Chinese government offers the following preferences in the Xiamen special area.

- The tax rate on profit for enterprises is 15 percent, half that in nonspecial areas (33 percent), and lower than in Hongkong and Macao and other countries. Foreign enterprises with an investment of over 5 million dollars (U.S.) and highly technical enterprises with a slow turnover will be given tax reductions. If foreign businesses reinvest their profits in the special economic zone for five years or more, the tax on those sums will be reduced or remitted.

- Imported machinery, equipment, transportation equipment, raw materials, parts, components and other materials used in production in the special economic zone are exempt from import taxes. Import tax reductions or exemptions for light industrial products will be decided by specific conditions. Products manu-

factured in the zone will be exempt from export taxes.

- Chinese machinery, raw materials and other supplies used in enterprises in the zone may be sold to foreign investors at below their normal export prices. They can be transported directly to the special economic zone with no documentation other than bills of lading.

- The profit and staff salaries of foreign investors may be remitted abroad after taxes through banks in the special economic zone.

Enterprises will have the right to use the land assigned to them for 20 years, with extensions where necessary. Land rent in fact in Xiamen is lower than that in the Shenzhen and other special economic zones in Guangdong province. This is to offset the fact that, being farther from Hongkong, Macao and other international trading markets, the Xiamen special zone has a slower capital turnover.

- Within the provisions of their labor contracts, businessmen in the special zone will have certain rights to hire and dismiss Chinese staff members and workers in their enterprises. The salaries and other benefits to Chinese staff members and workers established by labor contracts cannot be lower than those working in the same field in Chinese state-owned plants. In fact they average higher, about 200 yuan RMB monthly, with the inclusion of labor insurance, medical expenses and various subsidies.

**Q: Some foreign friends are worried that our special economic**

**zones are only a pragmatic measure of expediency. What is your opinion?**

**A:** Both export-processing and special economic zones exist in many developing countries. As for their existence in socialist countries, Lenin dealt with the question in the early days of the Soviet Union: "How can we speed up the development of our economy while we are an economically weaker country? We can do it with the aid of bourgeois capital."

Thirty years of experience has made us realize that it is difficult for a developing socialist country to base itself solely on the state-owned economy. Various other forms of economy must also be used — among them, imports of foreign capital and joint-venture enterprises. In other words, allowing a little profit for foreign businessmen can give us a great deal of benefit. We do not consider these measures temporary or makeshift.

**Q: Are there any problems in building the zone?**

**A:** China has had to undertake an economic readjustment. Thus, funds for the basic construction of the special economic zones are limited. This makes construction slower than previously estimated. Building, however, will accelerate as readjustment spurs economic development. While there is great enthusiasm for developing foreign trade, it is also true that there is some confusion and lack of order. Better and more unified administration is required. □



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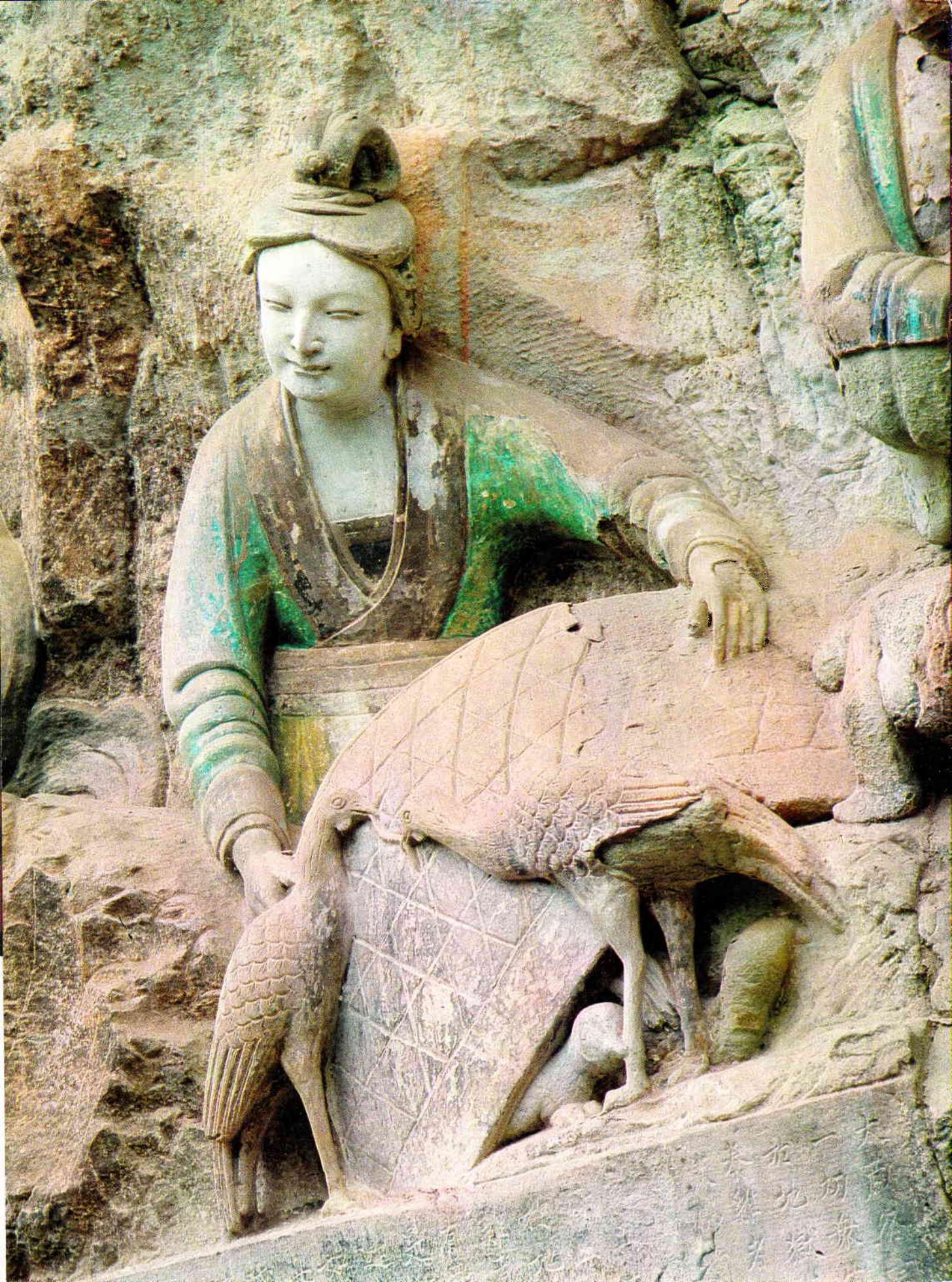
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