• Panchen Lama Tours Tibet

• China's Chances at the Asian Games

• Remembering Indian Friends

• Education of Delinquent Youth
The Panchen Lama speaks to monks and other believers in Tibet's Xigaze.
Articles of the Month

Fundamental Changes in Tibet

The Panchen Lama, interviewed in Xigaze, tells of economic and other improvements he found in Tibet.

China’s Chances at the 9th Asian Games

Assessing strengths and weaknesses in various sports, progress since the 1978 8th Asian Games, and the competition from other parts of Asia.

Juvenile Delinquency

A special report on a serious social problem, its causes, and comprehensive attempts to deal with it. Also “Reform School: No Locks, Just Love,” p. 43.

Remembering Indian Friends, Drs. Atal and Kotnis

In the late 30s, to assist the struggle against Japanese aggression, these men came to China as part of an Indian medical team, and left behind them imperishable memories of heroism and friendship.

Wuhan’s Steel Rolling Mills

One of the engineers in charge of construction talks about this largest and most advanced project using a majority of imported equipment.

Old China’s Money

The fascinating story of the development of coins and bills from the earliest times in China, with 4 pages of color photos.
Our Neighbors and Us

WHILE we were planning this issue, Chinese athletes were making their own final preparations for participating in this month's 9th Asian Games to be held in New Delhi, India. Dancers of the Central Song and Dance Ensemble were learning the Indian classical dance Alaripp which they are to perform at the Asian Festival of Performing Arts held in conjunction with the Games.

In December, delegates from India, will participate in memorial activities in Beijing for Dr. Menhanlal Atal and Dr. Dwarkanath S. Kotnis, two Indian doctors, members of a medical mission to China sent by the Indian National Congress during the Anti-Japanese War to serve the Chinese people in their fight against the invaders. Both of them died in China, Dr. Kotnis during that struggle and Dr. Atal on a visit to our People's Republic much later.

Articles on all of these topics are featured in this issue, and work on them recalled fond memories of the close ties between our magazine and the people of India. Upon our founding in 1952, many Indian friends gave us warm support. Some of them contributed articles about the historical friendly contacts between our two countries. In the 1950s, Indian readers held first place in China Reconstruc ts' circulation figures. Hundreds wrote to encourage us and to express their interest in the development of the new China and the life of the Chinese people. On our fifth anniversary in 1957, the late Indian Premier Jawaharlal Nehru wrote us a personal message of congratulation, in which he said in part:

"I am happy that cultural exchanges between our two countries have grown and we are seeking to understand and learn from one another. This is not only for our mutual good but will also be good for the larger causes of peace and freedom in Asia and the world."

IT IS not surprising that the people of India evinced such great interest in China—or that the Chinese should be equally interested in India. Both great countries have ancient cultures; both suffered severely from imperialist oppression. We are neighbor nations on the Asian continent with large populations, and with many problems and goals in common. As Soong Ching Ling, who established and led our magazine, wrote on the founding of a branch of the India-China Friendship Association in 1951:

"Both of our peoples love the land, love to labor on it, to nurture the good earth so that it may return a bountiful life to the masses. Both ... love knowledge, love to apply science to factory and field, to wrest the utmost from nature's products for the masses. Both ... have a spirit of militancy, a determination to see justice done for and by the masses ... (Our friendship) is a steel link in the great association of all peoples who want peace and peaceful construction in Asia and the whole world."

In the 1950s the late premiers of our two countries Zhou Enlai and Jawaharlal Nehru together developed and promoted the famous Five Principles of Peaceful Coexistence, which have since been acknowledged as a basic criterion of international relations by many of the world's nations. Those principles are: mutual respect for sovereignty and territorial integrity; non-aggression; non-interference in each other's internal affairs; equality and mutual benefit; and peaceful co-existence. In the following years, important visits of state were exchanged and contacts flourished in the fields of education, science, culture and sports.

At the outset of the 1960s a border issue rooted in past history, when neither of our countries was master of its own fate, unfortunately damaged the relationship between them, and the effects lasted many years.

But in the recent period our links have happily improved, which is good for both sides and good for peace in our part of the world. Of particular importance was the June 1981 visit to India by Chinese Minister of Foreign Affairs Huang Hua. In New Delhi he expressed the earnest desire for cooperation between the Chinese government and the Indian government. He stressed that if both sides make sincere efforts, based on mutual understanding and accommodation and the spirit of seeking common ground while reserving differences, whatever problems remain between our two countries can certainly be solved.

SINCE its founding, the aim of our magazine has been to express the good will of the Chinese people toward the peoples of the world, and particularly our Asian neighbors and to report on friendly exchanges between them.

Obstacles inherited from the past sometimes crop up, as they did recently with our neighbor Japan on an issue of history textbook. But, we hope, these are temporary. Mutual respect for one another and for the facts of history, and for the Five Principles, can surely overcome our differences—wherever they exist. We stand for normal state relations with all our neighbors, and for warmer links with all peoples.

When this issue reaches you, the Asian Games will be going on in New Delhi along with the varied and colorful Asian Festival of Performing Arts. These are magnificent gatherings of the Asian people and, we hope, the beginnings of ever more rapid expansion of friendly contacts among Asian peoples. The Chinese people very much wish to live in peace and harmony with neighboring countries. China Recon structs hopes to contribute to this great goal.
Civic Pride and Courtesy

The article for "To Our Readers" column entitled "Socialist Clean-up" in the June 1982 issue of China Reconstructs impressed me very much. I hope the entire world will follow your road. Your country will become the best in economic development, sanitation and hygiene, and honesty. But, I am just wondering when the "Civic Pride and Courtesy Month" comes to an end. Will this campaign last from month to month? I suggest a "Socialist Civil Pride and Courtesy Campaign of Long Duration."

ADEL MURSI ALI AHMED
Alexandria, Egypt

Enlightening about Modern China

I am reading with great interest China Reconstructs for the last three years. I am deeply interested to know more about China — Nepal's great northern neighbor — more than everyday news coverage can provide. I find CR enlightening as it is not laden with erudite and technical details.

Your moving commemoration notes on Edgar Snow and how the earlier edition of Red Star Over China tared impelled me to express my opinions. I read Snow's classic work during my student days and it left a deep impression on my mind. Thereafter I read different works on China, and your magazine with color plates on art, architecture, excavation, landscape and scenes from development activities has truly enlightened me about the emerging trends in modern China.

I also liked articles and features on the Tibet Autonomous Region bordering Nepal.

HRISKEEKSH UPADHYAY
Kathmandu, Nepal

Wrong Ideas Corrected

After reading China Reconstructs for the first time, I was in many ways surprised by your interesting articles.

It is my personal opinion that we have the wrong idea about China, in the same way a lot of people in other countries think about us: they expect Holland to be a country of wooden shoes, tulips, windmills and cheese.

So we think about China as a backward country.

I was really amazed and read your magazine nonstop until the end.

I had no idea that this was China. Your articles makes reading easy, because you don't use unreal propaganda slogans which we are not familiar with and make it hard for us to believe what they say.

You, on the other hand, show us that also China is not a paradise and that the people of your country, just like we do, make mistakes and not always walk the right way. D. KOOIJMAN

Rotterdam, Holland

Children Are Everyone's Concern

Most of your articles and features are full of illustrations and documentation. I find it rather happy to read the article about the children entitled "Children Are Everyone's Concern" (June 1982). It's true that today's child is tomorrow's father. We can find our future through the thoughts of our children.

So the children are the backbone of our nation and national development and they should be cared for properly in every corner of the world.

The article regarding Mt. Lushan is also interesting. China, a land of natural beauty and heritage, is again shown to us. We people of Bangladesh are also the lovers of beauty and our land is also covered with green carpets. We praise your green and your people.

MD. AZAHAR ALI
Dacca, Bangladesh

More on City Construction

The August 1982 issue, which I have just received, surprised me in very positive way. I mean the look of the front cover. It's excellent. Please try to keep up that same image in future. Don't put too many colors on the text of the cover and try to keep the text off the cover picture and it'll be much more pleasant-looking.

I have another suggestion. Please do some articles about towns of China. I'm really anxious to know whether the towns of China are more widely spread out than ours here in the Western world or whether they are as compact as ours. Please write about city planning too.

ESA TARVAINEN
Helsinki, Finland

Of previous CR articles on cities, many have been collected in our booklet "Fifteen Cities of China." More appear from time to time, and a second collection is on the way.

Positive Approach

I have read your magazine (June 1982) for the first time and find in it a positive approach that highlights all that is good.

If this is representative of all Chinese children they indeed have a happy childhood and optimistic view of the future.

Your culture I find fascinating. Could you tell me something of your schooling system? In this I am particularly interested as I am a teacher. Also I am interested in how the old are looked after. Do they become dependent on their families? Do the families look after them or are they looked after on a province level?

Sydney, Australia

We are now preparing articles on these matters.

S. C. SOLOMON

Success and Failure

Many thanks for yet more interesting issues. In your July edition you did not mention any problems arising from the Shaolin Temple film — the Western press has suggested youths were going to the old temple to learn Wushu there!

The difficulties and problems China faces are immense, and always there is the risk of losing ideological direction! Your reportage of the ways the problems are tackled, the successes and failure of various schemes, are of great interest.

The West has its own economic and ideological struggles, and even though our situation is different, we can still learn from the manner in which China fights for progress.

STEPHEN SHAW
Stockport, England

About Parapsychology

Your science articles are always fascinating. In the June issue, for example, I was particularly interested in "China's Neolithic Period" and "The Parapsychology Controversy." A personal comment on the latter: I do not think that parapsychology is really much more than pseudo-science. As your article points out, many cases in China were, after serious investigation, proven to be based on deception. The same holds true for research in the West, so the answer is quite obvious. Of course, I do not exclude that here and there things may be found that are, at present, difficult to account for. But up to now there is no solid evidence whatsoever for supernatural powers and if there are theories that cannot be explained yet, people will no doubt find more "natural" explanations in the future.

HERMAN CALLENS
Kessel, Belgium

NOVEMBER 1982
China's Space Science and Technology

On September 9, 1982, China successfully launched another scientific experiment satellite into space. On September 14, accurately orbited and having performed well, it returned and landed correctly in the planned area. *Photo by Wang Xingyi*

China has been working on the exploration and peaceful use of outer space for over twenty years, relying mainly on her own efforts.

Space activities began in 1958 with the research, manufacture and testing of space rockets. The experience gained, along with physical data collected in space, provided a foundation for satellite research and manufacture. Since the first successful launching of a satellite on April 24, 1970, China has sent 11 scientific and technological test satellites of different types into orbit. Three returned and landed safely as planned after operating in space for a period of time.

On September 20, 1981, a single launch vehicle sent three satellites into orbit at once. Two kinds of launch vehicle have been developed in the past decade or so. At present a three-stage launch vehicle, the CZ-3, powered by liquid propellant, is being developed for launching satellites into an “earth-stationary” orbit or putting large-scale spacecraft into low orbit.

**Space Station Network**

China has set up fairly large launching sites and a network of telemeter-tracking-command stations with a main control center in Weinan, Shaanxi province. The station in Jiuquan in northwestern Gansu province, for instance, is equipped with tracking and telemetric instruments for monitoring and controlling launch vehicles and satellites during their ascent. A newly-developed, oceangoing telemeter-tracking-command vessel has made it possible to extend the observation area and ability. The network has demonstrated a capacity to track and monitor China's scientific and technological test satellites and pinpoint the satellites' re-entry.

Several high-altitude balloons were launched for carrying out upper-atmosphere experiments and making observations in the fields of atmospheric and high-altitude physics. The maximum
volume of the balloons is about 10,000 cubic meters and their payload, 150 kilograms.

In the application of space science and technology Chinese scientists have recorded substantial achievements. The Purple Mountain Observatory in Nanjing and observatories in Beijing, Yunnan and Shaanxi have conducted observations of celestial bodies in outer space, including the sun, by optical and radio instruments. Meanwhile, the geomagnetic field, cosmic radiation, magnetic field and ionosphere parameters have all been observed and measured. These data in conjunction with the information acquired by space rockets, balloons and satellites have been used to study the influence and behavior of solar activities on the space environment near earth.

Remote-sensing technology has been used in land resources investigation, forest monitoring, regional geology, hydrologic survey, mineral exploration, seismology, oceanography and environmental monitoring. Research has been done in satellite communications. Individual items of space science and technology have also been applied to some areas of the national economy. For example, space rockets have been used to prevent hail from destroying crops.

The medical and solar-energy fields have benefited from research on the technology of satellite-control systems. The silica solar cells manufactured for satellites now are utilized in air transportation and microwave relay stations, opening up new channels for saving manpower and reducing investment.
CONTESTS between fighting bulls are a traditional folk entertainment among the Miao and Dong nationalities of Guizhou province in southwest China. These are not the bloody spectacles common in some foreign cultures. Generally, the bulls lock horns and pit their strength against one another rather than slashing, and the fight is stopped at the first threat of serious injury.

Local legend connects the origin of bull-fighting with an important agricultural discovery—that thinning and transplanting rice seedlings at a certain stage increases yields. One early summer, the story goes, two bulls were eating grass on a low bank of earth between rice paddies. They started to fight and in the process trampled a lot of the 10-inch high rice seedlings.

The owner of the fields rushed up and beat the bulls out of the field, then sadly started to straighten up the remaining plants. To fill in blank spaces where the rice was completely destroyed, he transplanted seedlings from thicker rows. At harvest time, he discovered that the transplanted rice grew much better than the rest. Next year he deliberately thinned and transplanted his seedlings and again got good results, so the technique spread.

Whether or not the story has any truth, bull-fights and the festivities that surround them have been popular for a long time. Traditionally held twice a year, before the spring plowing and after the autumn harvest, this year a third bull-fight was held in August. Why? A peasant in his 60s explains that people are more prosperous now and can hold a festival whenever they want. Also, a market fair is held in connection with the fight, and villagers from all over take advantage of this opportunity to bring things to sell or to shop for what they need. He himself carried a dozen homemade lusheng (reed pipes) to sell at the fair.

CHEN LEQI, of Dong nationality, is on the staff of the State Nationalities Affairs Commission.
In the old days, every village had its king bull, raised only for fighting. The honor of the village depended so much on the outcome of these fights that each had his own wooden stable, called the "king bull's palace," and special attendants. Their forage was carefully prepared, and they were given spirits to drink to make them fierce.

Today all the local bulls have to work, not just fight, for their living. The kings are simply selected from among the ordinary bulls contracted to households to do farmwork under the responsibility system. A winning bull's trophy goes to the household in charge of him.

Festive Occasion

The fighting arena is a large field of flat land surrounded by hills on four sides which accommodate a large crowd of spectators. For this gala occasion everyone dresses in his or her best, and girls wear silver ornaments and red flowers in their hair. Around the perimeter of the field are the market fair stalls selling fruit and vegetables, meat, fowl and fish, grain, furniture and handicrafts articles.

The opening ceremonies start at 12:00 noon. To the sound of drums, gongs and lusheng, a young man dressed as an arhat (disciple of Buddha) and carrying a board inscribed with the names of the king bulls leads the procession into the arena. Behind him is a squad of "guards" armed with imitations of ancient weapons. They are followed by the band of musicians, and then by the most important participants—the king bulls themselves—each led by a young man in arhat dress.

The bulls wear metal protective guards over their horns and red silk head coverings. On their backs they carry miniature "king bull towers," gaily decorated with meter-long golden pheasant feathers and four flags (formerly symbols of authority). Behind the bulls marches another arhat bearing a huge banner inscribed with the title "king." At the end of the procession come groups of young unmarried women from the different villages carrying colorful pennants with serrated edges. The procession circles the arena three times to the deafening roars of the crowd and the merry beat of the music.

The Fight's On

Once the opening ceremonies are over, the two bulls are led face to face in the two circles drawn at the center of the court. Three times an ancient cannon is discharged, and the music suddenly stops. The bulls' attendants remove the red silk coverings from their heads, and bulls rush toward one another and lock horns.

These two are well matched, neither wanting to give an inch. Raising a cloud of dust, one dodges swiftly to the side and the other follows. The two arhats circle them, shouting encouragement, and the cheers of the onlookers and the pounding of the gongs and drums roll over the field in waves of sound.

When there is a stalemate, or either bull is in danger of serious injury, the judge proclaims "mediation." Now, after locking horns many times, neither bull has gained a victory, and the judge's signal is given. The two arhats lasso their bulls' hind legs with thick ropes and begin to pull them back.

The kings don't like the idea of retreating, and a dozen young men rush up to help the arhats. The resulting tug-of-war between men and bulls is an additional entertainment for the audience. Finally pacified, the kings have their heads covered once more with red silk and are led away for a rest.

King for the Day

The second match also ends in stalemate, but in the third match there is a victor. The losing bull retreats and gives signs of submission. They are separated and led off. Immediately, the young women on the winner's side, according to tradition, swarm forward to seize the pennants held by the rival bull's team. After the trophy is awarded, the king is marched around the arena in triumph.

A few days later, the young women of the winning team ceremoniously return the seized pennants to the village of the losing bull. They are entertained warmly, with the arhats acted by unmarried young fellows serving as hosts. Rivalry is forgotten amid the young people's talk and laughter. Soon someone strikes up a tune, and the singing begins. The music-making may last all night, and many a courtship begins or flourishes during these gay, noisy parties.
China's Chances
at the 9th Asian Games

WEN ZHONGYU

ATHLETES from all over Asia are now gathering in New Delhi, India, for the 9th Asian Games scheduled for November-December. The months of training and study, the sweat and discipline, the pushing of the body beyond its seeming limits, will all culminate in the intense competition of the games. Win or lose, the men and women who go to New Delhi are true champs.

Four years ago at the 8th Asian Games in Bangkok, Thailand, Japan topped the medal standings with 70 golds, 59 silvers and 49 bronzes. China was second with 51 golds, 54 silvers and 46 bronzes. Fans and experts expect these two powerhouse national teams to battle it out for first place again this year, but in many events they will face stiff competition from outstanding athletes from other countries.

Table Tennis

Table tennis—or ping-pong—is one of China's strongest suits. Since 1961's 26th World Table Tennis Championships, when Chinese players captured the women's and men's singles and men's team events, they have remained top contenders in world play. At the 1981 Championships, they led in seven events, and the finals of five singles events were fought out between Chinese players.

This represents a big improvement over the 34th World Championships four years ago. The Chinese players had grown somewhat slack, and managed to win only the men's and women's team events and a women's doubles event in which a Chinese and a North Korean player were paired. Since then the team members have sharpened their skills considerably. They're expected to dominate much of the play at New Delhi, though top performers such as Japan's M. Kohno will present real challenges.

Badminton

China's badminton squad is also world class, though here it will face some lively competition. At the Eighth Asian Games, China took the women's singles, women's team, men's doubles and mixed doubles events. The men's team was downed by the Indonesians 4-1, and in the men's singles Han Jian was taken 2-0 by Indonesia's famed Liem Swie King.

WEN ZHONGYU is on the staff of the State Physical Culture and Sports Commission.
In the last four years Chinese players have honed their skills and gained a lot of practice in international competition. The 1982 All-England badminton competition saw the Chinese women win both the singles and doubles titles. In May the men's team, taking part for the first time in the Thomas Cup Tournament in London, took the overall world title in a close-fought 3-4 battle with the Indonesian team, winner of seven Thomas cups. This time Han Jian beat Liem Swie King 2-1. (The September 1982 China Reconstructs carried full details of the tournament.)

Indonesia's wealth of talented players, including veterans Liem, Rudy Hartono and Christian Hadiharta, will certainly if they attend the games be contenders for top spots, as will Indian aces Prakash Padukone and Syed Modi, the Sidek brothers from Malaysia and the south Korean woman player Sun Ai Hwang. Nevertheless, many expect China's players, their confidence heightened by recent wins, to carry off a number of golds and silvers.

‘Big Ball’ Sports

In the volleyball events at the Asian Games four years ago, the south Korean, Japanese and Chinese men's teams placed first, second and third. In the women's division, Japan took the gold, followed by China and south Korea. The Chinese women's team in particular has since then gone from strength to strength, climaxing with their capture of the world title (winning seven out of seven matches) in late 1981. The men's team has also improved considerably in recent years, and has won one Asian championship. China should do well at New Delhi, but there will certainly be some hard-fought and exciting matches.

In basketball, few Asian teams have yet reached the standards set by North and South American and European teams. China has a slight edge here, but the south Korean and Japanese women's teams should also make their mark.

In football (soccer), teams to watch for include India—which has made a particularly strong showing in recent months—Japan, Thailand, south Korea and Malaysia. The China team's lineup has recently been reorganized and new young players brought in; they are strong and energetic, but how well they will do against veterans at this early stage in their careers remains to be seen.

Track and Field

China edged Japan by a fairly narrow margin in these events four years ago, and is estimated to have a slight advantage in the upcoming games, though Japan and Thailand will be teams to watch. Chinese jumpers are particularly strong. At a recent match in Shanghai, 19-year-old Zhu Jianhua broke his own Asian record in the high jump, clearing 2.31 m. Cai Shu, also 19, has cleared 2.29 m., and six other Chinese athletes are not far behind. The woman high jumper Zheng Dazhen has cleared 1.93 m., equaling the Asian record.

Triple jumper Zou Zhenxian took gold and silver medals, with scores of 17.32 m. and 17.34 m., at the World Universiade and the World Cup Track and Field Championships last year, and ranked third among that year's top triple jumpers. Liu Yuhuang won a silver in the broad jump at the same World Universiade, and placed among the world's top ten.

At this year's Beijing Track and Field Invitational Tournament, with the Soviet Union, the German Democratic Republic and eight other countries participating, Chinese athletes scored firsts in five out of the 20 events, and in 1981 the International Amateur Athletic Federation promoted China from a B group to AA.

Japan and China are about equally matched in weightlifting, with each having their own particular strengths. In 1978, top honors were about evenly divided in Bangkok, and in New Delhi these events will be closely contested.

Swimming and Diving

Swimming is one of Japan's real strengths. At the last Asian Games they took the gold in 25 out of 29 swimming events (China won none). Since then China has developed some strong swimmers who should provide real competition. In recent international contests they have begun to place in the top six, and in 1981 set three new Asian records. In 1980 the woman swimmer Liang Weifeng captured the world championship in a Hawaii meet from the former American title-holder T. Caulkins. She also won a silver in the 100 m. breaststroke event at the 11th World Universiade. Nevertheless, the level of China's swimmers is still comparatively low, and they will have to perform at top capacity to beat Japan or Singapore's lively contingent.

NOVEMBER 1982
Four years ago China's divers took all the golds and silvers at Bangkok, and since then they have turned in impressive performances in international competition. At the 10th World Universiade in 1979, Chen Xiaoxia, then 17, took top place from the famous Soviet diver I. Kalinina, and has gone on to win a number of golds in world competitions. Her teammates Li Yihua, Shi Meiqin and Zhao Ying have also made names for themselves.

On the men's side, Li Hongping —- named one of the world's best divers by the U.S. publication Swimming World — has taken top place in platform diving in both the 11th World Universiade and the 2nd World Cup meets. Li Kongzheng, Wu Guocun and Liu Henglin have also turned in outstanding performance at international levels.

Gymnastics
China's gymnasts took ten firsts at the 8th Asian Games in 1978, and since then have progressed considerably by international standards. They have mastered world-level skills, and also created a number of unique routines that have won them acclaim in gymnastic circles.

In 1979 15-year-old Ma Yanhong won a gold medal on the uneven bars in international competition, and the next year Li Yue-jiu and Huang Yubin captured first place on the rings and parallel bars at the World Cup Gymnastics Championships. At the 1981 championships, the women's team took second place and the men's third, and Li Yue-jiu and Li Xiaoping won golds in the free exercise and pommelled horse events.

Barring upsets in this most volatile and nerve-wracking athletic event, China should make an excellent showing at New Delhi.

Aiming High
In a number of Asian Games events, China is not particularly strong. In hockey, the teams to watch are Pakistan and India, winner of the recent 1st Asian Cup Tournament; in wrestling, Japan and south Korea should mark their mark. In cycling, Japan is again the favorite, and at the end of August the Philippines won the ASEAN cycling cup.

Not too many years ago, China's athletes were in many respects behind world levels, in large part because of a lack opportunities to compete internationally. The restoration of China's legal seat on the International Olympics Committee and increased chances to play in world tournaments have rapidly improved China's sports skills. In friendship and competition, Chinese athletes learn from and exchange experience with sportspeople from every country, and they will certainly do this at New Delhi.

Fans at home expect Chinese athletes to aim for excellence, and their own motto is to break Asian records when they can and set their sights on world levels. This commitment to excellence, on the part of all Asian athletes, will surely produce exciting and memorable moments at the 9th Asian Games.
Quick, Firm, Flowing, Leaping: China’s Martial Arts

YAN NAIHUA

As quick as sound and wind, as firm as rock, as continuous as flowing water, as high as flight—these are the traditional descriptions of the movements of wushu, or martial arts. Derived originally from various forms of hand-to-hand combat, it is now a sport which entrances spectators and, for participants, a way to keep fit in both mind and body.

All ages practice it. At the 1982 National Martial Arts demonstration in Xi’an, an outstanding performance by 83-year-old Fu Maokun was followed by an equally dazzling display by teen-ager Huang Mingjian. Fu, famous for having killed a wild runaway ox with one blow when he was a young man, gave a vigorous demonstration of broadsword technique, while Huang manipulated a three-meter-long cudgel with remarkable agility.

The meeting demonstrated various kinds of wushu—fencing with sword, spear and broadsword; boxing and rare forms such as Gui (ghost) Foot, Buddhist Taizi (prince’s) Sword, and Dai Boxing.

Many Varieties

Though rich in varieties, wushu has four main divisions—bare-handed boxing, the wielding of cudgels and other weapons, combat and collective performances.

There are many styles, each with its own demands. Changquan requires dexterity, quickness and valor, so it is popular with young people. Taijiquan’s slow, light movements are suited to older people or sufferers of chronic diseases. Xingyiquan, characterized by powerful, balanced motions and poised steps, is usually practiced by young and middle-aged people. Nanquan, popular in China’s southern provinces, stresses arm-stretching movements with less leaping; its practitioners shout now and then to boost their strength. Shaolinquan, popular in north China, follows a short, simple routine but is vigorous and swift. Some styles mimic the actions of the mantis, monkey, eagle, a drunkard and others.

The weapons used include long ones such as spears, cudgels and broadswords; short swords, daggers and hooks; and flexible weapons, such as nine- and three-section cudgels.

Wushu can be done individually or with partners. Whether the boxers perform barehanded or with weapons, dexterity and accuracy are required. The basic movements are dodging, shifting, turning, tumbling, leaping and jumping. Hand, eye, body and foot movements must all be coordinated. The sequence and rhythm of movements in each style comprise an integrated whole.

Popular Exercise

In the parks of Beijing and other cities, particularly in the early mornings, one may see groups of enthusiasts practicing their own chosen form of wushu. Grandfathers teach grandsons; fathers and sons, husbands and wives practice together. More and more retired people have joined the ranks of

Fu Maokun, 83, running through a practice routine.

Eminent woman ‘taijiquan’ performer works with double maces modeled on ancient weapons.
taijiquan enthusiasts. In Beijing, Shanghai and other big cities, over 100,000 people perform it every day. Children's amateur wushu schools and taijiquan study centers have been set up in some cities.

Many people in the countryside have also taken it up, with Hebei province a particular center of activity. Out of Cangzhou county's population of 200,000 more than 40,000 children and young people practice wushu in over 100 training centers. In 300 of Yongfeng's 500 villages mass wushu organizations

have been set up. Wushu activities in Tiquan village started several centuries ago and have remained popular. People practice wushu not only in the mornings and evenings but even during breaks in the fields. Most peasants like to see wushu contests, and young villagers usually have some basic knowledge of the routines.

New talents have emerged in various provinces and municipalities. One of Beijing's top wushu performers, 19-year-old Li Lianjie (see July 1982 issue of CR), started learning wushu at the age of eight. Ten years' persistent training turned him into a skillful performer of Shaolinquan boxing. His quick, accurate, powerful, rhythmical style and marvelous technique have made him a five-time winner of the all-round championship in the national games. His

performance as the hero of the film Shaolin Temple created a stir both at home and abroad.

Eminent "crouching" woman boxer Li Sujun, from Henan province, performs a series of technically difficult movements, such as the front stretching somersault with split thrust, cleanly and smoothly.

Enthusiasts Abroad

Wushu was considered part of military physical training as early as the Zhou dynasty (11th century B.C. — 771 B.C.). In the Han dynasty (202 B.C.—220 A.D.) there were records of sumo wrestling. Sumo, now very popular in Japan, was introduced toward the end of the Ming dynasty, when Chen Yuanfu, master of Shaolinfu, went to Japan to impart his techniques to Japanese sportsmen. The Japanese wushu performers incorporated it with jujitsu and developed it into today's judo.

Today judo is an Olympic sport with widespread influence in the world. Japan's Karatedo and Aikido, Korea's Taekwando, Thailand's muay thai and the Philippines' cudgel work have all been influenced to some degree by Chinese wushu. Another school of Korean martial art is called Tang shou dao to indicate its Chinese origin.

A great number of Japanese people are students of Chinese martial arts today. The Union of Shaolin-

quan alone, initiated by So Mi-chiomi, has 2,600 branches in Japan with a million members. After So Michiomi died, his daughter, So Yuki, inherited her father's career and continued to popularize Shaolinquan. Wushu is now also very popular in southeast Asian countries such as Malaysia, Singapore and the Philippines. A nationwide Malaysian organization called Jingwu (skillful wushu) Physical Culture Meeting has branches in many places. Similar organizations exist in Singapore and the Philippines. All these countries have nationwide wushu contests, five have been held since 1969.

In the United States and Canada wushu fans have been on the increase. In New York City alone there are 40 wushu societies. The American Wushu Association has centers in San Francisco, Boston and Seattle. A number of contests have been held, with boxing, fencing, and all-round championships.

Britain has 200,000 wushu performers, and a nationwide wushu committee has been set up. A 4,000-member Chinese Wushu Association also exists in France. In March 1982 the first meeting of the European Kungfu Union was held, with representatives from Britain, France, Holland, West Germany, Spain and Switzerland. People from other countries have also applied to join the union, and there is a growing movement to get wushu listed as an Olympic sport.
'Arhat' (Buddhist disciple) shovel, a weapon used at Shaolin Temple.

A slashing, flashing double sword display.

Double hooks.

Using a cudgel or quarterstaff.

A 14-year-old martial arts enthusiast.

A young girl demonstrates the double daggers.
‘Drunken’ swordplay—the performer’s seemingly unbalanced movements are all part of his tactics.

A style popular in north China.
Boxing, south China style.

Imitating an eagle’s talons.

Working with a nine-section cudgel.

‘Monkey’ boxing.

Fencing.  Photos by Hua Jianying
Finding the Way to Use Southern Grasslands

PENG XIANCHU

The Nanshan Mountains have become a grazing area.

Photos by Wang Xinnin
When you say the word grasslands in China, the first places to come to mind are those of Inner Mongolia in the north and Xinjiang in the far northwest, but in fact a quarter, or 67 million hectares, of China’s total area of large grasslands is found in the mountainous areas of the south. One of these is in the Nanshan Mountains, located in the Chengbu Miao Autonomous County of southwestern Hunan province.

Until 1956 the area was uninhabited except by tigers, wolves and wild boars. Reasons for this include the frequently unbroken periods of wet weather and thick fog which made it unfavorable for farming, and, 1,600 meters above sea level, winter temperatures down to 12° C below zero.

The grassland is now the home of a livestock farm with 10,700 hectares of pasture, but the realization that this was the best use for the land was a long time in coming.

In the spring of 1956, several groups of urban young people who had volunteered to open up this area assembled at the county seat. They carried their bedrolls on their backs, and each group was led by a red flag with the words “Youth Reclamation Team.”

Shi Chongbin, now 46 and secretary of the farm's Communist Party Committee, who led one of these groups, likes to recall how things were.

Beyond the county seat there were no roads. Three days of cross-country marching over the hills brought the 950 young people to the Nanshan Mountains. They built themselves huts to sleep in, but these couldn’t keep out the rain, so often they had to keep their umbrellas up inside day and night. The locality afforded no supplies, so they had to carry everything they used, including grain, up from the foot of the range. With little more than spades and hard work, in several months they had turned up 300 hectares of land. They sowed 7.5 tons of seed corn, but when autumn came harvested only four tons. All but a hundred of the young people went back to their homes in the cities.

Later comers tried raising sugar beets, tea and medicinal herbs, but without good results. In the early 60s rice was grown for several years in succession, but it was not considered successful either. Those who remained thought it a good idea to give up farming and turn to forestry. The local government supported the proposal and in 1968 sent planes to sow the slopes with masson pines. But only a small number of them growing in the valleys survived the winter cold.

What was the best way to use this region? In 1974 it was learned that four families up in the hills made a living by raising cattle, and their animals looked very good. The mountains are covered with meter-high grass. In the valleys are streams that remain unfrozen the year round. Why not go in for stockraising?

With help from the government, in 1974 the farm bought a herd of dairy cows in Beijing and some sheep in Xinjiang. The next year the place was officially named Nanshan Livestock Farm.

New Problems

Then a new problem cropped up. They found the grass was not of particularly high nutritive value. And for five winter months— from November to March — the cattle fed poorly on the dry grass. The animals got enough to eat in summer and were fat in the fall, but all lost weight in the winter and some died by spring. Finally the State Council sent down a group of experts on soil science, pastures and livestock to make a thorough investigation of the area. They concluded that stockraising was the right direction for the Nanshan farm, but the pastures should be re-seeded with better grass. Twenty varieties of grass from New Zealand, Australia and other countries were planted on an experimental scale with Tu Mingyi, an woman agronomist, in charge.

Ryegrass and white clover proved to be among the most successful. In 1979 the State Animal-Husbandry Bureau provided the farm with five tons of these seeds, enough to sow 200 hectares. The grass grew luxuriantly and provided good grazing even in the dry months. After five years of experimentation, six varieties, with the above two as chief, have been found most suited to the climate. From 1980 planting of the new grasses began in earnest. In that year the government sent planes to sow 667 ha. of the two main varieties, and 1,067 ha. more in 1981.

The government also made it possible to learn from the advanced technology and experience of foreign countries. Under a 1979

In the farm's cheese factory.
animal husbandry contract signed with Australia, Australian pasture expert Dr. Collin Piggin and Anthony Brown, a development officer, came to the farm.

They helped the Chinese workers set up a pilot team which sowed different grasses on a large scale on varying degrees of slope. At their suggestion, one pasture was divided into smaller fenced-in sections for rotated grazing, and a water supply system, barns for hay and roads were also built. The pilot team carried out experiments in rotation grazing and comparison of grass growth when sowed in different seasons and with different kinds and amounts of fertilizer and manure. In two years at the farm Piggin and Brown helped the farm accumulate valuable scientific data and experience useful for reconstructing large-area pastures, knowledge that will be useful in other mountain areas in south China which have a lot of rain and mild damp weather.

Responsibility Helps

Various forms of production responsibility have enabled the Nanshan Livestock Farm to make even greater progress and more fully utilize its potential. The farm started its responsibility system of payment according to results in 1980. Workers who raise more cattle or sheep, or whose animals produce more meat or milk, or a greater number of young, get paid more. This has stimulated their initiative and made them work harder.

An example is the Daping dairy team. Formerly 32 workers cared for 109 cows. Now, with the responsibility system, 22 people take care of 161 cows and in addition are raising 43 young bulls.

The first step has been taken for all-round utilization of the farm’s resources. A dairy products factory opened there in 1979 made 156 tons of powdered milk in 1981. From slaughter of animals for various purposes the farm usually gets a hundred or so hides. Because formerly it had no tannery of its own, it had to sell them at a disadvantage. Last year a tannery and shoe factory was set up to utilize the leather. In its first four months, the eight workers turned the hides into 210 pairs of men’s, women’s and children’s shoes. The farm has also built six fish ponds which by the end of the year will have produced five tons of fish.

The farm’s operations now include four dairy teams, two beef cattle teams and two others raising sheep and bulls. A special team carries on experiments in cattle-raising and grass planting. Total stock is 2,218 head of cattle (952 of them milk cows) and a thousand sheep. It also now has a mechanized cheese factory and a hydro-power station with 600-kilowatt capacity, used with other wind power and solar energy facilities.

Last year for the first time the farm operated at a profit — 20,000 yuan — and did not need any government subsidy. Having finally found its direction, it has plans for raising many more head of stock and expanding its processing industries.
sial Histories of the Qing Dynasty; and the China Historical Materials Series (originally titled Chinese History of Internal Disturbances and Foreign Aggression).

Reference books recently published from the same source are Who's Who in China; Dictionary of Chinese Writers and Dictionary of Ancient and Modern Chinese Place Names. Reprints from the bookstore's literary and art collections include Research on Chinese Literature, Paintings of Ma Dai (Qing dynasty) and Figure Paintings from 'A Dream of Red Mansions' (by Qing dynasty painter Gai Qi, 1774-1829). Bound copies of the daily newspaper Life and the periodical Popular Life, both 1930's progressive publications, have also been issued.

Ancient Bone and Shell Inscriptions

The earliest systematic written language in China dates from the Shang dynasty (17th-11th centuries B.C.) and has been found on the oracle bones and tortoiseshells which were ceremonially inscribed by ancient soothsayers and used for divination purposes.

Many such relics have been uncovered and over a 20-year period scholars have worked to decipher the writings on these fragile and sometimes smashed-to-bits materials. The first fruits of this effort, ten volumes of the Oracle Bone and Tortoiseshell Inscriptions, is just out, and additional volumes will be available by the end of the year. The complete set of rubbings will include over 40,000 pieces of bones and shells chosen from 100,000 pieces, divided into four major categories (class relations, the development of production, science and culture, and miscellaneous) and 22 subcategories.

The compilation is due to the combined effort of many units and scholars under nationwide coordination, and is published by Zhong Hua Publishing House.

China's Currency

China's Currency Down Through the Ages, a color album compiled by the editorial group of the People's Bank of China, is the most comprehensive volume published so far on China's 4,000-year history of currency. It contains more than 1,000 pictures of various shells used as money, minted coins in the round and in the shapes of knives and shovels, made of gold, silver, copper and iron, as well as paper notes. (China was the first country to use paper currency.) The appendices chronicle the history of China's coinage and explain numismatic terms.

Encyclopedia Continued

The Greater Encyclopedia of China published its first volume, on astronomy, in 1981. The newest addition is a two-volume entry on foreign literature, including over 3,000 entries amounting to 3.6 million characters, with 1,700 black and white and 400 color pictures. Issued by the special publishing house established for this project by the State Council, the two present volumes are available in three hard-cover editions, “Deluxe,” “Grade A” and “Grade B.”
THE BASIC problems of food and clothing have been solved in Tibet, and a fundamental change has taken place in every aspect of life there, the Bainquen Erdini (the Panchen Lama) concluded after a nearly two-month tour of Tibet last summer. The Bainquen, along with the Dalai Lama, who is now in India, is one of the two top leaders of Tibetan Buddhism. The Bainquen is Honorary President of the Buddhist Association of All China and also a vice-chairman of the Standing Committee of the National People’s Congress. Speaking to us in Xigaze where many Bainquens had their traditional seat, he told us that “notable achievements in the development of the economy, improvement of the people’s livelihood and in the implementation of policies have taken place particularly in the last two years since the central people’s government announced important new policies for Tibet.”

A state leader in China since 1954 (then elected a vice-chairman of the Standing Committee of the NPC and a vice-chairman of the Chinese People’s Political Consultative Conference), the Bainquen had left Tibet for Beijing in 1964 and did not go back till 1982 because of mistreatment during the “cultural revolution”, which began in 1966. Fully rehabilitated by 1979, he was then re-elected to his former positions.

When he arrived in Lhasa, capital of the Tibet Autonomous Region, after an 18-year absence, thousands of Tibetans lined the streets and threw white hada scarves (symbol of honor and good wishes) into his open car. The Communist Party and government of the Tibetan Autonomous Region and heads of the People’s Liberation Army in Tibet held a grand welcome for him. It was toward the end of his tour that we interviewed him in his Xigaze home, the Deching Pozhang (Palace of Everlasting Peace).

He told us he was very moved by the reception he received, and that during these two months he had heard reports by representatives of the people’s government and people’s congresses at various levels in Tibet, discussed matters with leaders in all walks of life, inspected factories, communes and schools, talked with many friends, preached to clerics and lay believers and attended religious services in local monasteries.

He had flown to Lhasa in three hours from Lanzhou in Gansu province, he said, recalling that in the winter of 1951 it had taken him 140 days on horseback crossing the mountains in wind and snow to go only a part of that distance. And that after Tibet became a part of China in the Yuan dynasty (1279–1368), although courier posts for immediate changes of horse and messenger were set up along the route between Beijing and Lhasa, it still took six months for a message to make the trip.

The Bainquen praised the air service — now eight planes a week to Lhasa along two routes — for helping to strengthen ties between Tibet and the rest of the country and cement unity among China’s nationalities, and also for facilitating Tibet’s future development.

But it was on the way the new policies for Tibet are working that he spoke most.
The background to these policies was that Tibet had failed to recover rapidly from economic setbacks during the gang of four period and there was dissatisfaction with this and with the state of relations between Han and Tibetan cadres. The new policies, introduced in the spring of 1980, were issued to speed economic development and give Tibetans more control over their regional autonomous government. They supplanted some previous ones worked out for the whole country, and often applied mechanically without regard to Tibet's specific conditions. In agriculture, for instance, grain-growing was overstressed to the detriment of stock-breeding, so important in Tibet. And in industry there had been some unnecessary construction while neglecting handicrafts which supply the people's daily needs.

Regional National Autonomy

On the working of regional autonomy, the Bainquen said, “Generally speaking, I'm satisfied with how it is being applied in Tibet. Tibetan cadres now predominate in leading posts and all other important positions.” The Bainquen felt that the holding of direct elections at the county level was a step in this direction, assuring that people of Tibetan nationality are elected to the people's congresses. “So far,” he said, “direct elections have been held in Lhasa, and in 70 counties and 2,050 people's communes.” Members of county people's congresses throughout the country are now chosen by direct election rather than by the lower level congresses as formerly.

“Under the old feudal system, in which I was one of the biggest serfowners,” he said, “the Tibetan working people had no personal freedom at all, not to speak of a voice in state affairs. What a great change since then!”

The key to guaranteeing the success of regional autonomy is to train more Tibetan cadres. “After liberation,” he pointed out, “the Chinese Communist Party laid emphasis on training minority nationality cadres.” He cited the remarkable results achieved in Tibet in those early years.

Among the promising minority cadres who have emerged, he mentioned Doje Cering, first secretary of the Communist Party Committee of Xigaze prefecture, and Toinzhub, head of the prefectural government, both young and able. “They speak both Tibetan and Han languages and have won high regard among the masses and the other cadres for their understanding of the policies, their thoroughgoing work and their ability to organize,” he said.

He told us how, on the eve of his arrival in Xigaze, a snowslide came down the mountainside in the prefecture's Tingri county, damaging nearby villages and hundreds of hectares of farmland, and these two men by their quick, efficient action had helped people to overcome the effects of the disaster and resume production and normal life almost at once.

Han and Tibetan Cadres

The Bainquen recalled with much warmth the close friendship that had been established between the Tibetan people and the PLA men and the civilian cadres of Han nationality who came to help build up Tibet following its peaceful liberation in 1951. “They worked wholeheartedly for the benefit of the local people and were serious in carrying out the Party's policies concerning nationalities and religion,” he said. “The PLA lived frugally in order to make more grain and funds available to relieve the impoverished Tibetan people. For this they won universal praise. 'Jingzhu mami yagudu' (the People's Liberation Army is good) was a phrase heard everywhere.

“During the democratic reform to abolish serfdom in 1959, many Han cadres went down to the countryside to live and work with the people in the villages, and their host Tibetans would stand guard at night outside their billets to protect them against attacks by bad people. Many Han cadres worked hard to learn the Tibetan language. This too helped them develop close ties and friendship with the local people. But as a result of the 'cultural revolution', these ties were impaired. However, both the Han cadres and the Tibetan people have learned from real life that if a new Tibet is to be built, they must rely on one another.”

Commenting on the central government decision to recall the Han cadres in groups, starting with those who are not in good health and those whose departure will not affect the work, the Bainquen said he thought it was correct. However, he said, it is also necessary to keep some Han cadres on their jobs for a longer period according to specific conditions. This was necessary in the past, and would be in the future.

Tibetan Language

Then he returned to the use of the Tibetan language. Some of the shortcomings in implementing nationalities policy, he said, were
in this sphere. "During the 1950s, Han cadres in the local government offices and army units were all required to learn some Tibetan. However, during the 'cultural revolution', this rule was broken, and the use of Tibetan was even criticized by ultra-Leftists as one of the undesirable "four olds" to be discarded. Now things have taken a turn for the better. In the primary schools teaching is mainly in the Tibetan language, and students continue to study it in middle school.

"But not enough change has taken place in some respects. Some local government offices do not seem to have truly realized the significance of employing the Tibetan language."

We asked him to comment on the assertion by some people abroad that regional autonomy for the nationalities in China is not genuine and that Tibet should be given some kind of "full" autonomous status. To this the Bainquen replied sharply, "What they mean by 'full' is that Tibet would no longer be under the central people's government or covered by the Constitution. That would create a 'state within a state', which amounts to the same as creating a Tibet separate from the rest of China. We mustn't be deceived by this."

**Religious Freedom**

Religious freedom was a natural topic to discuss with him. He himself as a child had been chosen in 1941 by a conference of high-ranking lamas as the reincarnation of the ninth Bainquen Lama, who had died in 1937. He made his recent inspection tour of Tibet in the capacity of both a state and religious leader.

During his travels he was often asked to expound the Buddhist Sutras and as a Living Buddha to touch the heads of believers in blessing. He said to us that he thought his coming to Tibet and blessing people there had increased confidence among the devout that the Communist Party was indeed implementing its policy of freedom of religious belief.

"In the early days after the peaceful liberation of Tibet, efforts were made to carry out that policy," he went on, "but during the 'cultural revolution' there were serious violations. It is up to us to sum up and draw lessons from past experience. In the recent few years many good things have been done to resume freedom of religious belief in Tibet. Many of the monasteries and temples that were damaged are being restored with state funds. The religious activities of the people are protected.

"In our country there is freedom to believe in religion and also not to believe. Non-believers should realize that believers are also working to build socialism."

**Economic Gains**

The Bainquen repeated many times the point that the economy of Tibet can now guarantee the basic living requirements for food and clothing for the majority of its peasants and herdsmen. In Tibet, where industry is still extremely underdeveloped, the life of the farming and herding people, who comprise 90 percent of the population, is an important index of development.

Flexible economic policies initiated in 1980 to bring initial prosperity to Tibet include five years' exemption from taxes on agriculture and stock-raising, and from industrial and commercial taxes for collectively-owned and individual enterprises. And no quotas are set for agricultural and animal products to be purchased by the state. This allows peasants and herdsmen greater freedom to make their own decisions concerning production.
"The first step envisaged in 1980 was to start changing the condition of poverty in Tibet in two or three years — in most places this has been done in only two years," the Bainquen said. "But the achievements are not yet solid and there are still places where things have not changed. I found both advanced and backward communes in Xigaze prefecture. Well-off families have surplus grain. One family of ten I saw had five tons stored, with grain sacks even piled up under the eaves of the house. Some other communes are still poor. But even where members have no surplus grain, they now have enough to get by till the next harvest."

The total value of agricultural and livestock production for the Tibet Autonomous Region amounted to 478 million yuan in 1981, or 3.4 times the figure of 144 million yuan for 1959, the year in which serfdom was abolished. In 1981 grain production was 278 kilograms per person, as against 148.5 kg. in 1959, and livestock averaged 14.4 head per capita, as compared with 7.8 head then. These figures actually represent a larger overall numerical increase, for population has risen by 600,000 since 1959 to reach 1.85 million.

"Any change in Tibet must be evaluated against its background of feudal serfdom. Only then can we truly realize how great the change is," the Bainquen said. "One shouldn't just conclude that there has been little or no change in Tibet by comparing Tibet's economy with that of advanced areas elsewhere in China. There have been great changes, and even if supplies are still not abundant, this is an important starting point on the way to a much higher goal."

The Dalai Lama

We asked him about the Dalai Lama. "As I wind up my tour of Tibet," he said, "the Dalai Lama and other Tibetans now living abroad naturally come to my mind. I hope that they too will come back to have a look."

"Though the Dalai Lama and I have taken different political roads, we are brothers of the same nationality and in religion. We are both successors to the mantle of Zongkeba (Tsongkhapa, founder of the Yellow Sect of Tibetan Buddhism. The Communist Party's policy of letting bygones be bygones also holds for the Dalai Lama and other Tibetans now living abroad. If they really love their own people and religion, they will be able to make a real contribution to them only if they return to Tibet. The doors of our motherland have always been open to all patriotic people. They are free to come and free to go, and their safety will be guaranteed."

Zhaba (center) who returned to his home town in Tibet's Yadong county after 20 years abroad, made a total income of 5,000 yuan last year (including his family members' earnings). He spent 2,000 yuan for a hand tractor. Ma Jingqiu

A herdsman selling meat and hides at Lhasa's free market. Gu Shoukang

The destiny and future of the Tibetan people has been closely linked with that of the other nationalities in China over a very long period of historical development, the Bainquen observed. "All the more clearly, what has happened in the past 30 years demonstrates that the Tibetan people can prosper only as part of the big family of nations of socialist China. Any intelligent person ought to be able to draw this conclusion from the undeniable facts and the irresistible trend of history, and choose the road he should take.

"As for those who feel otherwise, to quote a Tibetan proverb, 'Bees can never blow down the king of the mountains with the flapping of their wings'. Socialist China will grow stronger day by day. Our Tibet, which is part of China, can go forward only along a socialist road."
Harbin: Winter in 'Ice City'

ZHENG SHE

At 45° north latitude, Harbin is China's northernmost large industrial city. It is a heavy machinery base and capital of Heilongjiang province. The influence of the continental climate from Siberia makes it colder than many cities of its latitude. Harbin is locked in frost for five months of the year. The lowest temperature may reach -38°C.

Harbin's winter scene and frequent snowfalls are always a wonder to people from more southerly or drier climes. In the depths of winter the trees are draped in snow, the buildings lie beneath a blanket of it, and icicles hang from the eaves.

A lot of people try to go out as little as possible in the breathtaking cold, and those who do hurry back in with eyebrows and beards covered with white frost. The bicycle, common transport in summer, is abandoned for the public bus system. But nothing stops the children. For them it is a time of joy, sliding on their homemade sleds.

The city is located on the broad (800-1,000 meters wide) Songhua River. In summer the Songhua is ideal for swimming, and on holidays it is crowded with swimmers and boaters. In winter, frozen to the depth of a meter or more, the river becomes an ice thoroughfare. Autos and carts desert the bridge and cross to villages on the other side wherever they have access to the river.

The sledge becomes one means of transport. There is an extremely simple homemade variety born, some say, of the dogsled, consisting of a wide wooden board with two iron rods as runners, and a chair fastened to it. It can carry two persons, one seated in the chair and the other standing in the rear punting it forward.

Parts of the river cleared for skating are thronged with young people in colorful clothes. In recent years they have taken to dancing on skates to music.

Snow falls here not so much heavily as often, and it piles up all winter. Snowmen and snow animals by the children and others can be seen all along the streets. Harbin is known for its ice carvings—pavilions and towers of ice that rise along the streets where once the summer flowers bloomed. There are also the famous lanterns carved of ice, illuminated with electric bulbs inside. In the parks one finds more elaborate ice art, whole complexes of buildings with carved birds, flowers, animals, historical figures and scenes of contemporary life. Many people travel to Harbin in winter just to see the sculptures.

Because of the cold, heating here has to be good—none of the half-hearted excuses that further south barely supplement padded clothing. Modern buildings have central steam heating. Many ordinary old single-family homes have heated tile walls with an anthracite coal stove set in them.

The autumn, in preparation for the long winter, is a time of frenzied activity sunning cabbage and filling the family root cellar with potatoes, carrots, turnips and apples.

The double windows of the houses—or rather the space between—make a handy freezer locker. People fill the space in the kitchen window almost half way up with chickens, ducks, fish and pieces of plastic-wrapped meat from an autumn quarter-hog. The temperature in the open air provides an instant freeze. People who don't want to cook for a few days, as over a holiday, make up a pile of steamed buns or meat-filled jiaozi, freeze them up and keep them between the windows ready for a meal.

The color pictures of Harbin in winter in this issue are by Gu Jinyu, an amateur photographer from Hongkong. He has traveled all over China and his scenes of Chaoshan, Taishan, Suzhou and Hangzhou have been highly praised.

CHINA RECONSTRUCTS
Winter wonderland of ice-coated trees along the Songhua River.

Photos by Gu Jinshuan (Hongkong)

Ice sailing on the frozen river.
A large bridge stretches across the Songhua. In the foreground, a statue of a flying swan.

Ice carvings.

Wooden shelters in the snowy mountains.

Harbin's Recreational Club.
In Loving Memory of India’s Heroic Dr. Kotnis

Jiang Yizhen

This December is the 40th anniversary of the death of Dr. Dwarkanath S. Kotnis, a great internationalist fighter and my close friend. This young Indian doctor had come to help the Chinese people in the dark days of the war of resistance against Japanese aggression.

When he died, of an illness compounded by severe overwork and poor diet, more than 1,000 civilians and armymen in the Shanxi-Chahar-Hebei liberated area came to his funeral at Gegong village, Tangxian county in Hebei province, where he had lived and worked. I was entrusted with reading the memorial speech and, in the course of it, was so overwhelmed with grief several times that I could barely continue.

Revisiting the village two years ago, I found that the site of the funeral was now a tree nursery where saplings were thriving (Dr. Kotnis’ tomb, together with that of Dr. Norman Bethune, has been moved to Shijiazhuang, capital of the province). To the west stood a primary school. I spoke with the owner of the house where Dr. Kotnis had stayed, and what he remembered most clearly was how much the people of the area had loved the young doctor.

Medical Mission to China

Dr. Kotnis graduated from medical college in India in 1938 and was preparing for the British Royal Medical Society exams for postgraduate work when he heard that an Indian medical team was being organized to go to China. Abandoning his own plans, he volunteered for the team, which eventually consisted of five men (Doctors B. K. Basu, Chokhar, Kotnis, Mukerjee and their leader, Dr. Menhanlal Atal). To show their friendship for the Chinese people, each added the suffix hua (meaning China) to the Chinese versions of their name. Dr. Kotnis became Ke Dihua.

In May 1940 Doctors Kotnis and Basu were sent to work in the medical school of the Shanxi-Chahar-Hebei border area command. I was then director of the school, which in addition to its teaching tasks treated wounded soldiers. During a particularly severe battle, the two doctors asked to lead a medical team to the front lines. There, over 13 days, Dr. Kotnis treated 800 wounded soldiers and performed 585 operations.

As the casualties streamed into the medical station, he worked three days and nights without rest, and when asked to consider his own health he insisted that his first duty was to the soldiers and their cause. When I saw him after his return from the front, he was thinner and his eyes had sunk deeper into his head, but his spirit was unquenched.

At the medical school, he always worked late into the night, preparing lectures which had to be translated into Chinese for delivery to his students. For a foreigner who had been in China only two years, this was very difficult, and his bilingual dictionary was well-thumbed and annotated. Many times I asked him to cut down his grueling work schedule, for all our sakes, but my urgings were useless.

When our only English interpreter went to Yan’an with Dr. Basu, a woman teacher of nursing who knew some English, Guo Qinglan, was sent to be Dr. Kotnis’ secretary. While this eased his work load in one way, it increased it in another—he began to study Chinese systematically with Guo’s help.
found her in a village and brought her along despite their own imminent danger, for the enemy was very close. The bodyguards told us the story, since Dr. Kotnis was busy delivering the woman's baby daughter, who would not have survived without his timely attention.

‘If Chinese and Indians Unite’

Through their common work and shared hardships, Dr. Kotnis and his secretary Guo Qinglan developed deep feeling for one another, but hesitated to marry while the war was in such a critical stage. Someone dropped a hint of the situation to Commander Nie Rongzhen, and he happily asked me to persuade them to go ahead with the marriage. My task was not too difficult, and in November 1941 we celebrated the wedding, to please the local people, according to local custom, with the bride carried to the bridegroom's house in a sedan chair to the sound of loud and merry music. The marriage seemed an embodiment of the profound friendship between the peoples of our two countries.

Dr. Kotnis once told me how, to pay his medical school tuition, his father had gone into debt. When he joined the Indian medical team to China after graduation, his father had enthusiastically supported his decision, even though it meant he would have no help in repaying the debt.

Four months after he reached China, a letter arrived with news of his father's death. He did not even ask for leave, explaining, “My father always despised people who had no persistence or lofty ideals. When I left he told me 'Do your duty in China, so that no one can ever look down on you. If we Indian and Chinese people can unite, then nobody can push us Asians around any more.'” Dr. Kotnis said that this was the hope not just of his father, but of people all over India.

As I think of those words today, I am filled with the warmest respect for Dr. Kotnis, his family, and his great nation, China and

(Continued on p. 30)
Dr. Menhalal Atal—Internationalist and Friend of China

LU ZHIJUN and TAN ZHUANG

In the depths of the winter of 1939, Dr. Menhanal Atal, leader of a medical team sent by the Indian Congress Party, arrived in Yan’an, seat of the Central Committee of the Chinese Communist Party, with medicine and medical apparatus.

The team was given a grand welcome by the people of the Shaanxi-Gansu-Ningxia border region and Chairman Mao Zedong. Its arrival was also an inspiration to young revolutionaries, strengthening their determination to resist the Japanese invaders. The doctors stayed in Yan’an only a few months, then headed for the front in southeastern Shaanxi. Their contributions in healing the wounded and rescuing the dying, and in training medical personnel, were unforgettable.

Dr. Atal was a veteran member of the Congress Party and a relative of Indian’s present Prime Minister Indira Gandhi. A graduate of the University of Edinburgh in Great Britain, he was a noted surgeon, a poet and an outstanding fighter for international peace. During the Spanish Civil War (1936-39) he worked with a Red Cross group of the International Brigades.

When the Korean War broke out in 1950, he openly supported the policy of non-interference in the internal affairs of Korea. At a meeting held by the International Red Cross in New Delhi in the late 1950s, the Indian representative protested strongly against the U.S.’s transparent intention of creating two Chinas, and emphasized that there could be only one China. Dr. Atal was very proud of this, because the Indian representative had stood for justice. Dr. Atal was one of the founders of the India-China Friendship Association and contributed a great deal to the promotion of friendship between the two countries.

Unforgettable Contributions

When he came to China with the medical team in 1939, he was already over 50, but he adapted himself remarkably well to the severe cold in northern Shaanxi and the hard cave life. He always dressed dapperly and rode a captured Japanese horse presented to him by Commander-in-Chief Zhu De. Yet he never failed to respond to the endless emergencies of wartime surgery, slithering along muddy loess pathways in the middle of the night to attend the wounded, and managed to overcome all kinds of difficulties despite the great shortage of medical supplies. He was always patient and careful when operating on the wounded and won the affection of the people.

During one period he had to walk more than 80 li (about 40 kilometers) back and forth from the hospital in Guai Mao to Yan’an to treat Premier Zhou Enlai’s arm. Very often he met peasant patients on the way and they were all attended to carefully. He was praised by the people of the

LU ZHIJUN and TAN ZHUANG, who both worked with Dr. Atal in Yan’an, are now respectively vice-director of the Chinese Medical Association and vice-head of the Beijing Party municipal office department of health-building sports.
border region as not only an inexhaustible doctor but also a conscientious teacher and a devoted friend. In December 1939 on his way to the front in southeast Shanxi, the car broke down. With his Chinese comrades he pulled the car with a rope for 20 kilometers.

Besides deep friendship the Indian medical team brought a small X-ray machine to the anti-Japanese front. Like charcoal in snowy weather, it was timely help, but there was no electricity and the only hand-operated generator was the one owned by the military commission for transmitting telegrams. So when the hospital needed the generator for an X-ray, it had to fetch it by horsecart and send it back when finished.

After the anti-Japanese war the X-ray machine was moved to a new battlefront with the troops. Today it stands in the Lanzhou No. 1 Hospital in Gansu province (the hospital's predecessor was the military hospital of the Eighth Route Army, later called the Yan'an Bethune International Peace Hospital), the best evidence of Sino-Indian friendship.

**India-China Friendship**

Dr. Atal showed great concern for the development of new China after the victory of the Chinese revolution. His first visit after its founding was in 1951. Afterward he made a very moving speech at the founding of the India-China Friendship Association in Bombay. In 1957 at the age of 71, despite poor health, he again visited China at the invitation of the Sino-Indian Friendship Association. He had a relapse of his liver disease the day he reached China and was hospitalized.

He died in China in December 1957, by coincidence in the same hospital room where Dr. Sun Yat-sen had also breathed his last. He was talking about the books he intended to write about Sino-Indian friendship right up to the end. According to Dr. Atal's will, half his ashes were sent back to India; the remaining half stayed in China to be buried in the martyrs' cemetery in Hebei province, where he had once worked.

Twenty-five years have passed since he left us, but he will live forever in the hearts of the Chinese people. As Premier Zhou Enlai said in the eulogy at Dr. Atal's funeral, we shall never forget the loyal assistance given to the Chinese people by the great Indian people and their fine son Dr. Atal.

We shall make further efforts to enhance the great friendship between the peoples of China and India, which will be the best way to commemorate Dr. Atal.

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**REMEMBERING KOTNIS**

*(Continued from p. 28)*

India are two great countries in Asia. Historically, both have suffered from feudalism and imperialist oppression. Our two peoples have developed close contacts and abiding friendship. In the internationalist spirit of Dr. Kotnis, we must strive to develop that friendship and, together, defend peace in Asia and the world.

**Always in Our Hearts**

In 1942 the war against Japanese aggression entered a critical period, and life in our base area was harder than ever. Dr. Kotnis began to have frequent attacks of epilepsy. Often I myself put my handkerchief in his mouth to prevent him from biting his tongue. Our military leaders wanted to send him for medical treatment to India, Hongkong or to Japanese-occupied Beiping (as Beijing was then called) through our underground and in disguise. He refused, and they begged him at least to go to Yan'an. He would not budge from his post. On December 9 of the same year he suffered another severe attack, and died despite everything our medical staff could do.

In the Spring of 1943 we built a tomb over his grave, just east of Norman Bethune's, in Tangxian county. Standing together with students and staff of the medical school and many other mourners, I read with tears in my eyes Chairman Mao Zedong's tribute to this foreign friend. It ended with the words, "We will never forget Dr. Kotnis' internationalist spirit."

How could we forget him? The red flag which symbolizes the victory of the Chinese revolution is dyed also with the blood of this great Indian doctor and beloved friend of the Chinese people. My brother, Dwarkanath Kotnis, whose body rests in Chinese soil, lives forever in my heart.
Sporting Goods for Athletes at Home and Abroad

WU DONGYAN

Just as Chinese athletes are beginning to make their mark in international competition, Chinese sporting goods are gaining worldwide reputations. Last May, for example, our men’s badminton team was in the headlines for capturing the world title at the Thomas Cup International Tournament.

Shortly before this another contest took place; it did not make headlines but was nonetheless very gratifying to the makers of China’s Air brand badminton shuttlecock. In a scientific appraisal of shuttlecocks from seven different countries sponsored by the International Badminton Federation, the Air brand was listed among the world’s best. A number of foreign customers obviously agree — last year 1.2 million of this durable, “bouncy” item were sold abroad in 50 countries and regions.

Up to World Standards

Nine China-made sports items are officially authorized for use in international matches — the Red Double Happiness and Double Fish ping-pong balls, Golden Cup soccer and basketballs, the Locomotive basketball, volleyball and soccer ball, and the Arrow basketball and rubber-padded Friendship ping-pong paddle No. 729.

The Red Double Happiness ping-pong paddle, made in Shanghai, was the first of China’s brands to be recognized for international play. The quality inspection for this item is very rigorous, and those that don’t meet the manufacturers’ high standards never reach the market. (A ping-pong ball might seem a very simple item to produce, but actually the best of them require over 100 separate processes to make.) In recent years, the hard, fast style of play developed in China has become common in international circles, and the balls must take a lot of punishment. Chinese producers have therefore come up with some exceptionally strong ones, of which the Double Fish brand is considered the best. Most of the 100 million ping-pong balls exported every year are either the Red Double Happiness or Double Fish brand.

For a time the Friendship ping-pong paddle No. 729, with its “inverted dimple” rubber surfaces, was jokingly called a secret weapon in the hands of Chinese players at international tournaments. Lightweight and with a very bouncy surface, it is perfectly adapted to their high-speed, controlled-placement style of play. Not to be outdone, the Shanghai Ping-Pong Equipment Factory after many experiments came out with a new improved model, the Red Double Happiness paddle, and in 1981 produced 720,000 pairs, of which 300,000 were sold abroad.

For the so-called big balls for volleyball, basketball and soccer quality standards are very high. They are perfectly shaped and balanced, and have a reputation for not leaking or becoming distorted even after hard wear. High-quality basketballs and volleyballs, tests show, have held their shape even after 400 matches. The Gold Cup No. 5 soccer balls, authorized for international tournaments, are produced by the Lisheng factory in Tianjin. Waterproof, they retain their bright color through heavy rain or rough handling. They are sewn entirely by hand, as quality balls traditionally are, with 880 stitches required for each one. Master craftsman Wu Jintian, 55, can make three balls a day, even though ten kilos of force are needed to set each stitch.

The Sporting Goods Industry

Before the 1949 liberation, China had only a few sports-goods workshops located in Beijing, Shanghai and Tianjin. None of them had more than 30 workers and the quality of their products was not

Quality inspection of Red Double Happiness ping-pong balls in Shanghai.
high. In the 1950s the industry grew considerably, but still made mostly copies of foreign products. During the “cultural revolution” many factories were forced to close or switch to other products. But in the late 1970s the industry began to recover and expand rapidly, and to do much more of its own research and design. Today it has its own professional journal, research institutes and national quality standards.

China now has 120 state-owned and collective sporting goods enterprises employing 23,000 people. Fifty percent of the work is done by machinery, including some automatic production lines. But, as is the case around the world, some of the most prized products are carefully handmade by skilled craftsmen. Some sporting goods are also made by city neighborhood workshops or by communes or production teams, some of them specializing in the “weapons” used in Chinese martial arts — cudgels, blunted swords, sabers, spears and so on.

The Shanghai branch of the industry is known for high-quality balls, the Tianjin branch for gymnastic apparatus, Beijing for track and field equipment and Guangzhou for aquatic sports items. Heilongjiang province in the far northeast is noted for skis, skates and other cold-weather gear. A number of factories have been set up in the northern and southwestern border regions inhabited by minority nationalities, which made little or no sportswear in the past.

Since ping-pong is China’s most popular sport, it is not surprising that it takes up a considerable proportion of national sporting-goods output. In the record year of production 230 million balls and 3.50 million paddles were made. Badminton has also become quite popular in recent years, because it can be played almost anywhere with just two rackets and a shuttlecock (most amateur players forgo the net). Annual shuttlecock output has reached 36 million.

Soccer, basketball and volleyball sports have been surging ahead in popularity in the last few years, and were given an additional boost by the Chinese women’s volleyball team’s capture of the world title and China’s good showing in soccer in 1982. Reports from Beijing, Tianjin and Shanghai indicate that 1982 ball sales in these categories are up 80 percent over last year.

**The Safety Factor**

As a spokesman for the culture and sports department of the Ministry of Light Industry has reminded manufacturers, “Some sports equipment involves human life and safety, and their production deserves the utmost care.”

A case in point is the uneven and parallel bar gymnastics equipment produced by Tianjin’s Chunhe Sports Apparatus Factory. Formerly it was made of wood, which sometimes cracked unexpectedly under stress. Now it is made of fiberglass and reinforced plastic. So China’s “flying” gymnasts can bound and leap to the limits of their strength without worrying that their equipment will let them down with a smash. The same factory has also made its weight-lifting equipment safer. Weights are covered with thick rubber, and the axles screw directly into the weights instead of being held in place by a linepin.

Both amateur and professional athletes need specialized shoes of all types, and this is another fast-growing branch of the industry. In addition to domestic sales, China exported 2.7 million pairs last year. The Tianjin Sports Shoe Factory (which sells over 90 percent of its products abroad) has expanded its line in just three years from only 3 to 36 different types of products in over 300 varieties and specifications.

Overall, the sporting goods industry is basically meeting domestic needs and looking forward to expanding its foreign markets. Its annual output value is now 160 million yuan, and it exports 54 million yuan worth of products. A limiting factor is shortage of certain raw materials. “Even the cleverest housewife can’t cook a meal without rice,” says Liu Diankun, head of a Ministry department in charge of sporting goods production, “and we can’t expand production without proper materials. It’s one of our biggest headaches!”
Wuhan's Steel Rolling Mills—Mastering Advanced Foreign Technology

XU ZHIYING

China's biggest most advanced steel rolling mill complex, at the Wuhan Iron and Steel Works, is now fully operational. This project was controversial when it was first proposed in the early 1970s because it was the largest metallurgical unit of its time based mainly on imported technology and equipment, including advanced 1.7-meter rollers. Some people still have questions. As someone who knows the project well and has worked in the iron and steel industry for over 35 years, I'd like to give my own views.

Economic and Other Benefits

Between 1976 and 1978 China had to import almost 5 million tons of plain and silicon sheet steel and zinc- and tin-coated plates, at a cost of US$1.32 billion.

From October 1978, when trial production started at the rolling mill, to the end of 1981 the complex has turned out 2.18 million tons of sheet and strip steel—which would have cost more than US$600 million to import. These products are the raw materials for the auto, electrical-machinery and chemical industries, for construction, and for such light industrial products as domestic electrical appliances, cans, enamelware, bicycles and steel furniture.

The mill is thus contributing significantly to the country's modernization and to people's improved living standards. Products such as the Phoenix bicycle and Melin canned foods, which use the mill's sheet steel, are also being produced for export in greater numbers, thus earning considerable foreign currency for China.

XU ZHIYING is an assistant chief engineer at the Wuhan Iron and Steel Works.

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Chinese personnel who are confident of their abilities and whose knowledge will be of great help in modernizing our steel industry.

A Rocky Road

When I graduated from the Engineering Institute of Southwestern Union University in 1945, there was virtually no iron and steel industry in China, and I and others felt deeply frustrated at the lack of opportunity to use our skills to serve our country. After the 1949 liberation, I eagerly went to northeast China to help build up the Anshan Iron and Steel Works, and in 1956 was transferred to the Wuhan plant. Thus I have taken part in the construction of our two largest steel bases so far, besides doing a short stint at the Panzhihua and Ma’anshan works. I have seen our industry conquer problem after problem to grow from tiny beginnings to its present state.

China’s annual output of crude steel today is 36 million tons, ranking her fifth in the world after the Soviet Union, the U.S., Japan and West Germany. But for years our rolling mill technology had remained a weak link. Output was inadequate and quality low, and large amounts of sheet steel had to be imported to fill our industrial needs.

In the 1970s, when Premier Zhou Enlai and other state leaders approved the plan to import rolling mill technology and equipment, the gang of four were in power. They branded any normal economic and cultural contacts with foreign countries as “national betrayal” or “blind worship of things foreign.” Premier Zhou and others withstood that pressure and confirmed our plans.

But there were still doubts about the project. Some people worried that such imports contradicted our principle of self-reliance, others thought it was wrong to spend so much money on such advanced technology in view of China’s economic and technical state. Even some foreign friends shared these views.

As I see it, the principle of self-reliance and the import of advanced technology should not be seen as completely contradictory but as complementing one another. There is no question that we should stand on our own feet in our efforts to modernize, as the steel industry has overwhelmingly done. But this does not mean we should close our door and refuse any help from outside. Today every country, including the advanced industrial ones, must learn from other country’s strong points and supply each other’s needs.

The purpose of importing certain items is to develop our national economy. We need to master imported technology, take the initiative and use it to improve our own industries. The Wuhan rolling mill complex is a good example of a project that will transform our national steel industry, reduce our dependence on imports, and actually increase our self-reliance.

As to the cost, it was indeed high. Four billion yuan was spent on the entire project, and 53 percent (equal to US$600 million at then-current exchange rates) went for imported equipment and technology. But last year the Wuhan Iron and Steel Works handed in to the state 404.93 million yuan in profits and 118.73 million in taxes, the money primarily coming from the rolling mills. When our production reaches full designed capacity, it will save China US$ 1 billion each year formerly spent on importing steel and profits will also increase by a big margin. Simple arithmetic indicates that the economic benefits far outweigh the initial costs.

As to the level of the imported technology, we have clearly proved that with good planning and a concerted educational effort Chinese workers and technicians can become advanced experts in a fairly short period of time. The imported equipment, in fact, was only at the advanced level of the 1970s, and the industry worldwide has moved on. Though clearly all imports have to take into account the country’s concrete needs and conditions, I believe we should aim always at fairly top-level technology in adopting foreign equipment.

Working and Learning

The failure or success of our project ultimately depended on whether we could master its advanced technology in a short time, and from the beginning we made detailed plans to train our workers and staff. Construction started in June 1975 (at its height, 100,000 workers from all over the country were busy on the site), and even at that time we were sending almost 350 veteran workers and technical staff to be trained at Japanese and West German factories. Shortly afterward 1,500 people were sent to colleges and technical institutes and 2,600 to steel mills in other parts of China. Another 5,000 were trained at the Wuhan mill’s old plants.

When construction reached the stage of installing and debugging equipment, those studying outside were called back and all were given technical tests and assigned to posts on that basis. When trial production began, more tests were given and some reassignments made. Not many enterprises in China have carried out such large-scale, concentrated training. The majority of the rolling mill’s 22,312 workers and staff are young people who just started work in 1975, but they have become skilled hands well able not only to handle their
The continuous casting shop.
Part of the 650-meter-long rolling line in the hot strip steel rolling mill.

After being molded and cut in the casting shop, the billets are transferred to the hot rolling mill.

The central control room of the highly automated hot rolling shop.
Cutting and bundling the long strip into sheets is the final process in the hot rolling mill.
Part of the cold rolling mill production line. Its full rolling capacity is 30 meters per second.

Automatic tin coating machine in the cold rolling mill and some finished products.

Photos by Wang Hongxun
jobs but to think creatively and exercise some initiative.

Young Yu Zhixiang was originally assigned as a 2nd-grade worker in the continuous casting shop, but through study and sustained effort he earned a promotion to technician. Through experiment he worked out the best relationship between temperature and drawing speed in continuous steel billet casting, thus improving the quality of the shop's output. Guo Lei, now an operating team leader in the cold rolling mill, had only a junior middle school education. But he took every advantage of his six months’ study in West Germany, and during trial production he and his team set records for output and quality.

The cold-rolling mill alone is controlled by 18 computers, and the project employs some of the most sophisticated automatic equipment in China. Thanks to concentrated study, all the control equipment is now overseen by a team of 43 home-trained engineers and technicians. One of them, a returned overseas Chinese named Zeng Chengxiao, has together with his colleagues put into effect eight separate technical innovations. Veteran engineer Yu Mingyan of the hot-rolling mill overcame a power shortage problem during the trial stage, increased the rolling speed to 900 meters per minute (the limit set by the Japanese technicians) and oversaw the conversion from imported steel billets to billets from our own Wuhuan mill. He has won the particular respect of the foreign specialists.

Our Foreign Friends

As chief representative for production on the Chinese side while the project was under construction, I had many contacts with representatives from Japan and West Germany. Because of our long-time separation from the outside world, when work began I and others had little idea of new advances in steel technology there. We also did not know how to deal with foreign companies. Under pressure of the gang of four and their followers, we were always nervous in working with or socializing with foreigners, afraid we might be accused of having “improper relations.” Our foreign co-workers themselves felt the gap between us, and could not understand it.

Things changed greatly after the fall of the gang of four. We became real colleagues and friends, working together to solve common problems. The foreign advisors did their best to pass on their experience to Chinese workers and technicians, and the relationship was so warm that workers posted slogans such as “Modestly learn from the foreign experts!” (Something that would have been unthinkable during the “cultural revolution.”)

The building of the rolling mill project truly embodies the ideas and efforts of our foreign co-workers as well as our own, and their concern for the project did not end with their return home. We communicate with one another regularly, and they never fail to ask about the current state of different parts of the project and the Chinese friends they made.

Past and Future Problems

Though basically the rolling mill has been very successful, there are still problems to be solved before we can reach our full designed capacity. Shortage of power has been a headache since the trial production stage. Some have complained that this problem was not carefully thought through at the planning stage. In fact it was considered, plans were drawn up, and the Ministry of Water Resources and Electric Power had started to build new facilities and combine some old transmission lines. The problem remained serious because of interference by the gang of four and some shortcomings in our later work. Today most of the early plans have been realized and we are starting to draw power from the Gezhouba hydropower station on the Changjiang (Yangtze), so in the future this should no longer be a difficulty.

Two remaining urgent problems are the supply of iron ore and steel. The Wuhuan Iron and Steel Works operates an iron mine, but it does not produce enough ore to meet the plant's smelting capacity. Even with enough ore, the smelting operation does not supply enough raw steel for the rolling mills. A priority therefore is to increase the iron ore and steel output of the whole works, partly through a complete renovation of the smelting furnaces. We may also be able to get ore and raw steel from mines and plants in other parts of China.

Within the rolling mill, lack of experience in business management has been a handicap — as it is in many Chinese factories. Advanced enterprises need advanced management of economic affairs, maintenance and repair, accident prevention and quality control, and in these respects our work is not what it should be. Transportation of raw materials and products also presents some bottlenecks which will have to be worked out in conjunction with the appropriate authorities.

Some mistakes were made in the initial imports of technology and equipment. Experience showed us that some of the imported items could have been made in China. We were also not careful enough in adapting foreign construction techniques to our own conditions. All in all, we have learned from our mistakes as well as our achievements. The rolling mill itself, and the process of building it, have both made enormous contributions to our steel industry and to the country’s socialist modernization.
Juvenile Delinquency: Salvaging Young Lives

YOU YUWEN

THERE IS MUCH LESS juvenile delinquency in China than in many other countries, but it does exist here, and for a time was rising rapidly. In the past several years the government, professionals and ordinary people of all kinds have launched a coordinated effort to analyze and solve this problem, which in China has its own particular history, causes and available remedies.

Causes

Chinese people often recall the years from the early 1950's to 1965 as a period of very little crime, juvenile or otherwise. In 1965, juvenile delinquents made up only 1.99 out of every 10,000 young people. They accounted for 38 percent of all criminal cases. By 1979 the rate had risen to 5.7 per 10,000 young people. The reasons for the increase are intricate and complex, involving the country's political, economic and social situation during that period, the state of education and the effects of domestic ideological trends and foreign influences on young people's psychological development.

Most of China's present delinquents were born in the late 1950s and early 60s, when the slogan "the more people, the more strength" was emphasized. They were part of the first peak birth rate generation after the 1949 founding of the People's Republic. Many of the things necessary for a child's proper development — economic and psychological security, discipline, a good education, and adequate job opportunities — were to an extent lacking in their growing-up years, which overlapped largely with the "cultural revolution."

During those peak birth-rate years, economic development was not keeping up with population growth. Lack of experience on the part of the country's leadership caused mistakes in economic plans and policies which had serious consequences. Then the "cultural revolution," beginning in 1966, brought the national economy to the edge of collapse, and a topsy-turvy situation emerged in which many workers and peasants were producing less because of an ideology which pitted production against revolution. These things naturally affected the lives and thinking of growing children.

The educational system was also in turmoil. For a time some schools closed altogether. Students were encouraged to struggle "politically" against their teachers. Those who studied diligently were often criticized for lack of revolutionary spirit, while others who didn't work but were quick to shout high-sounding slogans were praised as heroes. Many veteran leaders, scholars and professionals of all kinds were labeled bad elements, while the smash-and-grab behavior practiced by some so-called rebels was touted as revolutionary.

There was a thread of hysteria throughout society: criteria for right and wrong were reversed, and people's ideas fell into disorder. Selfishness and anarchism grew, and relationships became strained. Under the pressure of events, some people tried to do others down to protect themselves.

Since the fall of the gang of four in 1978, far-reaching changes have taken place in political, economic and social life, but of course the bad effects of the previous period cannot be wiped out overnight. Those feudal practices that staged a comeback during the "cultural revolution" still affect the thinking of some cadres, who have unfortunately got caught up in corruption and privilege-seeking. All this confused the minds of many young people. Though many new employment opportunities have been created in the past several years, a number of young people are still waiting for jobs. The scars left on some youths' minds by a
twisted moral and social education have not disappeared.
And the new period has brought its own difficulties. The greater openness in relations with foreign countries, for instance, in addition to bringing in many beneficial and advanced things from abroad, has given some young people distorted notions based on capitalist ideas and bourgeois lifestyles.

**Salvaging Young Lives**

Just as the causes of juvenile delinquency are complex, so the approaches to solving it have to be many-sided. A coordinated drive focusing on the physical, intellectual and moral welfare of all children and youth is underway (see "Children Are Everyone's Concern" in our June issue), and should do much toward developing a sound new generation. They will also be growing up in a social atmosphere very different than the one that existed for the children of the "cultural revolution."

But what of those older youth, confused in their thinking and disruptive in their behavior patterns, who at their worst have committed serious crimes and even at their best create severe headaches for their families and neighbors?

These young people are dealt with at several levels. The Ministry of Education runs special reform schools for minor offenders in their teens. Students enroll voluntarily, with the consent of their parents, rather than by court order. With equal parts affection and discipline, the schools seek to restore the youngster's often damaged sense of self-worth, instill good habits and realistic thinking, and prepare him or her to be a functioning, integrated member of society.

A regular academic program is combined, in most instances, with vocational courses that will be useful to the student in his future life. There are now 128 such schools throughout the country. (The article "Reform School: No Locks, Just Love" in this issue describes such a school in detail.)

Those who commit more serious offenses are sentenced by courts to forced-labor reform farms and camps. Discipline is strict, and inmates are expected to do productive work on a set schedule. Though they are quite different from the reform schools, some of their principles are the same. Teachers and supervisors take seriously their tasks of identifying and developing the good sides of these "flowers of the motherland who have been damaged by insect pests." The aim is rehabilitation, their motto is to be to the youngsters like parents toward children, like a doctor toward his patient, like a teacher to a pupil. The inmate's personal dignity is respected. Cursing, striking or verbal abuse are strictly forbidden.

In small ways the staff tries to show them they are not social outcasts, and that the staff is there to help, not punish. Teachers help them cut their hair, mend their clothes and take care of other problems. On important holidays, always difficult times for young people away from home, staff members regularly give up their own family plans in order to spend the time with students. The camps and farms have a number of academic and vocational courses to help students prepare for future jobs, and cultural-classes and activities to enrich their lives.

In one Beijing camp, teachers on duty sleep in the same rooms as the students, and dormitories remain unlocked. Earning the trust and affection of these young people, the staff believe, is the first step toward changing their thinking and behavior patterns.

**Social Supervision**

Only a small portion of delinquents are sent to labor camps or farms. About 80 percent are placed under temporary supervision by neighborhood committees or work units. Those released from camps or farms are also often given such supervision for a time. By 1981 some 40,000 special supervisory groups had been formed across the country, with over 200,000 members — including neighborhood committee leaders, police personnel, Youth League cadres, retired workers and teachers. Many devote their spare time to this work out of concern for the future of these young offenders.

The task is to help them to live in a better way, and the methods used are education, gentle persuasion and care. They are helped to deal with problems in their life and work that might have led to their former transgressions, and to meet new problems as they arise. Each is treated as an individual with his own needs and potential, and committee members act as
“big brothers and sisters” to their young charges.

In the Fuchunli neighborhood of Shanghai’s Jingnan district there are five released delinquents. The special group organized by the neighborhood committee in 1981 to work with the young people gradually gained their trust through heart-to-heart talks, by helping them find work and by praising even slight signs of progress. They were urged to join study classes run by the committee to increase their chances of getting a good job. Eventually the youngsters began to treat the group members almost like adopted family, coming to them for help whenever they encountered small difficulties.

Community Attitudes

A serious problem in integrating delinquent youth back into the community is the attitude of neighbors, potential employers and sometimes even their own families. Some are prejudiced against them, unwilling to believe they can ever reform.

Many supervisory group members have taken the lead in breaking down community hostility, convincing people that a welcoming attitude can help complete the transformation of a young delinquent, while a cold one may have the opposite effect.

Shao Yuhua, head of a police substation in Zhengzhou, Henan province, has patiently persuaded factories and other units in her district to take a chance on such young people and give them a job. She has also acted as informal go-between for those whose past records create difficulties in finding a potential marriage partner. Many of her young proteges are now happily settled all around the region, and they write her frequently to tell her of important events in their new lives.

Some factories are not only reluctant to employ reformed young delinquents, but also want to get rid of their own erring young workers. But there are also those who fight this tendency. One of them is Han Shengde, an old Party secretary of the Shanghai Textile Machinery Plant No. 1. Chen Rugan, a young worker in Han’s workshop, was detained for trial by the public security bureau for gambling. At the time, Han was ill and running a fever, but he made the difficult journey to visit young Chen.

He had a long talk with the boy, telling him that one mistake did not have to ruin his life, and that he should turn over a new leaf and get back to work as soon as possible. Chen, really moved at this gesture of support, promised to reform, and kept his promise. He is back at the factory, and has become an active technical innovator in the textile machinery industry.

An Early-Release Experiment

In Fushun, Liaoning province, 151 inmates of a labor camp were released ahead of schedule and sent back to their old schools or work units. The program had been worked out ahead of time by the public security bureau, the local Communist Youth League committee and the camp authorities. Those freed were one-time offenders, had regrettied their crimes, and had behaved well during their first six months at the camp.

When the news was announced, all of them, and other inmates as well, were excited and happy. There is a tendency, especially among first offenders, to feel they have a dim future. The release was a sign to everybody that good behavior would be rewarded.

Special neighborhood groups which included family members were mobilized to ease the young people’s transition back into society. Youth League branches in factories, and other group members worked hard to arrange optimal conditions at the youths’ work units, often getting model workers to befriend the released delinquents.

Young Fu Jinxiang, for instance, was coming back to the Fushun Transport Company No. 2. It was arranged that he would be assigned to the company’s best transport team, and the veteran team members welcomed him, taught him, and offered him personal guidance and care. Today Fu is an active and honest worker, respected by all.

Released delinquent Wang Bao-shan returned to the Fushun Lao-hutai Coal Mine. When the mine formed a special team to experiment with extra-thick coal cutting, Wang was included in the team. To live up to the trust placed in him, he worked extra hard, and a short time later took the lead in averting a coal mine collapse. Those who did not have work units to go back to were helped to find temporary jobs until they could get permanent assignment; some were assisted in starting their own small individual businesses. Many now attend night school or part-time courses.

Youth League branches also organized all sorts of outings and social activities for the released youth, inviting them to lectures, sports meets, movies and excursions. Last March — Civic Pride and Courtesy Month — the city Youth League Committee organized the youngsters into service groups which cleaned up the city’s railway station and helped passengers. The secretary of the city Party Committee joined the young people to emphasize to them — and to the general public — that they had left the past behind and started new lives.

The rehabilitation program has won enthusiastic support from
the former delinquents and their families, and from many grassroots units. Fushun Public Security Bureau and the camp staff made follow-up visits to the young people a month after their release to see how they were doing, to encourage them in their new direction and to warn them about backsliding. Today 90 percent of the 151 youths have adjusted well; 34 have made outstanding progress, and two have been specially commended. Only one committed a second crime and was re-arrested.

Public Opinion and Concern

Officials at all levels have taken the lead in reaching out to young delinquents through personal visits and talks, and in publicizing the need to reform and reintegrate them into society. Films and plays have been made on the subject to give erring youngsters hope and encourage people to take a forgiving and helpful attitude toward them. Performing troupes have traveled to camps and farms to entertain inmates and raise their morale. To do research on the problem and its solutions, the Chinese Academy of Social Sciences has established a special Youth Institute.

Statistics from the Ministry of Public Security show a decrease in both general and youth crime rates over the last few years. In China's 18 biggest cities, including Beijing, Tianjin and Shanghai, the crime rate dropped by 17.9 percent in the second half of 1981 compared to the first six months. Nationwide in the first three months of 1982, the rate was down 12.5 percent as compared to the same period the year before, with a drop of 15 percent in Beijing and other large cities.

Undoubtedly part of the cause is the greater public order in the country. The economy, education and cultural life are vastly improved, and many of the bad effects of the "cultural revolution" have either been or are being eliminated. But a share of the credit belongs to those professionals and volunteers who have worked to rehabilitate erring youngsters and give them a second chance.

Reform School:
No Locks, Just Love

S. R.

It is 8:15 on a June morning as our bus rolls through the western outskirts of Beijing. Aboard are about a dozen foreigners of different nationalities who work for foreign language publications and our interpreters. This is intensely cultivated farmland, and the peasants we see in the fields move with the deliberate rhythmic motions of those who live close to the earth. A few cows graze peacefully, a woman feeds a pig, a large dog at the roadside looks up as we pass.

The School

We are on our way to visit a reform school, and to some of us the very nameconjures up a depressing image that contrasts with the bright morning and scenes of ordinary life. We turn into the school grounds and get our first surprise. The gate is not even closed, much less locked, and there are no signs of guards or other tight security.

Inside, in a large reception room, Director Xu and some of his staff tell us about the school. It opened in November 1978 under the auspices of the city Bureau of Education, and is one of seven such schools in the city (down from nine a year or two ago; juvenile delinquency rates have decreased, and there is less need). It takes students from Beijing's Western District and statistically, only 0.122 percent of the District's students are delinquent.

There are no locks or guards at the gate because the students come to the school voluntarily, with their parents' consent. They are often referred by their original schools, where they have been chronic behavior problems. More than 400 young people have passed through the school since its opening, and 103 are here now — 81 boys and 22 girls. In age they range from 12 to 18 (the usual minimum is 13). One boy is 19. The youngest girl is 14 and the oldest 18.

None have committed serious crimes; those cases are handled
through the court system. Mostly their delinquencies fall into three categories: brawling and fighting (including some gang fighting with dangerous weapons); theft, mostly petty; and sexually promiscuous behavior. The girls fall mainly in the third category, while the boys are about evenly divided among the three types.

'Flowers of the Motherland'

A key fact is that in some senses they are as much victims as transgressors. Many of the girls, for instance, were raped or seduced at an early age by older men, and sometimes blackmailed into providing sexual favors for the man's friends. Many come from disturbed, irregular family backgrounds. Some have been beaten. Most, when they first started to misbehave, suffered the scorn and prejudice of neighbors and school authorities. They became almost outcasts, which in turn reinforced their antisocial behavior and their reliance on bad companions.

By the time they reach the school, they are often tough and sullen on the outside, but inside they are deeply afraid and lacking in self-confidence. The staff is trained to regard them not as criminals but as 'flowers of the motherland' who have been infected with blight. They are to be treated with patient, loving care. Through talks, and help with their daily lives and their studies, the teachers gain their trust and take every means to restore their self-esteem and self-confidence.

As their trust is gained, they are gradually encouraged to talk about their mistakes, to the teachers and their fellow students. This is a slow and painful process, but eventually most do it. It is the first step in analyzing their behavior and its causes. Helped by the teachers, they come to understand that there are societal and family causes as well as individual and to realize the consequences of their conduct for themselves and society. They are shown that they can reject the past and change their way of life.

There are no sudden, magic transformations. It is a long process with frequent backslidings. Later, talking to a 14-year-old boy, the visitors asked him why he was at the school:

Boy: "Well, I had some discipline problems in school."
Teacher: "And...?"
Boy: "Oh yeah, and they caught me breaking and entering."
Teacher: "Ummm...?"
Boy: "And I stole a pistol."
(Teacher and boy grin at one another.)

They are asked to do one good deed every day, and praised for it. Thus encouraged, by teachers as well as older students who are expected to help the newcomers adjust, they start to form new behavior patterns. They are also offered models. Particularly effective are former graduates of the school who are doing well and come to talk to the students. Other speakers are reformed criminals whose crimes were much more serious than these youngsters'. With these examples of people who have built new lives, the students begin to say to themselves, "Why not me, too?"

Education and Discipline

The students take standard middle-school courses and vocational courses which will be of practical use in later life. There are sewing and tailoring classes for the girls and carpentry and electronics workshops for the boys.

One large room displayed the students' handiwork—furniture from the carpentry shop and articles of clothing from the sewing room. Though the students on duty in the room apologized for the quality of the items, they obviously took great pride in these creations of their own hands. The items are sold to the public (the staff and their families buy a good number) and the money earned goes to the fund from which students are awarded monthly bonuses (of three, five and seven yuan according to their merits). Some students use the money to pay part of the 14-yuan charge their families give to cover food costs (otherwise, tuition is free).

The dormitories, though rather Spartan, are notable for their neatness and cleanliness. This is part of the students' responsibilities. Disciplinary rules are strict. Consistent discipline combined with affection was lacking in many of these youngsters' lives, and most come to welcome it, to take pride in exercising self-discipline. The official time limit on washing and dressing in the morning is five minutes; students usually try to beat the time, and boast that they have got it down to three minutes.

Results

The average stay at the school is one and a half years, the maximum about two years. After this students return to their regular
schools or, depending on age, enter the job market. Of the youngsters who have attended the school since 1978, about 3.5 have reformed and are now leading normal lives: 1.5 have done extremely well, and 20 have been admitted to the Communist Youth League. Only 1.5 have not responded to all the school’s efforts. Some have run away before their term was up and returned to their old habits.

These runaways and others who do not respond were listed as one of the school’s major current problems. The staff is trying to find new methods of coping with them. School leaders also point out that some teachers, though they work very hard, lack professional training. A few staff members who proved unsuitable for this kind of work were transferred. A third important problem was easing the students back into society through schools and jobs. Often they faced discrimination, which would gradually have to be broken down. The school tries, but it is not easy.

‘Red Flower’

In small groups, the visitors had a chance to talk with individual students. One 16-year-old girl (whom we shall call “Red Flower”) blushingly admitted that she had come to the school because she’d had sexual relations with a number of boys. She’d also not attended her regular school for eight months. She had once been a good student, but when she was 14 came under the influence of an older girl.

Red Flower’s stay at the school will shortly be up, but she doesn’t want to return to her regular school. She will live at home and come back here every day to work and study. She now has better relations with her parents, but they still don’t have full confidence in her. Once, during a visit home, the family discovered that 60 yuan was missing and accused her of taking it. She hadn’t, as was later proved, but the situation was very painful, and she credits a teacher with helping her to deal with the crisis.

She would like to attend college or study Japanese in a course offered by her district’s cultural center. (So far 11 of the school’s graduates have taken college entrance exams, though none have passed.)

A boy who has done very well in the electronics workshop was asked about his future. Was he afraid of discrimination and hostility when he got out? He knew he would face these things, he said, but he shrugged them off. He had acquired a useful trade, as he would not have done outside the school, and that was the important thing.

‘Little Tiger’

Another girl, 18, is a sturdy little person, direct and forthright, with a certain rugged individuality. We shall call her “Little Tiger.” When she was very young, her parents divorced and she went to live with her father until he died in 1975. He had exercised little discipline, letting her go her own way, so when she was sent to live with her mother, who was quite strict, there were many clashes. Her mother had not seen her for years, and showed little outward affection. Little Tiger began to get into trouble, and committed a number of petty thefts. There were frequent beatings. She herself read about the reform school in a newspaper, and asked her teacher about it.

At first she was a discipline problem, ready to fight everyone in the school, but began to respond to the warmth and affection she’d not experienced elsewhere. She now thinks of fellow students and staff as her real family, though relations with her mother have improved, partly through the school’s counseling of both parties.

When the school bought sewing machines last year and started the tailoring course, she wanted to join, but unlike many other girls had never sewed before. Her mother mocked her—“You’ll never learn to sew.” But she persisted, and soon brought her mother a pair of shoe-soles she had made. Like others, she does not want to leave the school, though her term is almost up. To her great delight, she has been accepted as a school staff member, and will be an assistant teacher in the sewing workshop.

A story she told illustrates the importance the government and Party place on showing the students — and the general public — that they are not outcasts, but essentially good people who can reform with proper care. Last March, during Civic Pride and Courtesy Month, schools all over the city took part in public service projects. Students at this school expected to get the dirtiest kind of assignment far from public view.

Instead a representative group was chosen to clean up in front of the Great Hall of the People, an awesome structure that symbolically represents the highest level of power and national unity. If that honor were not enough, they were invited in afterwards for a talk with officials of the Hall, who showed concern about their lives and gave them small gifts. The impact on the students was immense. In Little Tiger’s words, it made all her past bad deeds seem ridiculous and her future bright.

She now sees the school as a way station, a place where she can renew herself before the long journey of life.

In the electronics workshop.

Jan Thal
He Paints Overseas Chinese Homeland Scenes

ZHENG CHENGYANG'S hometown in Puning county, Guangdong province is one of the places from which overseas Chinese hail, and his is an overseas Chinese family. So he understands the great interest and feeling Chinese abroad have for the places of their family origin. Out of this feeling, he has painted the landscapes of many such villages, and in autumn 1981 under the auspices of the All-China Federation of Returned Overseas Chinese, made a painting tour of a dozen places in Guangdong and Fujian provinces. The result was 120 landscapes revealing the special beauty and new scenes of each spot. Exhibited in Hongkong, Japan and Singapore as well as in China, Zheng Chengyang's works have won praise both at home and abroad. There are plans to publish a book of his overseas homeland paintings.

BORN in 1939, he was fond of art from childhood, and studied traditional painting in the Beijing Academy of Art. He is also a skilled cartoonist. Since graduation in 1961 he has worked in the Beijing Scientific and Educational Film Studio as an animated cartoon designer.

His film-making career has afforded him many opportunities to visit the scenic spots of south China. New House in the Mountain Village, a landscape he created when he went to work on a film about the life of minority nationalities in Yunnan province, was chosen for the First Landscape and Bird-and-Flower Paintings Exhibition in 1977.

His landscapes, in the traditional ink and wash technique, are characterized by fresh, lively lines and unusual composition. For a period during the "cultural revolution" he found himself tending water buffaloes in Hubei province. He had plenty of time to observe them, and buffaloes, a frequent part of the south China landscapes, became one of his specialties.

QIU JI, an overseas Chinese now living in China, is a poet and painter and serves as advisor to the Beijing Language Institute.

CHINA RECONSTRUCTS
Queshi Island, a famous scenic spot at Shantou, Guangdong province.
Li Yuan, the traditional-style residence and garden built by an overseas Chinese and now open to the public.

Ao Yuan, burial spot of Tan Kah-kee, a patriotic overseas Chinese, in Jimei, his home town near Xiamen, Fujian province.
VISITORS to the magnificent Gezhouba water control project on the Changjiang (Yangtze) River near Yichang, Hubei province, are always impressed. It is huge — the largest such project to be designed and constructed by China.* But after this reporter came in contact with its builders, I realized that they are the true giants.

Nearly 50,000 engineers, workers and administrators now work at the site around the clock. It is their heroic efforts — their disregard for personal safety or gain, their tenacity and resourcefulness in the face of difficulties, and the common will to build up their country — that has made Gezhouba possible.

The Technical Force

On the night of January 3, 1981, work was in full swing on the cof-ferdam (a temporary dam to hold back the river’s flow while permanent structures were completed). In only 16 hours the 200-meter gap had been narrowed down to 100 meters. Although the pent-up waters rushed through with great force, the work was proceeding smoothly. Model experiments, however, had shown that this last section would be the most difficult stage.

Worksite headquarters called an emergency meeting. Should they go ahead in one sustained effort or stop for more tests and studies? Deputy chief engineer Yue Rongshou and some others thought there was nothing to be gained technically by slowing down; boldness was called for. Minister of Water Conservancy (now Minister of Water Resources and Electric Power) Qian Zhengying accepted the risk and gave the order to go ahead.

*A little rain never bothers Secretary Zhao Kaiwu (right) of the Construction Bureau Party Committee; acting bureau chief Deng Manfu (second left); and deputy chief engineers Yue Rongshou (left) and Guo Dingming (second right). - Ed.

The work was both delicate and difficult, but next day the gap was closed. Snow began to fall on the night of the 4th. If they had hesitated any longer, it might have delayed the entire project and scuttled the plan to begin navigation and power generation in 1981.

Yue Rongshou, 58, graduated from Sichuan University in 1948. After new China’s founding in 1949 he took part in the construction of many water projects and accumulated a wealth of practical experience. In 1954, when unusually big flood waters on the Changjiang menaced the city of Wuhan, Yue and his colleagues devised special rafts which mitigated the force of the waves pounding the dykes.

It was he who led the work of drawing up a timetable and master plan for getting the first stage of Gezhouba ready one year earlier than originally envisaged. Soon after its completion, it safely withstood the test of a flood crest reaching 72,000 cubic meters per second — testimony to the high quality of planning and construction.

Cooperative Effort

“I am only part of the collective that built the Gezhouba project,” said Yue Rongshou to this reporter, “I only did my bit.” Yue is modest, but there is truth in his disclaimer. The project presented many knotty problems involving large sums of money, which were solved through the coordinated efforts of many individuals.

DENG SHULIN is a staff reporter for China Reconstructs.
siltage, geological strata, reduction of flow momentum, manufacture and installation of generating units and navigation.

More than 120 units nationwide participated in preliminary discussions and plans, and over 100 national conferences were held. Thus Gezhouba is the product of extensive socialist cooperation and the crystallization of the collective wisdom of countless experts, engineers and technicians. During construction, many crises were overcome through the joint efforts of on-site technicians and workers. Some 3,400 major technical innovations are credited to the project since 1974, and these have helped substantially to speed construction.

Apart from Yue, other veteran specialists include the renowned “two Caos”: deputy chief engineer Cao Le'an, in charge of design, and deputy chief engineer Cao Hongxun, in charge of construction. The mainstay of the technical force here are the younger scientists and technicians trained after the founding of the new China. Chen Xiaolin, who graduated from the Beijing Institute of Geology in 1959, is now deputy chief engineer in charge of quality inspection. Twenty years of work in her field have honed her abilities to a fine edge. She can take any piece of bedrock and, with a tap of what people have called her “magic hammer,” correctly describe its type and characteristics. The workers trust her judgement and feel more at ease about their work when she comes around — Which she often does, getting her clothes as wet and muddy as theirs. “Away from the worksite a quality inspection engineer has nothing to say professionally,” she often remarks.

The Construction Force

If the blueprints of the Gezhouba project were drawn up by scientists and technicians, it is the workers who turned those plans into a mighty dam with their intelligence and hard work.

Zhou Jikang, veteran section chief at a maintenance plant, leads a gang of workers who specialize in shifting heavy equipment and whose services are much needed at Gezhouba. Zhou and his team have consistently completed assignments with flying colors, in spite of personnel shortages, narrow time limits and difficult jobs. He has earned several awards and the nickname “iron man.”

In the winter of 1981, just before the river’s flow was cut, Zhou was given two months to dismantle 12 huge electric shovels on the left bank, transport them to the right bank and reassemble them. Normally it would take 24 workers 18 days to move only one machine. Zhou had only 12 men, but 30 years of experience behind him. Zhou split his team into groups so that two or three electric shovels could be dismantled and assembled at the same time. Ingenuity, hard work and good coordination from other work sections helped them complete the job ahead of schedule.

With older workers setting an example and giving guidance, the 16,000 young workers are making rapid progress. Many complicated jobs are now being given over to them. The huge ship lock No. 2 ranks technically among the most advanced in the world. Each of its gates, 34 meters high and weighing 600 tons, is welded together from ten separate sections. The work had to be precise and flawless. The job was assigned to 24 young welders, including 7 women, led by a technician just out of college.

The design called for a tolerance of 5 mm between the gates; they achieved a tolerance of less than 2 mm.

Wang Zhan, a young woman of forceful character, is known for her tireless energy. In April 1980 her grouting team No. 4 was assigned the job of drilling holes in rock to anchor reinforcing bars. All the men were on other assignments, and by tradition only they handled pneumatic drills. The team leader was at his wits’ end when Wang asked, “Why shouldn’t women be allowed to handle them?” With that she grabbed a drill and set to work. Her hands swelled, her shoulders ached from the vibration. Weariness showed in her bloodshot eyes. But she kept on until the work was done. Wang Zhan has not only grit but brains. In the last few years she has learned to do many types of technical work, and does them well.

“You Need Many Skills”

Not long after young carpenter Chen Guangzhou arrived at the dam site, he was sent to work on the shiplock’s hoist tower. He and his teammates could not read the blueprints, however, and on the first day got nothing done. “This left a deep impression on me,” says Chen. “I realized that building modern hydroelectric projects calls for more than just willingness to work hard. You have to
learn a lot of skills, too." He borrowed books on drafting and other subjects and sought advice from older workers. His efforts paid off, and by passing an examination 18 months later he upped his technical grade level.

Chen Guangzhou, for instance, could find himself a girlfriend because he had a reputation as a shiftless worker. When he finally did find one, she dropped him when she heard he'd been criticized at work. Chen encouraged Wang to study hard and show more concern for the collective. With his help, Wang's behavior changed. He was punctual for work and volunteered for the heaviest and most difficult jobs. And his girlfriend came back to him.

The engineering bureau has set up many spare-time schools, secondary technical classes and even a college-level technical school to train the young workers in professional skills and socialist ideals. A club for young people provides entertainment and sports facilities.

**Leaders and Managers**

In 1979 an American hydroelectric delegation visited Gezhouba and one of the visitors said to Deng Manfu (then deputy bureau chief, now acting bureau chief): "You have quite a job directing such a big project. What college did you attend?" Deng Manfu told his skeptical visitor that he was a middle school graduate and had never been to college. His "higher education" had been in the water conservancy projects on which he'd worked for over 20 years.

Zhao Kaiwu, 54, is an old friend and colleague of Deng's. Around Gezhouba he is known as the man who organized and directed the construction of the sluiceway, a key component of the project. The timetable was extremely tight and the task complex, involving 17 different units and a huge workforce. But besides his organizational skills, Zhao has the ability to mobilize a strong collective leadership and to engage the enthusiasm of workers and technicians. The job was completed on schedule. Then vice-chief of the construction bureau, Zhao is now secretary of the bureau's Party committee.

A native of Shandong province, Zhao came to south China in 1948 as a member of the People's Liberation Army and stayed to work in the western part of Hubei province. Deng, five years younger, was 16 when his native Wuhan in the same province was liberated in 1949. He soon joined the ranks of the revolution. Both he and Zhao were sent to work on the Danjiangkou water conservancy project in western Hubei in the 1950s and conceived a liking for this highly creative, although arduous vocation. They picked up their extensive professional knowledge through persistent self-study, by taking lessons from technical experts—Zhao studied geology with Chen Xiaolin—and on construction sites.

The leading cadres stay close to the grassroots and share weal and woe with the rank and file. This applies not only to younger cadres such as Zhao Kaiwu and Deng Manfu but even to 62-year-old deputy bureau chief Zhang Shizhong, a veteran Communist Party member. Zhang spends much of his time at the worksite, living and taking his meals there, with clothes mud-spattered and perspiration-soaked like any other worker. The workers never address him by rank, but fondly as "Old Zhang."

In the early stages of the project when conditions were particularly tough, he put up for a night with two other people in a grass hut so small that his legs stuck out from one end. It snowed that night, and to this day his legs still give him trouble.

Many cadres at Gezhouba have devoted themselves heart and soul to the project. As Deng Manfu says, "People usually run for shelter when it begins to rain, but here it's the other way round—people run for the worksite because heavy rains mean danger and a light rain is good for pouring concrete."

Zhang Shizhong himself never sleeps well unless he first makes his evening round of the worksite. Zhao Kaiwu once got up in the middle of the night to answer a call of nature and decided impulsively to go down and see how the sluicegate construction was proceeding. His wife, discovering his disappearance, had a few anxious hours until he found time to call her next morning from the worksite.

The second stage of construction at Gezhouba is now in full swing, but the builders are already making plans for the future. They are setting their sights on completing with their own hands the even grander Three Gorges project upriver from Gezhouba.
Fishermen Net Good Life

WANG WEIZHONG

In June of this year the government of Fujian province on the southeast coast cited the Haixing fishery brigade for greatly developing ocean fishing and improving the lives of its people. A trip to Haixing highlights some of the reasons for its prosperity.

Saving for Reinvestment

The brigade’s solid economic base is visible from the figures and charts displayed in its exhibition room. Its public accumulation fund has grown from 30,000 yuan in 1955 to 4.2 million today. The brigade started with six small wooden sailboats, and today has 22 motorized junks equipped with fish detectors, direction finders and ship-to-shore radios.

Early in the 1960s brigade leaders and members realized that they would have to change from sail to modern motorboats if they really wanted to increase their catch, but just two of the motorboats then cost about 100,000 yuan. The fishermen discussed the situation, and volunteered to donate all their wages to the brigade’s accumulation fund for three years, meanwhile supporting their families through household sideline production.

By 1965 the brigade was able to buy 10 motorized fishing boats with the money saved. As the brigade’s income has increased over the years, the tradition of saving large sums to reinvest in productive facilities has been kept up. Today 45 percent of the brigade’s total income, and 55 percent of the money earned for production over standard quotas, is earmarked for the accumulation fund.

The brigade no longer depends just on fishing. There is a shipyard with over 20 staff members to build and repair fishing boats. It used to take a year to make one motorized junk with a loading capacity of 80 tons; the shipyard has now reduced the time to four months. Near the yard is a repair and spare parts workshop for fishing equipment, which can handle anything from a tiny part to a giant 1.4 meter propeller. The brigade also has its own spinning, net-making and repair workshop.

All-Round Benefits

If the exhibition room offers paper proof of the brigade’s prosperity, a tour of the village’s residential area provides concrete evidence. New, spacious housing is visible on every side. Typical are Lin Baoguang and his family, consisting of his wife, four children and old mother, who have a new six-room house. (Lin is an engineer on a fishing junk of production team No. 9, and his wife is a cook on the same boat.)
Their home is simply but comfortably furnished. A light and unusual touch are the floors, which are painted in sky blue, apple green or cream. The family owns an electric fan and, as a young son of the family volunteered, a 14-inch color TV which stays locked in a cupboard most of the time lest the children "mess it up" while the parents aren't around. Consumer items such as wrist-watches, bicycles and radios are very common among brigade families.

The brigade's collective welfare fund is also in very good shape. This year 120,000 yuan was spent for pipes and equipment to supply the brigade's 355 households with running water, and another 200,000 yuan was recently set aside for new school facilities and to purchase a dozen TV sets for fishing boats that are away from shore for long periods. Kindergarten and primary schools are tuition-free, and 96 percent of the brigade's school-age children attend. A pension plan supplies every retired worker with an income of about 300 yuan a year, and when brigade members pass away the families are given 280 yuan for funeral and burial expenses.

Leading by Example

A common saying around Haixing is, "If you think of the brigade as a fishing boat, then our pilot is Lin Chunguan." Lin, now 45, has been a fisherman from childhood and Party secretary of the brigade since 1960. He believes that a leader's place is where the productive work is going on — in this case, out on the fishing boats.

He has made a habit of joining in turn the teams where incomes and work efficiency are low in order to help solve their problems and develop new working methods. Thus, over the years, he and his family have belonged to teams No. 3, 6, 8 and 9. When No. 9, with his help, increased their output to hold first place among the other teams, the members wanted to give him 6,000 yuan as his share of their profits — the salary of an engineer.

Lin refused, accepting only the 3,500 yuan income that was the average for team cadres. People say that if he'd paid attention to his own interests throughout his career instead of the brigade's, he'd be 30,000 yuan richer. To those who've called him foolish, he replies, "I'm a Party member, and I was brought up by these villagers. I'll be really happy only when everyone in the brigade becomes prosperous."

Under Lin's leadership, brigade members have learned to think not just of their own interests, but of the collective and national welfare. Over the past 17 years 98.7 percent of the brigade's output has been sold directly to the state. In 1979 the county assigned them a quota of 750,000 kilos of fish to be sold to the state, an amount they overfulfilled by 250,000 kilos.

Keeping the Brigade Honest

In recent years smuggling and other irregular activities have become a serious problem along the coast, and Lin Chunguan and other local leaders helped draw up strict regulations to make sure that their brigade stays honest. First, no brigade member is to have any dealings with smugglers. Second, team members are not allowed to take out to sea even their own private radios, TVs, and cassette recorders. The reason for this is that local people, through relatives abroad or other means, can sometimes get such things more cheaply than they are available in other parts of the country, and then resell them at a profit when the fishing boats stop at other ports. The rule is meant to eliminate such dealings.

Last March, the rules were tested. Out at sea, teams No. 5 and 9 encountered a dozen smugglers' boats which quickly surrounded them. The smugglers tried to strike a deal — part of the teams' fish in exchange for a number of TVs and radio-cassette recorders. But the fishermen re-

Retired brigade members collect their pensions.

Part of the new residential section.

Photos by Li Kanyuan
Fighting Liver Cancer in Qidong County

LU ZHENHUA

Qidong county is a classic case of medical detective work. Alerted by figures showing an unusually high incidence of liver cancer in this county in Jiangsu province on the east coast, medical workers have not only established a method of early diagnosis which has saved many lives, but also identified some “culprits” in the form of environmental causes that can be reduced or eliminated.

Their work is in the finest tradition of China's health care service, which places great emphasis on prevention, and very much in line with the ideas and methods of many cancer experts worldwide.

Between 1958 and 1976, the mortality rate from natural causes among Qidong county’s 1.09 million people declined from 8.62 per thousand to 5.87 per thousand. At the same time, however, deaths from malignancies increased from 0.57 per thousand to 1.27 per thousand, of which 40 percent were due to cancer of the liver.

Countywide Surveys

By that time, county medical people were already well aware of the problem. The first general survey on the disease had been launched in 1972 through the cooperative efforts of county and provincial health departments, with help from Shanghai and Beijing. In six months more than 700 local medical workers (divided into specialists on pathology, genetics, immune systems, diagnosis and therapy) visited all the county’s towns and production teams, giving physical exams to every inhabitant over 16. They studied all the cancer and mortality cases from 1958 through 1971 and established a recording and reporting system to provide data for the county’s new Liver Cancer Research Institute.

The work was also extended to adjacent areas in order to clarify the geographical distribution of liver cancer. Tests were made of the local food, water supplies, soil, climate, plants and animal organisms to try to isolate environmental causes. Anti-cancer drugs were researched and trial-produced.

Since 1972, surveys have been carried out annually, and the results have been striking. There is now a clear picture of the incidence of liver, stomach, breast and lung cancer in the county. Between 1972 and the present, for instance, there have been 5,400 cases of liver cancer, an incidence rate annually of 0.53 per thousand. More than half the sufferers are men, and some cases show signs of a marked hereditary influence. Some patients are as young as 20 (an unexpected discovery). The incidence rises sharply in the 40-50 age group and then declines.

Remarkable progress has been made in detecting and treating liver cancer in its early stages and identifying environmental causes.

Early Diagnosis

Because liver cancer in its early stages has no symptoms perceptible to the patient, early diagnosis has always been difficult. By the time a sufferer feels pains in the liver, a lump in the abdomen or general debility, it is often too late to save his life. After years of study the county’s Liver Cancer Research Institute, with help from the Chinese Academy of Medical Sciences, Shanghai Medical College No. 1 and other units, developed a simple diagnostic test involving the presence of AFP in the blood.

AFP is a substance produced in the livers of newborn babies; production stops when they are about three months old. For some reason, a malignant liver also starts to give off AFP. “This test is sensitive, accurate and simple,” says Dr. Zhu Yuanrong, vice-director of the county Liver Cancer Research Institute, “and it costs only 3 cents per person to adminis-

Interviewing local residents for a general survey on liver cancer conducted by Qidong county’s Liver Cancer Research Institute.
ster, so it's very suitable for large-scale surveys." In 1977 a county survey of 637,000 people turned up 213 cases of liver cancer, 76 percent of them in early, treatable stages.

In the decade since 1972, over 200 partial surgical removals of the liver have been performed, enabling 58.49 percent of the patients to survive at least one year after the operation, 32.20 percent for at least three years and 26.66 percent for five years or more. Various anti-cancer drugs are also used. Over 30 percent of the patients treated with drugs now survive at least a year after diagnosis (the rate was only 5 percent in 1972) and about 100 people are still alive after three years. In the past few years the incidence and mortality rates for liver cancer, instead of rising, have stabilized and even show a slight downward trend.

The county's success was commended at a national conference on science and technology and has attracted attention from cancer experts around the world. In 1979 the county research institute received an international award for their work from a prestigious cancer research center in New York City, U.S.A.

Tracing the Causes

Traditionally, people in the county believed that the leading causes of liver cancer were local parasitic diseases, alcoholism and malnutrition. Survey researchers, however, have pinpointed some specific carcinogenic substances in the area — *Aspergillus oryzae*, a type of fungus that grows on corn and peanuts; the ammonium nitrate produced when pickled foods become contaminated; and various water pollutants. Hepatitis B, a liver disorder, is also now believed to be a predisposing factor for liver cancer.

Brigade clinics across the county, guided by commune- and county-level medical personnel, educate the peasants on prevention methods and lead drives to eliminate environmental causes of the disease. Commune members are urged to harvest corn and peanuts as quickly as possible and store them properly to prevent the growth of fungus, and to add more salt to pickled vegetables to prevent mold and rot. Because *Aspergillus oryzae* cannot easily be seen with the naked eye, medical workers frequently visit peasant homes to make sample tests, and corn and peanuts are carefully screened before processing.

Vaccines are given against hepatitis, and those who do contract it are treated in isolation to prevent spread of the disease. All blood donors are screened so that liver disorders are not passed on in this way, and food service workers are immediately transferred if they show signs of being infectious.

Many small rivers and streams cross the county, but most are either polluted or slow-moving, which encourages the growth of harmful bacteria. The county government and production brigades have allocated funds to help the peasants dig 130,000 new wells to improve the quality of the drinking water. Some better-off communes have now equipped their households with running water from wells.

The county's health care network is now geared to prevention, early diagnosis and treatment of liver cancer. At the top level is the county hospital and the Liver Cancer Research Institute, which now has 50 beds of its own, performs liver resections and other forms of treatment, and conducts the yearly surveys and other special research projects. The institute also works closely with specialized medical personnel at the commune hospitals and brigade clinics on grassroots work. Commune hospitals keep records of everyone who has had even the slightest liver complaint, or otherwise might be susceptible, and they are given regular check-ups.

The incidence of liver cancer in Qidong county is still higher than in other areas, but people here are no longer so pessimistic. Resources and specialists have been concentrated in a step-by-step scientific struggle against this killer disease, and everyone is confident that it will eventually be brought completely under control.

All photos from the Liver Cancer Research Institute, Qidong County
4,000 Years of Chinese Money

WANG LIANZHOU

CHINA is the birthplace of paper money and one of the earliest users of metal coinage. The rare and beautiful relics of the 4,000-year history of her currency, many of them unearthed after lying hidden for thousands of years, were displayed in the first full-scale numismatic exhibition since liberation held last May and June at the Museum of Chinese History in Beijing. They can also be seen in a lavishly-printed colorplate book covering the main items in the exhibition put out by the Xinhua Publishing House (at present only in Chinese). The 10,000-some items are witnesses from over the centuries of the rise and fall of dynasties, of the processes of development of various kinds of currency, and economic conditions of their time.

From Shells to 'Implement' Coins

Cowrie and tortoise shells, pearls and pieces of jade are known to have been used as tokens of exchange before the Shang dynasty (16th-11th century B.C.) and to have come into wide use during that time. Even today, Chinese characters connected with the idea of value or wealth carry the radi- cal bei 贝, derived from the character for shell.*

With the development of commodity production, the number of shells available, particularly in places far from the coast, could not meet the need. Replicas of shells made of bone and of bronze — China's earliest metal money — circulated in the last years of the Shang dynasty. The State of Chu which existed 770-221 B.C. in the mid-Changjiang (Yangtze) River valley used a bronze shell replica with an "ogre-face" design. Another kind with an inscription resembling the body of an ant (yi) or a nose (bi) came to be known as the yibi coin. Chu also had gold currency, a large flat slab of gold scored so that for lesser transactions it could be broken into smaller pieces. These could be called China's earliest true coins.

By the Spring and Autumn (770-476 B.C.) and Warring States (475-221 B.C.) periods metal money of various types had come into wide use. The growth of agriculture and handicrafts and a more specific division of labor made possible a greater variety of products, thus expanding commodity production — but demanding more money. This wider use of metal coinage marked the advent of a real money economy. There were three kinds of bronze coins: spade-shaped, knife-shaped and round.

Iron tools, already in wide use during this period, were highly desirable and actual implements became a medium of exchange. Later, smaller bronze replicas of them served this purpose. They represented various types of tools used in the states of Qin, Han and Wei, all on the central plain where people engaged mainly in farming. The biggest bronze spade coins measured 4-5 inches long and weighed 30-40 grams, the smallest, 5-6 gm. Like their iron originals, the earliest spade coins still had a cylindrical socket where the spade handle would have fitted. Later spade coins had a flat, solid head.

In the states of Qi and Yan along the northeastern coast, where people lived more by fishing and hunting, knives became a medium of exchange and the prototype for coins. Most spade and knife coins bore the name of the place where they were made. China is the only place in the world where such "implement" coins are known to have been used.

Round coins with a hole in the middle, thought to have evolved

* Some of them are cai 财 (wealth), gui 贵 (expensive) and jian 钱 (cheap).

'Ying yuan' gold ingots could be broken up into coins. This one (State of Chu, 770-221 B.C.), excavated this year in Jiangsu province, is the largest so far found in China.
Cowrie shells, China's earliest currency—real (above) and bone replica—came into use before 16th century B.C.

China's earliest metal money, bronze copy of shell.

Early currency, State of Chu (770-221 B.C.): Improved bronze shell with monster-face and first real coin cast in gold with characters "Ying" for Chu capital and "yuan", a measure of weight.

Flat miniature spade minted 257 B.C. at Anyang (in today's Henan province), State of Qin.

Three-holed flat spade coin minted 3rd century B.C., State of Qin.

The new iron tools became an exchange medium. Early (8th-5th century B.C.) spade coin still has handle socket. Minted at Anzang (now Zhengding, Hebei province).
Round coin minted at Anzang for State of Zhao.

Bronze Western Han dynasty 'wu zhu' minted 115 B.C. continued in use for 700 years.

Bronze Qin dynasty (221-207 B.C.) 'ban liang' was used throughout China after Emperor Qin Shi Huang unified the country and currency.

Knife coin (7th-6th century B.C.) made at State of Qi's Qicheng (now Linzi, Shandong province).


Following A.D. 621 characters gave name of coin ('tong bao'—current currency) after name of reign or period. Right: Reverse side.
Introduced in the early 11th century, paper currency (as above) became sole legal tender under Kublai Khan in the 13th century. Marco Polo noted.

Coin of 3rd century Yellow Turban rebels reads 'Taiping' (their creed, the Way of Great Peace) and 'bai qian' (hundred cash).

Issue of Taiping Heavenly Kingdom (Taiping Tian Guo) government set up during uprising 1850-1864.

China's earliest silver dollar (1888) to replace Mexican dollars then circulating.

Silver coin, 1914, bears head of Yuan Shikai, then President of the Republic.
Inflation under Kuomintang government in 1940s brought notes of huge denominations: 10,000 yuan ‘fabi’, 250,000 yuan ‘guanjin’, six-billion yuan note issued by state bank in Xinjiang.

In semicolonial old China notes issued by foreign banks were also legal tender. Left to right: Yokohama Specie Bank Ltd. (Japanese) 1902, Hongkong and Shanghai Banking Corp. (British) 1923, International Banking Corp. (U.S.) 1905.

Branches of the St. Petersburg Russo-Asiatic Bank issued notes in 1896 for use in China’s Xinjiang and northeastern provinces.
from the spinning whorl which also had a hole, appeared in the Warring States period and were used mainly in the states of Wei and Qin. Existing for a relatively short period of time, these form a link between the “implement” currency and later true coins.

**Important Ancient Coins**

Certain coins have had a far-reaching influence and occupy a pivotal position in the history of China’s currency.

1. The ban liang. After the State of Qin conquered the other warring states and brought them under one rule in 221 B.C., its head, the first emperor, Qin Shi Huang, abolished the coinage of the former states and instituted a new one for the whole country. The ban liang was one of the two kinds of metal money used. It was a round bronze coin with a square hole in the center, and the characters 半两 (half ounce). These round coins with a square hole set the shape for coins in China for the next 2,000 years and money was frequently carried in strings of them. One theory on the reason that the hole was made square is that it was intended to represent the earth, which, according to the ancient view of the universe, was square, while the sky was round.

The other metal money in the Qin dynasty was the yi coin of gold weighing 20 ounces. It was used mainly for rewards by the emperor and gifts by aristocrats, while the ban liang circulated among the people.

2. The wu zhu. Minted in 118 B.C., during the reign of Western Han dynasty Emperor Wu Di, these continued to be the main currency until A.D. 621. It is rare in world history that a currency was used for so long a time.

The wu zhu coins can be said to have developed through a long period of trial and error. In the early days of the Western Han dynasty (206 B.C.-A.D. 8) the ban liang continued to be used. These, however, were heavy and not convenient to carry, so Emperor Han Gao Zu ordered the minting of what came to be known as “pod” coins. These had such a big hole in the middle that the sides resembled four pea-pods joined into a square. With the denomination of half an ounce, they actually weighed only an eighth of an ounce. This led to inflation and soaring prices, and currency reforms were attempted many times throughout Western Han. The emperors even licensed the private minting of coins, which flooded the market with poor-quality, depre-ciated money and did much harm to the people. Against this background the wu zhu coins came into use.

The wu zhu weighed four grams and was 2.5 cm. in diameter, with a hole one cm. square. Its smaller size and weight is no doubt one reason for its endurance through the centuries. It weighed about the same as the drachma of Greece and denarius of Rome, so this weight seems to have proved its convenience elsewhere too.

The value of the wu zhu metal was higher than that in the previous depreciated coins. An indication of its value can be seen from the fact that when first introduced 20-30 wu zhu bought one hu (five deciliters) of rice.

Two characters of the name appeared on the coin in beautiful, dignified calligraphy, and the whole was of better workmanship than the old ban liang.

3. The kai yuan tong bao. Introduction of this type of coin in A.D. 621 under Tang dynasty Emperor Gao Zu marked a turning-point in China’s currency history. After that, characters on the coins no longer told the weight. Instead, after the kai yuan (new reign) tong bao, they gave the name of the coin preceded by the name of the reign or portion of reign in which it was issued. (Thus during the 300 years of the Northern and Southern Song dynasties, for instance, coins minted by 18 emperors bore 48 titles.) Coin names included tong bao 通宝 (current currency), yuan bao 元宝 and zhong bao 重宝 (heavy currency).

**Rebel Issues**

Many rebel peasant armies also issued their own currency or coinage. Most of these have been lost so those which have come down to us are rare historical treasures. The earliest are believed to be those of the third century A.D. Yellow Turbans, who followed a religious belief called the Taiping Dao (Way of Great Peace). They produced the taiping bai qian, of hundred-cash value.

The largest insurgent coinage was that of the Taiping Heavenly Kingdom, the rebel state set up during the famous Taiping Uprising of 1850-64. They included copper money in various sizes, and coins of gold and silver. Some were made at Nanjing after it became the Taiping capital in 1853. They bore the characters for Taiping Heavenly Kingdom, or for the last two words alone, or the words sheng bao 圣宝 (divine currency).

**Calligraphy**

Decorative effects on Chinese coins are achieved not with floral or, other designs, but mainly through artistically-written characters. Coin inscriptions can be re-

Earliest paper note found in China, a woodblock-printed ‘blank check’ from the early 11th century, on which amount was written at issue.
regarded as a living record of the evolution of the Chinese written language and its calligraphy.

Prior to unification under the Qin dynasty, coin writing was in the da zhuang (great curly script) style, which was ornate and differed from state to state. After unification Emperor Qin Shi Huang systematized the writing and promoted a single style throughout the country known as xiao zhuang (small curly script). Inscriptions on most coins from the Qin ban liang down through the wu zhu of the Sui dynasty (A.D. 581-618) are in xiao zhuang style, but some are in the more straight-lined li shu (clerical script) style.

The four characters on the Tang dynasty kai yuan tong bao are said to have been written by a famous calligrapher named Ouyang Xun. From Tang to early Northern Song (late 10th century) li shu gradually became the main coin style. After the founding of the Northern Song dynasty in 960, as calligraphy developed as an art, coin inscriptions were written in a variety of the newer styles.

Many inscriptions were written by the emperors themselves. Those for the chong ning and da yuan coins were in the handwriting of Song Hui Zong, the next-to-last Northern Song emperor. Though fatuous and self-indulgent, he was well-versed in painting and calligraphy. His coin inscriptions in a fine vigorous style are treasured for their artistic value. The writing on a Song coin called the yuan feng tong bao, in li shu style, is said to be that of Su Dongpo, a famous poet. It is often called the “Dong Po yuan feng.”

Particularly artistic were coins issued during the 16 years of the Wang Mang interregnum (45 B.C.-A.D. 23) between the Western and Eastern Han dynasties. After usurping power from Western Han and declaring his own dynasty, Wang Mang issued many kinds of money, including some in shapes long obsolete, using a “national style” to gain acceptance for his reign by “restoring ancient ways.”

One, the cuo dao, was remarkable for its exquisite workmanship. It was shaped like a knife, but with a square-hole circular coin at the handle end. Cast in super-high quality copper, after it had been in circulation for a time it had an iridescent sheen. A great many counterfeit cuo dao coins were made in later periods, but their makers were never able to duplicate the unique process, so their products, when compared with the originals, reveal themselves as fakes.

**Birth of Paper Money**

China’s earliest paper money was the jiaozi (meaning receipt) issued in the early 11th century, predating by more than a century Europe’s first paper notes issued at Venice in 1171. They were invented out of necessity. More and more coins were needed for the thriving commerce of the Northern Song dynasty. This caused a particular problem in the rich Sichuan basin, which was deficient in copper. Iron coins were used instead, but they were heavy and crude and of a minute denomination. Twenty thousand of them were needed to buy one bolt of silk.

During the reign of the Song Emperor Zhen Zong (998-1021) an official named Zhang Yong went to Sichuan. Seeing how inconvenient it was for the people to carry so much heavy money, he brought together 16 rich local merchants to discuss the problem. They agreed to issue a paper note to replace iron coinage. The early woodblock-printed jiaozi bore only a simple design. It could be circulated or cashed in for 1,000 iron coins.

In 1024 the Song central government took over the printing of jiaozi. This was the first time in China’s history that paper notes were issued by the government.

Kublai Khan (reigned 1260-1294), first emperor of the Yuan dynasty, banned all metal currency, and paper notes became the sole legal tender, a fact which Marco Polo noted in his account of his travels.

**In Semicolonial Old China**

The Opium War in 1840 reduced China to a semicolonial country. Under unequal treaties imposed on China, to facilitate their plunder of her resources, imperialist interests set up their own banks and issued their own paper money.

With expansion of foreign trade, in the 19th century there was a big influx of Mexican silver dollars much used in trade in the Far East, and by the end of the century they had become common currency in China. In 1890 the Chinese government set up China’s first mechanized mint in Guangzhou (Canton) to strike silver dollars of the Mexican standard to replace them.

The invention of paper currency made it easy for the ruling class in any period to issue it in large quantities and through this “cheap money” fleece the people. This reached its height in China under the Kuomintang government, particularly in the late 1940s, when China experienced an inflation hardly paralleled in history. On the eve of its downfall in 1949, the KMT government deluged the country with worthless gold and silver certificates in phenomenal denominations. One of the largest, issued by the KMT bank in Xinjiang, was for six billion yuan, but its buying power was almost nil. The faster the banknote presses revolved, the more devalued the paper money became. Prices shot up beyond control, and the people suffered greatly. Paper money which would have purchased almost 14 billion bolts of cloth in June 1937 was only enough to buy an inch of cloth in September 1949. When the economy was stabilized after liberation, in November 1951 the people’s government issued a new currency, the renminbi, according to a new monetary schedule.

In China’s long struggle from the 1920s until liberation in 1949 many revolutionary bases were set up under Chinese Communist Party leadership. To counteract the economic blockade by the Kuomintang government and consolidate their economy, they issued their own paper notes. China Reconstructs will publish an article describing them in a forthcoming issue.
Some of China's most striking folk dances have been preserved and developed into performance numbers by the Central Song and Dance Ensemble in Beijing—dances such as the graceful Dai nationality Peacock Dance, which characterizes the good-naturedness and wisdom of the minority women in southwest China and their wish for a prosperous life, and the swirling, twirling Scarf Dance, which was described as "the flame of New China" at the 3rd World Youth Festival in East Berlin, 1951, where it won the first prize. A troupe of 27 dancers and musicians from this ensemble will perform 20 dances and musical pieces at the Asian Festival of Performing Arts to be held in New Delhi, India, this November.

Dance of the Flying Apsaras, inspired by the angel-like creatures on the murals in the Dunhuang grottoes, was choreographed by the famous woman dancer Dai Ailian in the early 50s. It has been performed on stage in China and abroad more than a hundred times and is well loved by audiences. For the performance at the Asian Festival of Performing Arts, two young women in their twenties, Li Shuxia and Lu Chunping, have been chosen. Tall, slender and with long arms, the girls are ideal for this dance. At first they had dif-

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difficulty mastering the skill of manipulating flowing lengths of silk four and a half meters long. Zi Huayun, artistic director of the troupe and the first to perform this dance, coached them in every detail—from the movement of the wrists and fingers to the breathing.

The young girls worked hard to comprehend the essence of the ancient art. They read books about the Dunhuang murals and listened to the dance music in the evening after their painstaking practice during the day. When they performed after a month's rehearsal, people were impressed by the beauty and fairylike quality of their style. The long silks seemed to be an extension of their arms, at the same time shaping beautiful patterns in the air.

"Dance is a youthful art. You have constantly to replace old dancers with young ones; only in this way can the art of dance keep on. It is always my pleasure to see the young people surpass me and dance better than I do," Zi Huayun says.

Seven newly-created dances reflect the life and spirit of people today, covering the dance arts of several nationalities in China: the Han, Uygur, Tibetan, Mongolian and Tajik.

In Horsemens's Dance seven male performers in Tibetan herdsmen's attire depict the latter's daring and skill in taming horses, their sophisticated horsemanship and their jubilant gatherings. Since it was first performed in 1980, it has always got encores.

In Spring on the Pastureland girls and boys dressed in Mongolian robes move their arms like the wings of eagles, symbolizing soaring joy and freedom on the vast expanses of the grassland. The dance expresses the feelings of the Mongolian herdsmen at the great changes in recent years.

Cheerful Music of Rawap is a light Uygur-style dance with a hint of humor. Three young men and a girl entertain the audience with a comic theme that throws light on the life of young people.

These three dances were choreographed by Xin Bo, a veteran dancer who has become a prolific choreographer in recent years. His frequent visits to the pasturelands of Qinghai province and Inner Mongolia have given him new inspiration for artistic creation.

The solo Sea Wave will be performed by twenty-five-year-old Han Huiyi, an excellent new dancer. The dance personifies a seagull braving rough seas. A masterpiece by the famous choreographer Jia Zuguang, Sea Wave is based on Chinese folk dance and assimilates some movements from the ballet. It won prizes for both choreography and performance at the Dalian Dance Contest in 1980.

Yao Zhuzhu has been acclaimed as a dancer of great versatility. In a recital with two other dancers last spring, she portrayed a graceful flying apsara, a passionate gypsy girl, a gentle and soft Tajik girl, and even a funnily drunk sculptor in a satirical masked dance. She took up dancing at the age of eight and graduated from Beijing Dance School in 1954. In the 60s she was one of the main performers in the famous dance-drama Mermaid. At the Asian Festival of Performing Arts she will perform six dances.

The three singers of the troupe will present Chinese folk songs. A traditional Chinese music ensemble will play selections of classical Chinese music. The Chinese artists will also present Indian songs and the Alarippu dance.
New Finds of Striking Beauty on Show in Xi'an

SO RICH in history is Shaanxi province and its capital Xi'an that relics of previous ages are always turning up—or rather being turned up. One hundred forty-five of the most outstanding of recent finds have been placed on exhibit in the Shaanxi Provincial Museum in Xi'an.

A bronze ding ritual cauldron considered to be the most beautiful of the round tripod type, and also the heaviest cauldron ever excavated in China, can now be seen by the public. Weighing 226 kilograms, it stands 122 centimeters high, only slightly smaller than the tallest such vessel now known. It is judged to have been made not later than the reign of Zhou dynasty King Zhou Kang in the 11th century B.C. Its relatively simple, stylized decor is typical of the early Western Zhou (11th century-771 B.C.) bronzes.

The vessel was unearthed from an ancient tomb in Chunhua county near Baoji, straight west of Xi'an in the western part of the province. This is held to be the place of origin of the people who established the Zhou dynasty. A great many Zhou bronzes, including the earliest and most typical, have been uncovered there.

A TALLY consisting of a piece of bronze, generally in the shape of a tiger, which fits together with an identical piece held by another person, was used by the ancient emperors to signify authorization to move troops. One such tiger tally from the Warring States period (475-221 B.C.) has been found in the western suburbs of Xi'an. On the tiger's head is the character Du (a place now in the southern part of the city) indicating that the person who held one half commanded the troops there. Forty characters in gold on the left half state that no more than 50 soldiers could be moved without having in hand the right half in confirmation from the emperor. No commander could send out these troops without both halves of the tally unless in an emergency situation when signaled by a line of beacon fires. Bronze tallies have been found before, but one like this with incised characters filled with gold is very rare.

TWO HUNDRED relics discovered just east of Maoling, the tomb of Han dynasty Emperor Wu Di (r. 156-87 B.C.) were the main attraction at the exhibition. It is thought they may have some relation to the tomb, which has not yet been excavated, located near the remains of the Han dynasty capital, Chang'an, 40 kilometers northwest of present-day Xi'an. They include a gilded horse in lifelike style so that the lines of its well-proportioned body and well-developed muscles can be clearly studied. The horses of the Han dynasty are a famous breed. Found in the same place was an incense burner in gold and silver with a design of dragons on the base and undulating mountains amid encircling clouds carved on the cover. Both parts bear inscriptions of great value for historical study.

Many of the earliest bricks and tiles from palaces and tombs of the Qin (221-207 B.C.) and Han dynasties have been found in Shaanxi province. A large find of hollow bricks from Western Han were uncovered at Ta'erpo in Xianyang, northwest of Xi'an, which was the Qin dynasty capital. These are from a slightly later period, the reigns of Han dynasty emperors Xuan Di and Yuan Di between 114 and 33 B.C. as marked on the bricks. They have designs in relief or executed in fine raised lines of dragons, tigers and sparrows. One displayed at the exhibition shows two tigers.

ONE of the most exquisite pieces is a miniature altar of gilded bronze said to date from the year 584 during the Sui dynasty, whose capital was at present-day Xi'an. By that time Buddhism, introduced into China in the first century A.D., had become an important part of Chinese culture. Buddhist statuary made up the greater part of her plastic art. The exquisitely crafted piece consists of 23 separate units: the Buddha in the center seated on a lotus throne with a nimbus of lotus petals behind his head, on either side a Bodhisattva and the "strongman," a pair of guardian lions outside the altar rail firmly attached to the main statuette and others. It bears the name of the sculptor Dong Qin. Never has a Sui dynasty piece of such fine gilding been unearthed.

Miniature shrine.
A Suburban Commune

WANG MINGZHEN

For just over a year now, China Reconstructs has been carrying articles on different forms of the agricultural responsibility system in use around the country. In October and November 1981 we reported on parts of Anhui province which are among the poorest in the country, with relatively bad natural conditions, and their system of contracting responsibility mainly on a household basis. In August and September 1982 we described Huaxian county, Hunan province, which is more near the average economically, and where responsibility is assigned mostly to individuals or groups who do specialized jobs such as caring for certain crops or fields, raising chickens or pigs, and so on.

In this issue we look at the Shaohe (Shahe) Commune, 22 kilometers north of Beijing. Its proximity to a large city gives it advantages, and it can be classed among the more prosperous communes in China. It uses still another form of the responsibility system.

FROM 1978 to 1981, Shahe Commune's total income at the production team, brigade and commune level increased at an average of 29 percent a year. grain output by 9 percent a year, and per capita shares of grain by 38 percent annually. Per capita incomes have reached 333 yuan a year.

At the same time, the number of commune members doing farmwork has actually decreased (36 percent of the labor force now work in commune, brigade or team operated factories). Commune leaders attribute this greater prosperity to better economic management and a form of responsibility system suited to their conditions.

Essentially, the form involves contracting responsibility to small collective groups below the production team level. Some specialized jobs are also contracted to individuals. Incomes are linked both to group and individual output. Decisions are democratically made. At the same time, and this is very important, planning and management are very well developed and collectivized.

Commune, Brigade and Team

In 1981, for instance, in line with the state plan and local economic development, the commune set targets for its 17 brigades in terms of: (1) grain, (2) edible oils, (3) vegetables, (4) number of pigs, (5) production costs, (6) income from various sidelines, (7) income from labor services, (8) income from transport services, (9) profits from brigade-run industries, and (10) funds distributed to the collective and to individual members.

After discussion, the targets were divided among the brigades' 63 production teams and further subdivided among 153 work groups (each consisting of about 10 persons). Contracts were signed at every level. Within each work group, individual work stations and quotas were agreed upon, so that specific responsibilities were well understood.

The Second West Village production team and its work groups are fairly typical. Ji Chengfeng, 39, is a brisk and capable woman and leader of the team. When the 1981 team targets were issued, Ji thoroughly discussed the division of labor with team members, and then sub-divided the team into five work groups—four to grow grain and the fifth to grow vegetables. (The latter, greatly in demand in Beijing, are an important part of the commune's output.)

Contracts were signed with each of the work groups covering (1) the area of land to be worked, (2) number of workdays required, (3) cost, (4) total output and (5) profits to be handed in to the state and collective.

The small groups may work independently, but they do so within the scope of collective management and planning. Contracts clearly stipulate that the team owns all land and major means of production such as large farm equipment (of which there is a relatively large amount here, purchased with collective funds). The team not only makes up a production plan for each group, but also guarantees supplies of seeds, chemical fertilizer and pesticides and provides technical advice. Thus the collective provides organizational and material benefits that individuals could not manage on their own, while individual initiative and hard work is rewarded. Under this system, the collective has been strengthened and output and variety of products increased.

WANG MINGZHEN is on the staff of the agricultural department of Beijing's Municipal People's Government.
Work Group No. 1 of the Second West Village team is made up of 12 women from different households. On 8.7 hectares of land, the group’s 1982 target was to grow 52.6 tons of grain (mainly wheat and maize) and turn over to the state a net profit of at least 8,483 yuan. Their budget included just over 4,000 yuan for seeds, fertilizer, pesticides, electric power, plowing services and small farm tools. The 12 women together were expected to spend no more than 7,200 workdays on all of this.

The group’s leader is Liu Suzhen, a short, middle-aged woman with a gentle disposition. According to her, the group produced 16 tons extra over the quota in 1981, earning a total of 1,276 yuan or an average of 106 yuan per capita. This 106 yuan was a bonus earned in addition to their regular pay of 638 yuan, or about 2.9 yuan for each day worked.

However, this 744 yuan did not represent the group members’ whole income. So long as they meet their responsibilities to the group, they can take on other paying tasks as well. Liu Suzhen herself, for example, earned over 1,500 yuan in 1981 for 500 workdays*, 250 within the group and the rest in collective work outside the group. In addition, with the help of her husband she raised three pigs at home, earning another 150 yuan.

The families of all 12 women of the group have now moved into new houses, nine of the families have bought new TV sets, and all have bank savings. They are also eating much better than before, with a higher proportion of protein in their diet.

Group member Wang Xinying, who earned 1,331 yuan through collective work last year, is careful to explain that her family hasn’t bought a TV set not because they can’t afford it, but because they don’t want to distract their children from schoolwork. Much of her income went into a savings account, and 200 yuan was loaned to a neighbor who was building a new house. Wearing a neatly tailored pink blouse and leather shoes (the latter beyond the reach of most peasants a few years ago, and still rare outside of city areas), Wang Xinying is obviously delighted with her family’s economic* A workday represents a task, such as weeding a certain number of rows, rather than a time period, and a fast worker can finish a job in much less than a day. With peasants under the new system paid according to work done, and able to earn money in a variety of ways, productivity has increased considerably.

(Continued on p. 69)
Two Traveling Diplomats

WEI TANG

Qin had to ask his sister-in-law to give him something to eat. "We don’t even have firewood for cooking, to say nothing about food," she snapped.

The alliance was formed in 333 B.C. with Su Qin as head, he was already Prime Minister of the State of Zhao. In order to make it effective, he was given the seal of the prime minister of each of the other states.

This time when he went back to Luoyang, the king of the almost defunct old Zhou dynasty still holding on there had the roads swept and sent a minister to greet him. His mother eagerly came down the street to welcome her now respectable and richly clad son. Because of her former attitude, his wife did not dare look him in the face. His sister-in-law knelt before him.

"Why do you show me so much respect?" he asked, feeling uncomfortable.

"Because you have a high position and money."

"It’s money that counts, even with one’s relatives," Su Qin sighed as he rode them home in his chariot. He built a magnificent house for them and distributed the money he had brought with him among the poor and those who had once helped him.

ZHANG YI, too, had an auspicious beginning. He had gone to the State of Chu, and was once a minor guest at a banquet. While the King of Chu (most of the dukes under the Zhou dynasty were now calling themselves kings) was showing his guests a priceless piece of jade he had acquired, there was a sudden downpour and the jade disappeared. As the most humble and shabbily dressed among the guests, Zhang Yi was suspected. He was beaten black and blue to force him to confess he had taken the jade, but he still wouldn’t admit it. He

SU QIN (died 310 B.C.) originally had no intention of opposing the State of Qin. Going there from his native home in Luoyang, he found that his particular ideas for helping Qin were not wanted. He had to go back home in defeat, and in rags, having spent his resources.

"You’d have done better if you had become a merchant as I told you to," his mother complained, "but you insisted on getting an education and becoming an official. Now look what you’ve come to!" His wife sat before her loom weaving without lifting her head, as though they were strangers. Su

The age of the breakup into separate states was the age of the traveling philosopher.

In the Spring and Autumn and Warring States periods (772 to 221 B.C.) it was possible for a scholar from one state to go to another and achieve a high position. As the states were continually at war with each other, their rulers were eager to get new ideas. Some of these scholars, genuinely sought to solve problems of the age, others have been called adventurers. Sometimes they had considerable influence on events. Two of these scholars famed for their diplomatic activity in Warring States times were Su Qin and Zhang Yi.

THE STORY of Su Qin and Zhang Yi reflects the conflict between the two main choices of the age: to go along with the powerful State of Qin, which wanted to absorb the other six main states to the east (called the vertical alliance) or to unite the other states to oppose Qin (a horizontal alliance). Su Qin advocated the former, and Zhang Yi the latter, and were among those known as the “crisscross philosophers.” Both were of humble origin and had been fellow-students under a well-known debater.

Stung, Su Qin decided he’d have to come up with a better political scheme. He spent the next two years making an intensive study of the political and military successes and failures of every state, often working right through the night, keeping awake by pricking himself with an awl till blood came. His conclusion was just the opposite of his former position: now he wanted to unite the six states against Qin.

He convinced the Duke of Yan of the wisdom of his course and became the latter’s special ambassador to the other states. When

Su Qin trying to sell his plan for unity against Qin.
returned home battered and bruised. His wife wept, “If you hadn’t become a scholar and pursued fame and honor, you’d never have got this beating. Now stay home after this.” Zhang Yi opened his mouth wide and said, “Is my tongue still there?” Of course it was. “As long as I have my tongue to spread my ideas, I’ll be able to make it.”

When he recovered he sought out his former fellow-student Su Qin, hoping to get help. To his surprise, Su Qin treated him coolly. Su was entertaining guests when Zhang got there and kept him waiting in the corridor till noon. Many extravagant courses were served, but Zhang Yi was given the food of a servant.

They finally got to talk and Su Qin said, “You have greater ability than I, it is only that I have been luckier. One word of recommendation from me could make you somebody. But if you don’t live up to my expectations it will ruin my reputation.” Offended, Zhang Yi stood up and left without a word. He decided to try his luck on the other side—in the State of Qin.

Su Qin later told one of his assistants in confidence that he had deliberately wanted to infuriate Zhang Yi and drive him over to the side of Qin so that he could make use of him over there. Su Qin sent his men secretly to Qin with a handsome sum to establish connections there for Zhang Yi. Thus Zhang Yi eventually became a trusted minister of the Duke of Qin.

When Su Qin’s man finally revealed Su Qin’s real intention to him, Zhang Yi was moved to tears. “Su Qin is smarter than I,” he said, “but I’ll never forget what he has done for me. As long as he lives I will not do anything to counter his plan.”

Su Qin, however, was assassinated not long afterwards by a rival in the State of Qi. After his death Zhang Yi furthered his own plan by disrupting the unity of the other states and trying to win them over to Qin. Su’s alliance had kept Qin away for a while, but in the tide of history it was Zhang Yi whose plan succeeded as Qin conquered the other states one after another.

**A SUBURBAN COMMUNE**

*(Continued from p. 69)*

situation and the new system that helped bring it about.

**Industries and Sidelines**

This all-woman farming group represents something of a trend in this commune. The husbands all work in collective industrial enterprises or sideline occupations run by the team or brigade. Labor productivity throughout the commune has been raised so much in the last few years that about 2,000 people have been freed from basic farmwork to do other things. The reason behind much of the increased productivity—and, according to the women, the reason they find it easy to do the work by themselves—is that here most of the heavy farmwork has been basically mechanized.

In 1981 there were eight commune-run factories and 67 run by brigades and teams producing clothing, furniture, bricks and tiles, rugs, knives and scissors, paper boxes, enamelware and other products. The net profits from industries at the three levels reached 3,200,000 yuan in 1981, 47.4 percent of the commune’s total income. In terms of technical advice from established factories and a ready market for their products, nearness to the city has been an advantage in the commune’s increasing industrialization.

In addition to the new industries, specialized agricultural sidelines are flourishing at Shahe—mulberry trees and silkworm-raising, beekeeping, and growing mushrooms. Handicrafts such as weaving articles from straw are also developing rapidly. And despite the reduction in the labor force actually employed in farming, the commune’s 1981 gross grain output was 915 tons over the 1980 figure.

Commune members are now discussing improvements in their responsibility system, mainly in terms of calculating more accurately individual outputs and payments—which they believe will increase production and incomes even further.

Shahe is not typical of all communes, but it is perhaps an indication of future direction—not in its particular form of organization, but in its socialized and highly efficient management, its level of mechanization, its productivity and high living standard, and its industrial growth.

**CORRECTIONS**

In the August 1982 issue, page 36, bottom left, the number of TV sets should read “5,394 million.” On the opposite page, “synthetic fibers” should be “chemical fibers.”
PHOTO taken by a girl still in grade school was one of the seven prizewinners in a national photography contest sponsored by the All-China Journalists Association and the Beijing Journalism Institute last May.

One day in September 1981, as Wang Yao, then 12, was on her way to class at Beijing Experimental School No. 1, she saw several little first-graders striding proudly through the door in stiff new uniforms, which are worn in this school. She whipped out her camera, which she happened to have in her schoolbag and clicked off a shot. Later, Beijing's English-language newspaper China Daily printed it as a contender in its photo contest, and the picture also appeared in the Chinese Youth Daily.

WANG YAO began learning to use the camera when she was five, aided by her father, a worker and an amateur photographer. To practice motion shots, she often photographed her mother as she got supper. On Sundays she visited parks and the zoo with her camera, snapping holidaymakers or the white swans on the lake. To give her a grounding in art, her father enrolled her in a course at the district cultural center. There she began to understand perspective, proportion and lighting.

But it was in grade school that Wang Yao feels she has learned things of greatest help to her photography. It all started several years ago when some foreign guests were to visit the school. Wang Yao begged to be allowed to act as a school photographer.

"You?" The other pupils were surprised, but her teacher encouraged her. "That's fine. Don't be afraid. Don't worry if you don't get good results this time. You'll have more chances." The teacher made her a badge with the words "Red Scarf Photographer" on it. Wang Yao did not disappoint her teachers and schoolmates. She made a very good photographic record of the visit.

WHEN the school is asked to send pupils to participate in some important activity, such as welcoming a distinguished visitor, Wang Yao is always there, taking her place unself-consciously in the ranks of adult newspaper and TV photographers — though she carries a stool, in case she has to stand behind someone.

As Red Scarf Photographer Wang Yao has taken several hundred photos for her school, a dozen of which have appeared in newspapers or been used on TV.

Photography hasn't kept her from other interests, including sports. Recently she was awarded the title "Excellent Pupil" in her school and on a citywide level, a bronze medal for being a "three-good" pupil (morally, intellectually, physically). When she grows up she wants to be — guess what? A photographer.
Ximen Bao and the River God’s Brides

两千多年前，中国河南

Liangqian duo nian qian, Zhongguo Henan
Two thousand more year ago, China Henan

新县有条漳河，常常闹水灾。

Yexian you tiao Zhanghe, chang chang nao shuishai.
Ye county have a Zhang River, often stir up water disaster.

豪绅。巫婆们说这是河神

Haoqin, wupunmen shuo zhe shi Heshen
Despotic gentry, witches say this is river god

生气了，要是每年给他娶个媳妇，

sheng qi le. Yao shi mei nian gei ta qu ge xifu,
If every year give him marry a wife,

他就保佑大家，风调雨顺。

ta jiu hui baoyou da jia, feng tiaoyu shun.
He then can bless everyone, wind suitable rain timely.

从此，每到夏天，巫婆就找

Congci, mei dao xiatian, wupo jiu zhaobo
From then on, every time arrive summer, witch then find

穷人家的姑娘，打扮成新娘，

poor people family's girl, dress up as bride,

亲切地叫他小天。

keqing de jiao ta xiaotian.

以后不回来了，叫她的徒弟去

yi hou bu hui lai le, jiao ta de tidi qu
After not come back, tell her apprentice go (and)

催了。又把一个小巫婆扔进河里。

cuil. You ba yi ge xiao wupo rengjin
Then take a lesser witch throw into river.

Shiounding, jiaoren ba wupo rongjin
Speaking finished, tell people take witch throw into river.

里。

in.

这新娘不漂亮，麻烦巫婆去跟河神说一声，

Zhenning bu piangliang, manfan wupo qu gen Heshen shuo piangliang.
This bride not beautiful. Trouble witch go to river god say a word,

我们另选一个，过几天送去。”

we another choose one, pass few days send.

说完了，叫人把巫婆扔进河里。

Shiuding wahan, jiaoren ba wupo rongjin

river in.

过了一会儿，西门豹又说：“怎么

Guo yi hou, Ximen Bao you shuo: "Zemu
Pass a while, Ximen Bao again say, “How (is it)

还不回来？叫她的徒弟去

hui bu hui lai? Jiao ta de tidi qu
Tell her apprentice go (and)

催了。又把一个小巫婆扔进河里。

cuil. You ba yi ge xiao wupo rongjin

再次催了。又把一个小巫婆扔进河里。

zai cuil. You ba yi ge xiao wupo rongjin

Wupo xuan hui zui de

Witches, they all are

mop ji tiaoge duoshao qian.

on the other hand seize opportunity extort very much money.

因此，有姑娘的人家纷纷逃走。

Cerrui, you guangna de renjia fufu tiaow.
Therefore, have girl family one after another flee.

田地荒芜，新县越来越穷。

Tiandi huangwu, Yexian yue lai yue qiong.
Land waste, Ye county more and more poor.

一年，西门豹到新县当县官。

Yi nian, Ximen Bao dao Yexian dang xianguan.
One year, Ximen Bao arrive Ye county serveras (as) magistrate.

夏天，又要给河神娶媳妇了。

Xiatian, you yao gei Heshen qi xifu le.
Summer, again will give river god marry wife.

西门豹来到河边说：“这新娘不

Ximen Bao laidao hebian shuo: "Zhenning bu
Ximen Bao come to river bank, say, “This bride not

漂亮，麻烦巫婆去跟河神说一声，

piangliang, manfan wupo qu gen Heshen shuo piangliang.

河神，我们另选一个，过几天送去。”

Heshen, we another choose one, pass few days send.

说完了，叫人把巫婆扔进河里。

Shiuding wahan, jiaoren ba wupo rongjin

river in.

西门豹又说：“巫婆她们都是

Ximen Bao you shuo: "Wupo tamen dou shi
Ximen Bao again say, “Witches they all are

女的，不会办事，找个男的

nude, bu hui bianshi, zhao ge nage de

female, not able do business, find a male

去吧！”说着，又把一个最

"Qu ba!" Shuozhe, you ba yi ge zui
goes, again take a most

hui de Heshen rongjin heli.

River God's bride. Wupo

bad despotic gentry throw into river in. Witches

巫婆们害怕极了，都跪在地上

Wupo man haike jile, dou kui zai de在地上

hui de Heshen rongjin heli.

Despotic gentry fear extremely, all kneel at ground on

磕头求饶。

keto qiurao.

Ximen Bao dui luo bangzi

Knock head beg for mercy. Ximen Bao to ordinary people
说：“河水 滔滔 流去, 派去 的 人 都 shuò: “Héshuǐ tāntāo liúqù, pài qù de rén dōu say, “River water surgically flow past, sent people all 不 回来, 哪 有 什 么 河 神, 明明 bù huílái, nà yǒu shénme héshén, míngmíng not return, where have what river god, obviously 是 这 些 坏 人 坑 害 你 们. 今 后, 谁 shì zhèxiē huànrén kānhài nín mén. Jīnbù, shuí these bad people trap you. Today after, who 再 为 河神 娶 嫁 妻, 就 叫 谁 去 zài wéi héshén qù jiā qǔ, jiù jiào shuí qu again for river god marry wife, just tell who 見 河神.” jiàn héshén.” see river god.”

后来， 西门豹 发动 老百姓 治理 Hóulái, Xímén Băo fādòng lǎobǐngzhì zhí 漳河, 水灾 也不 再 发生了。 Zhanghé, shuǐzāi yě bù zài fāshēng le. Zhang River, water disaster also not again happen.

Translation

More than 2,000 years ago there was a Zhanghe River in Yexian county of China’s Henan province. It often flooded. Local despots and witches said this meant that the river god was angry, and that if he were given a bride every year he would bless the people and ensure suitable winds and timely rain. So every summer a witch would take a girl from a poor family, dress her up as a bride, put her on a small reed raft and let it float down the river until it finally sank. Nobody knows how many girls were killed in this way, but local despots seized the opportunity to extort a lot of money. So families who had girls fled one after another, farmland fell to waste and Yexian county became poorer and poorer.

One year Ximen Bao came to Yexian to serve as magistrate. In summer they were again to marry a wife to the river god. Ximen Bao came to the river bank and said, “This bride is not beautiful. Can we trouble the witch to have a word with the river god? We’ll choose another girl and send her to him in a few days.” Then he told the people to throw the witch into the river.

After a while, Ximen Bao said, “How is it she hasn’t come back? Ask her apprentice to go and hurry her up.” Then a lesser witch was thrown into the river. She was followed by three others in succession.

Ximen Bao said, “These witches are all women and can’t handle things well. Let’s find a man to go.” So the worst despot was thrown into the river. The witches and despots were so afraid that they all knelt on the ground and cowered, begging for mercy. Ximen Bao said to the ordinary people, “The river keeps on flowing. The persons we sent all did not come back. Where is there a river god? It’s obvious that these bad persons are tricking you. From now on anyone who tries to find a wife for the river god should be sent to see him.”

Afterwards, Ximen Bao organized the local people to control the Zhanghe River so that there were no more floods.

Notes

The bà 把 sentence.

The character bà 把 means ‘grasp’ or ‘take’.

It is used in one very common sentence form to emphasize the object of the action by bringing it up before the verb. Rěnmén bā wūpò rèngjīn hěi lǐnmen hên de màoyí de ànhòu rén 杭 pò rèngjīn hěi lǐnmen hên de màoyí de ànhòu rén 人们 that the witch throw into the river. Literally: The people took the witch and threw her into the river.

Other examples are: Wǒ bā gāngbǐ dúle 我把钢笔丢了 (I’ve lost my pen). Wǒ bā nà bèn zīdiān mǎilái 他把这本字典买来了 (I’ve bought that dictionary).

Everyday Expressions

1. 闹 lào stir up

2. 生气 shēng qì get angry

3. 破害 kěnhài damage, do harm to

4. 治理 zhílǐ control, govern

Exercises

1. Answer the following questions in Chinese:

(1) Why did the families who had girls flee Yexian county?

(2) How did Ximen Bao do away with the superstition of giving a bride to the river god?

2. Change the structure of the following sentences with bà 把.

(1) 我看了今天的报纸。

(2) 他写信给父亲的信。

(3) 我朋友给了我很多鲜花。
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**CHINA RECONSTRUCTS**
People’s Musician Nie Er

To commemorate the 70th anniversary of the birth of people’s musician Nie Er (1912-1935), the Ministry of Posts and Telecommunications issued on February 15, 1982 a stamp with Nie Er’s portrait on a background of his score for “The March of the Volunteers,” the national anthem of the People’s Republic of China. The stamp measures 30 x 40 mm., with a face value of 8 fen. Perf. 11.5. Color photogravured. Serial number: J. 75 (1-1).

Discovery of Tubercle Bacillus

The centenary of the discovery of the tubercle bacillus by Robert Koch (1843-1910) is honored with a commemorative stamp issued on March 24, 1982. The stamp measures 30 x 40 mm. with a denomination of 8 fen. Perf. 11 x 11. Color photogravured. Serial number: J. 74 (1-1).

Third Nationwide Census

Midnight June 30, 1982 was the moment in history at which China’s population was to be enumerated for the third time in the world’s largest census. On that day the Chinese Post Office issued a commemorative stamp showing the hands of a clock pointing to that time. The stamp measures 30 x 40 mm. with a denomination of 8 fen. Perf. 11.5 x 11. Color photogravured. Serial number: J. 78 (1-1).

Specials on Sable

China’s northeastern provinces are one of the main habitats of the sable (Martes zibellina), highly valued for its fur. The adult is about as big as a housecat, measuring 30-50 centimeters in length. A set of two special stamps entitled “Martes zibellina (Sable) was issued on June 20, 1982.
1. On the Alert, 8 fen.
2. Springing, 80 fen.
Both stamps measure 30 x 40 mm. Perf. 11 x 11.5. Color photogravured. Serial numbers: T. 68 (2-1) to (2-2).

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</tr>
<tr>
<td>Ethiopia</td>
<td>16.00</td>
</tr>
<tr>
<td>Mauritius</td>
<td>17.00</td>
</tr>
<tr>
<td>Nigeria</td>
<td>18.00</td>
</tr>
<tr>
<td>Tanzania</td>
<td>19.00</td>
</tr>
<tr>
<td>Other Countries</td>
<td>20.00</td>
</tr>
<tr>
<td>in Africa</td>
<td>21.00</td>
</tr>
<tr>
<td>Australia</td>
<td>22.00</td>
</tr>
</tbody>
</table>

### Currency Conversion

1. 8 fen = 0.115 US
2. 80 fen = 1.150 US

Orders, please send to a local dealer or CHINA RECONSTRUCTS, P.O. Box 390, Beijing, China.

P.S. Interested in advertising in "China Reconstructs", please send for rates for color black & white and single multiple insertions.