

China

Chinese Women
Criticize Chiang Ching

Reconstructs

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CONTENTS

Chiang Ching's Wild Dream Shattered	2
Chinese Women on Chiang Ching: The Enemy of Women's Liberation	5
Li Chun-kuang and His Big-Character Poster	8
Excerpts from Li Chun-Kuang's Big-Character Poster — Opinions Delivered at a Study Meeting, August 1975	11
Tu-an's Stony Mountains Bow to the Tachai Spirit	13
The Eight-Point Charter for Agriculture (2): Expanding Sources of Fertilizer and Using It Rationally	19
<i>Archaeology</i> : 4,000-Year-Old Clan Cemetery Excavated; A Neolithic Village Nearly 7,000 Years Old	21
Barefoot Doctors Among the Fishermen <i>Chu Hsuan-wen</i>	24
How a Labor Health Research Institute Works	29
<i>Cultural Notes</i> : 'Song of the Gardener'	32
The Peoples of Tali: Multi-National and United	34
The Gaur, Wild Ox of Yunnan <i>Yang Lan</i>	39
<i>Children</i> : Learning from Lei Feng	40
<i>Science and Technology</i> : Important Achievement in Research on the Theory of Functions; New Microwave Communications System	42
Surveying the Source of the Yalutsangpo River <i>Pao Yu-hua</i>	44
<i>Memoir from the Long March</i> : Crossing the Chinsha River <i>Hsiao Ying-tang</i>	46
<i>Language Corner</i> :	51
Lesson 4: The Writing of Chinese Characters For Advanced Students: The Desert Has Changed	

COVER PICTURES:

Front: Barefoot doctors going out to serve at sea, each assigned to a fishing boat. (*Story on p. 24*)

Back: Intensified field care, Kwangsi Chuang Autonomous Region. (*Story on p. 13*)

Inside front: Selecting better rice seeds.

Inside back: Disinfectant spray for sheep.

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Chiang Ching's Wild Dream Shattered

EMPRESS LU, wife of Liu Pang, founding emperor of the Han dynasty (206 B.C. - A.D. 220), was one of Chiang Ching's favorite historical characters. One day in 1976 in talking with Comrade Hua Kuo-feng, Chairman Mao reminded him how Liu Pang had become aware just before he died that his wife was scheming to make herself supreme ruler.

While Liu Pang was living, Empress Lu had used her power as imperial consort to raise members of her clan to positions of great power. After he died she had Liu Pang's chosen successor, son of another of his wives, murdered and his mother maimed — her hands and feet cut off, eyes gouged out, and made deaf and mute, she was left to die in an outhouse. Empress Lu persecuted or removed ministers and generals who had helped found the Han dynasty. She boosted her own followers and conferred princedoms on members of the Lu clan. Though she held only the title of Empress Dowager she was actual ruler for 16 years.

This ruthless and ambitious woman was glorified by Chiang Ching in order to prepare public opinion for her becoming empress. In the summer of 1974 when preparations were being made for the Fourth National People's Congress, Chiang Ching, already working together with Wang Hung-wen, Chang Chun-chiao and Yao Wen-yuan, schemed to have Wang made Chairman of the NPC Standing Committee and Chang premier, and

to form a "cabinet", that is, place their followers in top posts. She made many public appearances saying, "Empress Lu was a great feudal stateswoman." She ordered the propaganda machine under her control to publish special articles lauding the Han empress. She also praised the notorious Ching dynasty Empress Dowager Tzu Hsi (1835-1908), reminding people that the latter had been "actually a reigning empress". Tang dynasty Empress Wu Tse Tien, China's only empress who had reigned in her own right from 684 to 704, was Chiang Ching's idol. Of her she

declared, "Popular sentiment was gratified when Wu Tse Tien became a ruling empress."

"Some people liken me to Wu Tse Tien," she said on one public occasion, "others liken me to Empress Lu. I'm most honored. . . . From a class viewpoint I'm more progressive than they are, but I'm not as capable." On various occasions Chiang Ching declared her intention to emulate Empress Lu. Distorting history, she ordered her hirelings to write articles describing Empress Lu as the wife who "understood Liu Pang better, followed him more closely and lived

Commune members criticize the "gang of four".





Oil workers criticize the "gang of four".

Sketches by Hsu Hsi

with him longer than any others" and asserting that "no one except Empress Lu was able to carry on Liu Pang's unfinished cause".

Thwarted Attempts

The "gang of four" looked upon Premier Chou En-lai as the biggest obstacle to their gaining power. In the winter of 1974, behind the backs of the other members of the Communist Party Political Bureau, Chiang Ching sent Wang Hung-wen to Chairman Mao with false charges against Premier Chou. Chairman Mao criticized Wang sharply and warned him not to get mixed up with Chiang Ching. Chairman Mao also warned Chiang Ching, "Don't show yourself too often. Don't write your comments on documents. Don't form a cabinet under yourself (act like a behind-the-scenes boss)."

A week later Chiang Ching wrote to Chairman Mao saying, "Ever since the Ninth National Party Congress I've been generally idle and have not been assigned any

work. It's worse at present." Long aware of her ambition, Chairman Mao told her, "Your job is to study trends at home and abroad. This is an important task. I've said this to you many times. Don't say you have no work."

Some time afterward Chiang Ching again asked someone to relay to Chairman Mao her wish that Wang Hung-wen be named a vice-chairman of the NPC Standing Committee. Chairman Mao said by way of reply, "Chiang Ching has wild ambitions. She wants Wang Hung-wen to be Chairman of the Standing Committee of the National People's Congress and herself to be Chairman of the Party Central Committee."

The Fourth National People's Congress elected Chu Teh Chairman of its Standing Committee and reappointed Chou En-lai Premier of the State Council, to the joy of the nation. Foiled in her scheme, Chiang Ching ranted, subjected practically all the members of the

Political Bureau to a stream of verbal abuse and had her words relayed to Chairman Mao. Realizing that Chiang Ching was going down an anti-Party road, Chairman Mao said, "After I die, she will make trouble."

Chairman Mao always tried to help and educate people who had made mistakes. In July 1974 he said to Chiang Ching and her gang, "You'd better be careful; don't let yourselves become a small faction of four." In December he again said, "Don't form factions. Those who do so will fall." In May 1975 he again warned them, "Practice Marxism-Leninism, and not revisionism; unite, and don't split; be open and aboveboard, and don't intrigue and conspire. Don't function as a gang of four. Don't do it any more. Why do you keep doing it? Why don't you unite with the more than 200 members of the Party Central Committee? It is no good to keep a small circle of a few. It has always been no good doing so." Chairman Mao declared, "She

(Chiang Ching) does not represent me. She represents herself."

At another time Chairman Mao said of the problem of the "gang of four", "If this is not settled in the first half of this year, it should be settled in the second half; if not this year, then next year; if not the next year, then the year after."

Chiang Ching made several attempts to launch a movement to oust Premier Chou and a large number of Party, government and army leaders. All were detected by Chairman Mao and thwarted. Chiang Ching nursed a burning resentment. Whenever she had a chance she said, "The Political Bureau struggled against me for two months," and of Chairman Mao, "I get a headache every time he chants incantations."

Even before this she had written a poem: "There's an extraordinary peak on the river/ Which is locked in smoky mists/ Usually it cannot be seen/ Only rarely is its magnificence revealed." The "extraordinary peak" was herself, and Chairman Mao the smoky mists that enshrouded her.

Brazen Maneuvers

After Premier Chou died in January 1976 and Chairman Mao's illness worsened, Chiang Ching could not contain her ambition any longer. She again began to show up in all kinds of places declaring, "It's time men stepped aside and women did the managing", "Women should rule the country", "Women can also be ruling empresses. There will be empresses even in communist society. We're going to have communism with an empress."

Two years earlier she had even ordered a gown designed in the style worn by Empress Wu Tse Tien. News of the discovery of Empress Lu's jade seal threw her into ecstasy. "Where is it?" she said. "Bring it to me. This is very important." It was as if by possessing the gown and seal she could actually realize her dream of becoming empress.

In April 1976, upon Chairman Mao's nomination, Comrade Hua Kuo-feng was appointed First Vice-Chairman of the Party Cen-

tral Committee and Premier of the State Council. Foiled again in their bid for top positions, Chiang Ching and her gang began plotting to overthrow Hua Kuo-feng. Without authorization Chiang Ching summoned leading people from a number of provinces and municipalities and started a movement to remove from office a large number of central and local leaders who had consistently followed Chairman Mao's revolutionary line—including Comrade Hua Kuo-feng.

Using a chess simile, she said, "I'm like the pawn that has crossed the river and will not turn back. I'm the pawn that can eat up the 'old marshals'." Bent on creating disorder to facilitate the gang's seizure of power, about this time Chiang Ching tried to stir up trouble in Chengchow, a key railroad center. "Snarl up rail transportation there," she told a henchman in the Chengchow Railroad Bureau, and added the promise, "The State Council can't function any more, neither can the provincial Party committee. One day you'll become provincial Party secretary."

At the time, the "gang of four's" plan was described by one of their followers to his underlings in these words, "We're going to seize power through criticizing Teng Hsiao-ping. Now's the time for a power transfer. . . . Most of the veteran cadres represent old things. . . . We'll overthrow them if we can; if not, we'll drive them away; if we still can't get rid of them we'll badger them until they're sick or injured."

Early in September 1976 Chairman Mao became gravely ill. Hua Kuo-feng and other central leaders took turns staying at his side but Chiang Ching went off on a pleasure trip to the model farm brigade Tachai in Shansi province, taking with her a huge entourage. She thought her dream of becoming empress was about to be realized. On September 5 she was notified that Chairman Mao's condition had become critical, but she did not leave for Peking until hours later, in the meantime spending time playing cards and feasting.

The doctors had expressly forbidden her to move Chairman Mao

but on September 8 while the doctors were away she turned him over causing his condition to worsen.

A Desperate Move

After Chairman Mao's death the "gang of four" had something he had said earlier put out as his "last words" and altered the meaning to "act according to the principles laid down". By the "principles" laid down they meant their intrigues and revisionist practices. Then they ordered a major article published insinuating that Comrade Hua Kuo-feng had tampered with the quotation. Companion pieces talked about how after the death of Liu Pang, Empress Lu carried on according to principles laid down by him. Chiang Ching thought she could get rid of veteran leaders true to Chairman Mao's revolutionary line by charging them with "betraying" the principles laid down. The gang instructed their followers everywhere to create confusion. They plotted a counter-revolutionary coup d'etat for October.

In late September and early October Chiang Ching turned up all over the place, in factories, army units and schools, held banquets and had many photos taken of herself. Her close followers got people to write letters "entreating" her to assume the positions of Chairman of the Party Central Committee and of its Military Commission. Flushed with the hope of victory, when her sycophants wanted to take pictures of her she told them to save their film for the celebration of some "extra good news" about her.

The Chinese people had long been angry about what Chiang Ching and her gang were doing. All those who go against the tide of history inevitably meet their doom. After the 1911 revolution, in which the people under Dr. Sun Yat-sen overthrew China's last emperor, a few careerists tried to restore the monarchy and enthrone themselves, but failed. Chiang Ching's dream of becoming empress also came to an ignominious end when Chairman Hua Kuo-feng led the Chinese people in thoroughly defeating the "gang of four".

Chinese Women on Chiang Ching:

The Enemy of Women's Liberation

CHIANG CHING had never done any work for the women's cause and had never been concerned about it. Yet, beginning in 1974 she suddenly began posing as a "liberator" of women. She started giving talks all over the place "fighting for power for women". Since the "gang of four" were defeated in their anti-Party schemes, in meetings and articles Chinese women have been denouncing Chiang Ching for trying to use the idea of women's liberation to serve her own ends and lead

the women's movement onto the wrong path.

After Chairman Mao became critically ill Chiang Ching went around saying, "It's time men stepped aside and women did the managing" and "Women can also be ruling empresses". In plain language, declared a speaker at a meeting sponsored by the Peking Women's Federation, she was saying it was time that she, Chiang Ching, took over supreme power in the Communist Party and the

country and became a Chinese empress of the 1970s.

One of the points made by the speakers was that Chiang Ching was covering up the class content of the women question. In dealing with women's liberation Marxism has always stressed first of all the class roots of women's oppression. In old China the working people were oppressed politically, economically and ideologically by the exploiting classes. Working women especially were dominated by four

Women miners at the Pingdingshan Coal Mines in Honan province write posters criticizing the "gang of four".





Getting clear on theoretical points through study of Chairman Mao's works before criticizing the "gang of four", Hotun commune, Szechuan province.

systems of authority — political, clan, religious and masculine — which placed them at the bottom of society. They had no rights whatsoever.

Chairman Mao always attached great importance to women as a force in the revolution and was constantly pointing out the correct direction for the women's liberation movement. He said, **"The emancipation of the working women is inseparable from the victory of the class as a whole. Only when their class wins victory can they achieve real emancipation."** In line with this precept, Chinese women fought side by side with the men in struggles against imperialism, the Kuomintang reactionaries and the feudal landlords, and overthrew their rule, thus striking at the class roots of their oppression. Like the men they hold their destinies in their own hands.

After liberation, in an inscription for the first issue of the magazine *Women of New China* Chairman Mao wrote, **"Unite and take part in production and political activity to improve the economic and political status of women."** Later he made

the famous statement, **"Times have changed, and today men and women are equal. Whatever men comrades can accomplish, women comrades can too."**

During the cultural revolution, especially during the movement against Lin Piao and Confucius, women and men got together to criticize the old idea of looking down on women and the habits flowing from it. This struggle enabled the women to further free themselves from the spiritual shackles of thousands of years. As they make more and more contributions to socialist revolution and construction their political and economic status is rising steadily. Women cadres have been developed under the guidance of Chairman Mao and the Communist Party. Today, together with the men, women are exercising power on behalf of the proletariat at all levels, from the Party Central Committee, the National People's Congress Standing Committee and the ministries under the State Council down to the local levels. Equal pay for equal work is the rule for both industry and agricul-

ture. Women are truly "holding up half the sky".

Wilfully disregarding Marxist-Leninist theory, Chairman Mao's views on women's liberation and the background of women's position in China, Chiang Ching said, "The situation in the Party Central Committee is unreasonable. . .", "There is serious male chauvinism." She went on to say, "This situation should be changed," and "Women should rule the country."

Chiang Ching made women's liberation out to be women's struggle against men, seizing power from men and exercising dictatorship over men, speakers at the meetings pointed out. By this she was actually disrupting the unity within the ranks of the revolutionary classes. She was trying to deflect the women's movement from its aims of contributing to socialism and raising the status of women and use women as a force in her own seizure of power.

Phony Women's Champion

Another of Chiang Ching's views that came under fire was the idea that when women become leaders, that is their liberation. In repudiation women speakers pointed out, "Both in countries with bourgeois governments and with proletarian governments, whoever is in power represents the interests of his or her own class, never those of either men or women."

In fact, Chiang Ching herself never rejected all men. Three of the "gang of four" were men. Those who worked for the gang in their attempt to seize power, whether men or women, were put in important positions. On the other hand, she had nothing good to say about women who had devoted their lives to the revolution. She attacked veteran women revolutionaries like Tsai Chang and Teng Ying-chao, wife of Premier Chou En-lai, both of whom had fought beside Chairman Mao and as

leaders of the women's movement. Though Teng Ying-chao is a Vice-Chairman of the National Federation of Women, in 1975 Chiang Ching and her collaborators even objected to her taking part in the preparatory work for the Fourth National Women's Congress. After the fall of the "gang of four" Chairman Hua on behalf of the Party Central Committee proposed that Teng Ying-chao be appointed a Vice-Chairman of the National People's Congress Standing Committee, a point which had been agreed to by Chairman Mao before he died.

An article by a nurse who was assigned to duty with Chiang Ching tells how the latter bullied and humiliated women staff members around her. "Once in the Great Hall of the People," the nurse wrote, "Chiang Ching wanted a drink of water. I was a bit slow in getting it for her. She broke into a torrent of abuse and threw it at me." This nurse was later put under arrest for standing up to Chiang Ching when the latter made unreasonable charges against her. Premier Chou learned of it and told Chairman Mao, who ordered the nurse released.

Many women lashed out at Chiang Ching for her lavish and dissipated style of life and the way she lorded it over people. They pointed out that her becoming supreme ruler would have led to a restoration of the system of exploitation under which working women were oppressed and whatever women's liberation has achieved in China would be lost.

Dream Talk

An article by the Women's Federation of the Ningsia Hui Autonomous Region criticized Chiang Ching's idea that in primitive clan society the woman was the head of the house and as the productive forces develop, it will again be women who will govern, that "women can also be ruling em-

presses. There will be empresses even in communist society".

The fact is, the article points out, in the early stage of primitive communist society where there was yet no exploitation of man by man, mankind was still in a state of savagery. People engaged in group marriages and blood relationship could only be determined by the child's relation to the mother. The productive forces were at a very low level. The division of labor was for the men to hunt and fish, but this could not guarantee a steady source of food, and women were to gather fruits and berries, a more reliable diet. Women were responsible for distributing the food, which gave them a highly respected status in society. But this did not imply that women imposed their rule on men. Chiang Ching in her obsessive drive to be a ruling empress did not scruple at distorting history.

Since society is constantly developing and history moves in a forward direction, mankind is not going back to matriarchal society. It is even more ridiculous to say that there will be empresses in communist society. The emperor or empress in feudal society was the biggest landlord, the biggest power-holder in the system of exploitation. In communist society there will be no classes, no exploitation of man by man. The relationship between people and between men and women will be one of equality and mutual help. So obsessed was Chiang Ching with becoming an absolute monarch that she abandoned the most rudimentary Marxism-Leninism, the Ningsia article stated. When she said women should rule she did not mean enabling working women to be masters of their own destinies, but for herself to become empress and wield absolute power over the working people.

The Red Flag Canal

(In English)

This booklet is about the canal which the people of Honan's Linhsien county built themselves over a decade of hard work with dogged revolutionary spirit. The canal has completely solved the centuries-old problem of drought and water shortage and advanced the all-round development of industry and agriculture. It has brought a new surge to the socialist economy of Linhsien.

66 pages, illustrated 13 × 18.5 cm. paperback

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Li Chun-kuang and His Big-Character Poster

Staff Reporter

ON July 25, 1975, Chairman Mao criticized the "gang of four" for banning the feature film *Pioneers* about the Taching oil field workers. "There is no big error in this film," he wrote. "Suggest that it be approved for distribution. Don't nit-pick. And to list as many as ten accusations against it is going too far. It hampers the adjustment of the Party's current policy on literature and art" (See May 1977 issue of *China Reconstructs*).

In August, after hearing Chairman Mao's directive, Li Chun-kuang, a 35-year-old teacher of the theory of composition at the Conservatory of Music of the Central "May 7" University of Arts in Peking, wrote a *dazibao*, or big-character poster (p. 11). It was a sharp criticism of the "gang of four" and their followers in the Ministry of Culture for their arrogant control over the field of literature and art.

The gang tried to keep the *dazibao* from being known and persecuted Li. The intense struggle that developed around the *dazibao* is an example of the way people fought against the gang's counter-revolutionary activities.

A *China Reconstructs* reporter recently talked with Li Chun-kuang at the conservatory and asked him how he came to write the poster. "The material in the *dazibao* came from many comrades here," he said. "As we discussed

Chairman Mao's directive, our stand gradually took shape. What I did was only to put our feelings into a *dazibao*. As for the 'gang of four', especially Chiang Ching who controlled literary and art circles then, it was only gradually that we realized what they were."

Realization

Li Chun-kuang became a teacher at the conservatory in 1966, the year Chairman Mao launched the cultural revolution. A Communist Youth League member, he threw himself into the movement and soon became leader of a mass organization at the conservatory. When Chiang Ching appeared as the "standard-bearer of the revolution in literature and art", Li Chun-kuang, like others, did not see through her.

As the movement deepened, however, more and more questions rose in his mind. At several mass meetings he saw Chiang Ching lording it over the representatives of the masses, abusing people, implying that they were criminals and not allowing them to speak. On one occasion he heard her say to a young student, "You want to argue with me? You don't even have a right to stand here!" Her behavior made the whole atmosphere of the meeting tense. Isn't this the arrogant style of the bourgeoisie? Li Chun-kuang thought. How can a genuine proletarian revolutionary treat the masses like this?

On the other hand, on May 9, 1970 when Premier Chou En-lai received representatives of the masses from literary and art circles and universities and colleges, Li saw an altogether different atmosphere. Premier Chou talked with them as a friend, asked them what exactly was happening in their places of work and listened carefully to what they had to say. He asked Li what he had studied and whether he had read Lu Hsun's writings. Premier Chou's warmth toward the people left a deep impression on him. There was an essential difference between the attitudes of Premier Chou and Chiang Ching toward the masses.

In 1971, Lin Piao failed in an attempt to assassinate Chairman Mao, fled the country and was killed when his plane crashed. Chiang Ching, until then a Lin Piao supporter, suddenly reversed herself and declared that she had been against Lin Piao all along. "How Lin Piao persecuted me!" she said. More questions rose in Li Chun-kuang's mind. Hadn't Chiang Ching sung the same tune as Lin Piao in the cultural revolution? Wasn't it Lin Piao who had praised Chiang Ching everywhere as "politically very strong and artistically expert"? Wasn't it Lin Piao's accomplice Chen Po-ta who had concocted the title "standard-bearer of the revolution in literature and art" for Chiang Ching? And hadn't Chiang Ching shouted at a mass rally: To Lin Piao "good health forever!"?

Li Chun-kuang saw and heard many strange things in literary and art circles that made him indignant. It was clear that the eight model revolutionary theatrical works were the results of years of labor on the part of literary and art workers under the guidance of Chairman Mao and the concern of Premier Chou. But Chiang Ching and her followers lied shamelessly when they said that the works had been "nurtured with the heart blood" of Chiang Ching. To take the credit for herself, she ruthlessly attacked and persecuted those who knew better — the leaders, writers, artists and musicians who had actually created the new works.

"Gang of four" followers had seized power in the Ministry of Culture. Working together, they viciously discriminated against all who disagreed with them. Many old revolutionary cadres were dismissed from their posts and for a long time given no work. The composer of the famous "Battle Song of the Volunteers", for example, was slandered as a special agent by Chiang Ching and persecuted. In May 1970 Li Chun-kuang heard Premier Chou inquire about the composer before many people at a

reception, but Chiang Ching and her group turned a deaf ear.

Chiang Ching, who considered herself the "standard-bearer of the revolution in literature and art", never called for the study of proletarian theory of literary and artistic creation. Instead, she promoted her own revisionist ideas as a straightjacket for creation in literature and art and negated and tried to kill all works that did not fit her stereotypes. This infuriated Li Chun-kuang whose own study in the theory of music had been made sterile under the control of the Chiang Ching group.

Premier Chou's warm support for revolutionary literature and art won him the love and esteem of cultural workers despite the slander Chiang Ching and her followers launched at him on every occasion. On New Year's Day 1973, Premier Chou received film workers, telling them, "The people criticize the fact that there are too few films. They are right. Not only films, but publications too. These are urgent demands. The people have nothing to read. We should give them what's new and revolutionary." Chiang Ching was present and butted in with "There were lots of

literary and art works before the cultural revolution, but they were all poisonous weeds."

This greatly disturbed Li Chun-kuang. Premier Chou had obviously reflected the desire of the masses. Later Li learned that Chiang Ching had slandered Premier Chou by saying, "Now someone is attacking us by making use of the fact that there are few films. This is class struggle." Li Chun-kuang was indignant. Soon after this, Premier Chou, who was seriously ill, again came under her attack. This time it was under the guise of "criticizing today's Confucius" in the movement to criticize Lin Biao and Confucius. Only the class enemy could be behind this, Li Chun-kuang thought.

These things set Li Chun-kuang thinking. Earnestly he studied works by Marx, Engels, Lenin and Stalin and by Chairman Mao. He became more and more convinced that Chiang Ching was not the "standard-bearer of the revolution in literature and art" but a politically ambitious conspirator. How can we stand this handful of criminals who are ruining our state and trampling on the people? he thought. Countless revolutionaries lost their lives in the fight for socialism. I would give my life with no regret to help keep our country socialist and defend Chairman Mao's revolutionary line. He was deeply stirred.

Facing the Storm

On August 2, 1975, Li Chun-kuang went to a meeting called by the Ministry of Culture to transmit Chairman Mao's July 25 directive on the film *Pioneers*. The words of the directive were like a light in the darkness. Chairman Mao had supported the literary and art workers and sharply criticized Chiang Ching and her followers. Li Chun-kuang was filled with strength. Strange, he thought, that the heads of the ministry did not

Li Chun-kuang (left) talking with a teacher of the department of music.



come to the meeting, and the person who presided just read the directive hurriedly as if to get it over with, saying that it "broadened one's vision" and making no self-criticism.

Long suppressed hatred for the "gang of four" now burst into the open. The meeting to discuss Chairman Mao's directive turned into a meeting to criticize the leaders of the Ministry of Culture. At it, Li Chun-kuang spoke out. His theme was "Bombard the Ministry of Culture!" He knew that a severe struggle awaited him but he was ready to face it. That night he put his speech on paper in bold ink-brush characters and pasted it on a wall of the main building of the conservatory.

His *dazibao* shook literary and art circles and others in Peking. Every day crowds came to the conservatory to read it. They read it under umbrellas in the rain and with flashlights after dark. "Comrade Li Chun-kuang's *dazibao* is right," they commented. "It exposes exactly what's wrong with the Ministry of Culture." Many people shook hands with Li Chun-kuang, encouraging and thanking him. And many warned him that leaders in the Ministry of Culture would retaliate.

People working in many literary and art organizations in Peking and other parts of the country also expressed their criticism of the leaders in the Ministry of Culture. The film *Pioneers* was shown to the public again. Things livened up in literary and art circles.

Test

Chiang Ching was hysterical with rage. Yao Wen-yuan, who controlled the press, declared that the *dazibao* was reactionary. Chiang Ching's followers in the ministry planned revenge. "Li Chun-kuang seems so sure of himself," they said. "He must have backers. We will ferret them out!"

But Chairman Mao's directive had been very explicit and they feared the rising feeling of the masses. They had to act covertly. They used the power of their position to issue secret orders to keep people from reading the poster. They forbade people to copy it and prevented its contents from being reported to Chairman Mao and the Party Central Committee. Nor would they report to them what was actually happening in literary and art circles as a result of Chairman Mao's directive. Biding their time for retaliation, they threatened anyone who copied the *dazibao*.

When Premier Chou died in January 1976, the "gang of four" thought their chance to retaliate had come. They opened fire on cadres and rank-and-file workers in literary and art circles who opposed them. Li Chun-kuang was one of them.

In the spring of 1976 sworn followers of the "gang of four" in the Ministry of Culture began a "criticism and education" of Li Chun-kuang and ordered him to appear whenever he was called. He fought back. Once he sent them a note: "Can't follow your orders this morning. See you in the afternoon. If you want to invite me to another feast, you can keep the delicacies in the icebox until some auspicious hour."

The gang's lackeys took turns questioning him, trying to get him to say he had come to "a new understanding" of his *dazibao*. "I have no new understanding," Li Chun-kuang replied. "The view expressed in the *dazibao* is still my view."

In June 1976 the "gang of four" ordered drastic measures against Li Chun-kuang and formed "a strong group" to deal with him. He was held "under investigation" in a room at the conservatory and forbidden to go home, contact anyone outside or receive family, rela-

tives or friends. During the earthquake in July, Li's elderly parents asked that he be allowed to help build a shelter at home, but were flatly refused. The gang's followers stepped up their campaign against him. They questioned him day in and day out trying to trace his "backers". "It doesn't matter how high these persons are," they said. Their real target was the Party Central Committee.

At the same time they traced all who sympathized with him or had copied his *dazibao*. They questioned his friends, relatives and neighbors.

He was held for 108 days. Waging a stubborn struggle against the gang's intrigues and persecution, he was still certain that Chairman Mao's revolutionary line would finally triumph and that the more frantic Chiang Ching and the gang became the sooner they would collapse. He used his time to study the selected works of Marx, Engels, Lenin and Chairman Mao and learn Japanese. When he was questioned, his forceful arguments could not be answered by his opponents.

Letters of Encouragement

The arrest of the "gang of four" by the Party Central Committee under Chairman Hua Kuo-feng brought Li's freedom. His *dazibao*, now a year old, was published in the *Renmin Ribao* (*People's Daily*) on December 5, 1976. Hundreds of letters of support came from different parts of the country expressing concern for his health and praise for his example. They encouraged him to keep his fighting spirit and never become complacent.

A young commune member wrote: "The ten members of my family gathered to discuss your *dazibao*. We were very moved. My mother said, 'It's the wisdom of Chairman Hua that gave Li Chun-kuang a new life. Because Chairman Hua supports us we have a bright future building socialism.'"

Excerpts from Li Chun-kuang's Big-Character Poster

Opinions Delivered at a Study Meeting, August 1975

CHAIRMAN MAO'S "July 25 directive" has said what we think. Step by step, its significance will become clearer.

But what attitude does the Ministry of Culture take toward it? Some ministry leaders have expressed their view, but I say it is only empty talk. You have committed glaring errors, but why haven't you said a word about mobilizing the Party members, cadres, workers and students under the Ministry of Culture to criticize you and help you recognize and correct your mistakes? Why don't you arouse the masses to help you analyze and criticize the "ten points"? (He is referring to the "gang of four's" ten accusations against the film *Pioneers — Tr.*) In my opinion the "ten points" are absurd theoretically, confused in logic, overbearing in style, and noxious politically.

In cooking up the "ten points", you rejected Marxism, democratic centralism, the mass line and proletarian discipline. You simply have no regard for right or wrong! The present Ministry of Culture was set up after the Great Proletarian Cultural Revolution, but you don't like what the workers, peasants and soldiers like, and your hearts don't beat in unison with theirs. Your "ten points" were a demonstration against the Party Central Committee, showing that you dare to throw overboard what it had decided. Isn't this outrageous?

Every sentence in Chairman Mao's directive is of the utmost importance. "Suggest that it (the film) be approved for distribution." Isn't it a shocking situation that a

film (a good film welcomed by the workers, peasants and soldiers) could not be approved for distribution unless Chairman Mao himself intervened? "Don't nit-pick," he said. "And to list as many as ten accusations against it is going too far." Which one of your ten insolent accusations can stand up, or has any ground at all? They add up to nothing but an attempt to find fault with the film, reverse right and wrong and frame charges and a determination to kill it. Isn't this so? But why? How come such a deep hatred? It's really going too far!

You accused the film of "glorifying" someone. Who does it glorify? Who of us who went to Taching was not moved? The hundreds of thousands of oil workers and their leaders, including, for instance, a Marxist leadership like the Taching Party working committee (now a regular committee), are loyal to Chairman Mao, to the Party Central Committee, to Marxism and to the people. Their tremendous contributions can never be erased. They are glorious representatives of the Chinese working class. Speaking of "glorifying" someone, we may well say that the film glorifies the Chinese proletariat. Is this something unjustified or impermissible? Does it mean that doing a completely righteous thing like this is a crime? You have really gone too far!

CHAIRMAN MAO'S instruction on "the adjustment of the Party's current policy on literature and art" is very important, wise, incisive and timely. The current policy on literature and art followed

by the Ministry of Culture is not keeping pace with the development of the revolutionary situation, nor does it meet the demands of the Party and the people, demands proceeding from Marxism. It should be adjusted.

Take the cadre policy for example. Chairman Mao said that it was wrong to replace rank-and-file cadres whenever the leaders are changed. He stressed the need to unite 95 percent of the cadres, . . . that the Communist Party should appoint people on their merit rather than by favoritism. How far has this policy been carried out by the Ministry of Culture? How many veteran cadres in the ministry have been used under this policy?

Comrade Ma Ke, for instance, has been subjected to investigation for nine years and no evidence has been found to show that he had been an enemy, special agent or renegade. His case is roughly one of following the erroneous line. I'm not familiar with him, nor does he know me. In the past he responded warmly to the call Chairman Mao issued in the *Talks at the Yen-an Forum on Literature and Art*. He was one of the composers of the opera *The White-haired Girl* and wrote a number of good songs. These works have inspired millions of revolutionary fighters to storm the enemy citadel and serve the cause well. Can't this be counted as having done a tiny bit of good?

I heard that when he made a self-criticism before the masses, he concluded it with the remark, "If permitted to do so, I wish to do a tiny bit of work to the best of my

ability for the Party and the people in the limited number of years remaining to me." Did you hear this remark? Why don't you give it a little consideration? Nine years are not a short time. How many nine years are there in a cadre's life? The masses of literary and art circles have long been dissatisfied with such things but don't dare to speak out. Speaking out is itself a crime.

Time and again our beloved Premier Chou En-lai has inquired about some writers and artists and their works, and expressed his concern for them. But some leaders of the Ministry of Culture just turn a deaf ear. You pay no heed to what the premier says. Your institution is under the State Council but you dare to disobey the Premier of the State Council. Our Premier Chou, respected and beloved by the people throughout the country and the world, is loyal to the Party and the people. Under the leadership of Chairman Mao and the Party Central Committee, he has over the past decades worked indefatigably and with utter devotion in disregard of difficulties and peril. The attitude you take toward such a great proletarian revolutionary, such a good cadre of the Party, will never be tolerated by the people in their hundreds of millions!

The Ministry of Culture has not carried out the three-in-one combination of old, middle-aged and young cadres. To speak only about the organizations I know makes me think of a remark by Lenin, "**In place of the old leaders, who hold the common human views on ordinary matters, new leaders are put forth who talk unnatural stuff and nonsense.**" Do we have this situation? I can name names. Why should this be kept secret? Some comrades have sharply pointed out that there is a clique among the leaders of the Ministry of Culture and that you are the worst clique in literary and art circles. I admire the Marxist spirit of those who dare to state the case in such a straightforward manner!

AS to theoretical research, how many articles making a serious study of the writings of Marx, Engels, Lenin, Stalin and Chairman Mao on literature and art have been published by the Ministry of Culture? How many articles making a serious study of Lu Hsun's aesthetic thinking have been published? Nearly 20 years ago Chairman Mao spoke of the integration of revolutionary realism and revolutionary romanticism. This is the most fundamental principle for creative writing in proletarian revolutionary literature and art. When did you seriously study this question? You don't talk about Marx, Lenin, Chairman Mao or Lu Hsun. You only talk about making some great innovations. You are even wiser than Marx! In some of your articles, which are beyond comprehension, even the rudiments of grammar and sentence structure and the basic concepts of language are ignored.

As for studying theory, narrowing the differences between town and country, industry and agriculture, and mental and manual labor and restricting bourgeois right, you keep lecturing others about this every day. But what about yourselves? It seems that Lu Hsun's prediction fell far short of what has actually happened. He told members of the League of Chinese Left-wing Writers in 1930: Don't think that after the revolution succeeds, the masses of workers and peasants will invite you to ride in special cars and eat special food. It may be hard to get brown bread to eat.

How lucky our revolutionary writers and artists are now! Special clothes, special food, special cars. Lenin punished the administrative cadre who raised his salary. Chairman Mao criticized his guard who caught a fish to serve him on the Long March. Marx often went hungry. But today everything is splendid. After the great victory of the revolution, you have become heroes of a special sort and you are entitled to special food, special clothes and special

cars. And this is still not enough. I was told that the literary and art workers will be further classified into the highest level, higher level, high and inferior levels, and so on and so forth. What nonsense! It's utterly ridiculous!

EVERYBODY is dissatisfied. But such things cannot be talked about. If anybody talks about them, it means "bombardment" (concentrated malicious attack — *Tr.*). What does it matter if we bombard the Ministry of Culture? What I say today is a "bombardment". Is the Ministry of Culture really a tiger whose backside no one dares touch? I am deliberately touching it. When did the leading members of the ministry utter even one word of self-criticism? When have you ever tolerated even a few words of criticism or suggestion? Yet every remark of yours is like an imperial edict and everybody must respond "yes" and "all right".

Even Chairman Mao had to say in his July 25 directive, "**Suggest that it be approved for distribution**", because you are the ministry in charge of this work. So the Chairman of the Party Central Committee "suggested" that you handle the affair this way. On May 9, 1970, after giving completely correct and very important instructions on the cultural revolution in the Conservatory of Music, Premier Chou said to the masses, "Do you think these opinions of mine are worth your study?" When have you ever shown a tiny bit of such a great Marxist style?

I hope you listen to these opinions. Retaliate if you like. This will temper me politically, theoretically and ideologically and also strengthen my willpower and moral integrity. That's a good thing.

Chairman Mao's directive serves as a flame, the flame of the great truth of Marxism. Whoever wants to put this flame out will find it impossible. Don't underestimate Chairman Mao's strength. Don't underestimate the people's strength. Don't underestimate the strength of the truth of Marxism.

Tu-an's Stony Mountains Bow to the Tachai Spirit

Staff Reporter



A cement boat with pump in a deep pool at the Nanchiang brigade.

Pushing away a big stone.



ENTERING the Tu-an Yao Autonomous County, visitors are impressed by high mountain ranges with many weirdly shaped rocks. Layer upon layer of terraced fields wind like ribbons around the cloud-shrouded peaks. They are fed by long-hidden underground streams, water from surface rivers carried through tunnels that pierce the mountains, and from ponds and cisterns built in the highlands.

Located in the Kwangsi Chuang Autonomous Region in south China, the county is a rugged limestone mountain area. Out of a total area of 6,750 square kilometers, only 7.8 percent is farmland. Its 750,000 people belong to seven nationalities, the biggest being Yao, Chuang and Han. Farming used to be on tiny plots scattered about the mountainsides. These were so small that not even water buffaloes could be used for plowing, and so oddly-shaped that the only way to refer to the size was by the amount of

seed used. There was little irrigation or drainage, so crops often failed in a drought or were washed away by heavy rains. Even in 1965 the county's grain output was still very low.

Once, the local people were even urged to move away from their soil-poor area. They didn't. They stayed, and in ten years helped the county more than double its grain production — 241,000 tons in 1975 and another good harvest in 1976. When one asks how they did it, the unanimous answer is, "Because we did as Chairman Mao urged and learned from the Tachai brigade."

Moving Mountains

Agriculture substantially improved in Tu-an as elsewhere in

China right after liberation in 1949, but there farmland remained a problem. In the 1960s followers of Liu Shao-chi, instead of calling on the people to stick together and transform their mountainous area, wanted to relocate them on the plains. In such circumstances there was little interest in improving life through collective effort.

The cultural revolution repudiated Liu Shao-chi's revisionist line. The new county leadership formed in 1968 immediately launched a mass movement to learn from Tachai, the national model for agriculture. No sooner had it begun than a handful of class enemies again attempted to incite the people to move away. "We've more stones than soil in these moun-

tains," they said. "We'll only find a better life if we move somewhere else."

Striking back at this tendency, the Party committee initiated a countywide debate on whether to move or try to improve things where they were. The people of all nationalities studied Chairman Mao's statement that "**poverty gives rise to the desire for change, the desire for action and the desire for revolution.**" Chin Han-fang, leader of a production team, who had suffered a great deal in the old society, declared, "Before, the landlords claimed all the land. We didn't have any mountains or rivers to transform even if we had wanted to. Today, under the Communist Party and Chairman Mao,

Learning the Tachai spirit, school graduates who have settled down in the Kaoling commune determine to transform the mountain area.



we are the masters of the land. We shouldn't move away. We should stay right here and make the mountains and rivers serve us."

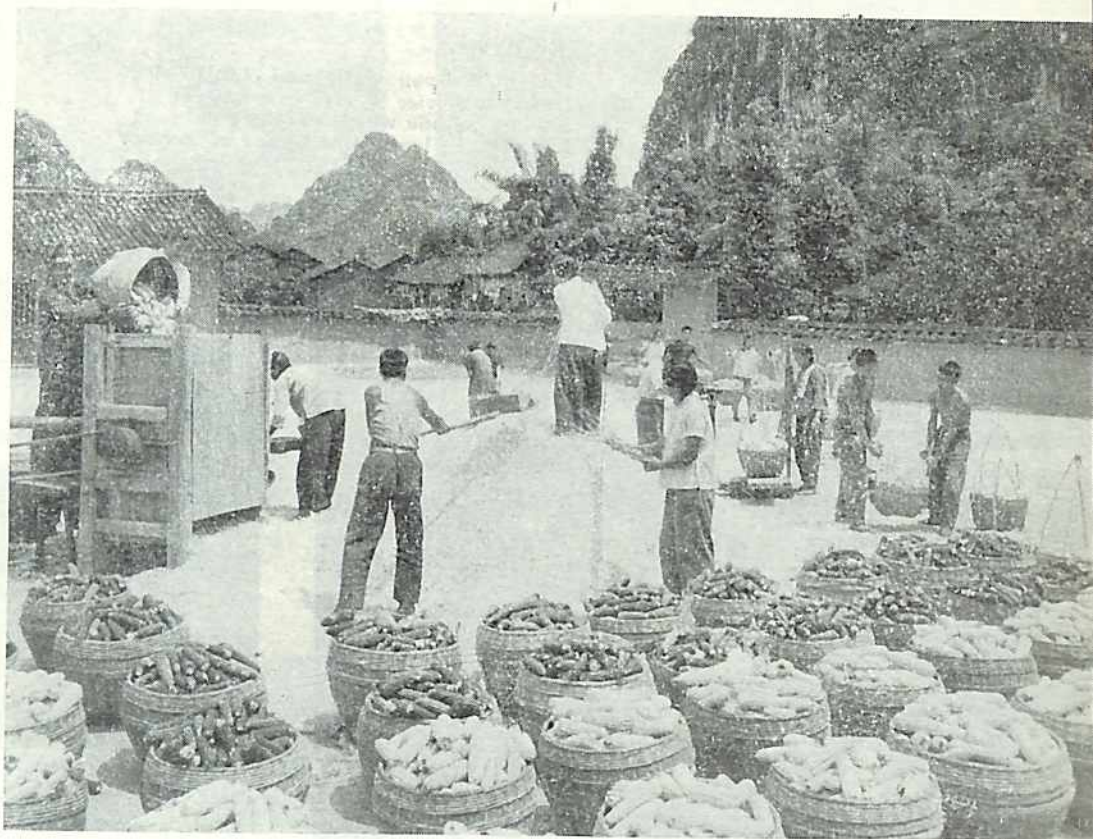
The Party committee organized county and commune cadres and peasant representatives to visit two outstanding units — the Motienling production team of the Paima commune and the Hungtu brigade of the Chenghsiang commune. The former, headed by Chin Han-fang, had connected narrow strips of land into large terraced fields. They had built many small irrigation projects and thus had raised their average grain output to six tons per hectare by 1967. The latter had set up two pumping stations to lift water from the Chengchiang River to the uplands. Thus their irrigated area had increased from less than half a hectare in 1964 to almost 300 hectares and grain output had doubled in four years.

The mass debate and the visits convinced the commune cadres and members. "Instead of moving our homes, we'll move the mountains," they said.

Building New Fields

The Kanwan brigade had a stretch of flat land but it was imbedded with rocks, the smallest the size of a buffalo. In 1969 the commune members felt they could blast it smooth, but where could they find the soil to fill it in? Led by Party branch secretary Wei Ti-hung, they collected earth wherever they could, in deep valleys, even from crevices between rocks on sheer cliffs. For 30 days they blasted away several thousand cubic meters of rocks and brought in 10,000 baskets of soil to build a new 0.06-hectare field.

The story of their tenacious struggle was publicized throughout the county by the Party committee. But some people still thought it did not pay to spend so much effort for so little land. The



Shelling corn.

matter came to a head in the autumn of 1972 when the Nungwang production team of the Pao-an commune decided to transform a rocky stretch near the village. "Build fields on these stones?" a well-to-do middle peasant said. "We'd be better off cutting and selling firewood."

Another debate ensued on whether or not it paid to transform rocky land. "It takes time and effort to build fields," commune member Wei Yuan-hao said, "but once we have them, we'll get grain from them every year afterward and so will our children and grandchildren." Meng Jui-tang, another peasant, remarked, "If we cut firewood individually instead of growing grain collectively, we'll be going back down the capitalist road. Chairman Mao says, 'Only socialism can save China.' We should never go back to the capitalist road where everyone is for himself."

Wei Chung-ying, the production team leader, declared, "When we keep on the socialist road and

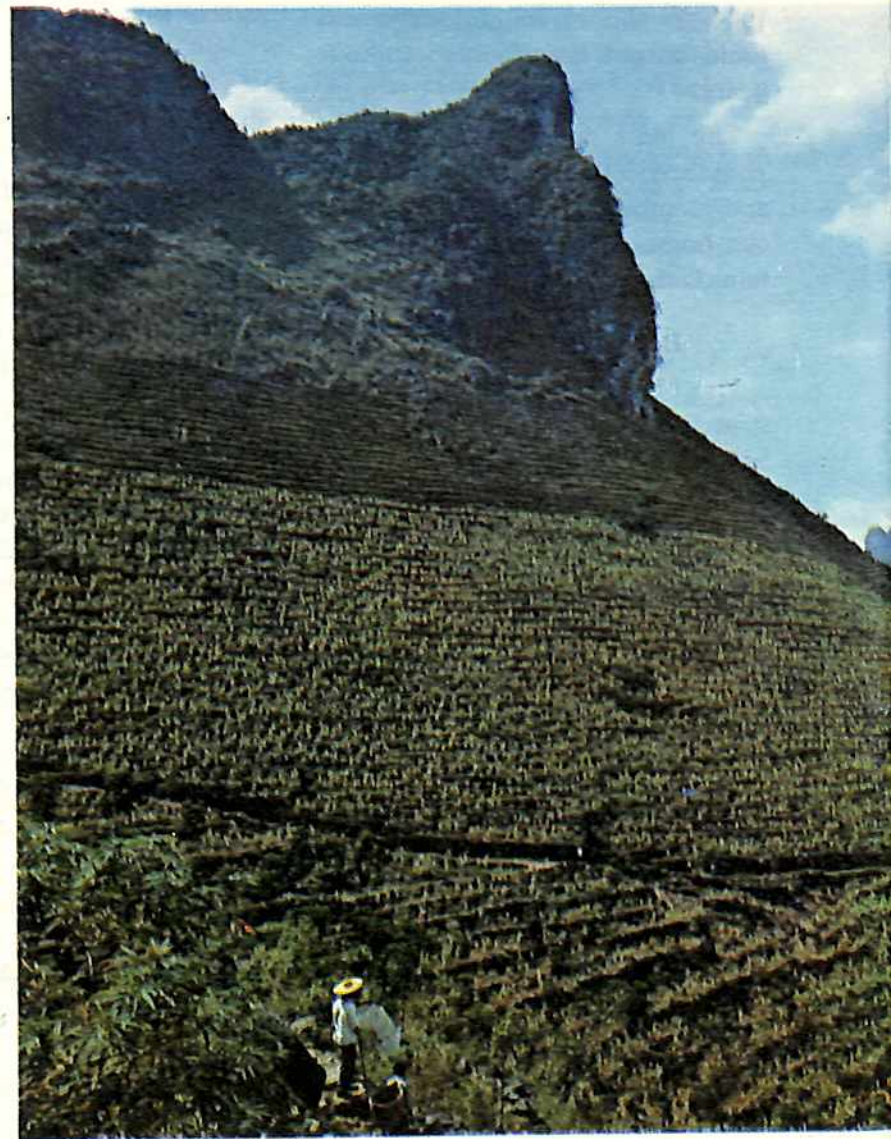
that way increase grain production, we'll be making a contribution not only to our own team but to the country and to the world revolution."

With clearer understanding resulting from the discussions, more and more commune members joined in the project. In three months they created 0.25 hectares of new fields out of rock. Then the team chose 23 strong young people for a special field-building group. Four years later they had the stones blasted from more than two hectares.

Gradually the benefits of building new fields became obvious and a mass movement to do so swept the county. In its southeast corner were 330 hectares of lowland with so many stones it was called the "Sea of Rocks". For this biggest-ever project, the county Party and revolutionary committees organized 5,000 men and women from three nearby communes. Since September 1974 they have converted 207 hectares of the area into fields.

Huang Tsai-yun (left) and Lu Ju-ying, leader and vice Party secretary of the Kaoling brigade which has done outstanding work in leveling the "Sea of Rocks".

This aqueduct passes through a cave on its way to a dry mountain area.





The "Foolish old men's field-building team" formed by four poor peasants of Yao nationality. In seven years on three mountainsides, they made three hectares of fields with a total of 110 terrace steps and 30 kilometers of stone embankments.

Terraced fields built on a stony mountainside.



Leveling the "Sea of Rocks".

Yet, the anti-Party gang of Wang Hung-wen, Chang Chun-chiao, Chiang Ching and Yao Wen-yuan wanted to stop the learn-from-Tachai movement and did everything they could to sabotage it. When this reporter visited the "Sea of Rocks" during a work break the commune members were holding a meeting denouncing the "gang of four". They said, "The more we understand about their crimes the more determined we are to continue learning from Tachai under the leadership of the Party Central Committee headed by Chairman Hua Kuo-feng."

Since 1969 nearly 4,000 hectares have been created in the county and 12,667 hectares of terraced fields improved. Many of the new fields yielded a good harvest the first year.

Utilizing Rivers

The county has three rivers, but their beds are 30 meters down below the farmland.

Situated between two mountains, the Panmai brigade of the Hsiao commune decided to drill a tunnel in one of them in order to bring in water from the other side. They had no engineers or proper equipment, but Lu Wan-feng, an old stonecutter, said, "Lu Chia-chuan learned to do surveying while in the army and I can cut stones. Let's try."

Led by the two, a group of strong young peasants started work. Lacking a surveyor's level, they used a bamboo as their leveling rod. Instead of pneumatic drills they used 5-kg. sledge hammers and steel drills. They worked by kerosene lanterns and used their bamboo hats to fan the smoke and dust away.

They had trouble with cave-ins. Finally Lu Wan-feng solved the problem by building a vaulted ceiling. On the first day when Lu Wan-feng's eldest son Lu Yu-kang was preparing to leave for the site,

the old man handed him a sledge hammer he had once used when working for a landlord. "Use this, son, and put all you have into building socialism," he said. Yu-kang became a leader in drilling and dynamiting and was cited as an activist. When he injured his arm and was hospitalized he called his 19-year-old son Lu Chien-kuei. "Get your grandfather's sledge hammer and take my place at the worksite," he said.

The 407-meter tunnel, planned to be finished in three years, was completed in 19 months. It enabled the brigade to expand irrigated land by 36 hectares.

This was the county's first tunnel. Leaders and peasant representatives from other brigades and communes came to look at it and went back to do the same. So far, 155 tunnels have been drilled in the county. In addition, 532 dams, 389 aqueducts, 723 pumping stations and 1,254 km. of channels which irrigate 24,400 hectares of land have been made. Eleven thousand drainage channels were also built to free 9,000 hectares from waterlogging.

Underground Water

The county has many deep pools linked with many subterranean rivers. In the rainy season these used to overflow and flood the fields. But during a long dry spell the water in these pools would drop sometimes as low as 100 meters below the land level so that it could not be reached. An old saying went, "Underground the rivers flow, but above ground buffaloes die of thirst."

In 1969 the county Party committee decided to get at this water. With help from a Kwangsi hydrogeological team, 2,100 cadres and commune members made a general survey. In three years they walked over 2,500 sq. km. of mountain

terrain, penetrated 170 deep caves and investigated 360 underground water sites. They found 23 underground rivers beneath 11 communes and obtained 4,000 items of data which provided a scientific basis for water utilization work.

For the pools they built cement boats to carry a pump. Floating in the deep pool, these pumped water whether the level rose or fell. The Touyeh production brigade of the Liuyeh commune, finding the walls of its pool too slanting and the bottom too small for a cement boat, built a cement slide on which the pump could be raised or lowered by steel cable.

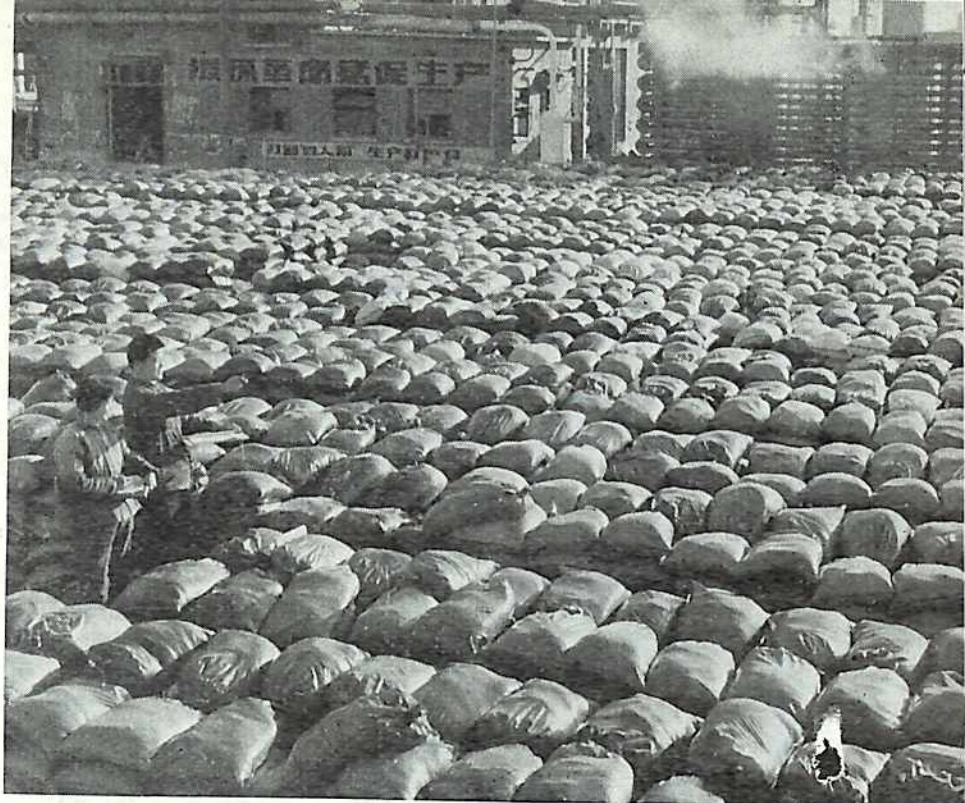
In 1973 the Chinchu production team in the Lajen commune decided to build a pumping station over a pool located in a cave. This cave was known for the rumbling noise that always came from it. People used to say it was the home of the Dragon King, the mythical king of the waters. Now someone started passing around the idea that disturbing the pool would bring disaster down on the village.

When Tang Hsiu-kuang, a Communist Party member, and a person from the hydrogeological team investigated the cave they found an underground river dashing itself against the rocks. This was the "Dragon". The pumping station was soon built.

"I'm the Dragon King," says the pumping station attendant Lu Chen-pang. "When I tell the water to come up, it comes."

And all because the people of the county decided to learn from Tachai. Since 1969 the people of Tu-an have set up 248 pumping stations over their underground rivers. These irrigate 3,200 hectares of land. With irrigation from surface rivers and ponds and cisterns built in the mountains, the total irrigated acreage has reached 28,530 hectares, five times that in 1965.

Expanding Sources of Fertilizer and Using It Rationally



Chemical fertilizer made in a small plant in Tingyuan county, Anhwei province.

China's Eight-point Charter for Agriculture, formulated in 1958 by Chairman Mao, concerns soil, fertilizer, water conservation, seed selection, rational close planting, plant protection, reform of tools, and field management. These eight points form the basis for scientific farming. "Land Improvement in China" in our August 1976 issue described how China has put the first one into effect.

CHINESE peasants pay close attention to the scientific use of fertilizers to produce higher yields. They call fertilizer "the food for the grain crops". Their rational application is an important measure in the Eight-point Charter.

Stressing Organic Manure

China's agriculture uses mainly organic or farm manure. Chemical fertilizers are only supplementary. Human and animal manure, lake or river silt, green manure, plant ashes, and composts of fermented straw and weeds are used. The peasants prefer farm manure because it increases the organic matter in the soil and improves soil structure, while chemical fertilizers, if used exclusively, tend to compact the soil. Moreover, the sources of manure are constant and

expandable. Collecting it takes manpower but little or no investment.

Tachai brigade, the nationally-known model agricultural collective, has solved the fertilizer problem with no outside help and according to its local conditions. Though chemical fertilizers are increasingly available, Tachai continues to stress farm manure, supplemented with chemical fertilizers. The brigade members ferment large quantities of straw mixed with human and animal manure and a small amount of phosphate fertilizer. Each year 150 tons of this is applied per hectare, 11 times that before liberation. With scientific application of fertilizer and such measures as deep plowing and converting slope land into terraced fields, Tachai has turned its barren loess soil into fertile soil that holds water and fertilizer. This has pushed the brigade's per-hectare

yield to 7.5 tons, ten times the pre-liberation figure.

The Main Source

Pig manure is the biggest source of farm manure in China. One pig produces three tons a year. Mixed with weeds and earth, this can make five to ten tons of high quality fertilizer, enough for one *mu* (0.06 hectare) of land. Smaller amounts of chemical fertilizer are generally added. The target of "one pig per person" or "one pig per *mu*" is common. The communes promote collective pig raising and also encourage individual members to raise their own. Today many prefectures, counties and communes have reached these targets. The number of pigs in China has quadrupled since liberation.

Other Fertilizers

Green manure is widely used. In south China winter green manure such as milk vetch and cow vetch, and summer sesbania are grown. North China grows alfalfa and hairy vetch. The area given to green manure crops has increased from 1.3 million hectares after liberation to 6.6 million hectares today.



Applying fertilizer.

Duckweed is grown in ponds, slow streams or paddyfields in east and south China. It does not occupy land and can be gathered every four or five days.

In areas such as the Yangtze and Pearl river deltas, which are covered with waterways, silt is an important fertilizer.

Many places use weathered coal, peat or humus coal as a base for fertilizer. It is broken up, mixed with ammonium, potassium, sodium and other materials, and turned into a humic acid fertilizer easily absorbed by crops. It can also be used to adjust the acid and alkali content of the soil. The method has spread since 1971 when a brigade in Chanchiang prefecture in Kwangtung province first succeeded in producing ammonium humate. After the prefecture Party committee publicized it, counties, communes and brigades have built 188 mechanized and semi-mechanized humic acid fertilizer plants.

Chemical Fertilizers

While stressing organic fertilizers, at the same time China has

steadily developed its chemical fertilizer industry. The policy is self-reliance, simultaneously building large, medium and small chemical fertilizer plants, with the stress on the medium and small. Small plants require little investment and take less time to build. Thus both prefectures and counties can build them. The fertilizers produced go to the immediate areas, which is convenient for the peasants and saves transport costs.

Huihsien county in Honan province mobilized its communes and brigades to accumulate their own funds to build a small nitrogenous fertilizer plant. Every commune contributed in the work. In one year they constructed a factory with an annual capacity of 15,000 tons of synthetic ammonia. The county trained the required workers. A phosphate fertilizer plant was also built in the county and 17 communes built smaller ones.

Today there are over 1,000 small chemical fertilizer plants in China's 2,000 counties. The small nitro-

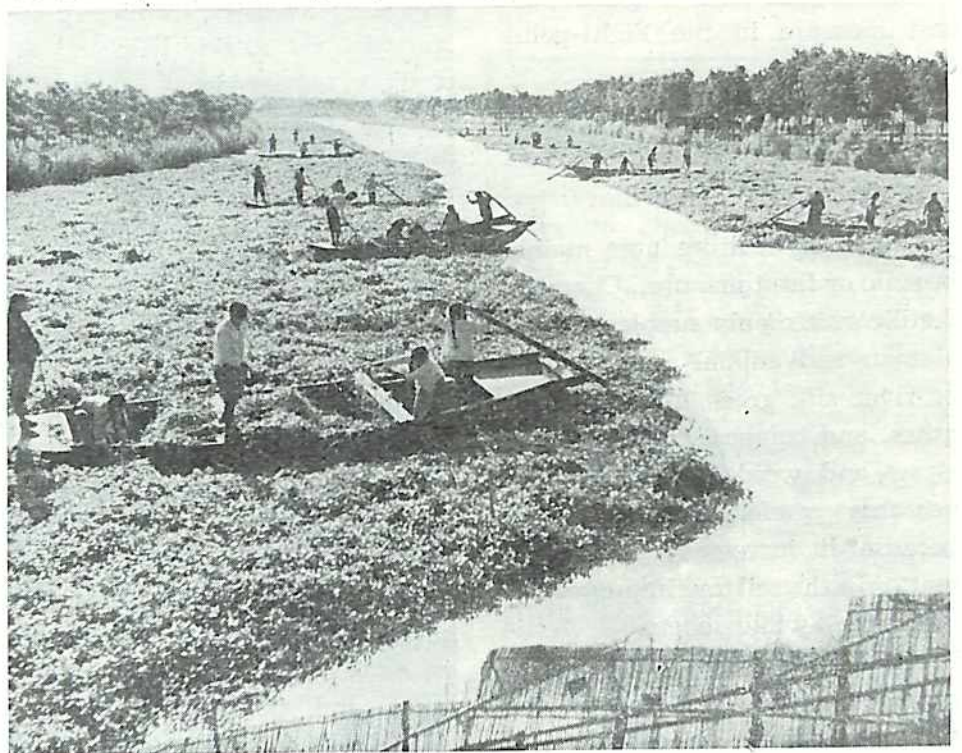
genous plants account for half of the country's total output.

Improving Application

Peasants have improved the methods of applying fertilizers. They are applied according to soil, topography and the growing periods and characteristics of the crops. For example, to get the greatest effect and minimize fertilizer loss, they are applied at different soil depths so that the plants can absorb nutrition from every layer as their roots grow deeper.

Rational application of fertilizer has made the soil more and more fertile, even in areas where the land is used intensively. For example, in Soochow prefecture in the Yangtze River delta, one of the most densely populated areas in China, most of the land has been improved so that it now gets three crops a year. Each crop on a hectare of land receives 60 tons of organic fertilizers. This is 180 tons per hectare per year. Organic matter in the soil has increased greatly. In the past more than twenty years total grain output has tripled, now averaging more than 10 tons per hectare.

Commune members in Wuhsien county, Kiangsu province, use the many waterways to grow plants for green manure.



4,000- Year-Old Clan Cemetery Excavated

A LARGE clan cemetery dating from the late period of primitive society has been unearthed in Lotu county, Chinghai province in the upper reaches of the Yellow River.

It was discovered by members of the Liuwan production brigade of the Kaomiao commune in the spring of 1974 while improving their farmland. Archaeologists started excavation in cooperation with local commune members in July of the same year. To date, nearly 1,000 tombs have been opened, yielding more than 30,000 tools and other objects of stone and bone, pottery utensils and orna-

ments. Very few archaeological finds in China can match this one in scale of excavation and number of relics uncovered.

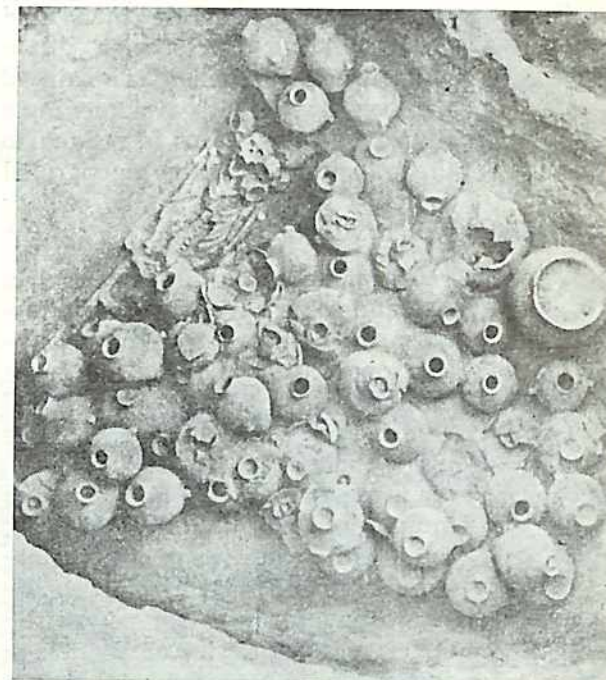
The size of the cemetery and the high density of the tombs show that as early as 4,000 years ago the upper reaches of the Yellow River and the valley of its tributary, the Huangshui River, were already well populated by ancestors of the Chinese people.

After more than two years of excavation and study the cemetery has been ascertained to represent the Machiyao culture (late Neolithic period or 4-5,000 years ago) and the Chichia culture (Chalcolithic period or 3-4,000 years ago), when primitive communes were disintegrating. Several groups of Chichia tombs were superimposed on the stratum of Machiyao tombs. This plus carbon 14 dating is further proof that Machiyao preceded Chichia. Analysis of the combination of various classes of pottery vessels, their shapes and ornaments and the shape of the tombs, coffins and form of burial show that Chichia was the continuation and development of Machiyao. Many objects of early Chichia are hardly distinguishable from those of late Machiyao.

The Machiyao culture developed from the Yangshao culture (when matriarchal commune society flourished on the central

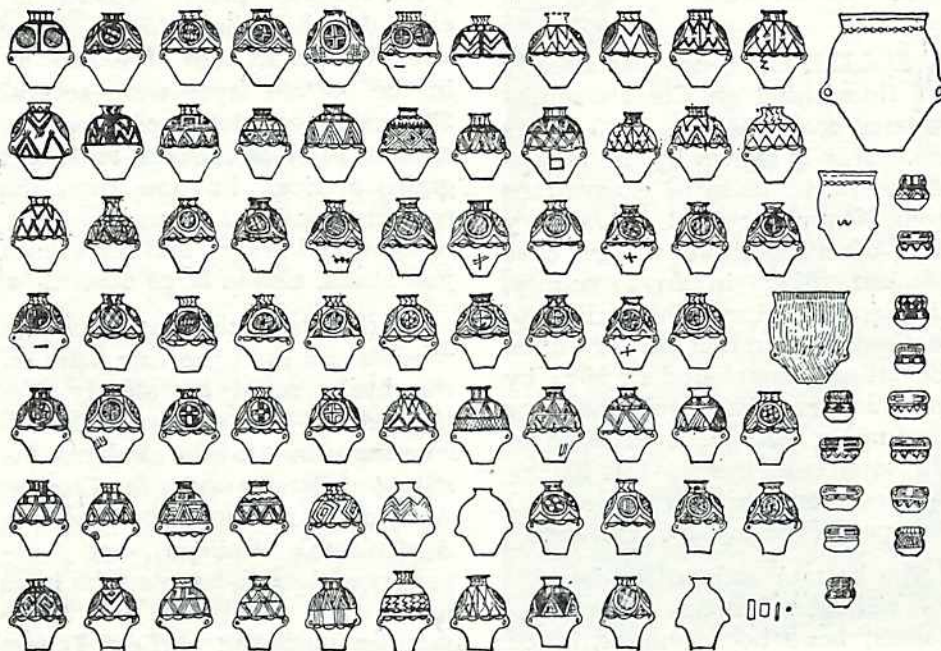


Painted pottery with nude male figure in relief.



In Tomb 564 of the Machiyao culture excavated at Liuwan, from which 91 pieces of pottery, three stone tools and one piece of turquoise were unearthed.

Combination of various classes of pottery vessels from Tomb 564.



plain in the Neolithic Age). Therefore we can say the culture of the upper reaches of the Yellow River developed from culture on the central plain. Some Soviet social-imperialist scholars concocted the theory that the Chichia culture originated from the west and north and that foreign influence was "the decisive factor in the origin of

ancient Chinese culture". Finds from the Liuwan cemetery prove this thesis incorrect.

Relics unearthed provide material for the study of the development of the clan system in primitive society, the beginnings of private property and the origin of classes.

Remains of millet were found in pottery jars in many Machiyao tombs, indicating that farm production was already well developed.

Social division of labor between the sexes had already appeared. In the Machiyao graves most of the burial accessories for men are polished stone axes, adzes, knives and chisels. For women they are earthenware or stone spinning wheels, bone awls and needles. This indicates that men had assumed the dominant position in farm and handicraft production and women engaged mainly in household work like spinning and weaving. In general, men had more burial accessories than women. Among them was a painted pottery vessel with a nude male figure in relief. This is related to the transition from the matriarchal to the patriarchal clan society which was taking place.

The Machiyao tombs vary in size and some have more burial accessories than others. In the bigger ones these consist of large numbers of pottery vessels and whole sets of tools. One of the tombs has as many as 90 objects, far more than needed by one living individual. On the other hand, some tombs are very small, only simple chambers with no coffin. These have only a few pots. The difference in the size of the tombs and the number of burial furnishings reflects the fact that in late primitive clan society there was a surplus over subsistence requirements, private property had begun to appear and some people were beginning to be divided into the rich and the poor.

Some of the larger tombs with the greatest number of objects held human sacrifices. Most of these were women, placed on their side with bent limbs. Some of them showed signs of having struggled against the bonds that tied them. They had no objects around them,

but they themselves surrounded the chief occupant of the tomb. The presence of human sacrifices shows that there were already household slaves, thus the beginning of classes.

In the Chichia tombs the division of labor between men and women, the disparity in possessions and the live burial of slaves are more evident than in the Machiyao tombs. In those with sacrifices, the young women slaves lie in the same position as in the Machiyao tombs facing their master, only the man is buried in a coffin and the women outside. All this reflects the fact that the people of Chichia culture were approaching the threshold into class society.

ARCHAEOLOGY

A Neolithic Village Nearly 7,000 Years Old

NEOLITHIC culture was already flourishing on China's southeastern coast nearly 7,000 years ago. This is shown by the results of the first season of excavations from November 1973 to January 1974 of a neolithic village near Homutu village in Yuyao county, Chekiang province. The earliest to be discovered in that part of China, the village was found in 1973 by commune members while building a pumping station. Excavation of 810 square meters of the 40,000-square-meter site has revealed four well-preserved layers of culture.

The bottom and earliest layer is the richest. Remains of wooden houses, bone hoes, unhusked rice,

large quantities of animal and plant remains, 1,800 objects of bone, wood, jade, stone and pottery, and 200,000 potsherds were found. Archaeologists believe the discovery is most valuable for a fuller understanding of the development of primitive society in China.

Objects from the third and fourth layers have been dated by carbon 14 testing at about 6,960 years old by the archaeological laboratory at Peking University. By that time a flourishing neolithic culture had already been developed by people living in the Yangtze River valley who, along with those in the Yellow River valley and other regions created ancient Chinese culture.

Bone Hoes and Rice Plants

The characters 耒耜 *leisi*, signifying a very primitive type of hoes, have long been known from inscriptions on tortoise shells or bones, and many ancient writings have described such hoes as important farm implements. Until the Homutu village excavations no *leisi* had ever been found. In the fourth layer were 76 bone hoes made from the shoulder blade of even-toed ungulate animals. Though retaining the original shape of the shoulder blade, the working edge shows clear marks of workmanship.

Remains or traces of rice plants had been discovered in past excavations, but this is the first time such a large quantity of well-preserved rice plants of such an early date have been found at one site. Within an area of 400 sq. m. in the bottom layer were several 50-centimeter-thick deposits of the remains of stalks, leaves, roots and grains of rice. In some spots the remains consisted almost entirely of unhusked grains, and sometimes just husks, also in large quantities.

On the plants the leaf-veins and rootlets and even the fine hairs on the husks could be clearly distinguished. This rice was cultivated, according to the Peking Institute of Botany under the Chinese Academy of Sciences, the Chekiang Agricultural College and experienced local peasants who have tested and analyzed it. These samples push the earliest known

date for cultivated rice back to at least 6,000 to 7,000 years ago.

Wooden Houses

The remains of wooden structures were unearthed in the second, third and fourth layers. Piles, posts, beams and planks were found in the fourth stratum in almost all excavated areas. Quantities of structural pieces with square or round tenons and oblong or round mortises show that the mortise and tenon method of construction was used for building. Sometimes a single piece has on it both mortise and tenon.

These finds prove that by this time the people had given up primitive cave and nest dwellings and had advanced to a settled life in more permanent wooden houses. They also show that the tenon and mortise construction was in use several thousand years earlier than originally thought.

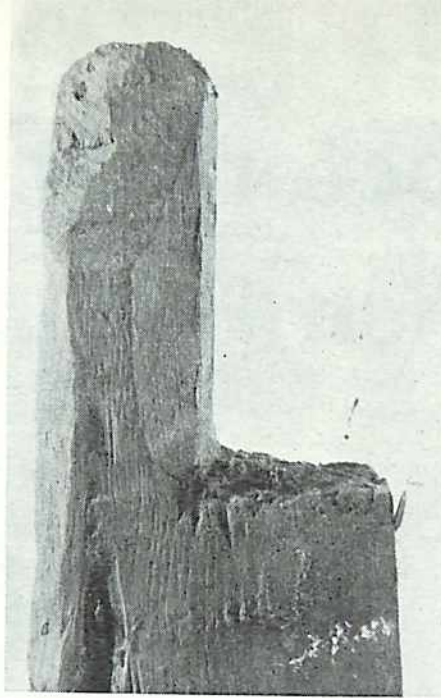
Pottery and Tools

Two kinds of pottery, coarse and fine, and well-polished stone artifacts were unearthed from the first, second and third layers. The coarse ware, red or grey, was tempered with sand; the fine ware, grey, red or black, was made of fine clay. All shapes were more or less regular.

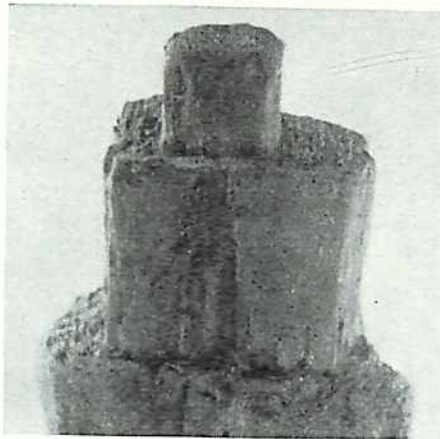
Pottery from the fourth layer consisted of only coarse blackish ware tempered with charcoal. The irregular shapes indicate that the pieces were obviously hand-made and that ceramic skill was still in its infancy. The objects in this layer included cooking caldrons, storage jars, and food containers such as pots, plates and bowls. There were only a few rough stone tools: axes, adzes and chisels. They still show clear traces of chipping, and with some, only the edges were polished. The large number of bone tools indicate that bone was the principal material for making tools: hoes for farming, different tools for spinning and weaving, arrowheads and whistles for hunting. There were also well-made wooden objects and tools, and some works of artistic value.

Plants and Animals

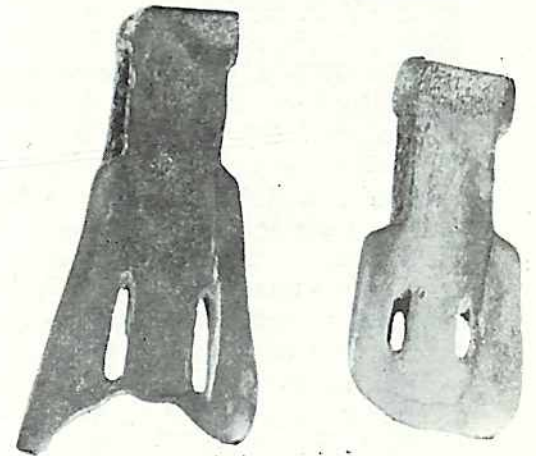
The Homutu excavations uncovered large quantities of plant



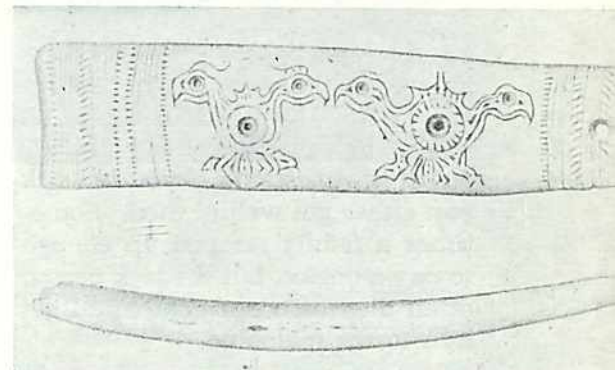
Wooden parts for construction.



Rice grains.



Bone hoes.



Replica of a bone batten, cross section, side view and top.

and animal remains. Preliminary study has defined 48 kinds of animals, the most numerous being the deer and tortoise. Pigs, dogs and probably cattle were domesticated. There were also bones of birds, fish, tigers, bears and monkeys and even of rhinoceroses and elephants.

There were also remains of pine, Chinese hemlock, sweetgum, sawtooth oak and fortune keteleeria trees and of walnuts, water caltrop and jujubes.

Such finds indicate that significant progress had been made in agriculture, including domestication of animals, but that hunting and gathering remained important supplementary sources of food. The Homutu fauna and flora remains are also valuable material for the study of the climate and vegetation of the time.

Preparations are being made for second season of excavations.



A pottery caldron.

Barefoot Doctors Among the Fishermen

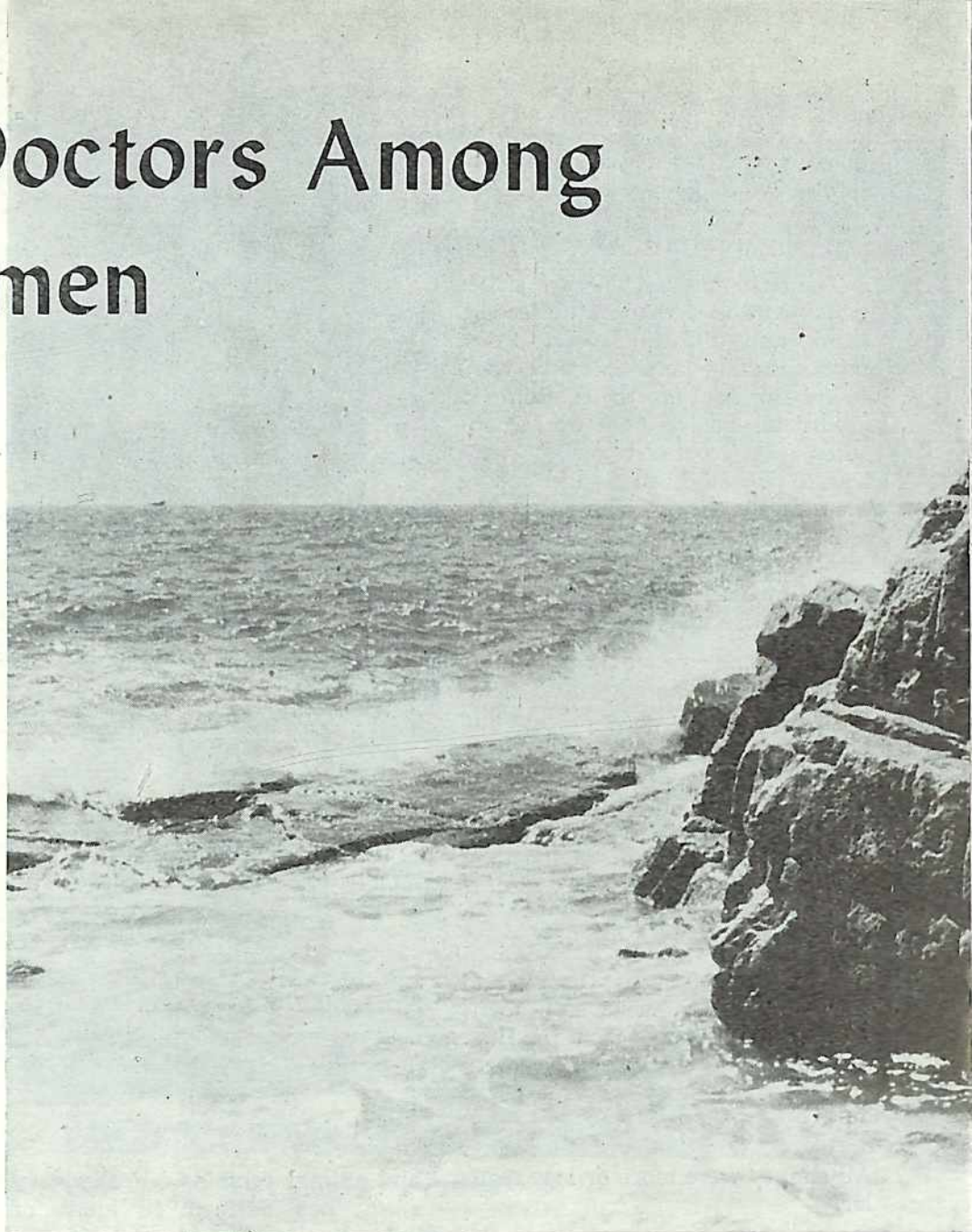
CHU HSUAN-WEN

SINCE 1968 a ten-girl team of barefoot doctors serving a fishing brigade on an island in the South China Sea has given 100,000 treatments and saved nearly 100 patients from death. Like barefoot doctors all over the country, they work at ordinary jobs, carrying their medical kits with them. These girls are fisherwomen — first or second mates, mechanics, helmsmen, lookouts and so on.

The girls' home is the Wanshan brigade on an island off the coast of Chuhai county in Kwangtung province, part of the Wanshan commune. In the old society the fishing people lived on their small boats. Poverty made medical care out of the question. If you fell sick you either got well or died. Sometimes a family scraped up enough to pay a doctor, but the sick person often died before a boat could get him to the mainland.

After liberation, with aid from the people's government the fishermen settle down on shore. When the people's commune was formed in 1958 a small hospital was set up on the island. But this was not much help for the men who stayed long periods out at sea. A fisherman would fall ill, the boat would bring him ashore — and lose much fishing time.

In 1965 the brigade Party branch selected ten girls, all daughters of former poor fishermen, and sent them to be trained by the PLA medical team stationed on the island. In their first month-long course the girls learned basic things about health work, first-aid, and diagnosis and treatment of the



All ten barefoot doctors are members of the militia.

most common illnesses. Then they returned for some practical training at the commune hospital. The hospital was headed by a man who had been a doctor in the Kuomintang army. Unwilling to train more barefoot doctors, he gave the girls only menial jobs such as sweeping and cleaning. He wouldn't let them touch even a stethoscope, much less write prescriptions. "Giving an injection is not like hauling in fishing nets," he said sarcastically. "If a smelly fisherwoman can become a doctor, then a dried herring can swim." Eight of the girls angrily quit.

AFTER the cultural revolution began in 1966, Chairman Mao's 1965 directive on stressing medical

and health work in the rural areas was publicized. The fishing brigade's Party branch again sent the ten girls to the army medical team. Discussing Chairman Mao's directive, they realized that their first try had failed because the hospital's leaders were bourgeois doctors following Liu Shao-chi's revisionist line in medicine who simply wanted to monopolize their field.

Many old people told the girls stories of the misery lack of medical care had caused them in the old society. There was Lo Mai-mei whose father fell sick when she was seven. The family had to sell her younger sister in order to pay a doctor. The father died anyway. When Mai-mei developed



eye trouble at 12, the family borrowed money to consult a witch doctor. In the end she lost the sight of her left eye. One day after she was married she came down with a high fever. Her husband took her to a hospital in Macao, but because they couldn't buy gifts for the doctors and nurses Mai-mei got poor care. Her husband had to sell their three-year-old son in order to pay the hospital. Anger at these injustices fired the girls with a determination to become competent barefoot doctors for the people, even though most of them had only gone to primary school.

The army medical people were warm, patient and meticulous in teaching them. The leader of its medical team told the girls to prac-

tice acupuncture on him. Inspired by his example, 17-year-old Huang Fu-mei practiced on herself. Soon all ten were able to use it. They learned the properties and uses of more than a hundred different medicinal herbs, going into the hills to collect them. They came away from the two-month training course able to treat common illnesses and injuries and with simple surgical skills such as making incisions, suturing and tying. A few had mastered more complicated surgery such as for venesection, gastroenterostomy and appendectomy.

In 1968 the girls began going out to sea as both fisherwomen and barefoot doctors, each assigned to a boat. Once when the fleet was at sea Huang Pei-lin, brigade leader on boat No. 6, suddenly passed out in a cold sweat. Chang Jung-tsai, the boat's first mate and barefoot doctor, found that he was suffering from dehydration and shock caused by overexhaustion from sticking to his work in spite of a bad cold. Injections and fluid soon brought him around.

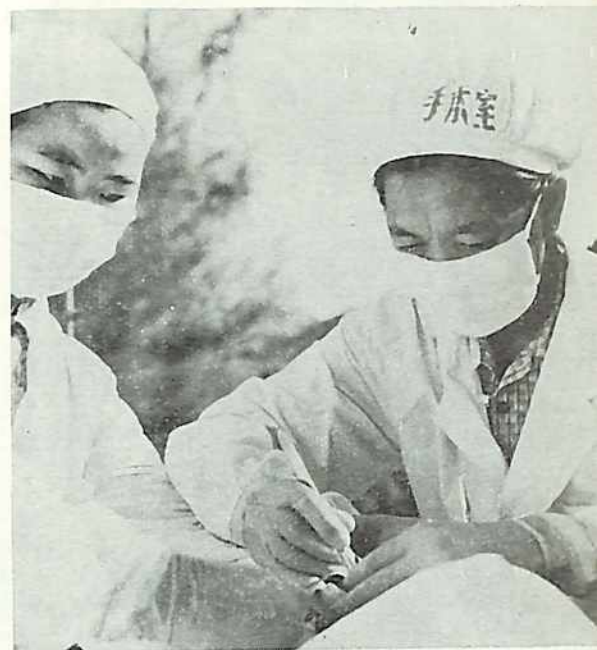
One June night in 1975 boat No. 7 was searching for fish when its port engine broke down. While repairing it the mechanic was accidentally struck on the head by a wrench. Blood spurted from a two-inch gash and he fell unconscious. Barefoot doctor Chiu Shih-chiao stopped the bleeding with finger pressure, but to stop it altogether the gash had to be sutured. It would take at least five hours to reach the hospital. Chiu summoned Wen Tai-ti, the barefoot doctor on boat No. 4 nearby. While Chiu held the patient steady in the rocking boat, Wen sewed up the injury.

The barefoot doctors at sea answer calls from boats of other brigades or communes. Once a boat from a neighboring county signalled Wanshan brigade's boat No. 5 for help for a fisherman badly ill from food poisoning. Barefoot doctor Chang Chin-huo left her meal and went over by sampan. Injections and other medicine brought the patient out of danger. Chang stayed for two

hours. But when she got back to her own boat she remembered another medicine that would give better results. She rowed back to deliver it.

THE girls work ten months a year at sea. The rest of the time they work on the island doing preventive health work. They go among the fishing people teaching sanitation and personal hygiene, helping to keep public places clean and giving inoculations. They make surveys of disease incidence. They also collect and study family remedies and use local resources for making medicines — herbs from the hills and products from the sea. In the last few years they have

Practicing surgery on an animal.



Chang Chin-huo, after graduating from the Kwangtung Provincial College of Traditional Medicine, returned to the island to work as doctor in the commune hospital.





Barefoot doctors calling at fishing boats.

Wen Ya-ying, 17, youngest in the barefoot doctor team.



An army medical worker teaches barefoot doctors about medicinal herbs.

The barefoot doctors are also experts at mending nets.





Huang Chin-huo, leader of the barefoot doctor team, looking out for schools of fish.

gathered more than five tons of some 70 kinds of herbs and processed them into medicines for relieving pain, stopping bleeding and treating burns, gastritis, enteritis, colds, rheumatic arthritis and senile chronic bronchitis. They deliver to the homes pre-mixed packages of herbs for preventing epidemic diseases and make herb broth to be taken aboard boats. All boats are stocked with both herbal and pharmaceutical medicines for common illnesses.

Because fishermen eat irregularly while working at sea, gastro-intestinal disorders are common. Improving a folk remedy for such ailments, the barefoot doctors made an effective powder from sea tortoise shells and cuttlefish bones to be taken orally.

Rheumatic arthritis, the result of cold and wet working conditions, is another common ailment. The barefoot doctors have spread the use of water-proof boots and coveralls. They have also used another folk preparation, spirits aged with sea snakes in it. This worked well and the Wanshan brigade's barefoot doctors were soon besieged with requests for it. They have mailed it to people on far-away frontiers, grasslands, and in mines and forests where rheumatic arthritis is also a problem.

The Wanshan fishing brigade set up a cooperative medical care system in 1968. Members pay a small annual fee and receive free medical care, including medicines. The additional cost is paid out of the brigade's public fund. Most patients can be treated without leaving their own homes or the island. Better health has resulted in much higher work attendance. Production has expanded. The brigade's 1976 catch was 20 percent higher than 1975, five times as much as 1965 and fifty times as much as the first years after liberation.

Members of the barefoot-doctor team change as the older ones go on to other posts. Over 30 women have served on the team since it started in 1968. Wen Chin-tsai, its first leader, is now secretary of the county Youth League and a member of the standing committee of the Chuhai county Party committee. Chiu Shih-chiao is a deputy Party secretary of another

commune. Some have been promoted to leading posts in the brigade and on the boats. In their new posts they continue to both fish and give medical treatment at sea. Their experience helps improve medical and health work, including the training of more barefoot doctors.

Chang Chin-huo of the original ten was sent to the Kwangtung Provincial College of Traditional Medicine. Graduated in 1973, she returned to work as a doctor in the island's commune hospital. She continues to go out with the fishing fleet and train more people. Chang Jung-tsai is studying at the Chungshan Medical College in Kwangchow, and returns each summer to work as doctor-fisherwoman on the boats. Inspired by these examples, doctors in the commune hospital also take turns going out to sea. All new barefoot doctors periodically train in the commune hospital. Medical care for this small island's fishing people is steadily improving.

Wen Chin-tsai, one of the original ten barefoot doctors, now a member of the county Party committee standing committee and secretary of the county Youth League.



How a Labor Health Research Institute Works



Institute personnel give miners an on-the-spot checkup.

SOcialist new China maintains a number of labor health research institutes across the country. Their task is to safeguard worker health, improve working conditions and protect the environment. One of these institutes is in Shenyang, an industrial city of a million workers in Liaoning province, northeast China.

The Shenyang institute, built in 1960, has an attached hospital and modern library for the study of occupational diseases. Its research covers dust control, industrial poisons, radiation protection, pathology and general labor health. It has laboratories for studies in immunology, isotopes, animal experimentation, respiratory and

brain function and chromatography. Its main task is to determine the factors in production that harm workers, how these cause disease, and initiate proper prevention and treatment measures. It also trains health workers for factories and mines.

Prevention First

Prevention is the Shenyang institute's first concern. Since the cultural revolution it has sent its personnel to work and investigate problems among, and with the cooperation of, workers in industry. Studies are carried out on working conditions, dust concentration and analysis of toxic substances. Research workers assist the ad-

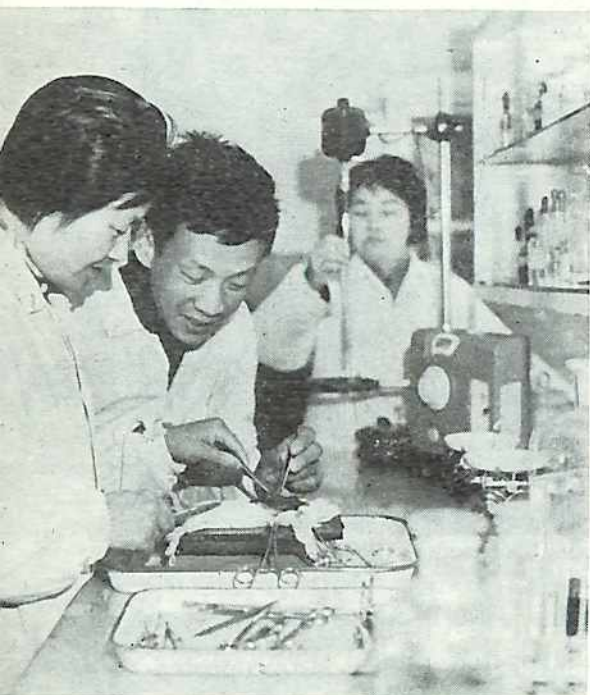
ministration in drawing up protective measures. They help the workers improve technological processes, labor conditions and the working environment.

Soon after liberation high dust concentration was a problem in the Shenyang Glass Plant, a factory still using some of the outdated equipment left over from the former Japanese puppet regime. Dust from grinding of raw materials exceeded the state-set norms and a number of workers acquired silicosis. The institute's occupational disease department sent a team to the plant where together with the workers, and studying the production process, they found the sources of silicosis. The plant drew

up an effective program for its prevention.

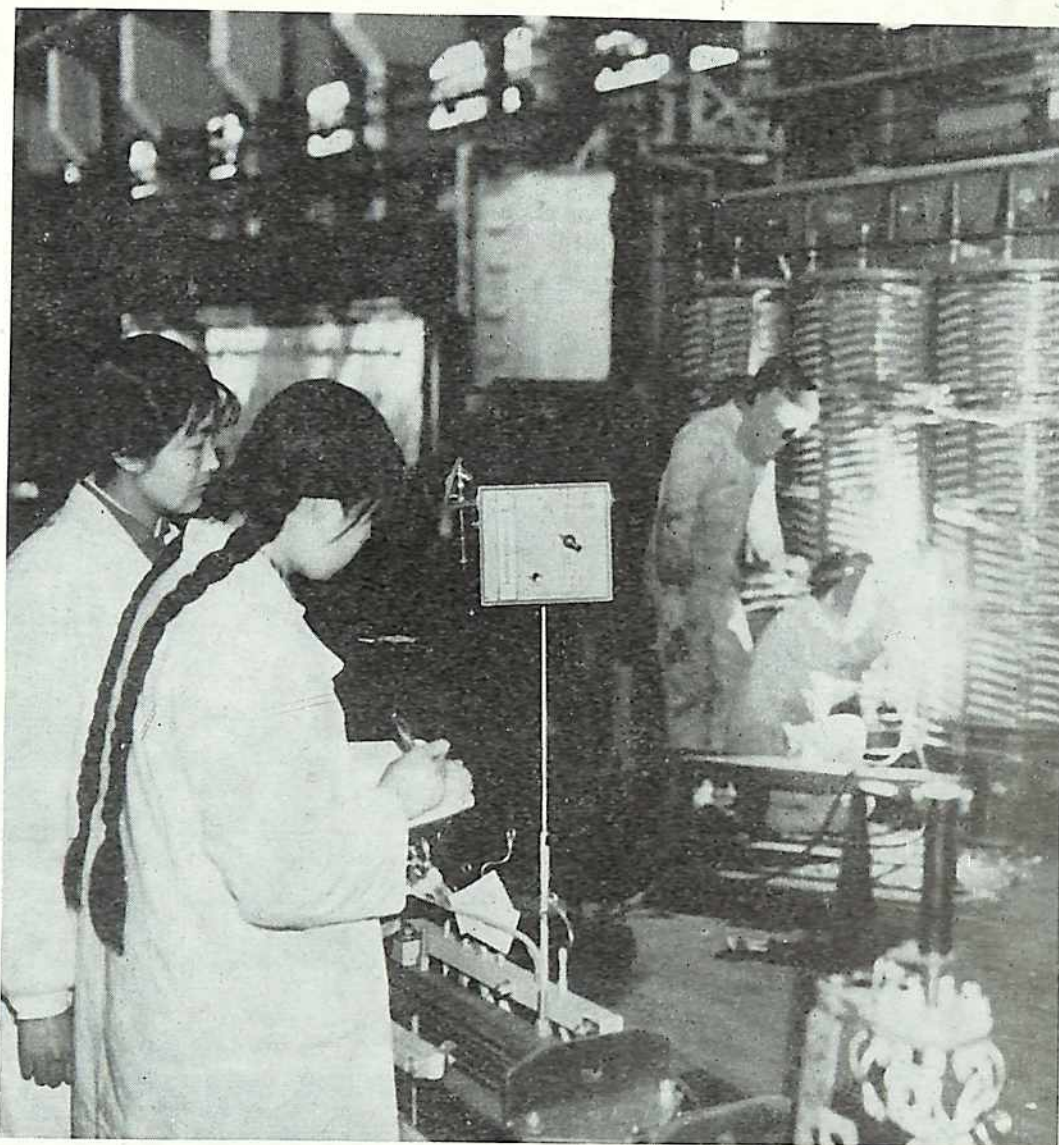
The plant installed dust-protection equipment, mobilized the workers to make innovations in the technological process and changed the open dry grinding process to a closed damp method. They put in suction pipes and sprayers, and automatized the entire process of grinding, sifting and mixing. Dust concentration now approaches state norms. No silicosis cases have been discovered in the past decade. The

Studying the effectiveness of a medicine for silicosis on animals.



institute initiated similar changes in the Shenyang Ceramics Plant, the No. 1 Grinding Wheel Plant and the Acid-resistant Materials Plant.

The institute's labor health department routinely sends teams to the city's factories and mines to give regular physical examinations to workers in contact with harmful substances. This helps to discover early symptoms of occupational diseases and permits prompt diagnosis and treatment. Over 200 factories and mines have been surveyed for silicosis and poisoning in the last two years and 48,000 workers examined.



Collecting air samples at the Shenyang Transformer Plant to devise protective measures for argon arc welders.

Workers in a coal mine said, "In the old society miners here used to be thrown into a pit when they dropped dead, and some were thrown in even before they died. In the new society doctors come to our mine to treat us."

The institute's radiology department designed and equipped a bus with fluoroscope, X-ray and electrocardiogram equipment to give on-the-spot examinations. Since 1975 this mobile unit has examined 12,000 workers who come in contact with dust regularly.

In 1975 the institute took on the job of preventing and treating cases of poisoning from farm chemicals and pesticides. In the spraying season the institute sends teams to communes outside Shenyang and

to two nearby counties. These teach the safe use of farm chemicals, train doctors, nurses and barefoot doctors, and give first aid to cases of poisoning. Their efforts have greatly reduced the number of such cases.

Treatment

The institute's hospital for occupational diseases handles silicosis and poisoned patients. It has 150 doctors and nurses, and 200 beds. The staff studies traditional medicine, integrates it with modern medicine and applies it in clinical practice. They have developed 58 prescriptions, many using Chinese herbal and other traditional medicine, for various occupational diseases.

To relieve workers suffering from chronic mercury and lead poisoning, the hospital staff visited old experienced doctors of traditional medicine, and sought and tested home prescriptions used among the people. This led to Chinese medicines that have few side effects, are convenient to take, low in price and easy to popularize among the workers.

In treating silicosis patients, the hospital has had good results by following the basic principles of dialectical treatment used in traditional Chinese medicine. Careful clinical observation of the different stages of silicosis enabled them to develop two prescriptions of traditional medicine — one for simple silicosis and the other for tubercular silicosis. These have brought certain positive results.

As part of its efforts to find methods of early diagnosis in silicosis, the institute now uses immunological tests on sera. It also made a systematic study of the effectiveness of *Kexiping*, a medicine used in the prevention and treatment of silicosis, to determine its dosage, length of treatment and method of administration.

Basic Research

The institute carries on research in the etiology, toxicology, immunology and pathology of occupational diseases, searching for new ways of prevention and treatment. The use of new chemicals in China's growing industry and agriculture makes it necessary to study their toxicity, toxicology and effective antidotes. The institute has conducted research on a number of farm chemicals. They have studied *Duojunling*, a new and effective pesticide. To find out whether eating treated grain for long periods is toxic or has genetic effect on the new born, they fed sprayed grain to animals and obtained valuable data on its low toxicity.

The institute's researchers studied the harmful effects of asbestos and activated carbon dust on animals to determine exactly how these substances cause disease. They also studied the harmful effect of fiber glass and polyester fiber production and worked out measures to protect the workers' health.

Argon arc welding affects the health of long-time welders. Institute researchers studied the problem at the Shenyang Transformer Plant and the Shenyang Electric Cable Plant. They measured and studied possible radiation, ultra-violet rays, harmful gases and high-frequency electric current at the worksites. Their finding that the main harmful factors were the high-frequency of the current used in welding and the high density of ozone on the site enabled them to propose protective measures.

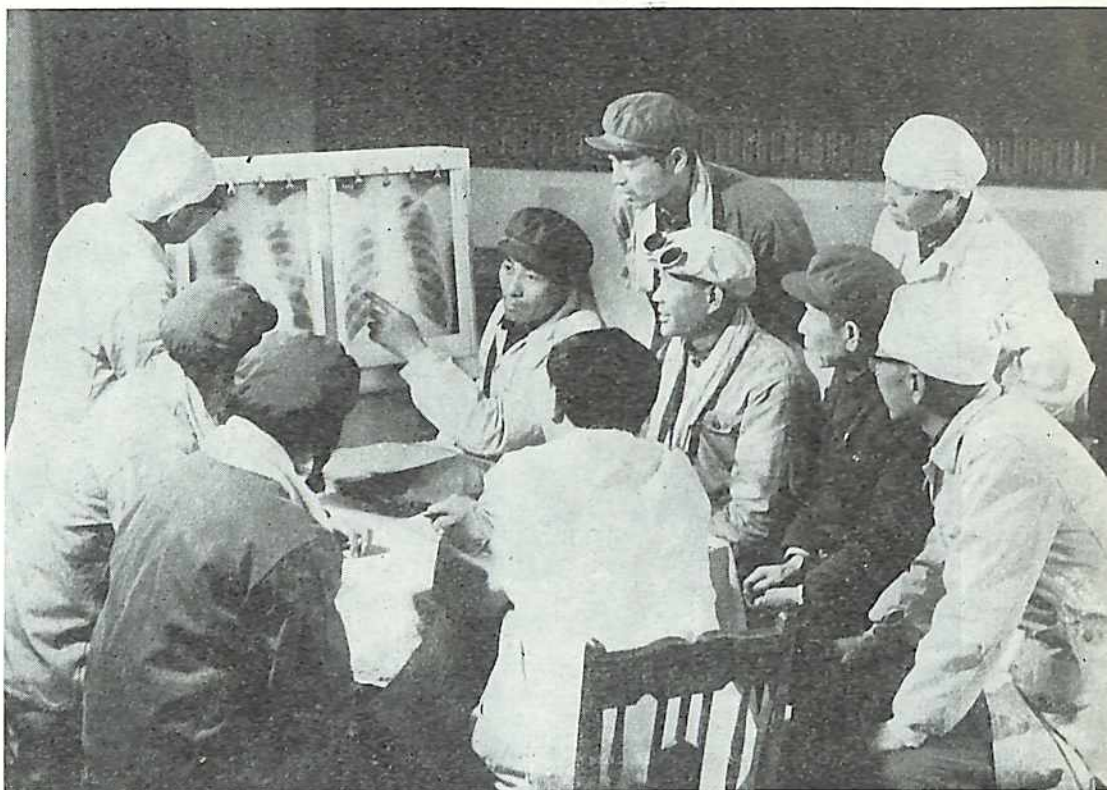
Training Personnel

Last year the institute gave a one-year course to train primary

health workers in labor protection. In setting up the class the institute followed the experience of the Shanghai Machine Tool Plant when it established its workers' university. The 30 students were professional factory and mine health workers and others in charge of on-the-job group health work. The teachers were specialists from the institute and the occupational disease hospital. The curriculum included labor health, protection, and the pathogenesis, prevention and treatment of occupational diseases. Teachers and students went to factories and mines to survey occupational diseases and do preventive work. The students also interned in the occupational disease hospital. After graduation students returned to their jobs to develop labor health programs in their places of work.

The institute also gives short-term classes to train professional workers for the grass roots in the prevention and treatment of silicosis, protection from radiation, labor health and the safe use of farm chemicals.

Medical personnel, workers and a factory leader making a diagnosis.





Yu Ying helps Tao Li understand the importance of learning for the revolution.

CULTURAL NOTES

'Song of the Gardener'

Final scene: Teachers (Fang Chueh in the back) and pupils gain a clear understanding of the direction of proletarian education.



SONG OF THE GARDENER, a Hunan opera suppressed by the "gang of four" for three years, has appeared on the stage again. A film version made in 1973 and blocked from release has also been shown. Both are being received with enthusiasm. It was a rebirth for a local opera praised by Chairman Mao and Chairman Hua.

The opera was first produced during the cultural revolution. In 1972 teachers at the Pihsiang Street Primary School in Changsha, Hunan province, put on a one-act *huaku*-style opera, *New Teacher*, at a local arts festival for both professionals and amateurs. Describing the new spirit of teachers during the revolution in education, it was well liked and won the attention of the Hunan Provincial Party Committee. The Changsha Hunan Opera Troupe, working with the teachers who wrote the opera, adapted it for Hunan opera and called it *Song of the Gardener*. For it they made wide investigations in schools and society and solicited the opinions of hundreds of workers. Provincial and municipal leaders joined in discussions of the adaptation and made many good suggestions.

The story is about the different methods of education used by two teachers. Tao Li, a fourth-grade pupil, is the son of a locomotive engineer. He is honest and plucky and likes to work with his hands. He wants to become an engine driver like his father so he can "carry passengers to Peking and goods to Changsha" and "send rice and flour to Indochina to support the people's revolutionary struggle". But he is also influenced by the idea current during the Lin Piao period that studying books isn't of much use. He tells himself he doesn't need to study because his father is a good engine driver and he never went to school in the old society. So Tao Li spends most of his time playing with a model train. He skips class when he feels like it, doesn't do his homework, hands in exams without answering the questions and doesn't bother to make up lessons he missed. Fang Chueh, the arithmetic teacher, whc

is influenced by Liu Shao-chi's revisionist line in education, feels that only punishment and coercion can make Tao Li change. When the boy doesn't hand in his homework, Teacher Fang forbids him to enter the classroom and even takes away his model train. This rough handling simply makes Tao Li stubborn.

Yu Ying, a Communist Party member, is in charge of the fourth grade. Remembering Chairman Mao's words that **"in all its work the school should aim at transforming the student's ideology"**, she feels that self-discipline is necessary but to get pupils to observe it calls for patience and careful work by the teacher. She makes friends with Tao Li and after school plays with the train with him. As the "engine driver" Tao Li is unable to figure out when his train arrives, even though the teacher gives him the distance and the train's speed. Yu Ying reminds the boy how his father, too poor to go to school in the old society, was constantly bullied and humiliated before he finally learned to drive an engine by watching the driver closely, how after liberation when the working people were able to have schooling his father learned to read and write with great determination.

"You young people are going to carry on the revolution," she tells Tao Li. "We are responsible for building up our country and making it stronger and more prosperous. You dream of a bright future but how can you help build it for the revolution without an education?"

Beginning to see the importance of learning, Tao Li resolves to **"study well and make progress every day"** as Chairman Mao urged children to do. Fang Chueh also realizes that a teacher is like a gardener and only when he has a deep working-class understanding of his pupils can he be sure the watering will nourish the roots. The opera is called *Song of the Gardener* exactly because the teachers as gardeners rearing young shoots are applying Chairman Mao's revolutionary line in education to raise a new generation

and therefore embody the Communist Party's leadership in education.

PERFORMANCES of the opera in 1973 won high praise from workers, peasants, soldiers, teachers and pupils. Typical comments: "It shows Chairman Mao's revolutionary line in education" and "If all our teachers were like Yu Ying we parents wouldn't have to worry." The artistic level was also praised. The opera spread and was adapted for local operatic styles of many provinces. On the recommendation of Hua Kuo-feng, then First Secretary of the Hunan Provincial Party Committee and also doing leadership work in the State Council, the opera was made into a color film by the Central Newsreel and Documentary Film Studio.

Before she even saw the film Chiang Ching declared, "The gardener should be a Communist Party member. How can you make her a teacher, an intellectual?" After seeing the film she claimed it was an attack on the revolution in education and said, "The line, 'How can you help build the country for the revolution without an education?' is all wrong."

"The educational line shown here is questionable," said Chang Chun-chiao, one of the "gang of four". "It shows the pupil being manipulated by the teacher."

"The opera presents a wrong line and praises the wrong people," said Yao Wen-yuan, another of the four.

On the gang's order, articles were published branding the work "a bad opera with serious mistakes in content". The film was banned before it was ever shown publicly. The gang then ordered a nationwide criticism of the film and persecuted the opera's author and performers. A special committee was set up to investigate the author. He was forced to "make a clean breast" of how he came to write it and who backed him. The gang also announced they were going to "find out" who approved the filming — an attempt to start a campaign against Hua Kuo-feng.

In December 1974, while the campaign against the film was at its height, Chairman Mao arrived in Hunan on an inspection tour and attended a showing of the film. He applauded. This greatly encouraged the film and opera people. The provincial cultural bureau submitted a report to the Ministry of Culture stating the opera was in keeping with Chairman Mao's revolutionary line and suggested that the film be shown publicly. The Ministry of Culture, however, was controlled by the "gang of four". Instead of lifting the ban, they accused the Hunan Provincial Party Committee of trying to "reverse the verdict" on the opera. Not only did the gang keep quiet about Chairman Mao's praise of the film but they even claimed it was a rumor and made a big to-do about tracing its origin.

Condemnation of the opera created great ideological confusion among educators. The Hunan opera troupe received letters asking, "Just how is *Song of the Gardener* wrong?" Teachers complained. "It seems it's wrong to be like either Fang Chueh or Yu Ying. What kind of teachers should we be then?" The criticism campaign also encouraged pupils to break discipline and shun study. Like the Lin Piao clique, Chiang Ching and her gang for a long time spread the idea that "one can make revolution just as well without any schooling". This made young people think they didn't need to study. The gang spoke of young people who handed in blank exam papers as "daring to go against the tide", those who defied discipline as "having rebel spirit", and those who did as they pleased as "full of vigor". They were trying to bring up confused young hoodlums who could easily be used to disrupt social order and help make way for the gang's seizure of power.

The fall of the gang brings great hope for the revolution in education. After seeing the film, teachers are more determined to carry out Chairman Mao's revolutionary line in education and be good "gardeners" in proletarian education.

The Peoples of Tali: Multi-national and United

TALI in the southwestern province of Yunnan has been the home of many nationalities since ancient times — the Pai, Han and Hui peoples on the plains, the Yi, Naisis and Lisus in the mountains. The area was liberated in 1949 after a long revolutionary struggle in which these groups united under the leadership of the Chinese Communist Party and Chairman Mao to fight the Kuomintang oppressors. Eighty percent of China's Pai people live in compact communities in the Tali area, so according to the Party's nationalities policy, it was made the Tali Pai Autonomous Prefecture in November 1956. Covering 33,000 square kilometers, it has a population of 2,300,000.

Hsiakuan, the capital, was once a place of narrow streets and run-down one-story buildings. It was distinguished only by the fact that it was a bus stop on the China-Burma road. Today it is a full-fledged city with wide streets lined by stores, hotels, offices and apartment buildings. They are filled

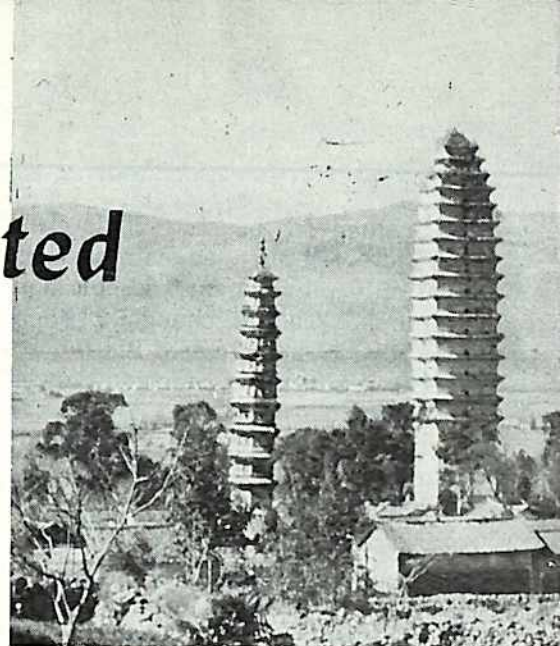
with a bustling crowd in which the Pai women's red waist-length jumpers over white blouses and the long rainbow-colored skirts of the Yi women stand out brightly.

Today Hsiakuan is an important industrial city and communications junction for western Yunnan. Spread out at the foot of snow-capped Tientsang Mountain are factories built since liberation. Out on deep blue Lake Erhai, which lies in the center of the Tali area, boats shuttle back and forth transporting passengers and goods. Motorized junks and sailboats cast and haul their fishnets. Pumping stations raise the lake water to irrigate fields in the foothills.

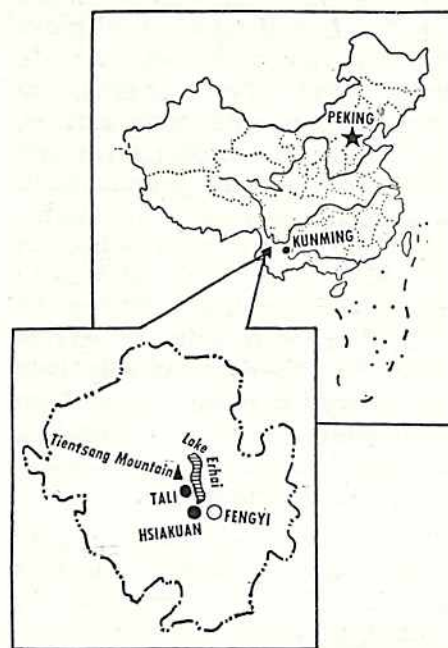
Behind this peaceful scene lies a hundred years of struggle against imperialist and feudal oppression.

THE PAIS are one of the oldest original peoples among Yunnan's 21 minority nationalities. In 109 B.C., during the Han dynasty, the central Chinese government

Students of many nationalities make up a class at the prefecture teachers' college.

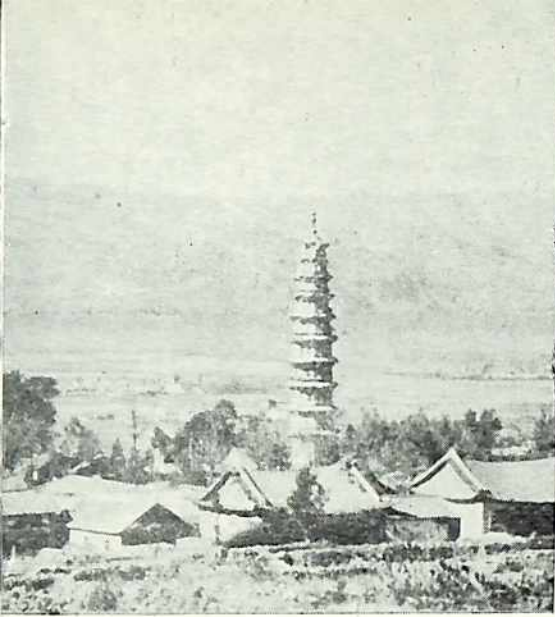


Tali Pai Autonomous Prefecture



established several counties there under its officials and Han settlers began moving in. In the 500 years from the 8th to the 13th century Tali was the political, economic and cultural center of the border region. Together the nationalities living there created a rich culture. Tali's well-known triple pagodas were built during the Tang dynasty (618-907). The biggest, close to 60 meters high, has withstood many strong earthquakes through the centuries.

But, also through the centuries, the working people of all nationalities were exploited and oppressed by the minority peoples' own ruling classes and that of the Hans. After the Opium War of 1840, imperialist forces penetrated the Tali



The triple pagodas at Tali built during the Tang dynasty (618-907).

area to plunder its resources and dump their commodities. Corrupt officials, backed by the imperialists, bled the people white.

The suffering they shared drew the people of the different nationalities together. They united and rose up against the feudal ruling class and the imperialists. The peasant revolution of the Taiping Heavenly Kingdom in the middle of the 19th century inspired the Pai, Hui, Yi and Han peoples time and again to rebel against the reactionary Ching dynasty rule. The rebel forces killed rotten officials, seized land and other property from the tyrant landlords and distributed them to the poor. Imperialist agents disguised as missionaries so enraged the Pais that finally they drove the intruders out. During the Sino-French War of 1884 a local army with Pais as the mainstay fought shoulder-to-shoulder with the Han and Chuang peoples and dealt a crushing blow to the French invaders.

IN 1921 the Chinese Communist Party was founded and began leading anti-imperialist and anti-feudal struggles in many parts of the country. These had a strong impact on the people in Tali. On the Long March the Second Front Army of the Chinese Workers' and Peasants' Red Army passed through the areas inhabited by the Pai people in 1936. They helped the local people fight the tyrant landlords and distribute the land.

Under the Kuomintang government the people of Tali had to pay forty different taxes. Peasants had



Hsiakuan

to turn in more than half their annual harvest. During the War of Liberation the Communist Party helped the people organize anti-enemy associations which made as their target the Kuomintang's increased demands for taxes, grain and men to fight in its army. Communist-led armed work teams were also formed in secret.

As the war advanced rapidly in early 1949, the Communist Party in the Tali area led the Pai people in an uprising. Five hundred work team members and local people stormed the office of the government in the area's Chienchuan county and liberated the county town. This was a great boost to the armed struggle of the people in other areas.

Six more months of fighting liberated a number of counties in the Tali area. The armed units of several peoples merged to become a 7,000-member multi-national guerrilla column. By the end of 1949 Yunnan was the Kuomintang's last refuge on the mainland. When the People's Liberation Army bore down on them, Tali's multi-national guerrilla force fought in coordination with it to liberate all of the area.

In forming the Tali Pai Autonomous Prefecture in 1956 the people took a further step in realizing their right to national equality and becoming masters in their own house. After consultation to achieve a proper balance, leaders for the autonomous government were elected by representatives of the nationalities. Ou Ken, a veteran Party cadre of Pai nationality, was chosen prefecture head, with six deputy heads, two of Han, two of Pai, one of Yi and one of Hui nationality. The 32 members of the prefecture people's council included 11 Pai, 11 Han, five Yi, two Hui members and one each from the Lisus, Nahsis and Miaos. The chief justice was a Pai. During the cultural revolution the government was reorganized as the revolutionary committee of the prefecture, with Ou Ken as chairman, and four vice-chairmen, Pai, Han, Yi and Hui.

THE UNITY of the nationalities has been a vital factor in promoting production, social change and a new mental outlook in the Tali area. The Fengyi commune is an example. It is situated in a low-lying area beside Lake Erhai. Before liberation whenever the rivers



Commune members after a day's work.



Shopping day at stalls set up by state stores in communes around Hsia-kuan.



Leveling fields beside Lake Erhai.



Testing new diesel engines at the prefecture's farm machinery plant.

Dredging up water plants for composting.





Wang Yu-ying (right) and another commune member checking on a chemical weed killer.

flooded, crops were lost and frequently half the population would be forced to leave their homes to go begging. Relations between the nationalities had always been bad. There was a Hui landlord in Chih-hua village whose brother was a division commander in the Kuomintang army. He tyrannized the Hui and Han poor peasants in his own village with impunity and persecuted the Pai peasants of the neighboring village too. When the Pai people upstream tried to divert the water of the river to irrigate their fields, the Hui landlord's armed retainers from Chihhua village would appear and order them to stop. Instigated by the strongarm men, the Pai and Hui peasants of the two villages often fought armed battles.

During the land reform after liberation the Pai, Hui and Han poor and lower-middle peasants were helped by the Communist Party to see that in the last analysis national struggle was a matter of class struggle. They got together, denounced the landlords and redistributed the land. During the agricultural cooperation movement

the two villages formed a socialist cooperative. With land now collectively owned the co-op dredged and rerouted the river so that all could benefit. They constructed roads and set up power lines. Production improved quickly.

In 1958 twenty-one co-ops in the area amalgamated to become the Fengyi People's Commune, with 53,000 people of six nationalities — Pai, Han, Hui, Yi, Lisu and Miao. With greater resources and manpower to draw on, the commune was able to straighten bends in two big rivers and construct a large reservoir, bringing 1,800 hectares of land under irrigation.

The mass movement to learn from the national agricultural model Tachai in Shansi province and criticism during the cultural revolution of the revisionist line of Liu Shao-chi and Lin Piao increased the commune members' enthusiasm for building socialism. The large, straight tracts of land are now plowed by tractors and irrigated and drained by a network of canals. Tillage of more than half the paddy fields is done by machine, as is 90 percent of the threshing. Eighty-five percent of the production teams have electricity.

Scientific farming is taking hold on a mass scale. An enthusiastic promoter is Wang Yu-ying, 40, a commune deputy Party secretary. A campaign led by her to reform the cropping system and use chemical weed-killers resulted in a per-hectare rise in wheat yield from 1.5 tons in 1965 to 6 tons in 1974. In the decade from 1965 to 1975 the commune's grain harvest went up 40 percent.

VALUE OF OUTPUT of the area's heavy industry has risen at an average annual rate of 21 percent over the past two decades. For light industry this figure is 6.7 percent. In 1956 there were only six machine repair shops in the whole prefecture. Now there are 108, as well as 19 manufacturing agricultural machinery and equipment for processing farm products. Each of the 13 counties

has at least one. Every county has a power plant and a number of light industrial factories. Twelve coal mines, several non-ferrous metals mines and 13 sawmills are tapping the area's rich mineral and forest resources. Hsiakuan has a number of medium-sized factories for manufacturing auto parts, cotton textiles, chemical fertilizer and synthetic fibers, and for wood-processing. These were built by the Yunnan province department of industry following a policy of placing more emphasis on the economic progress of minority areas.

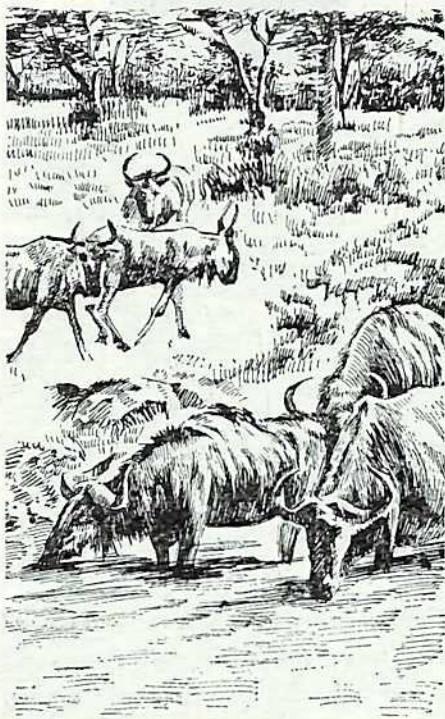
The Hsiakuan Farm Machinery Plant was originally a small repair shop. The Han workers there trained its first group of Pai workers soon after the liberation. As the shop grew into a plant more peasants of Pai and other minority nationalities were recruited. Today most of the original Han workers have retired and the minority workers have become the mainstay of the technical force. They also hold most of the leading positions. They are now training young Hans who came from the cities to settle here after graduation from school. The 500-worker plant makes diesel generators and farm machinery and implements.

Unity between workers of different nationalities and between veterans and newcomers gives force to their criticism of the revisionist line of Liu Shao-chi and Lin Piao and of the anti-Party clique of the "gang of four". Good teamwork in production has been a factor contributing to the plant's outstanding record for fulfilling its targets. In the casting shop, for instance, the steel and mold-making teams have for years been cited as advanced units for their close cooperation. The leaders and vice-leaders of the two teams are a Pai, a Hui, a Han and a Tu.

Asked how they achieved this cooperation, one of the workers replied, "We may be of different nationalities, but we are all members of China's working class. All of us want to fulfil the state plan and build socialism."

The Gaur, Wild Ox of Yunnan

YANG LAN



A bellow resounds in the early morning deep in the Hsishuang Panna mountains of Yunnan province. A large animal with a glistening brown-black coat races along a stream in the heavy forest. It has a broad forehead, short thick conical horns, a high wide hump and a long thin tail. Its legs are white below the knee. This is the gaur, the East Indian wild ox that the Tai people in Yunnan province call the Hopa.

The gaur belongs to the same genus as the domestic cow. It is the largest member of the cow family, often weighing 1.2-1.5 tons. About three meters long and two

meters high at the shoulder, its strength, erect carriage and fine meat make it an excellent draft or food animal. It is a coarse eater and full of vitality. Taming the gaur or crossing it with domestic cattle to improve the breed benefits farming in the mountains.

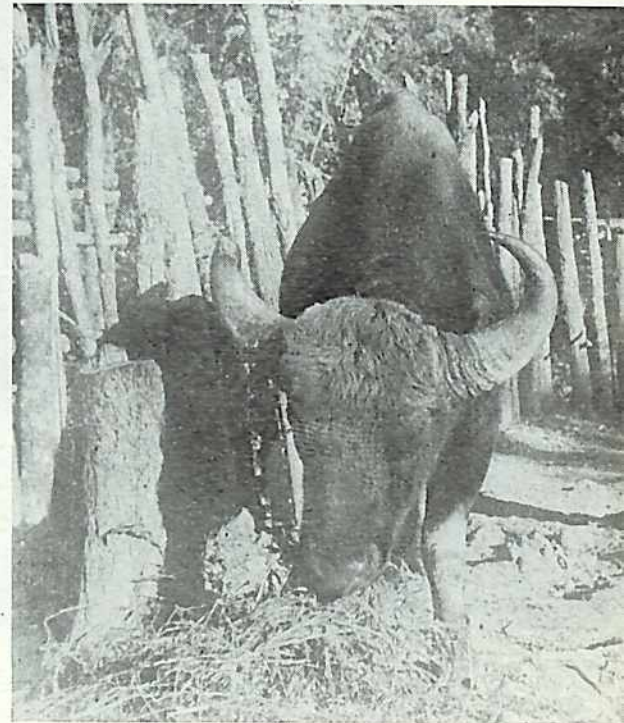
The gaur lives on hilly grassland above tropical or monsoonal forests. Hsishuang Panna's tropical and subtropical climate, high mountains, rivers and virgin forests provide a suitable environment for the gaur. When the valleys are damp and full of water during the rainy season, the gaur moves up to the slopes or ridges. When vegetation on the mountains withers during the dry season, it moves down to the valleys again.

Foraging herds of gaur usually consist of several cows with their calves led by one bull. They range over wide areas, often covering 20 kilometers a day, and have no fixed resting place. They mainly eat such grasses as cogon, and they prefer the salt-rich water in the valleys.

When the bull calves mature, the old bull drives them out of the herd and they live alone. In March and April the following year they return to the herd and fight fiercely with the old bull. These battles often lead to death. The victor leads the herd or entices some of the cows to follow him and sets up a new herd. This habit is particularly significant in the natural selection which preserves the quality of the breed.

HSISHUANG PANNA is known as the "Animal Kingdom". Surveys have found over 60 species of animals and over 400 of birds. These include the rare and valuable Asian elephant, gibbon, langur, slow loris, peafowl and hornbill.

Under reactionary feudal rule before liberation, Hsishuang Panna



Gaur

was a wild region seldom visited by outsiders. The mountains, waters and trees were concentrated in the hands of headmen who claimed to be the lords of heaven and earth, forcing the working people of the different nationalities to live more like draft animals than people. The reactionary ruling class only cut down the forests and hunted the animals, never studying the area's resources, to say nothing of protection and rational development.

After liberation, scientists organized by the Party and government canvassed the region. A nature preserve with its own management and research offices was established in Hsishuang Panna according to the State Council's principle of strengthening protection, promoting breeding and raising, and rational hunting practices. Open hunting, lumbering, pasturing and reclaiming land are prohibited.

Valuable species such as the gaur and the elephant were decreasing under reactionary rule. Today, under a correct wild-life policy, the various species have recovered.



Learn from Lei Feng (poster)

Liu Shu-chun and Pai Jen-hai

CHILDREN

Learning from Lei Feng

Lei Feng was a young soldier in the People's Liberation Army whose life was an outstanding example of whole-hearted devotion to the people. In 1963 after his death in a truck accident while on duty, Chairman Mao called on the country to "learn from Comrade Lei Feng". Premier Chou En-lai pointed out that people should "learn from Lei Feng's clear-cut class stand on what to hate and what to love, his revolutionary spirit of fitting his actions to his words, his communist style of working selflessly for the public interest, and his proletarian fighting will in disregard of personal danger".

Last spring Chairman Hua Kuo-feng issued another call: "Learn from Comrade Lei Feng and carry through to the end the proletarian revolutionary cause pioneered by Chairman Mao."

Lei Feng personifies the Communist spirit because he studied Mao Tsetung Thought and tried to live it. As time passes, his example is taking on ever more significance for the Chinese people, particularly the children, and today a new mass movement to learn from Lei Feng is gaining momentum.

The following incidents are stories from real life:

Sweeping the Snow

EARLY one morning last February Ling Yung, a pupil at Shanghai's Meichou Road Primary School No. 2, woke up to discover a world of white outside. He was excited about playing in the snow. But as he looked through the window he saw people cautiously mak-

ing their way to work along the slippery road. He thought of the paths inside the compound of his school. Someone could easily slip and fall on them. A thought flashed through his mind. He would be like Lei Feng. Without waiting to eat breakfast he ran out to find his classmate Hsiao Chang and the two hurried to school in the cold wind.

As they approached they heard the "swish-swish" of a broom sweeping. Who was here so early? When they entered the yard they saw Hsiao Liu, one of their schoolmates energetically sweeping the paths, sweat streaming down his face. The two boys joined him and later other pupils and teachers came to help.

With great satisfaction they watched their schoolmates walking to class over clean paths.

Thirteen Yuan

THE day after the Tangshan earthquake last July 28, An Hai-ying, a student at the Lingchiu County Middle School in Shansi province, asked her mother to mail a letter for her. It said: "I am a middle school student. Here is 13 yuan for the people of the earthquake area. Please accept it with the good wishes of a Red Guard."

A few months later the money was returned by the post office with a note of thanks. It said that the people's government was taking care of the people in the disaster area and that no individual contributions were necessary.

An Hai-ying has been trying to be like Lei Feng since the day she entered school. With help from her teachers she learned to read Lei Feng's diary, which had been published, and read it again and again. She knew every good deed he had done.

People noticed that Hai-ying always thought about the collective before herself. She realized one day that the walls of her classroom had become dirty and brought lime from home to whitewash them. When the classroom broom was worn out she brought one from home. When the ceiling needed papering she persuaded her mother to give her 200 sheets of old newspaper and 3 kilograms of paste flour the family had saved for their own rooms, to use as an under layer. She got several schoolmates to help her and one Sunday papered the ceiling of the classroom.

One day her mother said she was going to look for a pretty cotton print to make Hai-ying a new blouse. "Let me buy it," Hai-ying said. When she bought a less pretty one at lower price her mother was angry. "Lei Feng said that one's food and clothing are small matters," Hai-ying said. "Please keep the rest of the money for me and I'll use it for some good cause."

Her mother smiled.

Since then, Hai-ying has often given her mother small sums from her pocket money to keep for her. In four years she had saved 13 yuan. When anyone asked what she was going to do with her savings, she didn't say. Her family and friends found out the secret only when the money was returned by the post office. Hai-ying asked her mother to keep the money for her again. She is thinking about what other good deed she can do with it.

Finding the Owner

ONE drizzly Sunday morning last August, Wei Mao-hao, a boy in the Touyu commune in Shantung province, slung his basket over his shoulder and went out to cut grass for the pigs. On the road he came across a black bag. Inside it were a new East Wind wrist watch, a check for ¥ 150, some 30 yuan in bills and some clothing. There was not a soul around.

"How worried the owner must be," Mao-hao thought. "As a Little Red Guard, I should find him and return the bag as soon as possible." He stood beside the road and questioned all who passed by.

An hour and a half later he still had no clue. The rain was falling and he was cold and hungry. "What shall I do?" he wondered. He thought of the story of Lei Feng, how he had escorted an old woman to her home in the rain. It gave him new strength. He stayed by the roadside despite the rain.

After a long while he saw two men hurrying toward him. They were searching for something. He ran to them and asked what they were looking for. They told him a bag had slipped off their cart when they were on their way to get chemical fertilizer. Mao-hao handed them the bag.

"Just like Lei Feng!" they said.

I'm Coming

ONE afternoon last summer Liu Shu-ming, a third-grader at the Lei Feng Primary School in Lei Feng's native village near Changsha in Hunan province, was graz-

ing his buffalo. He heard a cry from a nearby pond. "Help! Help! Kuei-ying has fallen into the water!"

He hurriedly tied the buffalo to a tree and rushed to the pond shouting, "Don't worry, I'm coming!"

Ten-year-old Shu-ming had just learned to swim the year before. The pond was wide and deep. He hesitated. There were no grown-ups around, only a few children. At the sight of Kuei-ying thrashing around in the water, Shu-ming recalled the story his teacher had told him about Lei Feng rescuing a schoolmate. "What would Lei Feng do if he were here?" he asked himself. Plucking up his courage, he jumped into the water and swam toward Kuei-ying.

Shu-ming dived and pulled Kuei-ying to the surface, but she sank again. She grabbed his shoulder and pulled him down. He swallowed a lot of water. He shook himself free and pulled her up again. Finally the children brought a bamboo pole and some rope and got her out of the pond. Kuei-ying was unconscious. Although he was very tired, Shu-ming ran to the village to call some grown-ups.

Kuei-ying's parents and the production team leader came and thanked Shu-ming and praised his spirit of self-sacrifice.

"I was only doing what I ought to do — learning from Lei Feng," Shu-ming replied.



Important Achievement in Research on the Theory of Functions

FOR the first time in the world mathematicians have established an organic link between deficient value and singular direction — two main concepts of value distribution in the theory of functions. Yang Lo and Chang Kuang-hou cooperated in the research. Both men are members of the Institute of Mathematics under the Chinese Academy of Sciences. They have also estimated the number of deficient values for many common and important functions, obtaining accurate results for the general case, and discovered the law of distribution of singular directions.

Yang and Chang's work, published in *Scientia Sinica* and *Acta Mathematica*, has aroused great interest among researchers in the theory of functions, both in China and abroad. Veteran Chinese mathematicians consider these results a creative contribution which opens up new topics for research in value distribution theory. Abroad, specialists in the field have recognized the significance of their results.

For the past 50 years mathematicians have studied deficient values and singular directions, but always in isolation. Guided by their study of Chairman Mao's philosophical work *On Contradiction*, Yang and Chang used the dialectical method in a survey of foreign work on value distribution theory. They concluded that deficient value is a global concept reflecting the fact that a function infrequently assumes the deficient value and changes slowly. Singu-



Mathematicians Yang Lo (right) and Chang Kuang-hou.

lar direction, on the other hand, is a local concept reflecting the fact that a function assumes numerous values and changes rapidly. The two concepts are not isolated but interdependent and interrelated. There is an organic link between them and the two are united in a single contradiction. So they dialectically linked their research in the two fields which had long been studied separately.

Yang Lo and Chang Kuang-hou came to the Institute of Mathematics after graduating from Peking University in 1962. Chairman Mao had placed great importance on basic scientific research and issued a number of directives on the subject. Premier Chou En-lai

also constantly pointed out that basic research "must be given sufficient attention". With this support always in mind, Yang and Chang worked hard to reach and surpass advanced world levels. Under the leadership of the Party and with the help of veteran mathematicians and other comrades they persisted in their study of value distribution theory during the 10 years of the cultural revolution.

After 1972, as the two mathematicians entered an intensive stage in their work, the "gang of four" — Wang Hung-wen, Chang Chun-chiao, Chiang Ching and Yao Wen-yuan — spread many fallacies opposing basic research. In particular they implied that all those doing theoretical research were bourgeois experts and that their work was a "rightist counter-current" and tried to suppress them.

Yang Lo and Chang Kuang-hou continued to follow Marxism-Leninism and the directives of Chairman Mao and Premier Chou, resisted this interference and kept on working. Their results have advanced research on value distribution theory.

New Microwave Communications System

POST and telecommunications workers have designed and built a model II unit for China's 960-channel microwave communications system. Their work was done according to the orientation for development set out by Chairman Mao — **"maintain independence, keep the initiative in our own hands and rely on our own efforts"**. State tests show that the Model II meets design objectives. This puts China's microwave communications technology in the world's front ranks.

Research and development of microwave communications equipment began in the late 50s, overcoming the shortage of personnel and reference material caused by the imperialist and revisionist technical blockade. This led to China's first 60-channel microwave communications equipment.

In 1964 they began research on a 600-channel system. In three years they designed and produced the necessary vacuum-tube equipment, the foundation for high-capacity microwave communications.

During the cultural revolution, the post and telecommunications

workers condemned the revisionist lines of Liu Shao-chi and Lin Biao, which were holding up technical development. Now following Chairman Mao's revolutionary line more conscientiously, they speeded up work on microwave communications. By 1972 they had finished the Model I transistorized unit for a 960-channel microwave system. This was used in microwave communications trunk lines connecting Peking with the overwhelming majority of the provinces, municipalities and autonomous regions.

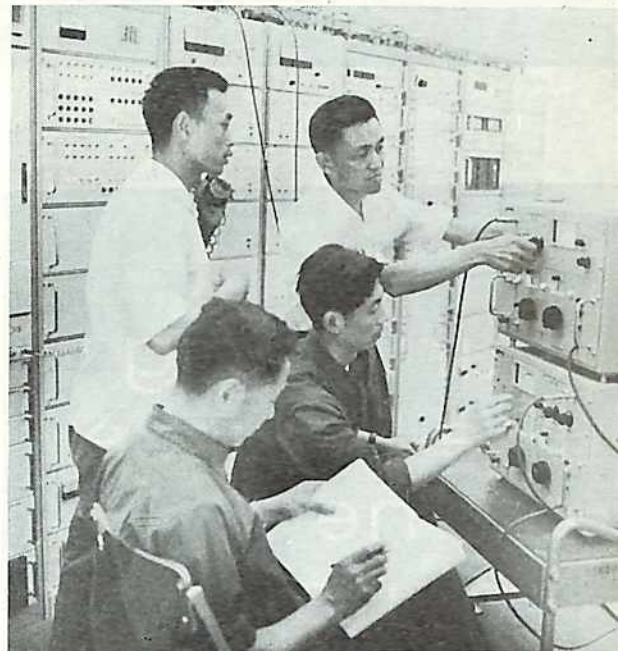
In 1974 they started research on the Model II unit. Combining workers, leaders and engineers, and integrating research, production and user units speeded up the work. The "gang of four" and their henchmen, however, disrupted progress by charging that work on modernizing science and technology was following the false "theory of productive forces" and that those who studied advanced techniques were bourgeois experts.

Communications workers, leaders and engineers resisted this

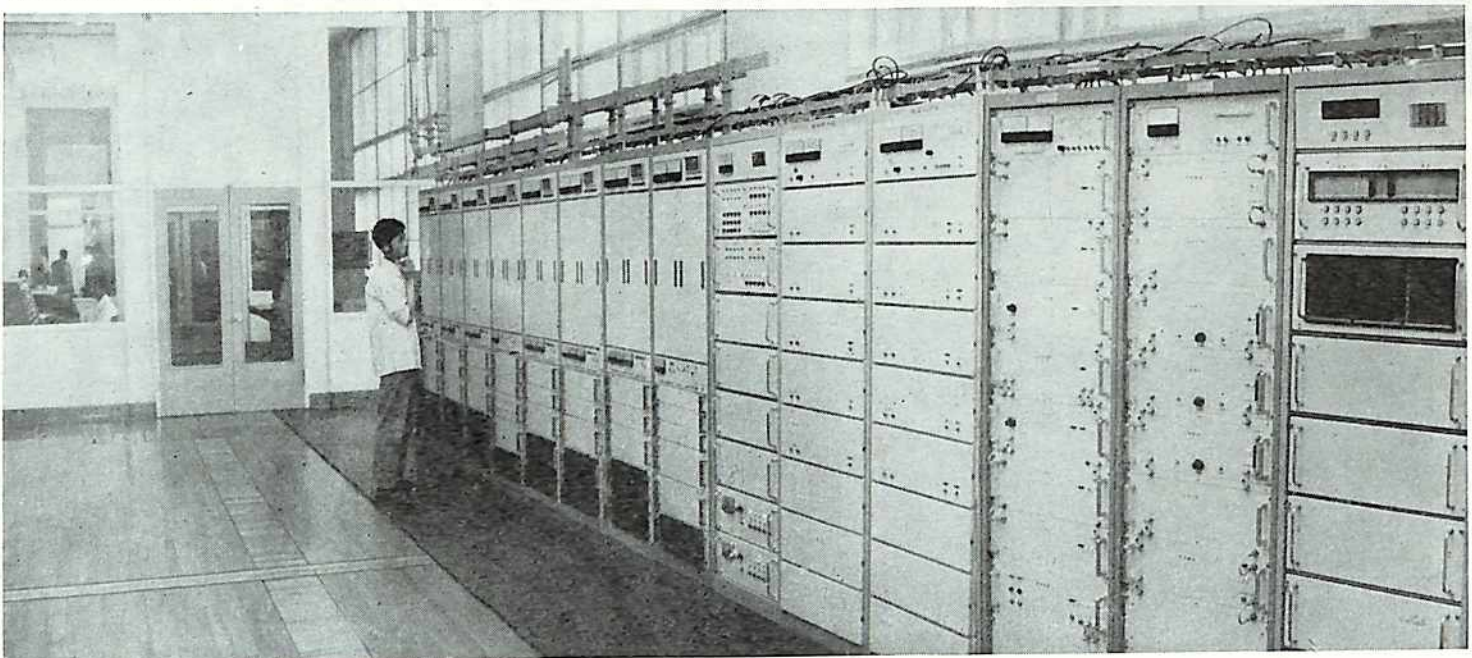
pressure and worked hard to complete their task. Breaking with many conventional practices, they boldly adopted new techniques and overcame technical difficulties. The Model II unit, which uses only domestic components, was finished in a year and a half.

The Model II unit is a great improvement over Model I. It has twice as many bands, its design fits the conditions of China's microwave communications trunk lines, and it can transmit color television. Relay stations need not be manned, a factor which has contributed to faster progress in microwave communications.

Representatives of research, production and user units test microwave equipment.



A Model II unit for the 960-channel microwave communications system.





Surveying.

the river. Lhasa, the biggest city in Tibet, is located in the middle reaches.

The Yalutsangpo starts as a tiny stream, gathers water from five main tributaries and several hundred smaller streams and accumulates an annual volume of 100 billion cubic meters. It winds almost 2,000 kilometers through the broad and flat Shigatse-Dagzhuka and Chushul-Sangri valleys, the narrow and steep Sangri-Jiacha Gorge and the well-known Great Bend Gorge, finally leaving China at Pazhikha to become the Brahmaputra in India.

For a long time there were contradictory statements on the origin of the Yalutsangpo. In the summer of 1975 the Chinghai-Tibet Plateau Comprehensive Investigation Team under the Chinese Academy of Sciences sent a detachment to survey the river's origin and surrounding areas. Its task was to find the source of the Yalutsangpo, study the origin and type of water, discover the laws governing hydrological changes. This would provide data for the all-round development of the river's water and hydropower resources.

In 1976 after another survey of the Yalutsangpo's upper reaches and the area west of its source, we gained a more comprehensive understanding of the source area's conditions in hydrology, geomorphology and geology.

WITH great hydropower potential, the Yalutsangpo is Tibet's largest and the world's highest river. Its mean elevation is 4,500 meters. Originating in the glaciers of the Himalaya Mountains, it flows east along the valleys of the Himalaya and Kangkar Tesi ranges over southern Tibet. Stretches of fertile land lie along both sides of

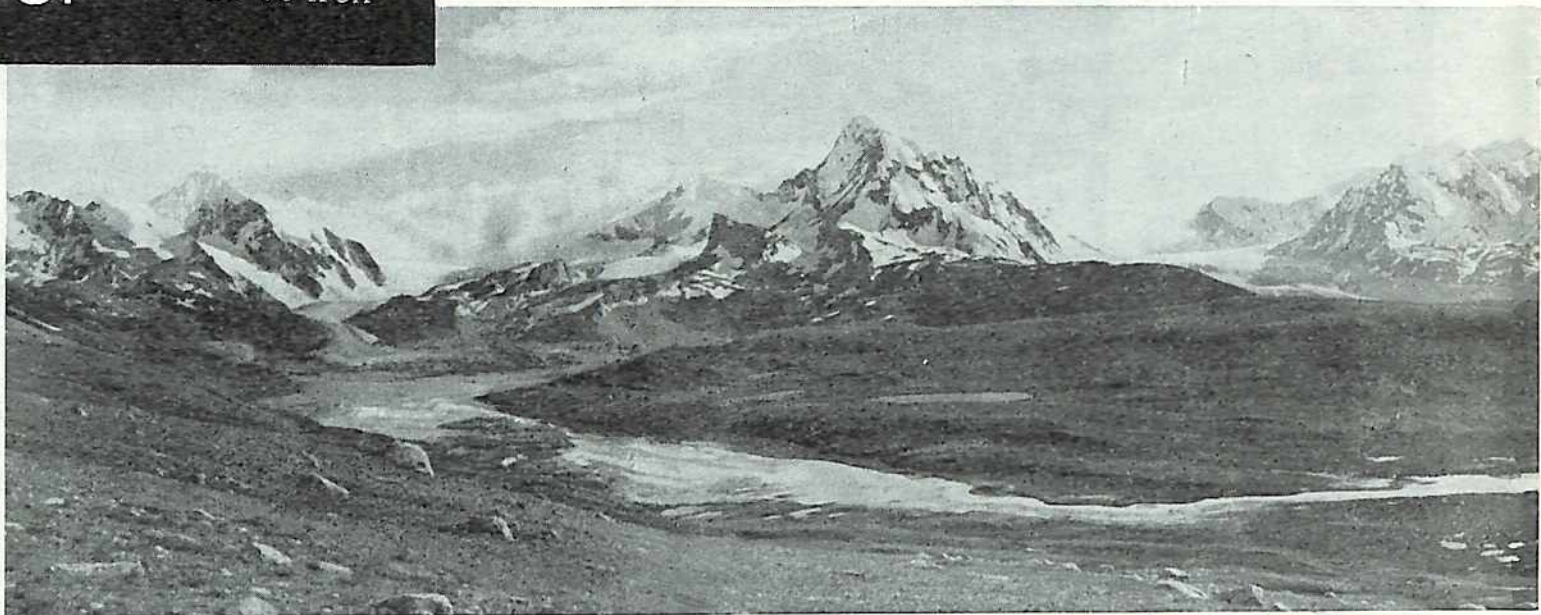
PAO YU-HUA is a member of the Chinghai-Tibet Plateau Comprehensive Investigation Team under the Chinese Academy of Sciences.

Three of the five glaciers which form the Khumbi River. The Shabkha Glacier, the main source, on the far right.

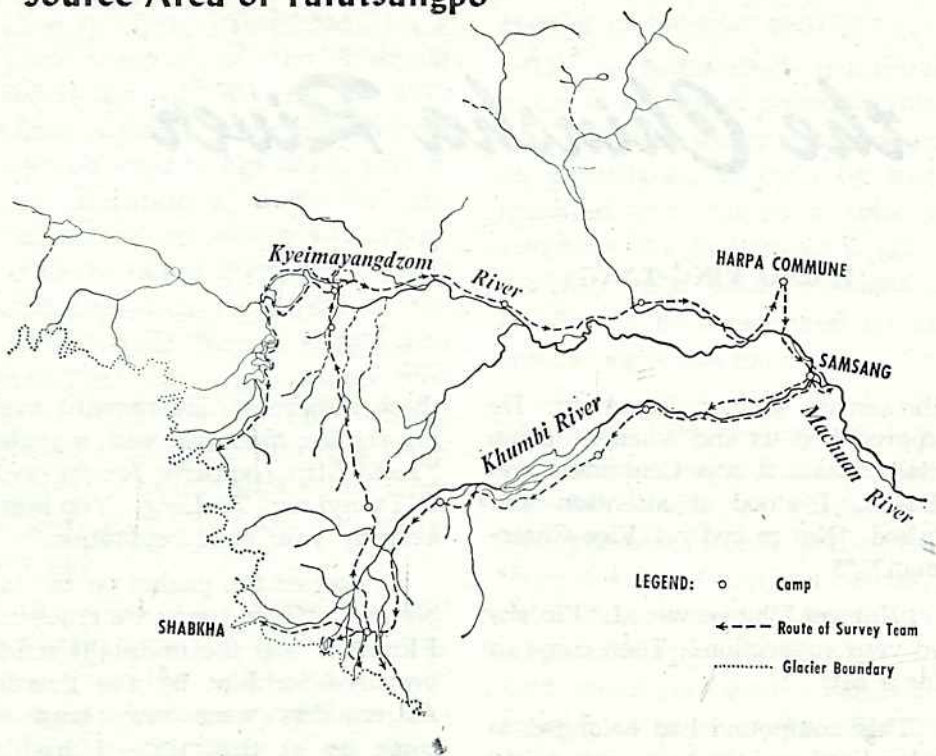
GEOGRAPHY OF CHINA

Surveying the Source of the Yalutsangpo River

PAO YU-HUA



Source Area of Yalutsangpo



Our detachment had the help of the Tibet Autonomous Region's Party Committee and the local people. We set out from Lhasa (3,650 meters above sea level) in trucks west along the Lhasa-Pusreng Highway through the valleys of the Lhasa and Nyangchhu rivers. We passed farming and pastoral areas along the Yalutsangpo. Winter wheat, *chingko* barley, rape and other crops were growing well. Tibetan commune members were working in their fields. Herdsmen on horseback, often

singing, were grazing flocks and herds on the grasslands.

Five days later we reached the county seat of Drongpa (4,600 meters), a new town on the plateau. The local people showed great concern for us and loaned us horses and yaks for our mission. Another day westward by truck brought us to the summer pasture of the Harpa commune. Here we left the highway and traveled on horseback toward the source area. Pointing to the southwest, our guide said that the snowcapped mountain ranges

in the distance were where we would find the beginnings of the Yalutsangpo.

With our equipment and instruments loaded on yaks, we arrived at Samsang where the Khumbi and the Kyeimayangdzom rivers join to form the upper Yalutsangpo, known below Samsang as the Machuan River. We pitched tents at the confluence. This very quiet place at once began to seethe with life.

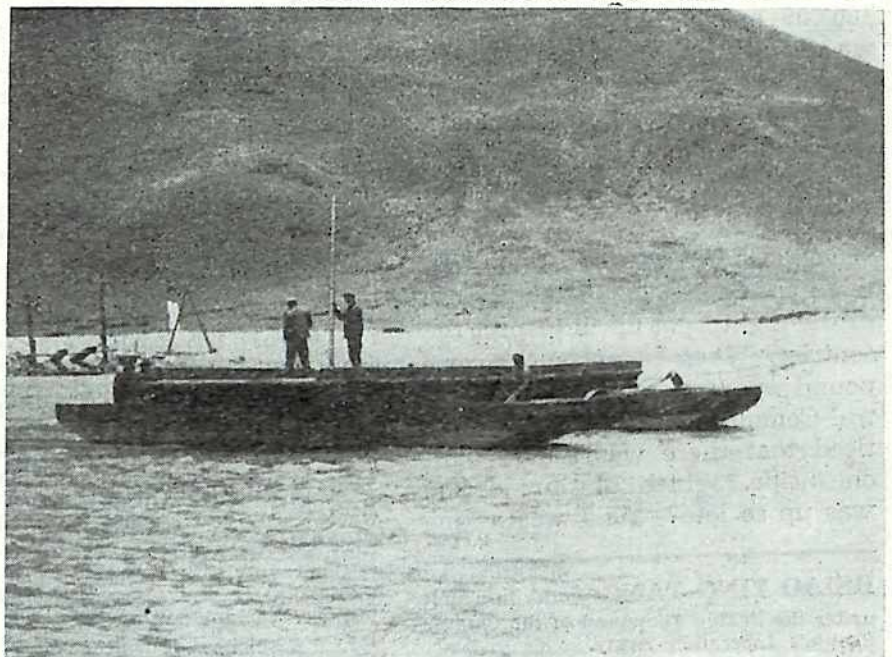
We lost no time beginning our observations of the two rivers. We made detailed hydrological observations, charted water depth, current velocity and temperature, carried out field surveys, investigated the geology, geomorphology and meteorology of the confluence area and worked out some maps. Sometimes we crossed the icy rivers on

(Continued on p. 52)

Team members study at Samsang.



Team members make hydrological observations on the upper reaches of the Yalutsangpo River in 1976.



Crossing the Chinsha River

HSIAO YING-TANG

AFTER the Tsunyi Meeting,* the First Front Army of the Chinese Workers' and Peasants' Red Army led by Chairman Mao routed the enemy forces in the vicinity of Loushan Pass and Tsunyi, crossed the Wuchiang and Peipan rivers to the south, and swept on toward Yunnan. During the march our Red Cadres' Regiment had the task of protecting the Central Committee organizations and our leading comrades.

There were two infantry battalions and one special service battalion in our regiment, most of our cadres having been transferred from crack companies and platoons which had seen plenty of action.

April in Yunnan was already hot. Even our thin uniforms were constantly drenched with sweat. In the misty fields the rice waved in the breeze as if to welcome us. The hills on both sides were overgrown with green trees, and bees buzzed to and fro among red flowers. The spring air was intoxicating. Although we had more than 100,000 enemy troops in pursuit, we all felt sure that with Chairman Mao leading us we would shake off the enemy and win fresh victories. Our morale was high as we marched along enjoying the spring scenery.

One evening our regiment quartered in a village. In the middle of the night I got up to inspect the sentries. When I reached the compound where members of the Central Committee were staying, I noticed that there was still a light on inside. Which of our leaders was up so late? As I was asking

the sentry, someone came out. He approached us and when he came close I saw it was Comrade Chou En-lai. I stood at attention and asked, "Not in bed yet, Vice-Chairman?"**

"Not yet," he answered, "Finished your inspection? Then come in for a bit."

This compound had belonged to a landlord and the house was fairly well built. In the room where Vice-Chairman Chou was staying there were several old-fashioned chairs and a large square table. On the table was a dim oil lamp, some writing material and a paper packet. On the wall hung a big map, so it seemed that he had been studying the route for our march. In the dim lamplight, the vice-chairman's face looked thin and wan. His eyes, too, had lost some of their sparkle. He was wearing himself out.

After we sat down he asked me, "How many men does your company have now?"

"We had some casualties in the battles at Tsunyi and Tucheng,"*** I told him. "Our present strength is just over a hundred and twenty."

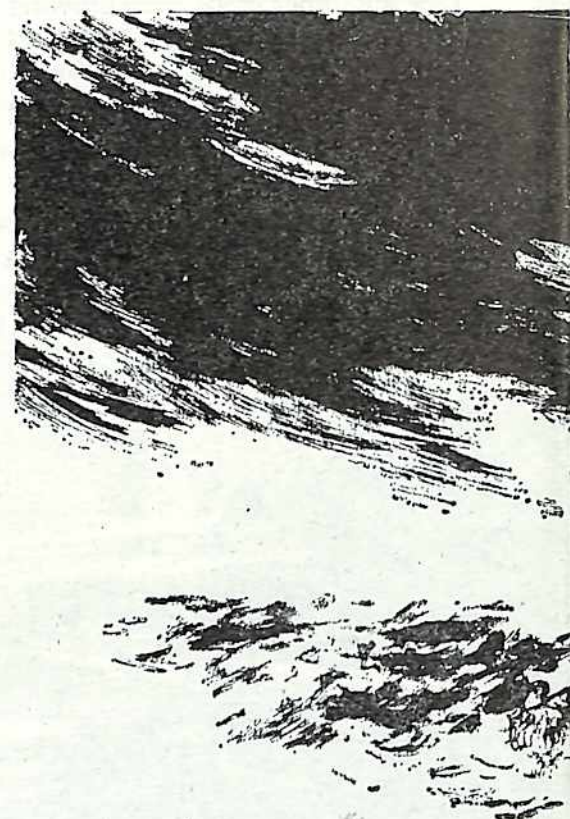
Then he asked me how our company had made out during the march and the state of our morale and equipment, and I answered

these questions. He thought over my replies, then said with a smile, "Your fifth company fought well at Tsunyi and Tucheng. You must keep up your good reputation."

He opened the packet on the table and offered me some crackers. I knew it was the midnight snack prepared for him by the guards. As crackers were very hard to come by at that time, I hastily declined.

"I had a big supper," I told him. "I'm still full."

He pushed the packet toward me, insisting that I try some, so I had to take a small piece. As I munched I waited for more questions, but the vice-chairman kept silent as if lost in thought.



HSIAO YING-TANG works in a unit under the Peking Command of the Chinese People's Liberation Army.

* In January 1935 the Red Army reached Tsunyi on the Long March. Here the Central Committee of the Party called an enlarged meeting of the Political Bureau. This meeting ended the rule of Wang Ming's "Left" opportunist line in the Central Committee, established Chairman Mao's position of leadership over the whole Party and brought the Party's line onto the correct Marxist-Leninist path.

** Comrade Chou En-lai was Vice-Chairman of the Central Revolutionary Military Commission at the time.

*** In Kweichow province.

Finally he said, "All right. It's late now. Go and turn in."

As I left Vice-Chairman Chou's room I was wondering: Why did he ask me such detailed questions about our company? Did he just ask them casually or is he choosing a unit for some important task? I was sorry that I hadn't got this point clear.

THE next day, we used the time to husk rice, mend or wash clothes, polish rifles and sharpen bayonets. A few of us sat under the eaves plaiting straw sandals, chatting as we worked.

"The enemy's chasing after us hard, yet we've halted here," remarked one man. "Isn't that odd?"

"What's odd about it?" someone retorted. "We must be waiting for them to catch up so we can give them a beating, or maybe there's some big job ahead and we need to make preparations."

"What big job?" cut in a third man. "An assault on Kunming?" A forced crossing of the Chinsha (Golden Sand) River?"

No one could answer this question and all eyes turned toward

me. "No orders have come down yet," I said. "Who knows?"

That afternoon when all our preparations were more or less complete, men kept coming to ask me why we still weren't leaving. I was feeling pretty impatient myself, and all these questions made me even more anxious. I decided to take a stroll and try to pick up some news.

It was a fairly big village of more than two hundred households. Their thatched cottages fenced with bamboo were surrounded by green paddy fields—a most tranquil scene. The peasants had a hard life, but somewhat better than those in Kweichow. There were many minority people. But because of the lies spread about us by the Kuomintang, all the young people seemed to have fled, leaving only some old folks and children in the village. Outside the gate of the primary school, in a pile of waste paper being blown around by the wind, I found a map of Yunnan. I picked it up eagerly. In the past we'd always relied on our higher command for directions and on local guides to lead the way. Thus this map, simple as it was, was better than nothing. From the map I could see that if we were to

head north we would have to cross the Chinsha River. The enemy defenses there would be very strong. If we tried to force a crossing, we had to expect some hard fighting.

ON THE WAY BACK I passed the headquarters of the central organizations and saw people hurrying in and out of the gate as if there were some meeting going on. Apparently at this stage of our Long March another major problem had arisen.

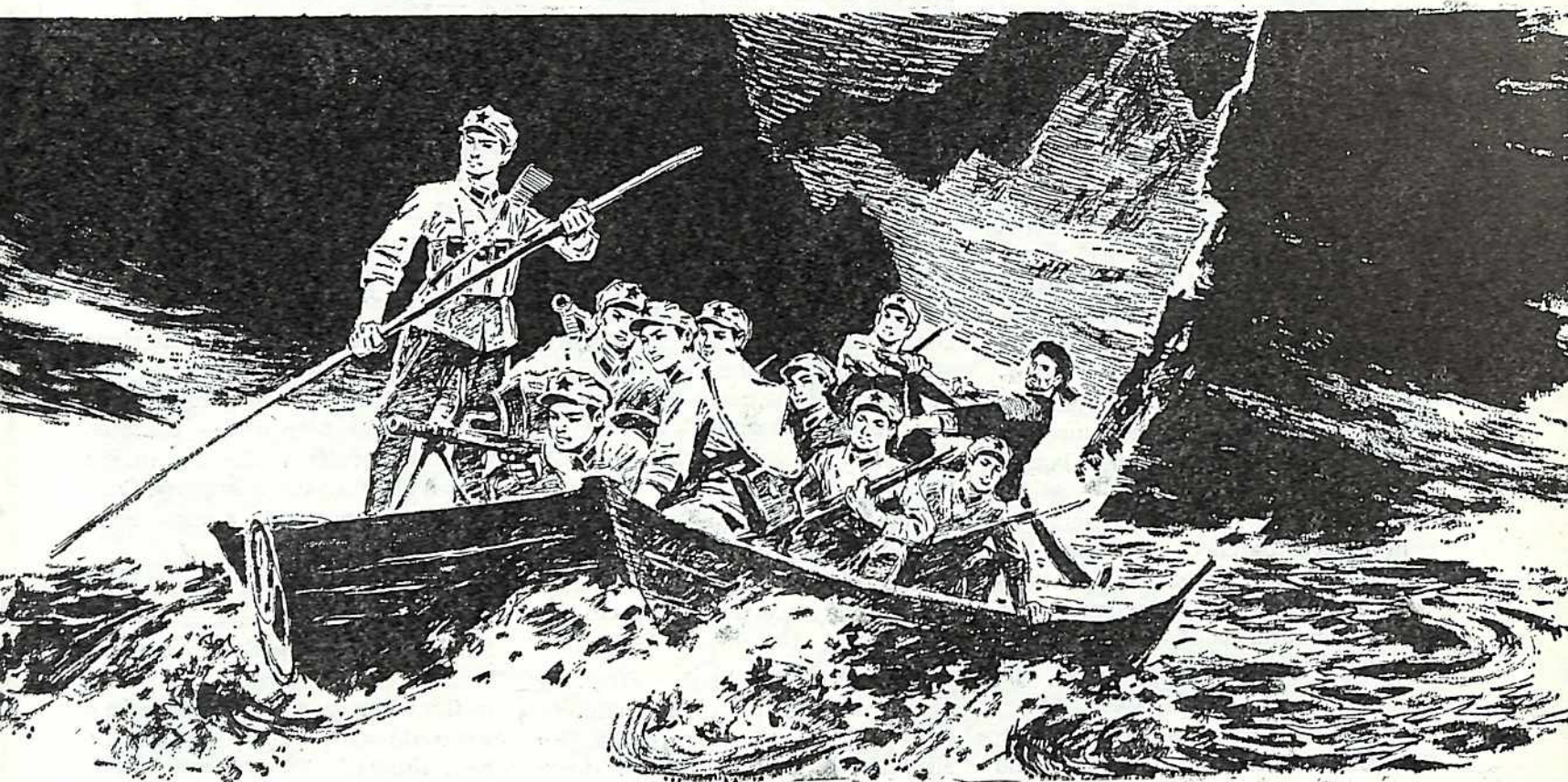
The next morning we heard that the enemy was approaching fast and about to encircle us. Still no order came to move. We were all on tenterhooks. At noon I suddenly saw the messenger from regimental headquarters approaching our company. I hurried to meet him. "The regimental commander's sent for us?" I asked.

"How'd you guess?" rejoined the messenger.

I knew then that he had, and joyfully grabbed hold of Political Instructor Li. Together we hurried to regimental headquarters.

Headquarters was packed with people—Regimental Commander Chen Keng, Political Commissar Sung Jen-chiung and some respon-

* The capital of Yunnan province.



sible comrades from the central organizations. Some I knew and others I didn't. The room was wreathed with tobacco smoke, and the meeting was still in progress.

When Li and I went in our regimental commander gave us our orders: "The Central Committee has decided that our army is to cross to the north bank of the Chinsha River and has given our regiment the task of capturing the ferry at Chiaochehtu. Our regiment has decided to send the second battalion as the advance detachment and your fifth company as the vanguard. Your job is to capture the ferry as fast as possible, no matter the cost, and cover the crossing. You are to set out as soon as you are ready!" Indicating a man near him in a dark suit, he added, "The Central Committee is sending a work team with you to help carry out this task. Comrade Li here is head of the work team. He's to be in overall charge."

Hearing this I was elated. I gave Comrade Li a firm handshake. After a brief consultation on when to start, I went back to our company.

AFTER the men had been briefed and lightened their equipment, we had a hearty meal, then set out along a path leading to the river. The vice-battalion commander Huo Hai-yuan and I marched behind the vanguard platoon while the political instructor and the work team brought up the rear. The two victories at Tsunyi and Tucheng had put our troops on their mettle. They'd had two days' rest to recover their strength, and they were jubilant at having been chosen as the vanguard in this action. We wound our way through the mountains, in some places trackless. Though the sun made us pour with sweat, not one of our men lagged behind or complained. Pushing forward at five kilometers an hour, we marched all night. At daybreak we rested for ten minutes to gulp down some water and a few mouthfuls of cold rice, then covered another 40 km. in one stretch.

We had now crossed a high mountain and were only some 30

km. from the Chinsha River. We decided to take a rest. This gave Comrade Li of the work team a chance to discuss the problem of capturing the ferry with us. We decided that as soon as we reached the bank we would wipe out the defenders there, seize some boats and force a crossing. After we had routed or wiped out the enemy on the opposite bank, we would dig in to wait for the detachment behind us.

By the time we drew near the river the sun had set. Some distance ahead of us we could see the dark silhouette of a range of hills, but could not tell the rocks from the trees. The Chinsha lay before us like a length of grey cloth, but the river itself was indistinguishable from its sandy banks. Between the hills and the river were flickering lights. I gave an order to the men behind, "The Chinsha's just ahead. Get ready for action!"

SUDDENLY the leader of the vanguard platoon ran up panting through the darkness to report what had happened at the ferry.

Since our entry into Yunnan the enemy had worried that we would force the Chinsha. They had deployed troops for a stretch of several hundred kilometers along the north shore to guard all ferries large and small. All the boats had been moved to their side to cut communication. From the north bank at Chiaochehtu they often sent over plainclothesmen to reconnoiter. Today they had sent some spies too, but these men must have gone off to smoke opium or squeeze the local people, for the boats that had brought them were still waiting at the ferry. When our scouts went down to the bank, the boatmen assumed they were the spies. "You're back," one said casually.

"Yes," said our men. They then darted forward to point their pistols at the boatmen's chests, and in this way we had captured the boats.

I raced to the bank. First we reassured the trembling boatmen, then found out from them the situation on the north shore. There

was a small town where a landlord force of thirty to forty men guarded the local tax-collector's office. This morning one company of regular troops had arrived as reinforcements and was stationed to the right of the town. In the center of the town, on the riverfront, was a wharf with stone steps where one of the landlords' men usually stood guard. Because of the tense situation they had posted an extra sentry. Though the enemy feared we would cross the Chinsha, this was not a major ferry and they had no idea we could arrive so fast, so the place was not too well defended.

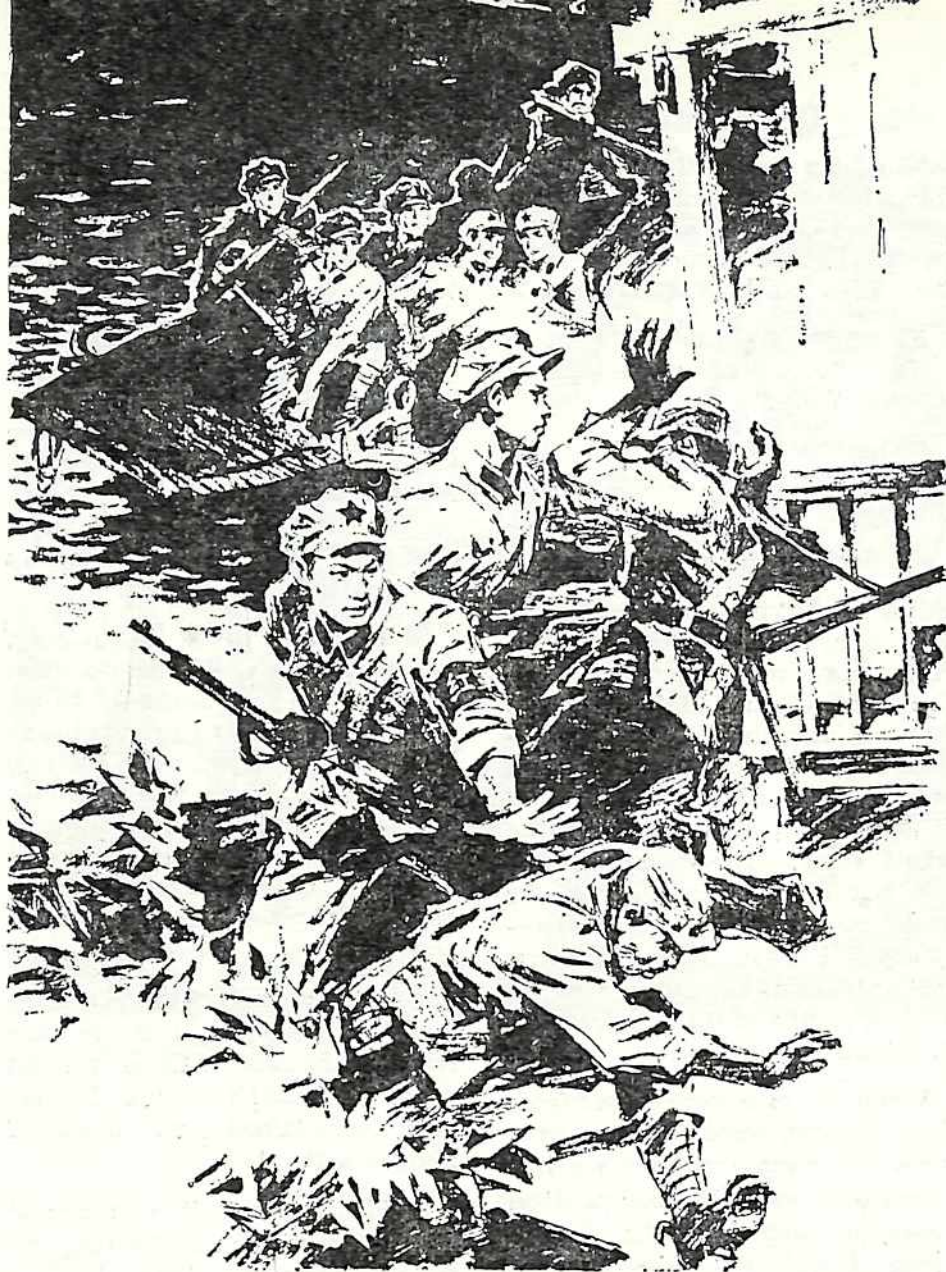
The vice-battalion commander and I discussed the situation briefly and decided to cross the river at once. Meanwhile the political instructor spoke to the boatmen, urging them to help us. They had suffered much under the Kuomintang and readily agreed.

I THEN ordered the first and second platoons to cross first with me, while the vice-battalion commander, the political instructor and the work team remained behind on the south bank. The third platoon would be on the alert, ready to give us fire support if we needed it.

The third platoon accordingly fanned out right and left along the bank, training their guns on the flickering lights of the town on the other side. Silently I led the first and second platoons aboard the two boats, whispering instructions on what they must do after landing and in case of emergency. Then the two boats cast off.

There was a breeze and the river was choppy. Waves slapped our boats and made them pitch. A few of our men helped the boatmen with the sculls while the others stayed close together, hugging their rifles to prevent their being splashed by the waves.

As we got closer to the town we could see the dark outlines of the buildings more clearly. When the boats drew still nearer, the lights in the windows grew brighter, and we could see shadowy figures and hear shouts.



Our boat reached the wharf. I nudged the two picked men near me. Guns ready, they jumped ashore and bounded up the stone steps. As they reached the top, we heard a hoarse voice with a local accent, "Hey, how come you're back so late?"

"Don't move!" a low voice growled.

I led my men up at a run and we overpowered the two sentries. A brief interrogation of the captives confirmed what we'd learned from the boatmen. So I ordered the first platoon to head along the street and attack the enemy regulars, and the second platoon to go left and attack the landlords' contingent. They were to keep me informed of developments.

THE BOATS went back to fetch the men behind us.

According to plan, our signalman collected some straw and set it ablaze on the bank—the signal that our company had crossed. The leaping flames lighted up the shimmering water.

When the first platoon reached the gate of the enemy company headquarters, the sentry challenged them. On our orders, one of the captured sentries answered, "We're from the local unit."

Before the Kuomintang soldier could ask anything else, our men leaped forward and caught him by the throat. Having ascertained the situation inside from him, they charged into the courtyard, kicked open the doors and shouted, "Hand over your guns and you'll be spared!"

They found a room full of fumes and the enemy troops sprawled on the ground smoking opium. The

soldiers looked up in bewilderment at this stern command and slowly raised their hands. "There's some mistake," they protested in puzzled voices. "We've just arrived today."

"Don't worry, there's no mistake," our men answered. "We're the Red Army and you're just the ones we want!"

The Kuomintang soldiers exchanged helpless glances, then got up and shambled out into the courtyard where we lined them up at bayonet point. Only their company commander and some other officers, who had been in a separate room, fired a few shots and fled. Since it was dark and we did not know the roads, we did not pursue them.

Something of the same sort had happened with the second platoon. They went into the quarters of the landlord contingent pretending they had come to pay their taxes. The landlords' men were also smoking opium or playing mah jong, and all of them were caught, including their chief.

Fine! Everything was going smoothly. I ordered the signalman to build another bonfire on the bank to give the second signal.

THE CAPTURE of the ferry had taken a great weight off our minds. As I stepped onto the flagstone street of the town and saw the dark houses, I was suddenly thirsty, my legs ached, and my stomach rumbled with hunger. If only we could find a place to have a square meal and then a sound sleep! I was thinking of discussing our next step with the political instructor when the vice-battalion commander came up.

"To consolidate and deepen our position at the ferry," he said, "the regimental commander orders you to advance another seven kilometers along the mountain road toward Huili* and guard against enemy attack."

Our men quickly assembled in the street. Everyone declared he was able to go on, but we were so

* In Yunnan province.

famished we had no strength. After all, we'd marched more than 100 km. at a stretch and had had nothing to eat but some cold rice. As we trudged along, I noticed a sign hanging in front of a door and by straining my eyes saw that it was a pastry shop. I opened the door and went in. All was dark inside and when I called for the shopkeeper no one answered. He had probably been frightened away by the gunfire. I lit an oil lamp and found quite a few local pastries on the shelves. Since there's no one around, I thought, I'll have to serve myself. I gathered up all the crackers and candy, about 15 kilograms. There were more than a hundred of us so each man got only a little, but it was better than nothing.

After we finished eating, our quartermaster worked out the cost, wrapped up some silver dollars, wrote a note and put these carefully in the drawer of the cash-desk. Then we blew out the lamp, closed the door and continued on our way.

ONCE out of the town, we started up a mountain path on the left leading into a ravine. Having advanced along this for eight kilometers we came to a patch of fairly level ground and decided to bivouac there. Each squad detailed a few men to gather firewood, fetch water and do the cooking. All the rest, hugging their rifles, fell sound asleep.

How long I slept I don't know, but I was awakened by some one shaking me. I opened my eyes and found it was the vice-battalion commander who'd come up.

"Get up quickly!" he said. "We're to continue the advance."

I sat up with a start. "Is there some enemy movement?"

He pointed at a high mountain silhouetted in the distance and said, "Twenty kilometers along this path will bring you to that peak. If the enemy occupies it, they'll be a big threat to us. The regimental commander has ordered us to occupy that height before dawn to extend our position and strengthen our hold on the ferry."

"But our regiment and leading comrades of the central organizations can cross in one day, can't they?" I asked in surprise. "Why consolidate our hold on the ferry?"

He smiled and said, "It's not so simple. Our whole main force is to cross there."

"What!" I exclaimed. "The whole First and Third Army Groups?"

He nodded. "That's right."

Now everything was clear — why our leading comrades had been busy meeting, why Vice-Chairman Chou had been up so late and asked me all those questions about our company. He had been planning not just the crossing of our staff officers but of the whole army. The thought elated me, but also brought home our heavy responsibility. I immediately notified all the platoon leaders, telling them to have their men get a quick meal and then be prepared to set out.

When our men were roused from their dreams, some of them were none too happy to hear we had to move at once. But our political instructor explained the significance of capturing the height and they became enthusiastic.

"Slog on another 20 km. and bivouac on the height!" somebody boomed.

"Capture the peak to cover the crossing!"

"Fight to the mountain top to guarantee victory!"

Then they went to hurry up the cooks.

AT DAWN, though nearly on our last legs, we made it to the summit. From there we overlooked a whole range of hills and the path to Huili twisting between them. We decided to occupy two hills on either side of the path to control the way from Huili to the ferry.

As we marched, the vanguard squad reported an enemy unit approaching. After a minor skirmish and another twenty minutes had passed, we saw a large enemy force on its way up.

This showed the brilliance of our higher command. If we had spent the night below in the ravine, we'd have had to pay a heavy price today to capture this position.

After our fourth company and the heavy machine-gun company of the special service battalion came up, Regimental Commander Chen Keng assigned our tasks. At his command, our machine guns opened fire. When the bugle sounded, our whole company charged, firing as we ran.

The enemy caved in quickly, fleeing in panic. We chased them for nearly 10 km. Some we killed, others flopped down pretending to be dead, others fell over cliffs to their death. When we reached a hill behind a village, a cavalryman brought the regimental commander's order: "Stop pursuit, bivouac in place and maintain an alert."

So we camped on the slope behind the village. By then we were really exhausted. Once we sat down we couldn't get up. No one even complained any more of hunger or thirst.

Suddenly when it was almost dark our men started shouting and running down the slope. I saw a unit passing the foot of the hill. Its vanguard was already approaching the village, but the rearguard had not yet appeared. Our men had heard from a courier that this was the Third Army Group and roused themselves from sleep to get up and watch. They raised great shouts of welcome although our comrades-in-arms could not possibly hear them. Once again, all our fatigue after our forced march, combat and pursuit was forgotten.

The next day our Central Committee leaders and members of the office staff crossed the river. We heard from some newcomers that the First Army Group had found it impossible to cross the river at Lungchiehtu because it was too wide and enemy planes could strafe them. The Third Army Group could not cross at Hungmentu either because the current was too swift. Now both were crossing at Chiaochehtu, and the Third Army Group was advancing on Huili.

Lesson 4

The Writing of Chinese Characters

All Chinese characters are written using one or more of eight basic strokes.

Stroke	Name	
丶	点 diǎn	dot
一	横 héng	horizontal
丨	竖 shù	vertical
ノ	撇 piě	left-falling
㇏	捺 nà	right-falling
㇇	提 tí	rising
丨 丨 丨	钩 gōu	hook
㇇ 乙 ㇏	折 zhé	turning

The strokes must be written in a certain order.

Rule	Example	Stroke order
First the horizontal, then the vertical	十	一 丨
First left-falling, then right-falling	人	ノ ㇏
From top to bottom	京	一 丨 冫 京
From left to right	你	亻 尔
First outside, then inside	月	冂 月
Finish inside, then close	国	冂 玉 国
First center, then the two sides	小	丨 丿 勹

Often the difference of one stroke produces an entirely different character with a different meaning. For example, in 大 dà (large), if a dot is added at the bottom, it becomes 太 tài (too much); if a dot is added at the top-right corner, it becomes 犬 quǎn (dog); if a horizontal line is added at the top, it becomes 天 tiān (sky); and if the left-falling and right-falling cross each other, it becomes 丈 zhàng (a length of ten feet).

Note the following characters which look almost alike:

千 qiān (thousand)	——	干 gàn (to do)
八 bā (eight)	——	人 rén (person)
早 zǎo (early)	——	旱 hàn (drought)
住 zhù (to live)	——	往 wǎng (to go)
刀 dāo (knife)	——	力 lì (strength)

Copy the following sentences writing the strokes in the proper order.

你好!
Nǐ hǎo!
(How are you?)

你早!
Nǐ zǎo!
(Good morning.)

你叫什么名字?
Nǐ jiào shénme míngzì?
(What is your name?)

我叫王大成。
Wǒ jiào Wáng Dàchéng.
(My name is Wang Dacheng.)

她是谁?
Tā shì shuí?
(Who is she?)

她是我的爱人。
Tā shì wǒ de àiren.
(She is my wife.)

再见!
Zài jiàn!
(See you again.)

For Advanced Students:

沙漠变了样

秋天,戈壁 gēbì (Gobi) 滩上太阳似火,闷热 mèn rè (stifling, sultry) 的天气使人透 tòu (through) 不过气来。我们的汽车从沙漠边缘 biānyuán (edge) 驶过 shǐ guò (drive past)。

忽然,一个大人工湖 réngōnghú (man-made lake) 出现在眼前。湖水碧蓝,鸟儿在湖面上飞翔 fēixiáng (soar), 鱼儿在湖水里游动 yóudòng (swim)。沙漠里闷热的空气顿时 dùnshí (at once) 消失了。我们凝视 níngshì (stare at) 着这清澈的湖水,回忆起这沙漠的过去。

千百年来,由于缺水,人们遭受了多少苦难!记得四十年前有一个反动统治者,他搜刮 sōuguā (squeeze) 了各族人民的大量钱财,花了三年时间,只修了一条不到二十公里长的小水渠,引来山上的水。可是水渠刚修成,就被大水冲毁了。

新中国成立后,一支解放军部队来到了这里。战士们不怕炎热,克服种种困难,用石头砌起了一条条水渠,

把山上的雪水引到沙漠里来。接着，他们又修建了一座座水库，只用了十几年的时间，就改变了千年干旱沙漠的面貌。如今这戈壁滩上粮食、棉花年年丰收，绿树参天 *cāntiān* (reach toward the sky)，果园里苹果和葡萄散发出诱人的 *yòurénde* (inviting) 香味。这里是人们用自己的劳动，改造大自然的一幅壮丽图画。

The Desert Has Changed

In autumn the sun over the Gobi Desert was like fire. In the stifling weather one could hardly breathe. Our car passed the edge of the desert.

Suddenly a big man-made lake appeared before our eyes. The water was clear and blue. Birds soared over the lake, fish swam in the water. The sultry desert air at once disappeared. Looking at the clear water, we recalled the past in this desert.

For centuries how much the people suffered because they lacked water! We recalled that 40 years

ago a reactionary ruler had squeezed a lot of money from the people of many nationalities, spent three years and only built a ditch less than 20 kilometers long to lead water from the mountains. It was just finished when it was destroyed by a flood.

After the founding of new China, a People's Liberation Army unit came here. Despite the extreme heat, they overcame many kinds of difficulties and built one stone channel after another to lead water from snow on the mountains to the desert. They also constructed one reservoir after another. In only ten or so years they changed the face of the centuries-old arid desert.

Today the Gobi Desert yields bumper harvests of grain and cotton every year. Green trees reach toward the sky and the apples and grapes in the orchards spread an inviting fragrance. Here is a magnificent picture of how the people with their own labor have transformed nature.

(Continued from p. 45)

horseback and several times crossed the more swift and turbulent currents in rubber boats.

Only a few days of work indicated that the source of the Yalutsangpo was either the Khumbi or the Kyeimayangdzom River, correcting a foreign explorer's assertion that there were three. According to our data on riverbed cross sections, velocity of current etc., we found that the Kyeimayangdzom has a greater volume of flow than the Khumbi. Still not sure which one is the source, we decided to go on.

A FEW DAYS later we started upstream along the Khumbi. After riding for five days we came to a halt at the base of a high glacier dropping like a snow-white ribbon from the top of a mountain to its foot along a valley between two icebound peaks. A wave of cold air swept over us. The glacier's ice front was very thick. Its surface looked deep blue in the sun. Water melting from the ice front constantly flowed in a tiny stream to the Khumbi. We found five modern glaciers in the area, melting into five streams to become the

Khumbi. The biggest glacier is the Shabkha, origin of the stream with more water than the other four. This is the main source of the Khumbi River.

We then scaled the watershed between the Khumbi and the Kyeimayangdzom, reaching the source area of that river in four days. Four modern glaciers in the ice-clad mountains at 6,000 meters melt and flow into the Kyeimayangdzom River. The biggest, also named Kyeimayangdzom, discharges more water. This is the main source of the Kyeimayangdzom River.

We observed and surveyed the discharge of water in every branch of the two rivers. Our data showed that the total volume of flow of the Kyeimayangdzom River is 30 percent more than that of the Khumbi; the Kyeimayangdzom is longer and drains an area several times larger. Our data was reliable because we obtained it in a period without rain or snow in the area. Hence, the Kyeimayangdzom River is the source of the Yalutsangpo. Our conclusion coincided with that of the local Tibetans and corrected the foreign explorer's view that the Khumbi River was the principal source.

Samsang, where the two rivers join, is sparsely populated. In the source area at a mean elevation of 5,000 meters people are even fewer. We lived and worked side by side with the Tibetan cadres and herdsmen who had come along with us. They told us of all they knew about the area.

In the source area vegetation thrives under 4,800 meters above sea level. Feeding on grass half a meter tall, our horses grew fatter and stronger after a month's traveling. Above 4,800 meters many alpine plants with red, yellow and blue flowers made the mountains beautiful. White saussurea and daisies grow in the sandy soil at the foot of glaciers. Wild ducks swim on the lakes. Eagles circle in the air. We glimpsed Tibetan antelopes, wild asses and wild yaks — rare animals native to the plateau. The biggest herd of wild asses we came across numbered more than 100. The area is like a natural zoo.

On our way back to Lhasa we couldn't help looking back to the source area. It is like a coral with many branches shining in the grasslands and mountains. Here, water from the source of the Yalutsangpo will irrigate pastures and farmland and new towns will rise.



