

## CHINA IN TRANSITION

Nowhere in the world has history moved so fast and change produced such striking effects as in China during the past few years. In *China in Transition*, the people who are creating this new land and life speak for themselves on why and how they are doing it.

The writers of the 72 on-the-spot reports and background articles printed here include authoritative spokesmen for China's new government, intellectuals, peasants, businessmen and people from the forefront of industry as well as Chinese journalists. Their articles were written between 1952 and 1956 for the English-language magazine CHINA RECONSTRUCTS.

From among over 600 articles which have appeared in the magazine between 1952 and 1956, these have been chosen and arranged to form an interpretative chronicle of events in new China in 20 different fields, including government, economic development, water conservancy, national minorities, literature and the arts, and everyday life. Brought together in a single volume, with succinct introductions highlighting significant trends in each field, they offer the most comprehensive view of new China so far published. It is not only timely, absorbing reading, but a grandstand view of history-as-it-happened to a quarter of the world's people.





# CHINA IN TRANSITION

SELECTED ARTICLES 1952-1956

BY WRITERS FOR  
*CHINA RECONSTRUCTS*

*CHINA RECONSTRUCTS*, PEKING, 1957



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## FOREWORD

**C**HINA RECONSTRUCTS, the magazine from which this anthology is compiled, completed its fifth year of publication in December 1956. The same five years witnessed tremendous changes in the life of the Chinese people. They began amid tasks of rehabilitation from the ruins of war, and the consolidation of the democratic gains of the revolution that was crowned with victory in 1949. When they ended, China had reorganized virtually her entire economy and society on socialist foundations.

Here we present 72 articles and features chosen from the more than 600 that appeared in the magazine during this period. Their subjects are extremely varied. Their authors include persons prominent in government, education, science, the arts and religion, journalists, factory workers, peasants and businessmen—in short, all types of participants in the giant task of building the country. The names of some have long been familiar abroad. Others are “new people”, awakened to activity and expression in recent years or even months. This short book cannot, of course, fully illustrate the vast and complicated process taking place in a nation of 600,000,000—one-fourth of mankind. But we hope that it will bring the reader closer to what the men and women of China were doing, thinking and feeling in these event-crowded times.

In 1952, the work of building the people's power and putting the existing economy back on its feet was brought to completion. The agrarian reform, which gave the land to the peasants, was effectively put through in all areas other than those in which the national minorities live. Great new river-control projects were under way to save the land from floods and droughts. Two nationwide campaigns, the *san fan* and *wu fan*, tore up the roots of corruption in official life, and of irresponsible and illegal profiteering, in private industry and trade. They gave strength to the new morality, solidified the leading position of the working class and put the capitalist sector of the economy in its proper framework

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for a country preparing the next great step, the transition to socialism. Military defence of the fruits of the revolution had not ceased. Chinese volunteers were still fighting in Korea, to help a neighbour and keep imperialist intervention from re-invading China itself. But a suspension of hostilities was being persistently sought through the tortuous Panmunjom negotiations. And in Peking a great people's peace conference, with delegates from all Asian countries and those bordering the Pacific, was held to crystallize public opinion to bring pressure for the ending of this and other conflicts in the region.

In 1953, the First Five-Year Plan of socialist industrialization was launched. With generous technical aid from the Soviet Union and her other co-members of the socialist world, China began to construct hundreds of enterprises in the sphere of basic industry, the only firm foundation for national independence and continued progress in the people's welfare. In agriculture, scores of millions of peasant smallholders, freed from the exactions of landlords and usurers, had entered mutual-aid teams, the first step toward co-operative farming. The Korean armistice, in the middle of the year, made it possible to devote an overwhelming proportion of the nation's resources to the tasks of peace.

In 1954, work under the Plan continued. Industry and communications made big advances. The progress of agriculture was proved in an acid test: it fed the people despite tremendous natural disasters such as had caused millions to die of hunger in the past. The key internal event of the year, however, was the country's first democratic election based on universal suffrage, at all levels from the rural district to the top organs of power. The first National People's Congress, held in October, adopted the Constitution of the People's Republic of China. This replaced the Common Programme, drawn up in 1949 by all China's democratic parties with the Communist Party in the lead. Besides creating a thoroughly democratic government structure, the Constitution, once more with the consent of all the democratic parties, went a big step beyond the Common Programme. It wrote the steps to be taken in the transition to socialism into the law of the land. Externally, China's relations with her Asian neighbours



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were closely cemented by the visits to Peking of Prime Ministers Nehru of India and U Nu of Burma. The Geneva Conference on Indo-China, in which China played a prominent part, restored peace to that part of the world after nine years, so that there was now no war on China's southern border.

In 1955, the First Five-Year Plan was "over the hump". The combined output of the means of production—steel, machinery and industrial fuels and power—reached a level twice that of 1952. Grain and cotton harvests were the highest ever recorded. Momentous decisions were taken on the speed of the advance to socialism. The peasants, seeing that yields were better where work was done in common in an organized way, flocked into co-operatives—these numbered more than a million, with 60 per cent of all farm households, by the end of the year. There was also a great spurt in the transition of capitalist enterprises to joint state-private operation. Abroad, the Bandung Conference, again with China's active participation, wrote an altogether new chapter in the cooperation of the nations of Asia and Africa, against colonialism and for independence and progress. This was a rich fruit of the Five Principles of Peaceful Coexistence propounded the previous year by India, China and Burma. China offered the United States, as well as all other countries, good relations on the basis of the Five Principles.

The year 1956 was epoch-making. It marked the victory of the socialist revolution in China just as the liberation in 1949 had marked the triumph of the democratic revolution. Virtually the entire rural population was in cooperatives, permitting rational use of land and labour and laying the groundwork for the mechanized agriculture of the future. Purely capitalist trade and industry had, in effect, disappeared. The Eighth Congress of the Chinese Communist Party, held in September, pointed out that the main issue in China was no longer one between contending classes. The whole people, including most former capitalists and landlords, were marching in the same direction. The chief task now was to bridge the gap between the vast productive possibilities opened by socialism and the continued backwardness, by world standards, of our industry, agriculture and education.

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In every field of society, every citizen who wanted to take part in this great effort, regardless of his class or political past, was being enlisted to the extent of his training and abilities. To ensure the best use of all energies, democratic institutions were being perfected, more powers were given to local governments including those of the autonomous national minority areas, and the relationship of China's political parties, representing different groups of the people, was defined as long-term coexistence and mutual supervision. To push forward science and culture, the policies of "let a hundred schools of thought contend; let a hundred flowers bloom" were proclaimed.

At the end of 1956, the First Five-Year Plan, not due for completion until the following year, had been mainly fulfilled. China was making steel for her own needs, supplying herself with 60 per cent of all the machines she required, manufacturing automobiles, aircraft and many other things of primary importance for the first time. The people were living and dressing better. They were happier, better educated, more confident of the future.

In foreign relations and trade, very important new gains were made. President Sukarno of Indonesia and Premier Acharya of Nepal came as visitors. Premier Chou En-lai toured eleven countries of Asia and Europe. The "Bandung Spirit" took deeper root in all the participating nations, as shown by their solidarity in the face of the attempted comeback of colonialism, the imperialist invasion of Egypt which ended in such shameful failure. China laboured to cement the new solidarity of the socialist countries with those which had freed themselves from imperialism, a great new combination for world stability and peace.

As we look back, the progress in every field has been prodigious. But the problems ahead are bigger still and in some ways more difficult—in a sense we have only won through to their threshold.

What the Chinese people have done, what they still have to do, their achievements and errors, their plans and hopes, are to some extent reflected in this book—and will be further chronicled in our magazine.

THE EDITORS

*China Reconstructs*



*Wang Chuan-kuo*

**Terraced fields in Yunnan province.**



## CHANGING LAND

CHINA is one of the oldest, most richly endowed, most populous countries on earth. Its people have created it with their labour, and given rise to a great culture. But in the past, the land did not belong to them. After many centuries of feudal rule, China entered the modern period poverty-stricken and backward. During the past hundred years, in addition, it was ravaged by imperialist invaders.

The stubborn people rose again and again. Their answer to the Opium War of 1840 was the great Taiping peasant revolution of 1851-64. It was suppressed. Their answer to subsequent foreign seizures of national territory was the Boxer Rising of 1900. This too was suppressed. In 1911, the yoke of the age-old monarchy was broken and a republic proclaimed.

But experience showed that social revolution, not merely a change in forms of government, was needed to save China. This began in earnest when the working class, with the formation of the Communist Party in 1921, began to lead the fight of the peasants and all other oppressed sections of the people. After almost thirty years of epic struggle against the massed forces of reaction, national and social liberation was won in 1949.

The people themselves came to power. All trammels on progress were broken. The vast task of developing all the potentialities of the land, so long retarded, was begun. That is why this section is called "Changing Land".

## The Physical Setting

by LO KAI-FU

CHINA is the size of all Europe, but does not resemble it in relief, mainly because of dissimilar effects of the movements of the earth's crust. Its climate too is different, due to its geographical position.

The land surface of China inclines eastward. It descends in gigantic steps from the Tibetan plateau, the part of the earth nearest the sun, through the fertile yellow loess highlands of the middle Yellow River, to the alluvial plain of North China and the sea.

If a line is drawn through Peking in the north and the mountains of western Hunan province in the south, it will be found that the territory to the east is largely lowland and nowhere higher than 9,900 feet. That to the west, by contrast, is highland, practically never lower than 3,300 feet and rising to over 29,000 feet at Chomolangma (Mount Everest), which lies in Chinese territory. The two main exceptions are the Tarim and Dzungarian Basins in the Sinkiang Uighur Autonomous Region in westernmost China, which are, respectively, 2,574 feet and 627 feet at their lowest points. The Dzungarian Basin, incidentally, is also an exception to the west-east tilt.

Structurally (geomorphologically), the country's skeleton comprises three mountain arcs, and, along with them, a range running for 1,240 miles from west to east. This starts as the Kunlun range in Tibet, continues in the Altyn Tagh and Chilien ranges, both being to the north of the Tsaidam Basin. It then goes on to the Tsinling range, at the north foot of which lies Sian, the ancient political and cultural centre of China. East of the Tsinlings, the central range greatly falls in elevation, ending with the Tapieh Mountains on the border of Honan, Hupeh and Anhwei provinces, north of the Yangtze River.

The Mongolian mountain arc, lying north of the central range, bends toward the south like a giant wide-curved "U". Beginning with the Tien Shan Mountains in the west, it is connected by the

Yin Shan range, which shelters the great bend of the Yellow River, with the Great Khingans in Northeast China. The Mongolian arc was raised, together with the major part of the central range, by the "Hercynian movement" approximately 203 million years ago. It rises from a rock platform formed very early in the earth's existence. The platform, in present-day China, includes the deserts of Sinkiang — the Takla Makan and part of the Gobi, and the steppes of Inner Mongolia.

The Tibetan and South China mountain arcs lie south of the central range. It is at the highest point of the Tibetan arc that Chomolangma (Mount Everest) is located. Formed during the "Himalayan movement" only about 12 million years ago, this arc embraces the mountains on the Tibetan plateau, often referred to as the "roof of the world". Its ranges are bent northeastward, with the Chilien and the Chiunglai mountains as the vertex. The Himalayas are part of a great worldwide mountain system. On the one hand, it is connected by other ranges with the Alps in Europe. On the other, it links with ranges that run south through the Indo-China peninsula, swing in a great curve through the Indonesian Islands, turn north through the Philippines, Taiwan, the Liu Chiu (Ryukyu) Islands, Japan and the Aleutians, and then, on the other side of the Bering Strait, become the American Rockies and the Andes.

The South China arc comprises all the mountains of that part of the country south of the Yangtze and east of the Tibetan plateau. It is a group of ranges with one wing trending from northeast to southwest (as do those of Chekiang and Fukien provinces), and the other from northwest to southeast (as in Hunan, Kweichow and Kwangsi provinces). Most of these mountains are parts of old platforms reinforced by the Yenshan movement in the Jurassic age, 150 million years ago. They are more dissected by rivers than those of the other two arcs.

Places of contact between mountain arcs are often areas of great earthquakes. This is true of both the meeting-place of the Mongolian and Tibetan arcs, around Kansu and Shensi provinces, and between the Tibetan and South China arcs, around the provinces of Szechuan, Kweichow and Yunnan.

The so-called "festoon islands" of Asia are a part of the Himalayan alps. They represent mountain ranges running from the Aleutian Islands to the Philippines, separating the China seas from the Pacific Ocean.



The 124-mile-wide Taiwan Straits separate the deep, coral-reef studded South China Sea from the shallow waters to the north: the East China Sea, the Yellow Sea and Pohai Gulf. These shallow northern seas are even at the bottom, which is only 66 feet deep in many parts of the Pohai. Their longshore currents change direction in accordance with the monsoon winds. The South China Sea, on the other hand, is over 13,200 feet deep in some places; while in others the bottom rises above the surface to form islands such as the Sisha (Paracel Islands), Tungsha (Pratas Reef), and the Nansha group. The eddies of the ocean currents in the South China Sea also show seasonal changes in direction.

China has a varied coastline. South of Hangchow Bay, the famous tidal spot, there are innumerable bays and promontories where the mountainous land abuts on the sea. Good harbours abound here. These shores are fringed by islands. By contrast, the shoreline north of Shanghai runs smoothly along alluvial plains, and it is only on the Shantung and Liaotung peninsulas that good harbours appear, for example Tsingtao and Talien (Dairen).

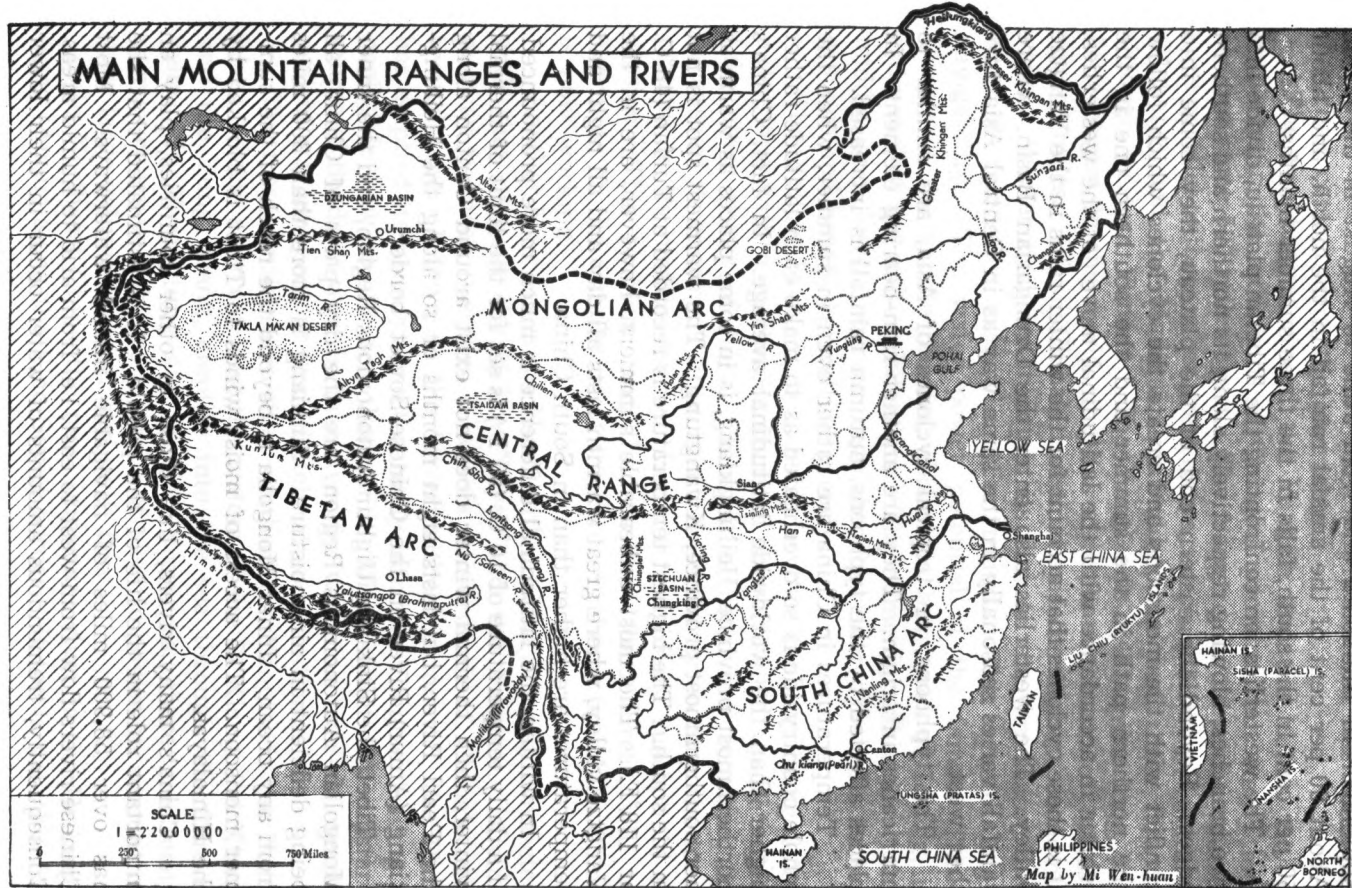
Although the general aspect of the coast, the indented shore and numerous islands indicate a sinking coast, there is evidence that both the rugged and the smooth shores are now rising as a result of the after-effects of the Himalayan movement. Past cliffs, raised beaches and sand dunes, elevated sea caves and uplifted abrasion platforms are seen almost everywhere along the South China coast, as well as along the Shantung and Liaotung peninsulas.

Being situated at the eastern end of the world's greatest land mass, China has a strongly continental climate. The "monsoonal shift" dominates the air circulation over most of the country for most of the year. The westerlies exert their influence, usually to the north of 40° latitude, in the spring and summer when the monsoons are not in full swing. The coasts, especially in the south, are occasionally visited by typhoons.

The cold Gobi Desert constitutes a high-pressure centre from which winter monsoons flow southwards into the low-pressure areas over the Indian Ocean and the South Pacific. Generally, less than 10 per cent of the annual precipitation occurs in the winter.

During the summer, the situation is reversed. The ocean warms up more slowly than the land, and a high-pressure area is created above it, sending air currents into the low-pressure area over the land. Laden with moisture, the wet summer monsoons result in China's "rainy season", which lasts from April to

# MAIN MOUNTAIN RANGES AND RIVERS



September in the south and from June to August in the north. About 80 per cent of the annual rainfall in the north, and about 50 per cent in the south, falls in the three summer months.

The westerlies, on confronting the Tibetan plateau, divide into two branches, blowing respectively along its northern and southern edges. Beyond the eastern end of the plateau, they come into conflict with the monsoons and create the cyclones which follow the northern path in the summer and the southern one in the winter in accordance with the latitudinal move of the westerlies. It is these cyclones that account for the winter rains in the Yangtze valley. The westerlies also enter the Dzungarian Basin, where rainfall varies seasonally in the same way as in Central Asia further west.

The typhoons, or tropical cyclones of Asia, are similar to hurricanes in origin. They are another rain-bearing element. In places affected by the typhoons, autumn rainfall is increased.

Temperatures in China are rather even in summer, when the whole countryside is so overheated as to make each latitude rather higher than the worldwide latitudinal average. In fact, China's northernmost province, Heilungkiang, is in some places as warm as her southernmost province, Kwangtung. The warmest spot is not in the south. The highest temperature is recorded at Turfan (48°C. or 118°F.). The most unbearable summers, however, are in the Yangtze valley, where great warmth lasts all day and all night and temperatures are higher than in South China.

In winter, the latitudinal difference is much more pronounced. If a daily temperature of 10°C. (50°F.) is set for the limit of thermal winter, then thermal winter does not exist around Canton along the Pearl River, but lasts eight months or so along the Heilungkiang (Amur) River on the Chinese-Soviet border.

Tibet, the Sinkiang Uighur Autonomous Region, and the Inner Mongolian Autonomous Region, are the dry parts of China, all being deficient in air moisture. Sinkiang is more than 300 miles from any ocean. Inner Mongolia is beyond the reach of the summer monsoon. The access of moist winds to Tibet is blocked by the Himalayas.

China's many rivers, like those in other countries, play an important role in the life of the people. It is estimated that she has over 58,900 miles of navigable inland waterways. Most Chinese rivers flow from west to east, i.e. from arid to humid areas. Consequently, tremendous amounts of water occur in their lower

reaches. This makes it clear why so much effort has been put into river control since the liberation.

The two biggest rivers, the Yangtze and the Yellow River, both rise in the mountains of Chinghai province, but empty into the sea some 500 miles apart. The Yangtze, in its upper course, runs parallel to three other great rivers, the Nu (Salween), Lantsang (Mekong) and the Mailikai (Irrawaddy), the last three flowing through western Yunnan. The Yangtze is 3,473 miles long, the fifth longest in the world, and has a catchment basin of 748,454 square miles. Of all China's rivers, it has the highest economic value. Winter cyclones maintain its flow in the dry season and keep it relatively even the year round. This creates high navigability. The water power potential at the famous Three Gorges in the middle reaches, above the busy port of Ichang, is estimated at ten million kilowatts. The numerous lakes along the middle and lower courses regulate the river, provide fishing grounds and benefit agriculture greatly.

The Yellow River is not as big as the Yangtze, being 3,000 miles long with a catchment basin of some 287,000 square miles. Like other rivers of North China, it is rated low economically because of its enormous silt content, collected by eroding the loess plateau in its middle course. Loess is extremely susceptible to erosion. This problem, and the resultant flood threat, will be overcome on the completion of the control scheme on which China is now working.

Another big river is the Huai, with a history closely connected with that of both the Yellow River and the Yangtze. Lying midway between the two, it waters one-seventh of China's cultivated land. Known as the "river without a mouth", the Huai has emptied its waters almost entirely into the Yangtze, leaving a negligible flow to the sea through its silted outlet. A constant source of floods, it was the first river for which an over-all control project was mapped out immediately after liberation.

The most considerable river south of the Yangtze is the Pearl River, which, after catching the waters of the Si Kiang, Pei Kiang and the Tung Kiang, empties into the sea through the Canton delta. In Kwangtung and Fukien provinces, there are many shorter rivers valuable as a source of electric power on account of their large volume of water and swift flow.

In Northeast China the most important river is the Heilungkiang (Amur) along the Sino-Soviet border. It too is valuable for

navigation and as a power-source, but only in the warm period of the year, as it freezes for six months in some parts.

Of the 600 million people counted in China at the last census, taken in 1953-54, about 80 per cent live in the eastern, wetter half of the country. Concentration is especially marked in the North China plain, the Yangtze and Pearl River deltas and the Szechuan Basin. The latter is in reality a dissected hilly land, a great part of which lies about 600-1,200 feet above sea-level, surrounded by mountains over 6,500 feet high.

One reason for the concentration of the population in the moister half of China is that her economy, for 2,000 years, has been predominantly agricultural and therefore dependent on sufficient rains as well as on flat land. A further reason was the growth of big cities along the coast and on the main rivers.

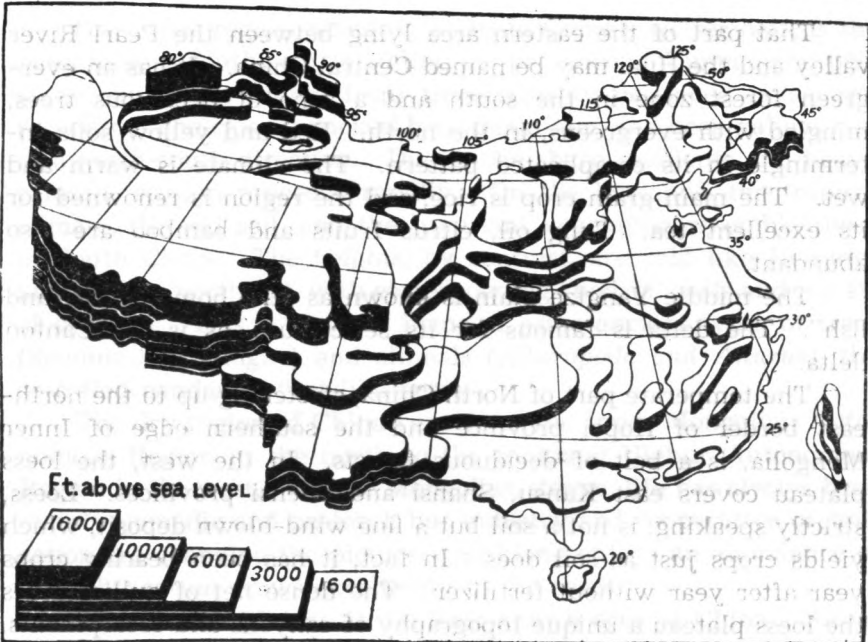
Gradual population shifts are to be expected. Although agriculture in the dry west cannot be as productive as in the east, it can improve with afforestation, irrigation and other technological developments. The exploration of mineral resources, and the progress of industrialization, moreover, will modify the population pattern. It should be stressed here that the distribution of population is not determined by natural conditions.

There are striking differences between the wet and dry parts of China as well as between the warm and the cold. Wheat is the predominant grain crop in the north, where the people eat noodles and steamed bread, and where farm activities stop in the cold winters. In the south, rice is the main staple food, and cultivation continues the year round. On the basis of climate, soils and vegetation, China falls into a number of regions.

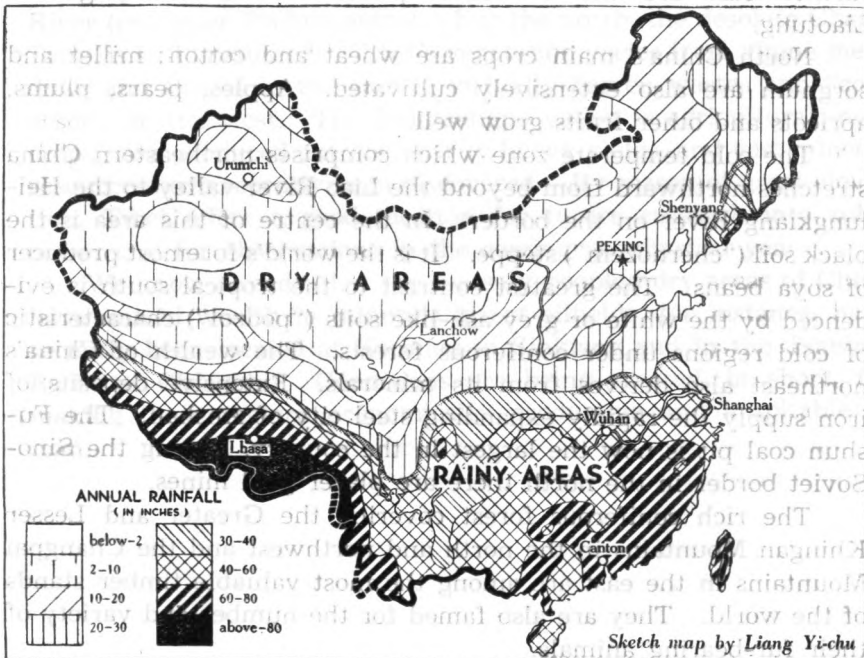
In the south, we find the Pearl River valley (mainly in Kwangsi and Kwangtung provinces) is tropical with long, warm summers accompanied by heavy rainfall. The winter months are frostless, and three grain crops, or as many as seven vegetable crops, can be grown each year. Rice, sugar-cane, tobacco and tropical fruits are important products. The limestone areas of Kwangtung and Kwangsi have left a well-developed "Karst" topography. The fantastic groups of hills and caves in Kwangsi have been one of the favourite subjects of Chinese painters throughout the ages. China's two largest islands, Taiwan and Hainan, which are covered with luxuriant forests, also belong to this region, as does the coastal province of Fukien.



# CHANGING LAND



Elevation (above) and Rainfall (below)



That part of the eastern area lying between the Pearl River valley and the Huai may be named Central China. It has an evergreen forest zone in the south and a zone of deciduous trees, mingled with evergreens, in the north. Red and yellow soils intermingle in its complicated pattern. The climate is warm and wet. The main grain crop is rice, and the region is renowned for its excellent tea. Tung oil, citrus fruits and bamboo are also abundant.

The middle Yangtze plain is known as "the home of rice and fish". The delta is famous for its sericulture, as is the Canton delta.

The temperate part of North China, stretching up to the northeast border of Hopei province and the southern edge of Inner Mongolia, is a belt of deciduous forests. In the west, the loess plateau covers east Kansu, Shansi and Shensi provinces. Loess, strictly speaking, is not a soil but a fine wind-blown deposit, which yields crops just as soil does. In fact, it has been bearing crops year after year without fertilizer. The dense net of gullies gives the loess plateau a unique topography of canyons and escarpments. East of the loess area is the alluvial North China plain. Still further east are the brownsoil peninsulas of Shantung and Liaotung.

North China's main crops are wheat and cotton; millet and sorghum are also extensively cultivated. Apples, pears, plums, apricots and other fruits grow well.

The cold temperate zone which comprises northeastern China stretches northward from beyond the Liao River valley to the Heilungkiang River on the border. In the centre of this area is the black soil ("chernozem") steppe. It is the world's foremost producer of soya beans. The greatest contrast to the tropical south is evidenced by the white or grey ash-like soils ("podzol") characteristic of cold regions under coniferous forests. The wealth of China's northeast also derives from its minerals. Extensive deposits of iron supply the rapidly expanding steel city of Anshan. The Fushun coal pit is now the largest in the country. Along the Sino-Soviet border in the north there are placer gold mines.

The rich coniferous forest covering the Greater and Lesser Khingan Mountains in the north and northwest and the Changpai Mountains in the east are among the most valuable timber stands of the world. They are also famed for the number and variety of their fur-bearing animals.

One other region, which also lies in China's wetter half, is the mountainous southwest, including the province of Yunnan and part of Szechuan. It differs from those already described in several respects. The closely-packed high mountains and deep valleys run in a north-south direction. Due to the sharp gradients and heavy rainfall, erosion proceeds rapidly. On the lowlands, the tropical climate, the red soil, and the luxuriant vegetation resemble those of South China. The heights, by contrast, are cold like Heilungkiang in the northeast, with corresponding "podzol" soils and forests of conifers. This is also the home of some ancient types of trees (*Sequoia* and *Ginkgo*) and animals (*Ailuropoda* and *Ailurus*), the so-called pandas or "cat-like bears".

The dry region of China runs from the Inner Mongolian Autonomous Region in the north to the Sinkiang Uighur Autonomous Region in the west. On the Mongolian steppe, life has always been mainly nomadic and pastoral, but industry and cooperative organization are changing the picture. Sinkiang enjoys an abundance of sunlight; cotton grows excellently in the oases.

The Tibetan plateau is the least-known area of China. Scientific expeditions which went there in 1952 and 1953 have made preliminary surveys of the southern areas around the Yalutsangpo River (or Upper Brahmaputra). But the north, the desolate Chang Tang, is still unstudied. Tibet's vegetation varies from alpine meadows and shrubs in the east to virtually barren wastes and "cold desert" to the west. The Yalutsangpo valley is agricultural; new crops have produced extraordinarily heavy yields, and vast mineral resources have recently been discovered. By reason of great elevation, Tibet offers a good location for future research into solar power and for observations in the coming geophysical year.

We know already that the sparsely-peopled dry areas of China have untold wealth in minerals (great oilfields, for instance, have recently been located at Karamai in Sinkiang and in the Tsaidam Basin of Chinghai). Conditions are being created, in short, for making these regions economically productive and hospitable to man.

## Changing the Economic Map

by LIU TSAI-HSIN

A TRAVELLER coming to today's China with a map or guide-book even a couple of years old might find himself lost. As his train passed through areas marked as rural countryside, he might be startled by the smokestacks of a new industrial city. In the fields, cultivated in large tracts by cooperatives instead of in tiny plots by individual peasants as in the past, he might see crops quite different from those he expected. On land which his book described as barren and unproductive, he might find rich cultivation, or newly-planted forest.

These outward changes in the landscape reflect the already-evident fruits of China's First Five-Year Plan (1953-57), the initial changes China's tremendous constructive efforts have brought into her economic geography.

Old China knew nothing of planning. Most of her industries were concentrated in a dozen or so large cities, mainly on the seaboard and in the northeast. As late as the beginning of 1953, no less than 70 per cent of the country's total industrial output came from one-tenth of its territory.

Coal mining and metallurgy were largely concentrated in northeastern centres like Fushun and Anshan. But much of the engineering industry was in Shanghai, which had to get its steel from hundreds of miles away.

Shanghai, along with two other coastal cities, Tientsin and Tsingtao, was a big textile centre. But the cotton it worked up came from abroad, or from relatively distant provinces of China. Most cotton-growing areas had few or no mills.

Large parts of the country, including the vast minority areas of the northwest and southwest, were altogether devoid of industry.

All these disproportions were obstacles to the further development of the economy. During the period of rehabilitation (1949-1952), little could be done about them. They could be basically tackled only with the beginning of planned industrialization.

Five principles now guide the People's Government in its choice of industrial building sites.

1. Nearness to fuel and raw material sources, as well as to consuming areas, to eliminate costly long-distance transport;
2. Better balance of industry and agriculture within each region;
3. The raising of the economic level of national minority regions in order to end their past inequality in this regard;
4. A degree of regional specialization within the national economy, helping to free China from dependence on foreign countries;
5. Location of new heavy industries away from the seacoast, making them less vulnerable to any possible military attack.

In accordance with these principles, and governed by present possibilities, the task set for 1953-57 has two parts:

Firstly, existing industrial bases (such as the northeast and Shanghai) are being strengthened and modernized so that they can play a larger role in the general scheme of economic progress. Much has already been done in this regard. Anshan, with new plants supplementing the old ones, is supplying steel to over a thousand industrial and railway construction sites all over the nation. Shenyang (Mukden) has expanded and re-tooled its pneumatic-tool manufacturing plant, and its light and heavy machine-tool industries, into really up-to-date industrial giants. Shanghai sent 44,000 skilled workers, more than 2,000 technicians and 8,000 experienced administrators to other parts of the country in 1953-55.

Secondly, a series of altogether new industrial bases is being built in northern, northwestern and central China. They will use the rich natural resources of these areas and lift them out of their traditional backwardness. The turn of the southwest, another great region, will come somewhat later.

Throughout the country, 694 "above norm" industrial enterprises are being built in this period. Among them, 472, or 68 per cent, are in the hitherto non-industrial hinterland.\*

In iron and steel, two new bases are being set up. One is located near Wuhan in Central China, where iron ore resources are now known to be much bigger than formerly supposed. The

\*The "norm" is a measure of investment set in capital construction. It varies for different fields. It is, for instance, ¥10 million for a steel mill, tractor plant or shipyard; ¥6 million for a cement factory; ¥3 million for a cotton mill. The rapid acceleration in the second half of the Plan will enable China to work on 800 such enterprises, instead of the planned 694. Besides continuing construction on industrial bases in outlying areas, plans call for strengthening bases near the coast.



other, which will be in partial production by 1962, is at Paotow in the grasslands of the Inner Mongolian Autonomous Region. There vast iron deposits have been newly discovered. Both places have the added advantage of being linked by rail with the rich coalfields of Shansi, with the old steel base in the northeast, and with the coastal centres, assuring them of needed equipment.

In the future, these new steel cities will become the nuclei for other industries — coal, power, chemicals, machine-building and railway workshops. Wuhan, which will also have an automobile plant and shipyard, will be able to help the industrialization of Southwest China. Paotow will do the same for the northwest.

Deposits of minerals, previously known or newly prospected, will serve as bases for other important industries. One of them is petroleum, which is being very energetically developed. During the First Five-Year Plan, two oil centres are being expanded: the Yumen oilfield in Kansu province, and the Tushantze well in the Sinkiang Uighur Autonomous Region. Later there will be a third, in the greatest of the many recently-discovered oil sources, the Tsaidam Basin in Chinghai province.\* In the oil areas entire new cities have grown up, with refineries and processing plants for by-products.

Coal production will assume a far greater scale. It will be centred near new and old mines in Honan and Hopei provinces and the great Tatung field in Shansi.

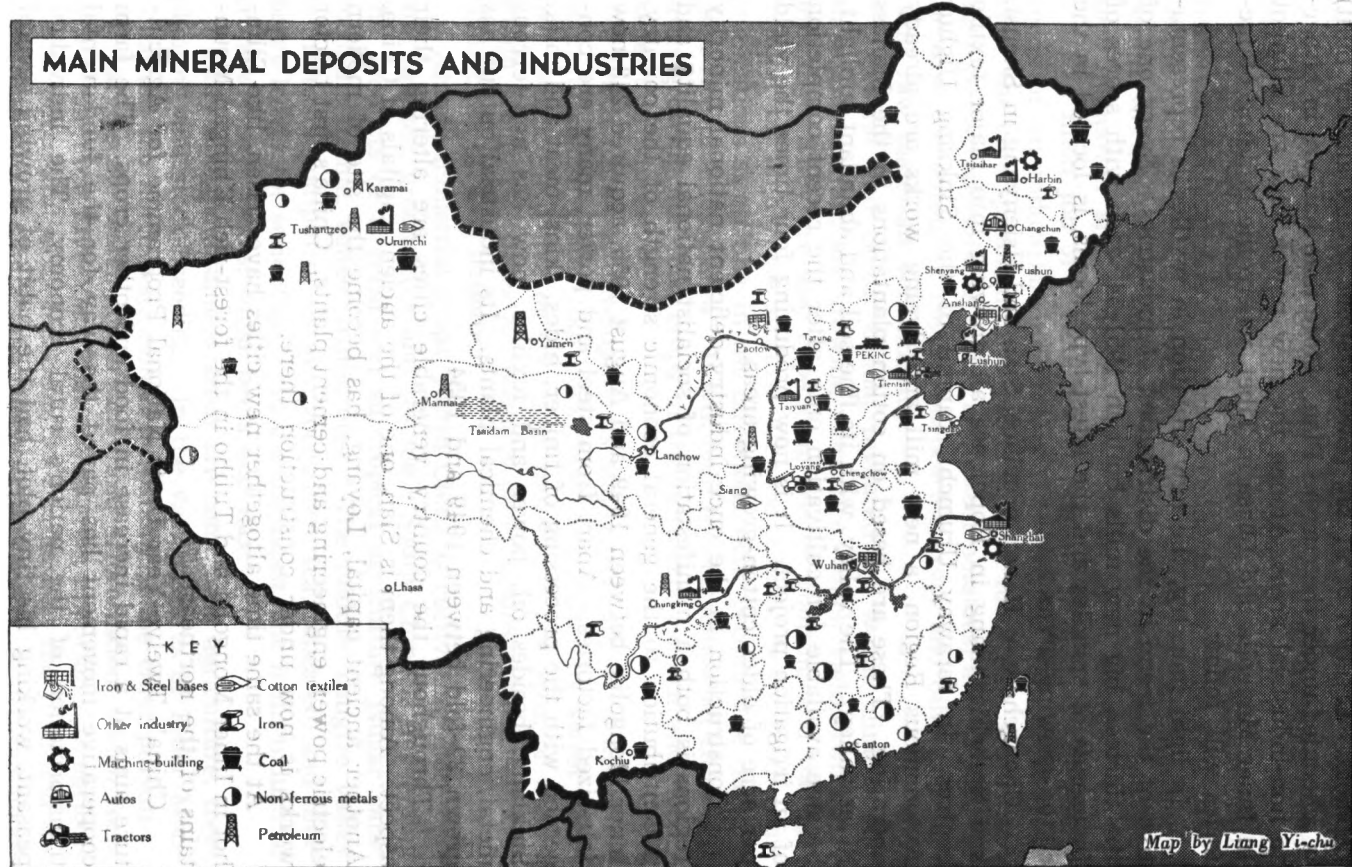
Non-ferrous metal resources will be exploited mainly in the southwestern province of Yunnan, with its famous tin mines at Kochiu and deposits of copper, lead and zinc.

The above gives an idea of the main specializations of the various areas in the realm of basic industry. But subsidiary lines, to give each area a balanced economy, are not being neglected. North China's main part in the national division of labour, for example, is to produce more coal. But engineering industries are also being developed there on a considerable scale, on the basis of existing steel mills in three of the region's cities—Peking, Tientsin and Taiyuan. They include the manufacture of steel-rolling machinery, big coke ovens, cranes and complete modern weaving-mill equipment, none of which were made in China before.

Along with metals, fuels and machinery, China is building electric power installations, in which she was formerly woefully

\*Since this article was written, an even larger source has been discovered in Sinkiang. See "Karamai: Biggest Oil Discovery" on page 139.

# MAIN MINERAL DEPOSITS AND INDUSTRIES



Map by Liang Yi-chu

deficient. Erection of 91 big power stations (many already built) is scheduled under the current Plan. More than half are in hitherto non-industrial areas. Among the new power sites are Silinhot in Inner Mongolia and Lhasa in Tibet, where the building of factories will follow.

In light industry, the new situation in textiles is representative of the trend in the distribution of industries. Every one of the thirteen big new mills built in 1951-54, each with scores of thousands of spindles and the latest-type looms, is located in the cotton-growing areas.

Chengchow in Honan province, Sian and Hsienyang in Shensi, and Shihchiachuang in Hopei are all growing into major textile centres. In faraway Urumchi, capital of the Sinkiang Uighur Autonomous Region, a new mill and dyeing works are already operating. These are based on cotton plantations in the Manass River valley. The valley, with its fine soil and abundant sunlight, became available for cultivation only after the recent completion of an irrigation project. It is now producing four times the yield per acre of older cotton-growing areas.

Construction in the once industry-deficient national minority regions is both a manifestation of socialist national equality and a contribution to the general economic strength of the country. Inner Mongolia, between 1949 and August 1955, acquired 248 new fair-sized factories. Apart from steel and power, many are concerned with the processing of timber, hides, skins, meat and milk. Sinkiang, besides oil, power and textiles, now has non-ferrous metal, engineering and chemical plants. Its industrial output has grown 32-fold between 1949 and 1954.

Throughout the country venerable cities are altering their aspect. Among them is Sian, one of the ancient capitals of China. Another ancient capital, Loyang, has become the site of modern electric power, engineering and cement plants. China's first tractor works is now under construction there.

At the same time altogether new cities have arisen, like Silinhot in Inner Mongolia and Tuliho in the forest-rich Khingan Mountains of the northeast.

China's Twelve-Year Draft National Programme for Agriculture aims at a rapid increase in food and other crops. The farm cooperative movement has paved the way for the fundamental transformation of the nation's rural economy. The individual peasant, working his tiny plot, had the habit of growing several

crops at the same time. Now what to plant in each area is decided according to its natural conditions and role in the national economic scheme. This means more and cheaper production.

Area-specialization is being effected gradually. Whatever its main crop, each locality is to produce enough food to prevent strain on the nation's grain reserve and transport. Where circumstances permit stock-breeding and forestry are also being developed, to keep manpower and equipment busy at all times.

The main job of agriculture at present is to meet the rising needs of an industrializing society. Under the First Five-Year Plan, the chief problem is to produce more food (rice, wheat and high-yield crops such as maize and sweet potatoes) and steadily to increase the output of cotton, oil-bearing crops and other agricultural raw materials for industry.

Central and South China, favoured by warm climate and abundant rainfall, are growing more rice, which yields two crops annually. They are also expanding winter planting and the cultivation of high-yield strains. Central China, with good communications stretching in all directions, will become the nation's chief rice-producing area. It will help to feed industrial cities and areas growing non-food crops in the northern, eastern and north-eastern provinces.

North China is developing its staple, wheat. It is also supplanting coarse grains like buckwheat and millet by sweet potatoes, which yield five or six times more food per acre, or maize, which yields  $1\frac{1}{2}$  times as much as other grains. Much work is being done here on irrigation.

Among industrial crops, North China is cultivating more cotton, tobacco, groundnuts and sesame. South China is developing the products of tropical and subtropical agriculture (sugar cane, coconuts, ramie, coffee, fruits, etc.). The middle Yangtze valley is increasing output of its own specialties: tea, rapeseed, and mulberry leaves for sericulture. In the northeast, the main industrial crops are soya beans, sugar beets and flax.

Hilly and mountainous areas are combining agriculture, tree-planting and stock-breeding. In the vast pastures of Inner Mongolia and the northwest, animal husbandry is the chief pursuit.

Large-scale water conservancy and afforestation, which form part of the First Five-Year Plan, are of great importance to agriculture. Successful work has been done to harness the Huai and the Yungting, two of China's most treacherous rivers, to prevent floods

and develop irrigation and hydro-electric power. Work has started on overall control of the Yellow River. A Yangtze River control scheme is being devised. Huge forest shelter-belts are growing up to save the northern plains from the disastrous dust-storms to which they are subject. Trees set along river banks prevent loss of water and soil. Economically valuable timber is being planted in the south.

Ultimately, these undertakings will not only remove many present obstacles to agricultural production; they will bring changes into China's physical geography and climate.

Also of great importance in overcoming agricultural deficiencies is the reclamation of uncultivated and virgin land. A good start is being made in the northeastern province of Heilungkiang. It has millions of unused acres of flat, rich, black soil, suitable rainfall and a long growing season. These conditions facilitate the mechanized cultivation of wheat, rice and soya beans, as well as sugar beets and flax. Other new bases for grain and industrial crops will be created on idle lands in Inner Mongolia and the northwest.

What has already been done in the rationalization of China's agricultural pattern may be summarized as follows:

In food production, Central China and Szechuan province are regularly supplying rice to many hitherto food-short regions. The northeast supplies other regions with soya beans and *kaoliang* (Chinese sorghum).

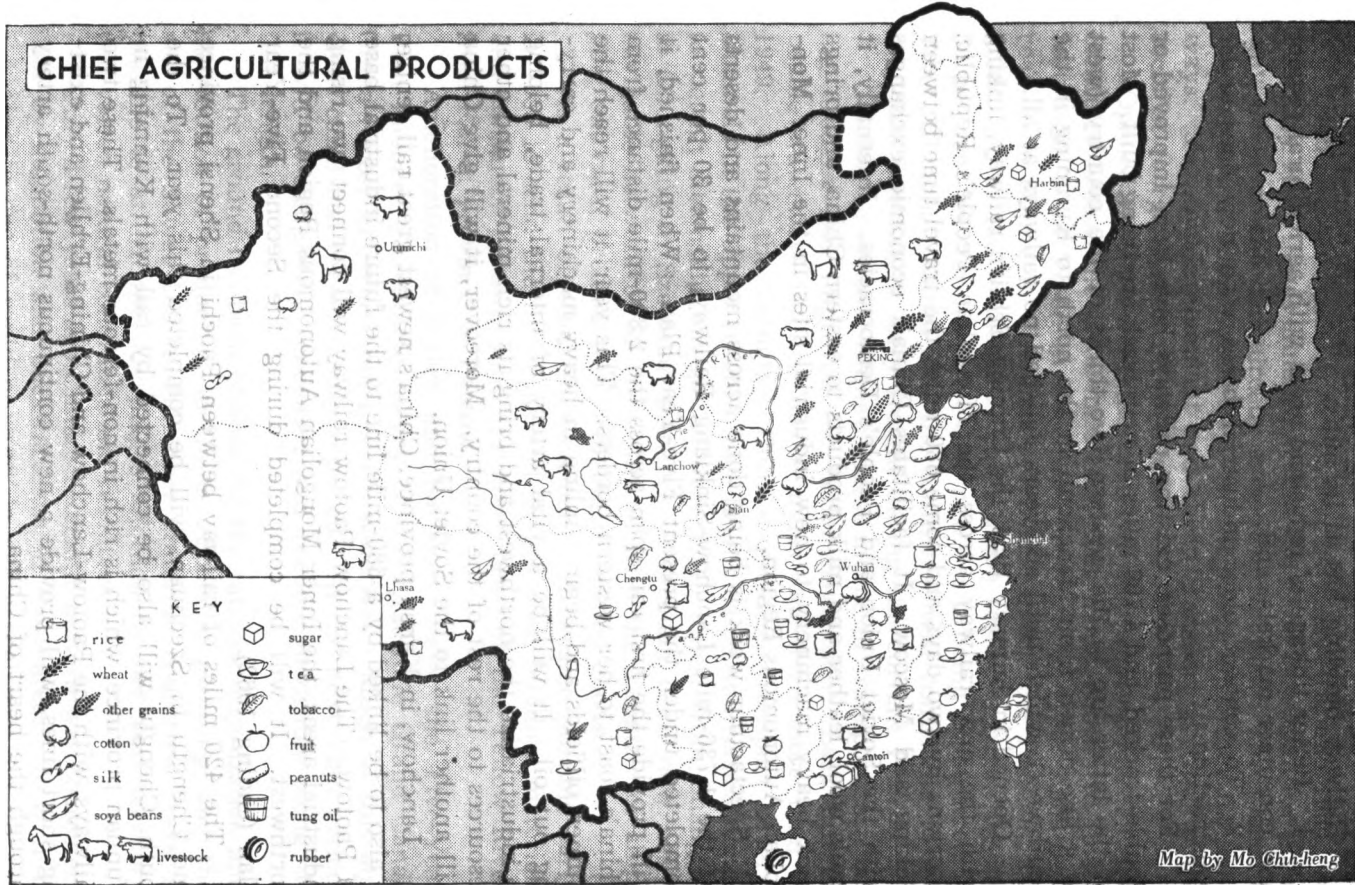
Provinces which formerly had serious food deficits are increasing local production. Hopei and Kiangsu are meeting more of their own needs. Kweichow has a surplus.

As regards cotton, traditional growing regions are being strengthened and vast new areas have been planted in Kansu and Sinkiang in the northwest. The latter, once considered unfit for cotton, are now big producers, thanks to irrigation and better farm methods.

Agriculture is advancing into places formerly thought too cold or arid. Of great economic importance is the fact that cotton is being grown far above the 42nd parallel of latitude, once considered the northern limit. On the Tibetan plateau, winter wheat, rye, maize, potatoes, vegetables and fruits—all previously unknown there—are producing high yields. Tibetan farms are harvesting over  $3\frac{1}{2}$  tons of winter wheat per acre.

Greater agricultural and industrial interdependence immediately demands greater transportation facilities.

# CHIEF AGRICULTURAL PRODUCTS



Map by Mo Chih-feng



Railway building has as its aims:

1. Better linkage of industrial areas with agricultural regions and consumer markets, and;
2. To connect older industrial bases with new ones under construction.

For these purposes, existing railways have been improved or double-tracked, and 4,700 miles of new track are being built. Most of the latter are in the western two-thirds of the country (west of a line drawn from Manchouli in the north to Kunming in the southwest), which until six years ago had no railways at all.

Opened in January 1956, the Chining-Erhlien railway, linking with the new railway across the Mongolian People's Republic, shortens by two days and some 680 miles the travel time between Peking and Moscow. It facilitates China's economic exchanges with the Soviet Union and People's Democracies. Internally, it hauls wool, leather and milk products to eastern China, and brings back heavy machinery to new industrial sites in the Inner Mongolian Autonomous Region.

Spectacular work is being done across mountains and deserts on the 1,736-mile Lanchow-Sinkiang Railway, to be 30 per cent completed under the present Five-Year Plan. When finished, it will provide the first rail span across the 2,800-mile distance from China's coast to her western borders. This year, it will reach the Yumen oilfields and begin hauling in heavy machinery and carrying out oil. It will be a vital artery of internal trade, helping to industrialize the northwest and bring its rich mineral and other resources to the rest of the country. Moreover, it will give China still another link to the Soviet Union.

Lanchow, in Kansu province, China's newest great rail centre, is also to be linked by a 680-mile line to the future industrial base of Paotow. The Lanchow-Paotow railway will connect two rising industrial areas, the Inner Mongolian Autonomous Region and the northwest. It will be completed during the Second Five-Year Plan (ending 1962).

The 420 miles of railway between Paochi in Shensi province and Chengtu in Szechuan, will be completed this year. To the south, Chengtu will also be connected by rail with Kunming in Yunnan province, which is rich in non-ferrous metals. These two railways, with the Paotow-Lanchow and Chining-Erhlien and existing short lines, will provide a new continuous north-south artery through the heart of China.

Usable motor roads were doubled between 1949 and 1955. In February 1956, it was announced that the Five-Year Plan for highway development had already been overfulfilled. The plan for highways and inland waterways is integrated with that for railways. To provide abundant and cheap transport is vital to the socialist reorganization of production.

Opened in 1954 were the first two highways to the Tibetan centre of Lhasa: the 1,400-mile road over mountains up to 16,000 feet high, from Ya-an in Szechuan province; and the 1,300-mile road from Sining in Chinghai province, serving the Tsaidam oil-fields. After the former was built, Lhasa residents began paying 50 per cent less for timber. Other new roads being constructed in Tibet, Chinghai, Kansu and the southwest will contribute to the four-fold increase in lorry freight during the current Plan.

Inland waterways, China's oldest means of transport, are being dredged and improved for better navigation. Last autumn usable waterways totalled 62,000 miles, one-third more than in 1949. Along the Yangtze, China's greatest transport artery, channels in the upper reaches have been cleared and reconstructed to permit steamship navigation over 1,240 miles, from Shanghai to Chungking in Szechuan province. Szechuan itself now has a navigable network of 89 rivers linked with the Yangtze for shipping out rural produce and bringing in needed goods.

As a result of other improvements, it became possible early in 1955 to send the first tugs and barges with building materials and consumer goods around the great bend of the Yellow River from Kansu province to Paotow.

Amelioration of rivers and harbours under the Five-Year Plan includes a complete survey of the 1,120-mile Grand Canal, China's most important north-south waterway. Much of this ancient canal has been recently repaired. In the next Plan period, it will be completely renovated and become navigable along its full length.

The ground has been broken for the rational organization and distribution of production in China. Socialist planning, and the aid of the Soviet Union and other fraternal countries, make it possible to utilize the advantages afforded by her vast territory and varied natural conditions and resources.

Only a few years ago China's economic pattern was characterized by stagnation and backwardness in most areas. Now it is changing to one of rapid progress in every region.

## Taiwan—China's Largest Island

by CHEN HAN-SENG

ON a clear day, looking seaward from the coast of Fukien province, one can discern the dim line of a distant mountain range. The range stretches almost 236 miles from north to south; it has 62 peaks which tower 9,000 feet or higher, and one reaches 12,950 feet above sea level. Such is the majestic skyline of Taiwan, the largest island and the smallest province of China—now temporarily divided from the motherland by outside forces, and which our people are determined to liberate.

Taiwan's fertile western plain, below the mountains, yields rich harvests of rice, sugar cane, pineapples and bananas. A valley in the northwest is famous for its tea. More than three-fifths of the entire island is covered by forests which produce, among other things, 70 per cent of the world's camphor and camphor oil. It was the breath-taking landscape and luxuriant vegetation of Taiwan which caused Portuguese navigators, who first sighted it in 1590, to name it *Ilha Formosa* (Beautiful Island).

Besides field and forest crops, Taiwan has considerable mineral wealth. There are an estimated 400 million tons of coal in the northwestern valley, oilfields in the south, sulphur and gold in the extreme north, asbestos on the east coast. Deposits of bauxite, the raw material for aluminium, are also abundant.

A railway girds the island except for two short gaps where the topography has made construction difficult. Highways encircle it completely, traversing some of the most scenic precipices in the world. The two biggest ports of Taiwan are Keelung in the north and Kaohsiung (Takao) in the south. Both are trade centres traditionally connected with Amoy in Fukien province and suitable for international ocean shipping. They are strategically-located naval bases guarding the Taiwan Strait.

In ancient Chinese history, the island was known by various names. The present one, Taiwan, became established in the latter half of the seventeenth century. About 97 per cent of the population, which now exceeds 8 million, are Chinese whose ancestors

came from Fukien and Kwangtung provinces from the ninth century onward. The other three per cent are 240,000 members of the Kaoshan national minority, descendants of people of Malay stock who arrived in the sixth century from the southeast coast of Kwangtung, Hainan Island, Sumatra, Borneo and the Philippines. Stone axes, pottery and other remains of Taiwan's neolithic culture found by archaeologists have an affinity with those of continental China. The Kaoshans, up to the present, have no written language of their own. Still earlier inhabitants, the Lonkiau tribes, originated from the Liu Chiu Islands, of which Okinawa is the largest. They have now disappeared, but are known to have been seen by Dutch officers who came to Taiwan three hundred years ago.

The name of the Kaoshan minority means "high mountain". These people are noted for their patriotism and courage. In recent history, they have repeatedly fought shoulder to shoulder with the Chinese against foreign invaders and domestic tyrants. Though the Kaoshans are such a small proportion of the population, their 500 or so villages are scattered through mountainous areas covering more than half of Taiwan. The Ami and Paiwang tribes of Kaoshans live along the eastern seaboard; the Tayor in the north; the Tsowu, Bunung and Saishet in the deep interior. The Yami tribe is concentrated on the islet of Hungtouyu some 50 nautical miles to the southeast. All the tribes cultivate taro and maize by primitive methods and hunting still plays an important part in their livelihood. Only the Ami and Paiwang have private ownership of land.

Today, with Taiwan still illegally occupied by Chiang Kai-shek and his U.S. backers, the Kaoshans continue to suffer national oppression. But when all the people of Taiwan are liberated, the nationalities policy of the new China—based on equality, autonomy and fraternity—will help them to advance at a rapid pace. The Central Academy for National Minorities in Peking has just opened an excellent exhibition, the first in history, on Kaoshan culture and art. It has aroused great interest both on the mainland and in Taiwan, where the news has penetrated.

Records dating back to the third century tell us that the Chinese were already sailing to Taiwan, and there are seventh-century descriptions of Lonkiau and Kaoshan tribesmen visiting the mainland. Early in the ninth century, when trade in pearls and other commodities began with Taiwan and the Penghu (Pescadores)

The Chinese and Kaoshans — with their proud patriotic tradition of fighting every invader — never acquiesced in this disgraceful act. They formed their own army and, in the winter of 1895, fought many hard battles before they were finally defeated by Japanese troops. Between 1895 and 1945, the Japanese population, civil and military, rose to 320,000. The same half-century witnessed more than twenty revolts against Japan. In 1930, Kaoshan building workers, led by a primary school teacher, Hwa Kang, rose in arms against intolerable police brutality and occupied Wusha, Taichung. The Japanese drove them to the mountains and sprayed them with poison gas from the air, killing the leaders and most of their associates.

There were new uprisings in 1934 and 1941. Guerrilla forces were organized on the eve of Japan's surrender in World War II in 1945. These actions were part of the general resistance of the Chinese people to the attempt of Japanese imperialists to enslave their country. In Taiwan, the slogan of the resistance was always reunion of Taiwan with China. For this objective, in the half century of Japanese domination, an estimated 500,000 people on the island gave their lives.

During the Second World War, the powers allied against the fascist axis determined to right the wrongs of Taiwan's people. The Cairo Declaration of December 1, 1943, signed by the U.S., Britain and China declared that "all the territories Japan has stolen from the Chinese, such as Manchuria, Formosa and the Pescadores" should be returned to China. President Roosevelt, in a broadcast, said that the principle that had been applied was a very simple one, that stolen property should go back to those to whom it belonged. The Potsdam Declaration of 1945, which the Soviet Union also signed on the eve of its entry into the war against Japan, confirmed the decisions in Cairo.

After the Japanese surrender, the Kuomintang regime, then still in power in China, set up an administration there. Very soon, its appointees began to plunder the island as they had the mainland. In February 1947, a peaceful protest of Taiwan's inhabitants was met with bullets. In the spirit of freedom which had always characterized them, they replied with a general strike in factories, schools and commercial establishments. Chiang Kai-shek's government, while pretending to negotiate, landed two divisions of troops at Keelung and perpetrated one of the worst massacres in Taiwan's history, earning fiery and undying hatred.

When Chiang was crushed on the continent, Taiwan naturally expected liberation too. But ships of the United States navy brought the remnants of his corrupt regime and army to the island, planting them on the backs of its people. Yet even at that time, the United States did not dare to deny that Taiwan was an integral part of China. President Truman declared in January 1950: "The United States has no...intention of utilizing its armed forces to interfere in the present situation. The United States government will not pursue a course which will lead to involvement in the civil conflict in China." He stressed specifically that no "military aid or advice" would be provided to Chiang Kai-shek, and Secretary of State Dean Acheson followed with a statement that "when Formosa was made a province of China, nobody raised any lawyers' doubts...that was regarded as in accordance with the commitments". How false all these words were was soon proved by the facts.

In June 1950, the U.S. Seventh Fleet was sent to prevent Taiwan's liberation. Chiang's tyrannical regime was financed and armed. A navy and air force were supplied him by the United States which he has used to seize or sink more than 470 Chinese vessels, kill or abduct 1,300 fishermen, make raids on the mainland, and piratically attack, detain or rob 67 foreign ships engaged in peaceful trade. Of these, 43 were British. Others belonged to Norway, Denmark, Italy, Greece, Panama, West Germany, the U.S.S.R. and Poland. Among foreign seamen killed was the captain of the British ship *Rosita*.

The Chinese people are resolved to liberate their brothers on Taiwan. Until this is done our national sovereignty will not be complete, peace in Asia will not be secure, and the brave people of Taiwan will not enjoy the freedom for which they fought so long. Nor will the international waters around China, so important to the world's commerce and the prosperity of many lands, be cleared of the menace of piracy.





*China Photo Service*

Voting in Swatow, Kwangtung province.

## THE PEOPLE'S GOVERNMENT

**F**OR over a hundred years our forerunners fought persistently against internal and foreign oppression. Today the Chinese people have stood up. Our revolution has received the sympathy and acclaim of the people of the whole world. We have friends throughout the world.

These words were spoken by Chairman Mao Tse-tung at the opening session of the Chinese People's Political Consultative Conference, which on October 1, 1949, proclaimed the People's Republic of China and hoisted, for the first time, its crimson five-starred flag.

The Conference was the most democratic assembly which had ever met on Chinese soil, and united the widest variety of people. Its 662 participants included delegates from all the country's democratic parties, mass organizations, nationalities and professional groups. There were members of the Communist Party which had led the anti-feudal, anti-imperialist revolution to victory in the face of terror, suppression and war. There were worker-veterans of grim labour struggles, peasants who had taken up arms to give effect to their age-old dream, "the land to the tiller". There were intellectuals who had stood firm through persecution and the assassination of their colleagues, and patriotic businessmen who had striven to create a national industry in conditions of semi-colonial backwardness.

Born of their deliberations were the Common Programme, which was to serve as China's provisional constitution for five years, and the new Central People's Government. The Conference itself continued to serve China as her interim parliament.

In 1954, in China's first general election, 278 million people elected their delegates to more than 280,000 local people's congresses. In subsequent rounds, deputies were elected to the county, municipal and provincial congresses and those of the various national autonomous regions—and finally to the National People's Congress, which adopted the Constitution with socialism as its goal.

## After Liberation—New Democracy

by CHIEN TUAN-SHENG

THE Common Programme, which serves as our interim Constitution, stipulates that the state power of the People's Republic of China belongs to the people, and that the People's Congress is the organ of state power. When the Congress is not in session, the People's Government which it elects becomes the organ for exercising state power. This is true at all levels. Each people's congress is to be elected by universal franchise, but pending the convocation of the people's congresses elected by universal franchise, the Chinese People's Political Consultative Conference nationally, and the people's representative conference locally, are convened instead. The former acts for the National People's Congress and the latter for the local people's congress.

By the end of 1951, a little over two years after the founding of the People's Republic, people's representative conferences had been convened in all the 36 provinces into which the mainland of China is now divided. In the countryside, where not even a pretence of democratic government had existed under any previous Chinese government, people's representative conferences or peasant representative conferences were convoked in many thousands of *hsiang* (sub-districts). People's representative conferences had also been convened in all but 46 of the 2,158 *hsien* (districts). Municipal people's representative conferences have met in all 156 municipalities. Borough people's representative conferences, as well as citywide ones, have been held in 54 out of 96 municipal areas with a population of over 100,000.

These representative conferences, being a transitional form of the people's congresses, are gradually becoming fully elective. The Municipal People's Representative Conference of Peking illustrates this process. When the first conference was convened in August 1949, half a year after the liberation of the city, the participants were all appointed by the Peking Military Control Committee in consultation with local political party branches, people's organizations, national minority groups and other bodies, while a number

were appointed directly for their personal merit. In the second conference, three months later, 76 per cent of the representatives were elected, directly or indirectly, by the members of their own parties, organizations or groups. At the third conference, convened in February 1951, the proportion of elected representatives rose to 83 per cent.

In the fourth conference, elections for which have just been completed, the proportion is still higher. Out of a total of 519 delegates to the present conference, 173 were elected directly by their constituents, 278 were elected indirectly, and only 51 were appointed. In other words, the proportion of elected representatives has risen to 87 per cent. Special appointment was still deemed desirable in the case of a number of specialists of high standing who can contribute much to the deliberations of the conference, as they have to those of earlier ones. In addition, 17 members of the Peking Municipal People's Government, including the Mayor and Vice-Mayor, act as *ex officio* delegates.

The election of representatives usually consists of two steps: nomination and voting. In well-organized bodies like the trade unions in the urban centres and peasant associations in the villages, preliminary panels of candidates are first made up by the basic units. Names on which agreement cannot be reached are eliminated by conferences chosen by the basic units, after which the list is presented to the entire unit for discussion. If there are still objections to any candidate, further conferences are held, and the process of discussion or revision is repeated. After such nomination by general consent, the voting itself signifies final approval of the candidates by the electors. But even at this late stage, the electors are free to propose candidates whose names do not appear on the list.

The elections are accompanied by intensive educational campaigns, which acquaint the voters with the record of performance of each people's representative conference and people's government—both assessing their achievements and criticizing their mistakes.

The people's conferences elected in this way in their turn elect the people's governments. Thus the incumbent Central People's Government was elected by the Chinese People's Political Consultative Conference of 1949. The people's government at local levels are, according to The Common Programme, each to be elected by the corresponding people's congress and, pending the

convocation of the congress, by the people's representative conference as the latter gradually assumes the functions and powers of the congress. Carrying the provisions of The Common Programme into effect, some municipal people's governments were elected by the representative conferences as early as in November 1949. By the end of 1951, people's representative conferences had assumed their power of electing the people's government in about half the provinces and municipalities.

The people's government so elected is also an accurate reflection of the makeup of the united front in its own locality. Thus, in the sub-districts, which are predominantly agricultural in population, the members of the people's government are mostly peasants. But in a metropolis like Peking, where universities and schools account for a considerable part of the population, there are no less than five professors and two school teachers among the 26 members of the Municipal People's Government. The election of the members of the people's government by the people's representative conference also requires elaborate consultation and discussion among its constituent groups, so as to insure general agreement.

The Common Programme, based on mutual agreement between representatives of the people, clearly defines the rights and obligations of every class and group in the new democracy. The people, the people's representative conference and the people's government are all committed to advancing it and building up the country under its provisions. There is therefore no conflict of interest between them, and the separation of legislative and executive powers is not considered necessary.

The Chinese People's Political Consultative Conference and the Central People's Government, or the local people's representative conference and the local people's government, represent respectively the organ of state power and the organ for exercising state power between sessions. Both can legislate, lay down policies of administration and perform other important acts so long as the decisions of the latter do not counter the prior decisions of the former.

The close working unity of the two organs is made still easier by the existence of the National Committee and Standing Committee of the PPCC on the highest level, and of the consultative committees of the local people's representative conferences. These are interim committees of the People's Political Consultative

Conference and the people's representative conferences respectively. They can be frequently called together and in fact often meet in joint session with the people's governments.

It is in the sphere of administration that the people's government, through the administrative organs set up under it, has exclusive competence. Thus the Government Administration Council with its various ministries and commissions performs the administration of the Central People's Government, while the provincial and municipal departments of administration do the same in the people's governments of the provinces and municipalities.

Since the administrative departments touch the interest of the population in the most direct fashion, the people and their representatives voice their views, freely and frequently, on the way in which they are conducted. The administrative departments and personnel of new China have to pay close attention to such expressions. In people's China there is division of work, but no division of power. The people are supreme and their representatives are all-potent. The state power belongs to the people.

The people take an active part in government. One form of their participation is that they initiate governmental action through their representatives. The people send in large numbers of proposals and suggestions to be considered, and if accepted, to be passed as resolutions by the representative conferences. Often, too, they give their opinions directly to the members of people's governments or to the administrative departments concerned. The subjects on which they express themselves are numerous and varied.

In a district (*hsien*) or sub-district (*hsiang*) they may ask for the repair of a bridge over a country stream. In a city they may urge regulation of house rents; an industrial zoning scheme; the removal to a safe distance of hazardous enterprises such as match factories; the founding of commercial investment companies to provide a healthy outlet for surplus capital and prevent speculation; improved educational facilities for workers, etc. Provincial representatives are requested to speed the dredging of waterways for navigation, clear clogged irrigation systems, organize better marketing facilities for agricultural products and so on.

Some suggestions can be dealt with immediately by administrative authorities on the spot. Others have to be discussed by the people's government council. Still others are subject to consideration by the interim committee of the representative conference or the conference itself.



An instance of the people's active participation was the movement to relieve the drought in south Szechuan last year. Insufficient winter rainfall made the soil in some districts too dry for spring planting. The situation could only be remedied by building temporary reservoirs and filling them with all available water from the streams, from the valleys and from new wells which needed digging. This could only be done by collective efforts in each locality. Yet because the peasants' plots were small and scattered, some being nearer to water-sources than others, such collective effort was deemed impossible in the past. Under a government that belongs to the people and has proved its concern for the interest of every member of the rural community, the situation has become different. The peasants in south Szechuan, as elsewhere, readily see the wisdom of building common reservoirs to irrigate all the surrounding farms.

Through their representative conferences, the peasants in affected areas have discussed and adopted various anti-drought measures and carried them out zealously, without delay or friction, the local administrative authorities seeing to it that not a single farm remains beyond the reach of water. With the people's government and the people themselves working in unity, the calamitous consequences of drought in former times have been avoided. At this writing, the spring crop in south Szechuan is growing as in normal years.

As masters of state power, the people also criticize the government without hesitation. No limit is placed on the time and place in which such criticism can be raised. It can be done in writing or verbally on the floor of the representative conferences. Written criticisms can be signed or anonymous. Administrative personnel, especially at lower levels where they are more numerous but less carefully chosen and trained than those above, are urged to welcome open criticism and are forbidden to suppress, discourage or ignore it. At first, some representatives hesitated to criticize malfeasant or negligent officials, being suspicious that it would have no effect or even invite reprisals. Soon however, they were convinced by facts that all valid criticism was well accepted and was followed by speedy action to correct the abuses complained of. Now all such hesitation has disappeared.

It is a common thing, at a sub-district representative conference, to see a delegate publicly reproaching a member of the sub-district government for bad conduct, and for the member concerned

to criticize himself in his reply, offer apologies, and pledge to act better in the future. Such interchanges of criticism and self-criticism also occur in representative conferences at higher levels, although they are somewhat less common there. It is to be added that in all cases of serious criticisms, involving charges of breach of law, careful investigation by superior authorities precedes any action that may be taken against the person charged.

The more the people are able to criticize the government, the more they feel their responsibility in electing the persons best qualified to represent them in the people's conferences, and through them the best qualified members for the people's governments. In the movement against corruption, waste and bureaucracy in the first half of 1952, criticism and self-criticism as applied to government personnel reached a new high. The result was a still more intimate relationship between the people and the government. In the elections which followed, the people scrutinized their candidates with even greater care than they had done previously. The process has also led to a much greater and more detailed interest in what the government is doing.

As a result of the people's active participation in government in all these ways, the support that they give to it has reached a high degree of warmth and firmness. The people have come to realize that the entire structure of people's governments, correctly and wisely led by Chairman Mao Tse-tung, has not only secured them many benefits but has also educated them to be full masters of their own affairs at every level.

That the material and tangible benefits that have accrued to the people lead to solid support for the government is understandable enough. But the educative process by which the people are taught to take part in the affairs of government is an equally important factor in making for eager and resolute support. Here again, we may take the peasants as an illustration. Though they were grateful to the People's Government for the distribution of land, they at first took little or no interest in government and even considered themselves incapable of such interest — being shy of meddling in affairs which they considered "above" them. Now, however, they have learned to take their share in government, and in doing so have ceased to look at it from "below." The change is most profound. The people and government have become inseparable and the government has come to have all the strength that only the masses possess and can give.

## For Peace and Friendship

by SOONG CHING LING

**L**ONG live friendship among the peoples!" This is a call the Chinese people support fully: for its humaneness, for its strength, for its ringing guarantee that peace in the world can be preserved.

We believe that there is no fundamental cause for the peoples to quarrel with each other. We believe that international disputes do not originate with ordinary men and women, but are injected by the few who profit from prejudice, splitting and conflict. We believe that no matter what their differences in colour, customs, worship or politics, the interests of the mass of the people everywhere are common—and will sooner or later unite them.

This belief is a basic tenet of our thinking. It is written into our law and guides our daily actions within our own Chinese family of nations, and toward the family of the nations of the world. Since the founding of our People's Republic we have applied it faithfully, and have been able, in consequence, to establish cordial, frank and sincere relations with peoples from every corner of the globe.

These are relations between equals, each concerned for the welfare of the other. They are associations by free choice, founded on understanding of the will of each people to be free and independent. Relations so based create rock-like solidarity.

Within the part of the world where the people rule, we have lifted the friendship among states to a level never before attained. Here all activity is not for selfish individual profit but for the benefit of whole populations, so antagonism of interests is unknown. Here, because each step of progress by one is a matter of rejoicing for all, the exchange of material necessities is truly mutual. Here, because cooperation is the way of life, all obstacles are surmounted to plan and effect vast constructive undertakings that change nature and improve the livelihood of man. Here cultural development is given full play and appreciation for the contribution of each people to civilization grows steadily.

Past history has nothing to show comparable to the neighbourly aid the Soviet Union has given China. It has dispatched its best specialists to help rebuild our economy from the ruins of war and reactionary mismanagement. It has transferred to us, without any compensation, railways and other enterprises in which the Soviet people made huge investments in funds and labour. It has sent the most accomplished of its experts to train our personnel in every sphere, passing on experience and technical information without stint. In our Five-Year Plan, it is assisting in the setting up and re-equipping of 141 major industrial installations which will play a great role in the industrialization of China. We have many trade agreements with the Soviet Union and People's Democracies. In culture, we have a constant exchange of books, films, delegations, students, dramatic and concert groups on a scale never before imagined—let alone carried out. This is friendship in its fullest development.

If it were left to the world's peoples, such would be the characteristics of every contact between them. We have proved that where states reflect the will of the people, wholesome relations are bound to develop. Friendship among the peoples benefits everyone. It allows the full concentration of energy and resources for the improvement of our own lives, and those of our neighbours, with fear laid aside once and for all.

The increasing, broad and worldwide support for negotiations to settle the differences between nations indicates that more and more people are recognizing this truth. They see the immense expenditures of materials and money which some nations are devoting to war preparations, materials and money which the people need to live, to keep healthy, to take care of their children. It is only natural for them to make comparisons with a situation that would reverse matters, that would make normal relations between nations and peoples possible. It is becoming self-evident that friendship is the only sensible way.

In the past half year there have been new and significant developments along those lines. People are not only discovering the correct path; they are learning the value of following it with persistence. This, along with the heroic efforts of the Korean and Chinese peoples, led to the Korean armistice. That the "warlords of Washington", as an American writer has called them, were finally compelled to sign the agreement despite their unwillingness to negotiate, that it now hobbles their continued efforts to turn the

course back from peace to war, shows that even they can no longer ignore the wishes of the people. Before the armistice, it was the fashion among certain politicians to speak the word "negotiations" only with contempt. Force, they said, was the only way to get one's point across. But their force did not work in Korea, any more than it can work elsewhere. The frightful losses they caused only angered the people further. Today no statesman in a position of responsibility dares openly to oppose the idea of talking over differences—unless he is bent on political suicide.

So now we have come to another critical stage in international affairs, one which marks great progress but requires us to see all the more clearly, to keep our eyes open and concentrated on the objective—peace.

On the one hand, all peoples are anxious to put an end to the provocations of the war-minded, to their constant probing and testing to see where they can start another fight. Everywhere, including the countries dragged into the Atlantic Pact and other military alliances, the people want to have done with constant uproar and tension. They do not want to let the opportunity of taking far-reaching steps toward general peace slip from their hands. They see no threats of "aggression" against their own countries from the Soviet Union or China, or the other people's lands. The proof that this fake "stimulant" is on the wane is the isolation of those who persist in shouting the alarm, the crumbling of such schemes as the "European Army" which the people would support if there were any real menace to arm against. The proof is in the growing response to the hand of friendship extended again and again from the countries of the peace camp, which have advanced reasonable proposals, made many concessions, and extricated the world from one dangerous crisis after another. "Action instead of words", the enemies of peace sneer at us. Our actions are there. The peoples see them and understand.

The evil trickery of those who concoct the thick, black, scare-headlines is failing. It is perfectly evident who is constructing ring upon ring of military bases, boasting of how they will "surround" us, obviously intent on using them for attack. The peoples of the West, the other peoples of the East, want peace no less than we do. They are tired of the sword rattling, tired of the price they have to pay for it. What makes them particularly uneasy is that they are expected to approve of the resurrection of the very dregs of humanity, the Japanese military fascists, the German nazis, the

very forces which, eight short years ago, they smashed with such great sacrifice. Increasingly aware of the danger, they are demanding that their affairs be carried on differently; that disagreements be discussed on a give-and-take basis. The world wants to relax.

Who needs tension then? Only the small group of corporation executives in high positions in certain governments, men of the stamp of Charles Wilson of General Motors who, being both the chief manufacturer of war materials for the U.S. government and its Secretary of Defence, says: "What is good for my business is good for the country." For such men, things are "good" when enmity is rampant, suspicion brews, and disorder reigns. For them war is the goose that lays the golden eggs of armament sales, which nothing can match for quick, high profits. Yet they too, in the present mood of the people, cannot be frank about such things. They are compelled to resort to slick statements about friendship, about how the world must realize that times have changed, about the old colonial patterns being outdated, about how "the door to peace is never closed". At the same time, behind this smokescreen of words, they manoeuvre in quite a different direction; hundreds of millions of dollars are spent for subversive activities in peaceful countries; billions are spent to stifle independence struggles in Asia, Africa, and Latin America in support of the very colonialism which has been pronounced "outdated", to prepare to turn the "cold war" into a hot one. The men who do this, despite all they say, do not want the world to relax.

The fight between what the people want and what the war profiteers want is basic. Its outcome, in each country and in the world, will determine whether we have peace or war. It is a fight to uphold the natural affinity between peoples, who have no reason to bear arms against each other. It is a fight to frustrate those who want to thrust arms into the hands of deceived men for the purpose of slaughtering their fellows, filling their own pockets with blood-money at the same time.

Peace is scoring successes. In order that they may continue, we must be vigilant. It is required of us that we pierce with truth every malicious web of lies spun to snare the people. If we can do this, the people will take the truth, make it their own, and act on it for peace.

Chinese men and women, loyal to the principle of friendship between peoples, will go on striving for it whole-heartedly, side by



side with all—of whatever views—who want world tranquility. We will continue to press for sincere negotiations to lay the groundwork for a relaxation of international tensions, for the resumption of cultural exchange, for a peace that lasts. First of all, we call for a conference of the United States, the United Kingdom, France, the Soviet Union and our People's Republic of China, devoted to this purpose.

On the Korean question, alongside the Korean people and in accordance with the wish of the majority everywhere, we will seek for a peaceful solution. At the same time, we will demand that agreements be adhered to; that no "side deals" like the post-armistice connivance with Syngman Rhee be entered into to nullify the work done and stop further progress; that under no circumstances should fighting in Korea be resumed. We will also strive for the termination of all other hostilities now going on, and for their just settlement.

The Chinese people, joining hundreds of millions of others in East and West, welcome and support every effort of the German and Japanese peoples to prevent the return of the militarists who have led them to national disaster and to take, at last, the road to peace and democracy.

The Chinese people will join all those who want to end the actions that are destroying the prestige and functions of the United Nations. We want this international organization strong, acting as a forum for peace instead of a catspaw for war, worthy of the peoples' confidence. We demand that the U.N. Charter, won by the vast sacrifices of World War II, be protected from tampering. We demand that the true representatives of the Chinese people be seated on all international bodies. Without the representatives of nearly a quarter of mankind, no organ can deal adequately and effectively with any world problem.

The Chinese people stand with all those who want civilization preserved, not destroyed, in demanding the immediate prohibition of all weapons of mass annihilation. The major powers must agree on disarmament, which will mean so much to the safety and livelihood of all.

Ours is a peaceful country. In China, the dreams which so many of us worked for over the years are daily becoming reality—our people healthy, a rapidly developing industry and agriculture, a rich cultural life. Who can deny these advances? Who can deny that they have been made at the expense of no other people or na-

tion? And in our further forward movement, it will be the same. Our system allows no different way. In small things and big, its basis is the cooperative spirit.

That is what enables us to hold high the banner of friendship among peoples. We have confidence in our own strength and still more in the strength of peoples striving together. We firmly believe that this banner will be carried forward everywhere, to victory for the peoples and peace.

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DECEMBER 1955

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## How We Made the Census

*by CHUNG LIN and HSIAO LU*

AT MIDNIGHT, June 30, 1953, there were 601,938,035 Chinese people, according to China's first real census. Many people, remembering the population claims of previous Chinese governments and their admittedly incomplete counting methods, wondered what system had been used to arrive at the total, how a census could be taken in such a vast country, and what degree of accuracy could be claimed for the figures.

It is quite true that no previous government ever succeeded in reaching an accurate estimate of China's population. We know from ancient historical records that some kind of head-counting was done even before 1000 B.C. We know too that in the Han dynasty (206 B.C.-A.D. 220) fairly detailed counts were made for taxation purposes and to obtain men for military service and slave labour. In the Sung dynasty (A.D. 960-1279) the *pao chia* system was introduced, whereby every locality was divided into groups of households with one man responsible for each group, collecting taxes, impressing men for military service and forced labour and making an annual return of the number of people under his control.

This system continued through the sixteenth century, was taken over by the Manchu dynasty and lasted right up to the time of the

Taiping Revolution about 100 years ago, when the *pao chia* network was largely destroyed. The Manchu government made its last attempt at a census just before its downfall in 1911, and published a population return of 374,223,088.

Thereafter there was no census until 1928, when the Kuomintang government announced that it would complete a census in three months. This scheme was so elaborate that it had to be continued in 1929 and 1930. In 1931, the Kuomintang published the estimated figure of 474,800,000, and even so this was known to be incomplete.

All these attempts to count the population of China had one factor in common—they were not done for the benefit of the people but for the ends of the ruling class, for extracting the utmost possible in taxation, for impressing men into the fighting forces of the government or of some local warlord, or for obtaining slave or semi-slave labour for all kinds of public and private work.

Little wonder, then, that each attempt failed to give an accurate figure, not just because of the partial and unscientific methods used but primarily because of the resistance of the people, who resorted to every kind of concealment to cover up the existence of military-age men, able-bodied breadwinners, or sheer numbers of heads on which they might be taxed.

The thing that made the 1953 census different from all others was the fact that it was carried out by a government which has the confidence of the people. And its purpose was made clear to all by a tremendous nationwide campaign of information and propaganda. It was nothing less than the extension of democracy to every citizen of China, since it was carried out in conjunction with the compilation of a voters' register for China's first democratic elections.

Its purpose was also to enable the government to make proper calculations in relation to China's economic planning. From 1950 onwards, the Ministry of the Interior had been compiling figures passed on by the provincial and municipal people's governments, but these were incomplete and moreover did not include details as to age, sex, nationality and so on. Many government departments required this fuller information to facilitate the drawing up of their plans for the country's development and welfare.

The work was directed by the State Statistical Bureau, which set up branches at county and provincial levels all over the country. A body of principles had to be established and a detailed programme

**TOTAL POPULATION: 601,938,035**

**MEN**

51.82%

297,553,518

**WOMEN**

48.18%

276,652,422



**HAN**

547,283,057



**MONGOLIAN**

1,462,956



**HUI**

3,559,350



**TIBETAN**

2,775,622



**UIGHUR**

3,640,125



**MIAO**

2,511,339



**YI**

3,254,269



**CHUANG**

6,611,455



**PUYI**

1,247,883



**KOREAN**

1,120,405



**MANCHU**

2,418,931



**OTHERS**

6,718,025

**HAN**

93.94%

547,283,057

**OTHER NATIONALITIES**

6.06%

35,320,360

**NOTE:** The total includes people in Taiwan and overseas Chinese. The proportion of men to women is given on the basis of the number directly registered.

of work had to be made out that would ensure the greatest possible accuracy. Before drawing up its plans the State Statistical Bureau held consultations with the Ministry of the Interior and the Public Security Bureau, and with them made a detailed study of the methods used in the Soviet Union for its 1939 census. They were assisted by a statistical expert from the Soviet Union, Sergei K. Krotevich.

There were many questions to be settled. The first was whether the basis to be used was the counting of all persons in one place on a single day or the listing of people according to their permanent residence.

The second alternative was the one finally chosen, because with China's vast territory and population a single-day count would have required too great a force of census workers, whereas if the count could be extended over a longer period the staff could be much smaller.

This agreed on, the term "permanent resident" had to be defined. Allowance had to be made for China's traditional family system. Every member of a Chinese family is regarded as an inseparable part of it, regardless of how far away he may be living or how long he has been away from home. In order not to offend this feeling of family unity, it was decided to include in the count as "permanent residents" all those who at the time of the census had been living or were to remain away from home for less than five months, and to enter other members of the family who had been away for longer than five months in a separate column which would not be used in making the count. Actual registration of the long-absent members would then be made in the places where they resided.

Regulations had also to be drawn up for the registration of people with no fixed abode (for example, construction workers, railway builders and others who move from building site to building site as their work demands), long-term patients in hospitals or sanatoria, students, hostel-dwellers, boat-dwellers, merchant seamen whose home is their ship, nomads and many more. Each of these questions was solved in the most practical way available — for example, boat dwellers and seamen would register in the first port at which they called while registration was proceeding and would then be given a certificate to show that they had done so.

The operative date for the census was set at June 30, 1953 — that is, whatever time the count was taken, the figures were drawn

up on the basis of the situation on that date. If the count was made before June 30, it was subsequently brought up to date. Altogether the count occupied a little more than a year. Before it began — that is, early in 1953 — the State Statistical Bureau summoned a meeting of responsible census officers to discuss the draft working plan. After discussion and amendment, the plan was submitted to the Government Administration Council and ratified by that body in April 1953, after which work began at once.

Two and a half million central and local government workers took part in the actual recording, and these were aided by volunteer census workers in the localities. The existing administrative divisions were used as the geographical basis for the work.

Publicity about the census went hand in hand with that about the elections, and this helped to smooth the way for the census takers and win the informed cooperation of the people. Census workers were instructed to observe local customs fully and to behave in a friendly manner at all times in asking for information. Voters' certificates were issued at the time of taking the census to all those who were over 18 years of age and had not been deprived of political rights for any reason.

There were only four questions on the registration form — name, age, sex and nationality. The question of age presented some slight complications as several ways of calculating age are used in China. For the purposes of the census, it had been decided that each person's age was to be calculated as that at June 30, 1953 (Gregorian calendar). But many Chinese people use the Chinese calendar and custom, which considers a child to be one year old at birth and adds a year to his age on each lunar New Year's Day. Some older people reckon the date of their birth in terms of the old 12-year cycle system (the Year of the Tiger, the Year of the Ox and so on) and others are accustomed to reckon by the year of the dynasty in which they were born. A conversion table was therefore worked out for census workers so that they could reckon the birth-year of every person uniformly.

Nationality too was a question which had to be decided. A child is generally regarded as belonging to the same nationality as his parents, but if the parents were of different nationalities, they were permitted to decide the nationality of those of their children who were under 18 years of age; those over 18 could choose for themselves which of their parents' nationalities they would adopt.

In general, people were asked to attend the registration centres themselves and provide details about their families. Either the head of the family or some well-informed member of the family could attend for this purpose. (The family itself decided who should be regarded as its head.) Mobile census units, working on the basis of the local police and neighbourhood committee records, visited those who did not come to register. They also saw to the registration of the old, the sick, the disabled and people too far from the centres to be able to reach them easily.

Thorough checking and rechecking went on at every level. After the preliminary national survey was completed a sample check was made in 343 counties in 23 provinces, 5 municipalities and one autonomous region, covering altogether 9 per cent of the total population — 52,953,400 people. It was found that duplications amounted to 1.39 per thousand and omissions to 2.55 per thousand. These errors were corrected during the rechecking. County and provincial checking and rechecking was done as soon as the local registration was completed, and recounts were made where necessary.

The tabulation of the figures at the national level was commenced in May 1954 and the total was finally announced in November of the same year. It includes 7,591,298 people on Taiwan, whose numbers are taken from Kuomintang figures published for the year 1951. It also includes 11,743,320 Chinese residing or studying abroad, calculated on the basis of figures published in the countries where they are living, and some 8,397,477 persons living in such remote places as the border regions of China where travel problems made it difficult for the census takers to reach them in time. These three categories, amounting in all to 27,732,095 people, were indirectly counted; the balance of 574,205,940 people was directly drawn up with the active assistance of the people, who knew full well that the taking of the census would aid economic planning, extend democracy and help the spread of many social services which are now entering their lives for the first time.



## Election in the Countryside

by HSIAO FENG

FOR SEVERAL MONTHS now, China's first nationwide election movement has been sweeping the country, opening new vistas of political activity for the people. Everywhere, and particularly in the agricultural areas, one of the achievements of the movement has been the awakening of women to fuller participation in public affairs. All these features were well illustrated by what happened in Tsaikungchuang, on the western outskirts of Peking.

The basic rural electoral unit is the *hsiang* (an administrative unit composed of several villages). Tsaikungchuang, with its eleven villages, belongs to this category. The registration of voters there began last June, at the height of the busy season. The peasants were at work day and night on their wheat, corn and vegetable plots. String beans and strawberries were just being got ready for the market. When representatives of the Peking municipal election committee, sent to start off the campaign, arrived in Tsaikungchuang, it was already dark, but the squeaking of water-wheels could still be heard.

The next morning the visitors helped the local government personnel and peasants active in social matters to form their own local election committee. The committee had the job of propagating the election law, making the peasants fully conscious of their rights, and carrying out the registration. After this was completed, it was their task to divide the whole body of voters into small groups for more convenient discussion during the period of nomination of candidates. Finally, they were to record the actual votes cast. To be elected were 35 deputies to the *hsiang* people's congress, who would in turn elect, from their own number, the *hsiang* people's government and two delegates to the people's congress of the next highest administrative unit, the district.

From the beginning, the committee had to face many problems. One was to carry out the campaign without interfering with agricultural work. The peasants themselves insisted on this. Things were so busy that they grudged even the hours spent at

mutual-aid team meetings necessary to the work itself. They were still not too clear about what the election had to do with them, and if they thought it would hurt production they would lose interest altogether.

The first way the committee tried to tackle the difficulty was to borrow a loudspeaker system from a nearby building project, so that they could speak to the peasants in the fields. This did not improve matters much; it was no substitute for personal contact. Yet to get people to meetings was very hard too. The mutual-aid team headed by Mao Ching had nine men away on a building job and was tilling their wheat and sorghum plots with its remaining manpower. The team's wheat was ripe, the sweet-potato fields badly needed weeding and the peasants were at their wits' end as to how to manage. The members of the committee realized that success or failure in the local campaign hinged on whether they could solve this knotty but typical problem. So they went to all the other mutual-aid groups in the *hsiang* and asked for volunteers to help the hard-pressed team. They also talked to the nine men working on the construction who agreed to put in extra time in the fields when they came home at night. Soon the urgent jobs had been done and Mao Ching, the team-leader, was so relieved that he agreed to take on the chairmanship of one of the election groups.

In the registration of voters and the concurrent taking of the nationwide census, four booths were set up in the fields. When even queueing up at those proved burdensome to the peasants, still another method was adopted. The election committee went out to the fields in the noon work-break to take names and do the registering. They also visited homes to list the housewives, the old and the children.

Another thing that had to be done was to help women become active in the campaign. Under the laws of new China, women have equal rights with men in all respects, including the right to vote and to be elected. It is the policy to see not only that they participate in every field of productive work but also that they are properly represented in the organs of state power, so that their needs and desires may be met by the government. In Tsaikung-chuang, as elsewhere, women formed about half the population. Some were busy with household duties and children, but most worked in the fields, having received land in the land reform in which they had shown themselves determined fighters. Since that

time, however, they had taken little part in public matters. The women's association was dormant and one could still hear, among the old women, such sayings as: "We eat the leftovers; let the men manage affairs."

The election committee itself was formed with four women members who were natives of the *hsiang*. Through them contact was made with several young girls who had done public relations work in the various villages and had good friends in many a household. These young girls grasped the importance of the elections readily. They accompanied the election committee members on visits to talk to the local women. Because the local government personnel had paid little attention to them in the past, these women were surprised, but they made the election workers very welcome. Good relations were quickly established. Women began turning up at meetings, many with their children. The older ones stopped referring to themselves as "eaters of leftovers" and came too, bringing stools to sit on and following the proceedings with the greatest attention. If one didn't see it with one's own eyes, one would hardly believe that our rural women, so long home-bound, could develop such an enthusiasm for politics.

In Tsai-kung-chuang, even though the women worked in the fields and many had become model labourers, they had seldom been included in important discussions. Kuo Chien-chen, for instance, the wife of the *hsiang* chairman, was respected by everyone in the mutual-aid team to which she belonged for her conscientiousness in work. But when village meetings or even meetings of her own mutual-aid team were called, nobody ever bothered to tell her. When someone had suggested it, the answer was: "She's fifty already. Being out in the fields all day is hard enough. Why disturb her any more?" But when the committee invited her to an election meeting Kuo Chien-chen not only did not feel that it was an imposition but was very happy to be asked. Before long she was one of the *hsiang*'s 60 electors-group chairmen, and among the most active.

The lists of voters, written in bold black characters on red paper, were posted in the villages nine days after the registration. Before they had been up for ten minutes crowds gathered around them despite the drizzling rain. Mothers came out with their children, over whom they carefully held umbrellas. Some of the women had used their legal option and registered under their maiden names. Thus Wang Shu-hsien appeared as Shih Shu-hsien

and Wang Chao as Chao Shen-chih. Many who read the lists wondered: Who were these people? Why had they never been seen in the village? When they finally made the connections, they couldn't help smiling and laughing. Happiest of all were the women themselves. It was something undreamed of to have their names in such a place, for everyone to see.

The next step was the discussion of nominations in each group. First, there was much talk about the desirable and undesirable qualities in a candidate. Sentiment was strong against putting up bossy people, or hot-tempered ones whose eyes "pop out like buns when they are annoyed". But after a while it was decided that good temper and honesty were also not enough. It was necessary to have representatives who had shown that they could get things done, and who would therefore make able public servants. But what constituted ability? Some said the important thing was to get around the *hsiang* and talk to everyone, so they suggested those who owned bicycles. Others insisted that education was a prerequisite, because "how can an illiterate get our wishes to the government and interpret government directives to us?" Still others said that knowledge of farming was most important, because every local matter was tied up with it, and that only good workers who could lead the people in production should be named. After long discussion, a list of the necessary qualifications was drawn up. "The candidate must be politically dependable and a good worker, have a sense of justice and be loyal to the people. He or she must have a good personal attitude, and be capable of leadership in production."

Having settled this general question, the next one was: who would fit the bill? Hot discussions arose. Some favoured one person, some another. Soon the nominations far outnumbered the number of deputies to be chosen, and all were so earnestly put forward that no one wanted to withdraw a choice. Now there were no more complaints of too many meetings: it was felt that more were needed to thrash things out. After each gathering, groups of people stood around arguing far into the night. The elections became the main topic of conversation.

The *hsiang* Communist Party, the Youth League, Women's Association and other people's organizations put out a tentative list which was discussed along with the other suggestions. The most time was spent in talking about the existing *hsiang* government personnel, who had been chosen among the local people for quali-

ties shown in the land reform. Should they be re-elected? How could their work be improved?

Kuo Yung-hai, a propagandist for the local Communist Party committee, was vice-chairman of the people's *hsiang* government. He was a poor peasant who had assumed his first public post in 1950. Because he consulted with the people in everything he did, his prestige was high. He was never arrogant with anyone who came to him, and never delayed in what had to be done. An enthusiastic leader in production, he had always helped others with their harvests before attending to his own. His selflessness was universally appreciated and the suggestion to nominate him was acclaimed by all.

Chi Yu-ho, secretary of the *hsiang* government, also won quick approval. Although he had a paralyzed mother and a new baby, nobody had ever known him to plead family burdens when there was work at hand, even if at night. He had a very clear mind and did not muddle things or make mistakes.

The voters decided, without dissent, to nominate these two men as deputies and to recommend that they be sent up to the district congress as well.

Not all the government personnel, however, had the same good reputation. One man, Wu Ching-lin, was widely disliked. After the land reform, he had managed to manoeuvre the division of the landlord's effects in such a way as to get a lot of furniture for his own use. What he liked most of all was to issue orders, and if anything was not to his liking he cursed and raged. When his name was discussed, one peasant got up and said: "Why talk about it? Now is our chance to depose this little emperor." This was the general opinion, and he was not on the list of nominees.

Much argument developed around Fang Yung-kuei, the *hsiang* government chairman. His diligence was recognized: he was tireless and often stayed on the job, without going home, for days on end. He too had been a poor peasant and his record in the land reform was spotless. His habits were simple, his usual food was rolls of millet bread which he carried around wrapped in a cloth. In his work he was impartial. But he was also terribly impatient. If he thought of something, he expected everyone to agree that it was good and to do it on the run. At first very few were willing to vote for him.

At a criticism meeting which all candidates had to go through, one person asked him: "Why do you always puff out your whiskers

and pop your eyes? Why, if there are three ways of saying something, do you pick the most offensive one every time?" Even those who took his side said he must change his bureaucratic ways. Hearing such comments, Fang Yung-kuei was honestly shocked. He got up at a meeting and said: "I'm just like a tree; if it isn't pruned it'll grow wild. Your criticism is the pruning I need. It will help me to serve you." After this the voters began to talk about his good points and decided to give him another chance.

Among the preliminary nominees who had not held public office before was a personable young fellow named Chang Yung-ping. Everybody liked him, everybody, that is, who hadn't had to work with him. In his mutual-aid team he wasn't popular at all. He had once been its chairman and had started off with big ideas about enlarging the team. But his leadership had been so poor that the members were always quarrelling and no difficulty was ever solved. Finally, the team-members had replaced him with Yang Fu-hai, a very quiet fellow who did not make any sort of impression at all at first glance. Yang proved a very good chairman. The team put him up as candidate in the electoral group to which it belonged. In joint meetings of several groups, it challenged the nomination of Chang Yung-ping, whose name was dropped.

The election itself was on July 18, after discussion had continued for a month and most of the eliminations had already been made. Dressed up in their best, the peasants went to the *hsiang* polling centre, a big tree-shaded courtyard festooned for the occasion with red cloth streamers. The young people sang and carried flowers. The women wore gay cotton prints. The old men had combed and smoothed their beards with special care. There were even some blind people, stroking their voting certificates and smiling as broadly as anyone else.

Most of the people had already agreed on the names remaining on the list, and there was a big show of hands as each was announced. It was remarked that the wife of secretary Chi Yu-ho, who had been against his being a deputy because he would have even less time to attend to family affairs, nevertheless voted for her husband. What was more, her face shone with happiness when she saw every hand go up for him.

Chi Yu-ho and vice-chairman Kuo Yung-hai were elected. So was Chairman Fang Yung-kuei. Among the new deputies were seven women. Shih Yu-hsiang, of Manchu nationality, was a

worker in the women's association. Tseng Shu-hsing, a young girl, did public relations work in the village. The 35 deputies elected also included mutual-aid team leader Yang Fu-hai and the Youth League member Chang Kuo-ping. No section of the *hsiang* population remained unrepresented — the peasants, the construction and cement-factory workers, or the merchants.

Going back to their homes, the voters of Tsai-kung-chuang felt that they had carried out a very important task. More than ever, they felt that the government and the whole country were their own. They were also happy that the election process had been so thorough. "Everyone chosen is fully qualified," said one woman, echoing the general feeling. "We didn't satisfy ourselves with second-raters. We picked the best people in the *hsiang*."

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FEBRUARY 1955

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## The New State Structure

by CHIEN TUAN-SHENG

**T**HE Constitution of the People's Republic of China was unanimously adopted by the First National People's Congress on September 20, 1954, amid the rejoicings of the whole nation. One of its great achievements is that it provides us with a political system which is democratic in spirit, suitable for present-day China and a guarantee for the fulfilment of the great task of building a socialist society.

The chapter on "The State Structure" contains 64 of the Constitution's 106 articles. It deals with the various organs of the state, their organization, functions and relations with one another.

The central and all-important organ of state power is the People's Congress. There is a local people's congress for every political subdivision of the country; for the whole nation there is the National People's Congress.



From the lowest to the highest, all these congresses are elected by the people. But we do not yet have a completely direct and secret ballot at all levels. The reason is related to present-day conditions in China. Despite considerable advances made in recent years, there is still a large percentage of illiteracy and there are also large areas where travel and communications are still extremely difficult. Since the voters at the lower level have an opportunity of knowing candidates personally and intimately, they already elect directly—often by show of hands. But since they may know too little about the candidates for the higher congresses to be able to vote for them directly, the congresses at county level and above are elected by the lower ones. For example, the county congresses elect deputies to the provincial congresses, and the latter to the National People's Congress.

The choice of the candidate is the pivot of all elections. To be able to choose candidates satisfactorily, two conditions are necessary: first, that those who are choosing must know the candidates, and second, that they must have the opportunity to exchange views freely among themselves as to which candidate is the most suitable. The number of people taking part in the election at each level is small enough for both these requirements to be met.

As illiteracy is eliminated and communications improve, the voters will be able to know all candidates for higher levels more easily: when this time comes, direct election will become universal.

The National People's Congress, the organ through which power of the people is exercised, enjoys unlimited and illimitable authority. It can amend and revise the Constitution, or adopt a new one. It alone makes the laws. It lays down the economic plan which governs the growth and transformation of the national economy. It decides on the state budget and on questions of war and peace—both of fundamental importance to the life of the nation.

The National People's Congress is distinguished from all other organs of state power because it is, so to speak, their creator. It elects its Standing Committee which functions continuously during the periods when the Congress is not in session. It elects the titular representatives of the state—the Chairman and Vice-Chairman of the People's Republic of China. It also elects the heads of the Supreme People's Court and the Supreme People's Procuratorate. Its consent is necessary when the Chairman of the People's Republic chooses the Premier of the State Council, when the duly-

appointed Premier selects the Ministers, and when the members of the National Defence Council are named.

The National People's Congress possesses the supreme power of control over all other state organs, which are responsible and must report to it (or to its Standing Committee when it is not in session). It may remove the Premier or other members of the State Council as well as the heads of other state organs. Furthermore, the Constitution explicitly states that the National People's Congress shall exercise such other power as it may deem necessary.

This fullness and completeness of power is derived from the principle that in a people's democratic state the people must reign supreme. There are no checks and balances to hinder the people's power.

The question has been asked: why does the Congress not hold long sessions, meet more frequently, and dispense with the Standing Committee which functions between sessions? May not the Standing Committee usurp the power which should belong to the people through the Congress?

To those accustomed to the practice of western parliaments, it may seem unusual that the sessions of the National People's Congress are short and take place only once a year (or whenever the Standing Committee deems it necessary, or one-fifth of the deputies so propose). But there is a very good reason for this. Our deputies are all actively engaged in various types of work, and do not give up their jobs on being elected. It is through their work that they keep in contact with the people, their needs and opinions. Deputies who are workers or engineers do so by remaining in the factory, where they gain daily first-hand knowledge of the requirements of industry. The same is true of those engaged in agriculture, education, the arts and all other fields. It is held that if the deputies gave up their own work even for their period of office (four years), they could quickly lose their representative character and become professional politicians. Deputies who are in daily contact with the rank and file, on the other hand, bring to every session a freshness of mind and a seriousness of view rare among professional politicians. Nor are they inclined to waste time on such minor matters as private bills, or engage in complicated manoeuvres such as filibustering, which can do so much to delay public business. The short sessions do not limit the right of constituents to bring matters to the attention of the Congress through their deputies at any time. If constituents wish to make complaints

or suggestions to the government between sessions, their deputies have the duty to address questions, through the Standing Committee, to the State Council or any of its Ministries and Commissions, which are obliged to answer. Deputies to the National People's Congress also attend sessions of the provincial or other local people's congresses which elected them, and are subject to recall by their electors.

As for the possibility that the Standing Committee might usurp the power of the National People's Congress, there need be no fear of this. It acts only on behalf of the Congress and is strictly accountable to it for all its work. Any of its members may be called to account or removed by the Congress.

The position of the Chairman of the People's Republic of China in our state structure is in some ways unique. Comparison with the office of the President of the U.S.A. or of the French Republic is unrealistic. It bears a closer resemblance to that of the Chairman of the Presidium of the Supreme Soviet in the U.S.S.R., since both issue from the highest organ of state power and are not part of the administrative organ. But here the likeness ends: the Soviet Chairman is the leading spokesman of the Presidium of the Supreme Soviet as a body, whereas the Chairman and Vice-Chairman of the People's Republic of China do not hold their office as chief members of any council or committee.

The powers of the Chairman are mainly procedural. He does many things, but all are based on prior decisions arrived at by the National People's Congress or its Standing Committee. Among them are the promulgation of laws and decrees, appointment or removal of Ministers and other principal officials of the government, conferring of state orders, medals and titles of honour, proclamation of amnesties, declaration of a state of war and orders for mobilization.

The Chairman's function of representing the People's Republic of China in relations with foreign states accords with the usual practice in most republican states. So also does his command of the armed forces of the country. In China, in addition, he presides over the Council of National Defence and appoints or removes its members and vice-chairmen, subject to the decision of the Congress. But the Defence Council, being an advisory body, does not in any way infringe on the powers of either the National People's Congress or the State Council.

## THE PEOPLE'S GOVERNMENT

The Constitution authorizes the Chairman to convene, when necessary, a Supreme State Conference in which the Vice-Chairman of the Republic, the Chairman of the Standing Committee, the Premier of the State Council and others concerned may take part. This Conference too can only deliberate and advise and has no power of decision.

The office of the Chairman of the People's Republic of China, then, carries no independent power. It does not affect the integrity of either the National People's Congress or the State Council. It does, however, provide a great, simple symbol of the unity of the State.

The State Council is the country's highest administrative organ. Its members (Vice-Premiers, Secretary-General, Ministers and Heads of Commissions) are recommended by the Premier who, as we have seen above, is nominated by the Chairman of the Republic. It acts as the executive of the National People's Congress and its Standing Committee and works under the constant supervision of the latter. Since the State Council, with over 40 members, is rather a large body, it can meet in full session or there can be a meeting of the Premier and the Vice-Premiers, of whom there are ten (some being concurrently heads of administrative departments).

Administration in China is, generally speaking, organized on three levels: the province, the county and the *hsiang* (the smallest rural area), with cities and towns enjoying a status corresponding to their size and importance. Very large cities may have the status of a province—three do so at the moment. They and some lesser cities are further subdivided into urban districts, which have the status of counties.

For every local unit, whether it be a vast province like Szechuan, the great metropolis of Shanghai with its six million inhabitants, or a small *hsiang* with a population of a few hundred, there are a People's Congress and a People's Council, the local equivalents of the National People's Congress and the State Council.

Side by side with the local government system described above, which is uniform throughout the country and not at all complex for a large country like China, stands the system of self-government in the national autonomous areas.

China is a multi-national state. In areas where nationalities other than the Han form a majority or where there is a substantial minority requiring such measures, national self-government is encouraged. Here the system of local government may vary from

the general pattern. Autonomous national regions correspond in status to the provinces, and autonomous counties to the counties. In some places there is also an additional level between these two which is called an autonomous *chou* and has no counterpart in the general system. The *chou* are established in national areas more complex than a county but not sufficiently large or clearly-defined for a region.

While China is a multi-national state, it is also a unified one. All autonomous national regions come under the control of the Central Government, while autonomous *chou* or counties come under the governments of the provinces of which they are a part. With regard to finance, public security forces and local legislation, the autonomous areas have greater latitude and their local government organs may differ from the usual ones. Such latitude, however, is exercised within limits defined by the National People's Congress.

The first National People's Congress adopted two organic laws relating respectively to the organization of the People's Courts and basic judicial procedure, and the People's Procuratorate.

The judicial structure consists of the primary and intermediate courts, high court and the Supreme Court. Primary courts each cover a county or its equivalent, each high court a province or its equivalent, and the Supreme Court the whole nation. The jurisdiction of an intermediate court extends over a group of counties or an autonomous national *chou*.

Most cases begin in the primary courts, though some which involve more serious offences may have their first hearing in higher ones. The first trial in any court must be carried out with the participation of people's assessors whose authority, both in matters of fact and matters of law, is equal to that of the judges. In general, one appeal is allowed and the judgment of the court of appeal is final.

The organization of the People's Procuratorate is parallel to that of the courts. The procurators, besides acting as state prosecutors, have the authority to see that the law is strictly observed by the administrative departments of the State Council, the local organs of state, public officials and all citizens.

The President of the Supreme Court is elected by the National People's Congress; the presidents of lower courts are elected by local people's congresses. All are responsible to their respective congresses and must report to them on their work.

In the administration of justice the courts are independent, subject only to the law. Since the law is made by the people there is no contradiction between the overall supervision exercised by the people's congress and the independent function of the courts.

Such, in brief, is the state structure of the People's Republic of China as laid down in our Constitution and as it exists throughout our country today.

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MAY 1956

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## Going to Law in Peking

*by* YANG KUANG-TEH

**H**OW do people go to law in new China? What kind of justice is meted out in the People's Courts? Since the old legal system was thrown out six years ago and the drafting of new codes has not yet been completed, what is the basis of the new justice and how is it being applied in practice? Let us take a look at some fairly typical cases of the kind that Peking's people's courts deal with in their day-to-day work, and try to get an answer.

First it should be said that many more people go to law now than in the past. This is not because there are more crimes or more disputes than formerly. It is because justice in the old days was costly. "The gates of the court are open only to the wealthy," ran the old saying. "If you have reason but no money, do not enter." There were not enough courts. Even after waiting long or travelling far for a hearing, the people had little hope of fair treatment under the graft-ridden system by which judges and advocates grew fat.

Now there are many more courts and they are under democratic control. The president of the Supreme People's Court and those of the local courts are elected by the National People's Congress and the local people's congresses respectively. The judges of the Supreme People's Court are appointed by the Standing Com-

mittee of the National People's Congress; those of the local courts are appointed by the people's congresses of the corresponding level. All cases are first heard by a judge and people's assessors. The latter are elected directly. Appeals are heard by a panel of three judges.

Some important laws and regulations have already been promulgated and put into practice—for example, the Marriage Law, Trade Union Law, Electoral Law and the Agrarian Reform Law, the regulations on conditions of arrest and other matters. Cases are heard without undue delay, proceedings are direct and simple, and in general there are no fees to pay. People therefore apply to the courts for the redress of wrongs or the settlement of disputes far more readily than in the old days.

Let us begin with rent cases, which are the commonest in Peking courts. A good deal of city housing is still owned by private landlords. Peking's housing regulations entitle the landlord to a reasonable rental, based on the condition and amenities of the house, and exceeding the interest on bank deposits of the same value. A landlord may not apply for permission to terminate a tenancy unless the tenant has fallen more than three months in arrears with the rent, or has sub-let the premises without authorization. He may also apply if he can show that he needs the premises for his own use or is going to build on the land.

The defendant in a recent case was a Mrs. Pao, a property-owner who had charged twice the average rent for a dwelling. Furthermore she had demanded, and her tenant had paid, six months' rent in advance as a condition of entry into the house. The tenant, an actress named Mrs. Yien, had not only agreed to pay the inflated rent but had also paid it six months in advance before entering. She herself did not think of taking the matter to court, but neighbours learned of her difficulties and reported it.

In the old days property-owners could, and did, demand rent and "key money" in advance from prospective tenants, who were sometimes forced to pay huge sums, almost as much as the property was worth. This is now forbidden. But there is still a housing shortage in the capital, where the population has increased 50 per cent in the last six years, and it is not unknown for unscrupulous landlords to take advantage of the situation by making extortionate demands of this kind in the hope that they will not be reported. When the case against Mrs. Pao was heard, the court ruled that Mrs. Yien, the tenant, need only pay the amount fixed



by the housing authority as a fair rental. It ordered the landlady to refund the excess rent. At the same time it fined both landlady and tenant for having violated the housing authority's regulations. The landlady appealed to a higher court, but her appeal was not granted.

Many rent disputes are settled out of court, often by the mediation committees which take care of neighbourhood affairs. Landlords are persuaded to accept payment by instalments from tenants who have fallen in arrears. Questions of outside repairs, which are the landlord's responsibility, and of internal damage, which is the tenant's, are frequently settled in this way.

A good many divorce cases came to the courts in the first years after the liberation, when people wanted to dissolve unhappy marriages contracted under the old, unfree, feudal marriage system. Now they are less frequent.

The new Marriage Law, passed in 1950, makes men and women equals in the family. It absolutely prohibits forced marriage, child marriage and pressure on widows to remain single. Under the law, a divorce may be granted if both parties wish it or if either husband or wife insists on it. But the court must try to effect a reconciliation before making its ruling. Great care is taken to see that marriage is not regarded lightly and that the interests of women and children are protected.

For example, a divorce was refused by the court to an office worker whose marriage to an older girl had been arranged by his parents when he himself was only 13 years old. The couple had been married nine years and had a three-year-old child. Despite its unfortunate beginning, the marriage had become one of mutual respect and affection. But after being transferred to work in Peking, the husband had come under the influence of people by whose city standards his wife, a not very well-educated country girl, seemed "different". One day when she called at his office, he overheard some of his new colleagues speaking slightly of her appearance and manner, and this made him resolve to apply for a divorce.

The judge had several long and friendly discussions with the applicant to try and convince him how wrong his attitude had been. It was his duty, he was told, to help with his wife's education—for it was not her fault that she was only semi-literate. Relatives who knew the couple well testified that they had lived together harmoniously. The young man eventually decided not

to proceed with his application for a divorce. Such changes of mind often happen after couples have been encouraged to talk things over in the court.

If such efforts at reconciliation fail, the court must consider the couple's future and base its decision to grant a divorce on certain provisions, such as that which prevents a man from divorcing his wife while she is pregnant and until her child is one year old.

In another case, a man named Liu Ching-ming, whose marriage was also an arranged one, applied for a divorce from his 30-year-old wife. They had been married for twelve years, but they had never been happy. In fact, for most of the time he had been away from home studying. At the time of his application, they had not seen each other for over four years.

At first the wife was unwilling to be divorced, but subsequently changed her mind and requested that the court should order her husband to pay her a lump sum for the housework she had done in the twelve years during which she had been wife in little more than name. This the court would not do. But after consideration it granted the divorce and made a court order that the husband should pay his wife a monthly allowance for herself and her child. The wife had received land in the land reform for herself and her child and was able to support herself to some extent. The mother's allowance would continue for two years, but would be discontinued in the event of her marrying again; the child's allowance would continue until she was old enough to earn her own living.

Peking's courts have received many grateful letters from people who have been released from unbearably painful relationships. Many too are the couples who, after friendly discussion with court workers, have resolved their mutual difficulties and begun to live together more happily. "Husband and wife," says China's Marriage Law, "are in duty bound to love, respect, assist and care for each other, to live in harmony, to engage in productive work, to care for their children and strive jointly for the welfare of the family and the building up of a new society."

The courts also handle many inheritance disputes. Here there is as yet no codified body of law, so the court bases its decisions on the mass of experience already gained. This has been carefully studied and summed up to guide judges and assessors in making decisions beneficial to the people, the social system and the development of production.

## THE PEOPLE'S GOVERNMENT

The right to inherit property is guaranteed in the Constitution. Wills are valid, as in all countries, if the testator is in his right mind, if the document is properly signed and so on. The court has the duty to see that dependents of the deceased person who are minors, or who have no earning capacity, are provided for—whether mentioned in the will or not.

If a case comes up in which no will has been made, the court endeavours to arrange a fair and amicable division of property among the heirs. One principle is that if the property includes the means of production, as for example a factory, a workshop or some machinery, this is kept intact so that production can continue. The court is also expected to have regard to local customs, such as that of deducting the amount of her dowry from the inheritance of a married daughter.

In one such case, Wang versus Wang, there was no will. Five sisters, all of them married, sued their uncle for possession of the house in which their widowed mother had lived prior to her death. Upon investigation by the court, it was found that the mother had been bedridden during the last six months of her life. During that time the uncle had supported her and paid all her medical fees, and the mother had actually made over the house to his name. This was taken by the court as an indication that it was the woman's wish that her brother should inherit. It ruled that her wish should be respected, and divided the remainder of the property—a piece of land — among the daughters.

These are just a few examples of the kind of civil cases which are daily dealt with in our courts. Each court has a people's consulting office where people may come for legal advice and information. A great many legal and even personal problems are resolved in these offices without having to come before the court, thanks to the helpful and friendly advice of the staff.



*Liu Hsing-ning*

**Hupei peasant.**

## TWO REVOLUTIONS FOR THE FARM

**T**HE LAND REFORM completed in 1952 ended two thousand years during which the Chinese peasant had been bled mercilessly by landlord and moneylender. After it there were no more tenants, or farm labourers who owned nothing but their hands. Every tiller of the soil, man or woman, became an owner. This was the democratic revolution on the farm, which ended feudalism.

In 1955-56, a change took place that was no less great. As a result of the upsurge in voluntary organization, nine-tenths of the peasants pooled their land, tools and draught animals in cooperatives. The countryside itself altered its appearance. The tiny squares and strips of the past became a memory. Instead there were big fields, worked in common and ready for mechanized operation when it comes. This was the socialist revolution on the farm, which made it certain that rural capitalism, with a few getting rich and others becoming landless again, would never develop.

The process towards collective work went stage by stage. First there were mutual-aid teams for seasonal tasks. Then some of these became permanent. Then came the preliminary, semi-socialist form of agricultural co-op, in which members received interest on their landholdings as well as a share of the crop for work done. Finally, in the socialist co-op, or collective farm, the land and bigger farm implements became common property and work was the sole source of income. At every stage the peasants saw how better organization could improve their livelihood by the more scientific crop-planning that working on large units allows, better use of labour, better tools than the individual peasant could afford for himself, more diversified farming and development of subsidiary occupations.

In 1956, despite the fact that 30 million acres of land were affected by floods alone, China's harvest was the biggest yet known. So was the income of her peasants.

## Land Reform Uproots Feudalism

by CHEN HAN-SENG

**T**HE AIM of the great agrarian reform now being completed in China is to uproot the feudal land system that has a history of 2,500 years, and to replace it with a system in which the tillers own the soil. Today, only two and a half years after the People's Republic of China was founded, this fundamental change has already taken place in areas containing a rural population of more than 310,000,000 persons. Vast and unprecedented numbers of producers have been entirely freed from the burden of excessive rents and piled-up debt and begun to enjoy the full fruits of their own labour. In terms of the national economy, the agrarian reform not only increases production and prosperity in the countryside but also lays the basis for the industrialization of China, which could not possibly have taken place while land relations remained feudal.

Before the land reform, the landlords, who constituted only 5 per cent of the rural population and lived as parasites on the peasants, owned between 50 and 60 per cent of all agricultural land in the country. The rest of the people living outside the cities, constituting 95 per cent of the rural population, owned considerably less than half the land. This unjust and oppressive situation, which was the main internal factor holding back China's progress, is now being wiped out. Instead, land ownership is being rapidly equalized on a *per capita* basis (women and children get their share as well as men). Politically, while the old system lasted, there could be no democracy. Now democracy has become real for the great formerly-oppressed majority of the Chinese people.

To understand the evils of the old society, now being eradicated, it is necessary to examine past conditions in the villages in greater detail. The two main classes were then the landlords and peasants. The peasantry, in its turn, was differentiated into four groups—rich peasants (who practice capitalist exploitation and to some degree feudal exploitation), middle peasants (small producers who do not, as a rule, exploit others), poor peasants (small producers who

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are exploited in various ways) and hired labourers (rural proletarians). Let us look more closely at the position of these groups and the way they lived.

*Landlords:* A small non-working minority whose considerable landholdings were tilled by others, who collected excessive rents, practised usury, hoarded grain and speculated in it, frequently acted as tax collectors and stole the tax-funds. This class was all-powerful in the villages, being able to exploit the people through many means—rent, interest, prices and taxes. The *per capita* landholding for the landlord class, including all family members, was 30 to 50 times the *per capita* holding among poor peasants.

*Rich Peasants:* The members of this well-to-do minority of the peasantry, of which it formed not much more than 5 per cent, owned substantial parcels of land and all equipment necessary to till it. They worked themselves but also hired labour on a long-term basis. Many also rented out some of their land and lent money out at interest. Rich peasants owned, on the average, about 10 per cent of the arable land in China.

*Middle Peasants.* A group among the peasantry that shrank continuously in numbers, tilled the land themselves and could generally make ends meet—thus avoiding the necessity of selling any part of their labour power for wages.

*Poor Peasants:* The biggest and most rapidly-growing group of peasants who had so little land to till that they could not subsist on it. They lacked implements, and were compelled to do some outside work as day-labourers or harvest hands to survive. They led a half-hungry existence and suffered unrelieved misery under the triple, ever-increasing burden of heavy rents, interest and debt. A typical example of their plight was a village where they comprised half the number of households but possessed only 18 per cent of the land.

Most, though not all, poor peasants were tenants who were nominally charged 40 to 50 per cent of their crop as rent but actually paid out 60 to 70 per cent. This was because the landlords assessed rent on the basis of average area-yield—according to a “rough calculation” in which land used for buildings, cowsheds and roadways was also counted as productive. Moreover, every tenant had to make an advanced deposit, generally equal to a whole year’s crop. Since few had the ready cash, the deposit was charged as debt at an annual interest of up to 75 per cent. As one bitter



peasant saying had it, such a debt resembled "a straw cape in the rain, the longer you wear it, the heavier it becomes."

*Hired Labourers:* People in this group had no land, and toiled and sweated year in and year out for others without ever improving their condition. Their number was constantly growing as peasants in other categories were dispossessed.

At the time of liberation, hired labourers embraced as high as 30 per cent of all households in some villages. They were subjected to unheard-of exploitation, working from dawn to dusk. On almost any pretext, the employer would cut their wages. Such cuts were invariably calculated at the higher harvest-season rate, even though the worker might be getting the lower slack-season rate at the time.

Hired labourers were subjected to cruel and manifold feudal exploitation by the landlords. They were often forced to buy grain at a high price which was withheld from their wage. By fines, deductions for food and other devices, the landlord was often able to arrange things in such a way that the land-worker received no cash at all at the end of a year's toil.

Hired labourers were also exploited by the rich peasants in this way. It was intensified by the frequent tendency of rich peasants, as well as landlords, to keep wages constantly in arrears and oppress them in other ways.

Middle and poor peasants and hired labourers together made up 90 per cent of the rural population, but owned 30 per cent or less of the land.

Poor peasants and hired labourers have always been the motive force of revolt in China. Today, they provide the main drive in the agrarian movement transforming the whole country.

For over two thousand years, Chinese peasants fought the landlords and demanded their just share of land. The first major peasant rising, which took place in 209 B.C., was followed by hundreds of others, large and small. But conditions for the emergence of a new society were not ripe, and there was no new, rising class to give leadership to the peasants. All these heroic struggles therefore came to naught. The peasants remained under the ruthless suppression of feudalism.

In the middle of the nineteenth century, when a Chinese bourgeois class was beginning to crystallize, the peasantry launched an attack of unprecedented scope on the feudal system—the Taiping Uprising. But the bourgeoisie did not dare to put itself at the head

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of the peasants. The landlords, in league with foreign imperialists who both supplied arms and intervened with their own troops, managed to win out after fourteen years of bloody civil war. It was not until thirty years ago, when the Chinese peasants accepted the leadership of the Communist Party, that they were able to take the road which has led to final victory over feudalism.

III The Kuomintang reactionaries who ruled China after 1927 talked piously of rent reduction. But being themselves representatives of the landed interest, they actually increased the burdens of the peasants. The Chinese Communist Party, on the other hand, worked to change conditions on the land. Led by the Communists, the peasants of Kiangsi province were able to resist and frequently defeat the well-equipped million-man army sent against them by Chiang Kai-shek. This was because every one of them had his own soil to defend.

During the Anti-Japanese War of 1937-45, the Chiang Kai-shek regime began to collect agricultural taxes in kind instead of in inflated currency. The landlords shifted the full burden to the peasants by collecting the rent in kind also. The economic status of poor peasants and hired labourers became even worse than it had been.

In the growing areas led by the Communist Party, by contrast, a policy of land reform was pursued. Rents and interests were universally reduced. While the policy of dividing all landlord holdings was discontinued in the interests of unity against the invader, tracts owned by pro-Japanese traitors were confiscated and distributed to land-hungry peasants. The result was that agricultural output rose by 30 to 50 per cent in the liberated areas. That was one of the main reasons why the armed forces led by the Communist Party were able to grow, inflict defeats on the Japanese imperialists and liberate large areas and populations in North, Northeast, Northwest and Central China.

The War of Liberation against Chiang Kai-shek and his American backers followed the war against Japan. In May 1946, the Chinese Communist Party decided to change the policy of reducing rent and interest to one of confiscating landlord estates and distributing them among the peasants. A widespread land-reform movement was launched in North and Northeast China and in Shantung province. More than half of the agricultural output, which had previously flowed into the hands of parasitic landlords, now remained at the disposal of the peasants.

In June 1950, eight months after it was founded, the Central People's Government promulgated the new Land Reform Law. In August, it adopted the Decisions Concerning Differentiation of Class Status in the Countryside. These enactments have since governed the nationwide campaign to abolish the system of feudal exploitation.

Apart from land, the farm implements, draught animals, surplus food, grain and houses of the landlords were made subject to confiscation and redistribution. On the other hand, landlords who also engaged in industry or commerce were allowed to keep funds or other assets that formed part of their capitalist, rather than their feudal, activities. Moreover, the interests of rich peasants and others who rented out small parcels of land were protected. The maintenance of the rich-peasant economy, as well as its expansion within certain limits, are considered to be advantageous to China's national economy today and thus beneficial to the livelihood of the peasantry.

Among the six administrative regions of the country, Northeast China and North China completed the agrarian reform long before the rest. When the Land Reform Law was passed, however, many areas in Northwest, Central-South and East China had not yet begun the reform. The work here, proceeding under peaceful conditions, assumed a very regular character. First, certain villages in each county were selected as "basic points" for purposes of demonstration and training. In these places, the reform was gradually carried out following the 1950 autumn harvest. Between January and March 1951, an overall programme was set in motion. By May, the distribution of land was mainly completed.

The remaining region, Southwest China, was originally marked down for rent-and-interest reduction only. Soon, however, conditions were found to be ripe for the next stage. From March 1951 on, 62 per cent of Southwest China's arable land was distributed among 70 per cent of the peasants.

The general line of relying on the poor peasants and hired labourers, uniting with the middle peasants and neutralizing the rich peasants was put into effect. The rich-peasant economy was preserved and only those rich-peasant holdings which were rented out (i.e. in respect of which the rich peasant acted as a landlord) were subject to requisition. Landlords were permitted to refund deposits by instalments. Special care was taken to keep capital in circulation, so that industry and commerce would not be impaired.

Since eight out of every ten families in China's small towns, and seven out of every ten in big cities, have property relations with the countryside, the reform could not have been accomplished without close urban-rural contact. Many landlords are absentee and do not live in the villages. Many poor people in the towns were really land-hungry peasants seeking a temporary livelihood away from home. It was therefore necessary for the peasants to set up offices in the towns to clarify titles and other matters. City-dwellers with interest in the land were also permitted to set up offices in the countryside to facilitate the reform.

The land reform is the fiercest as well as the last battle against feudalism in China. It is a movement of the peasants to eliminate the landlords as a class and make the soil their own. It is unprecedented in thoroughness, speed and effectiveness. It is led by the Communist Party and has the poor peasants and hired labourers as its main force.

Such a movement would be impossible to carry out on a nationwide scale without stable conditions of people's rule, without a mass rise in political consciousness and organization, without trained personnel to give it planned leadership.

All these prerequisites are taken into account in the preparatory work, which is divided into three stages.

First, remnant armed bands of reactionaries are rounded up, rural despots removed and local peace ensured by the security organs of the state.

Then the peasants are organized through a preliminary movement to reduce rents and reclaim deposits, during which the Peasant Associations grow in strength as a first step in reorganizing village administrations. In this stage, large groups of oppressed village people gain their first experience in successfully enforcing their will on their former oppressors.

Thirdly, many thousands of land-reform workers, mobilized from the cities as well as the countryside, are trained to an understanding of their tasks and sent to the "basic points" to obtain practical experience. Later they are detailed to all affected localities to lead and cooperate with the Peasant Associations in the full-scale reform.

The reform itself consists of four steps.

First, a deep study is made of conditions in one *hsiang* (an administrative unit comprising many villages) and a typical village

within it. Active local peasants work together with personnel from the outside to explain the government's policy to the people. Through accusation meetings and other means, the facts of past abuses by the landlords are brought to light. The dispossessed come to understand that the wealth of the landlords is actually their own property, of which the landlord class has robbed them by force and fraud. The long-suppressed indignation of the people reaches a high tide. The people understand that they can at last act on it because the landlord class has no backing, while they are backed by the entire power of the state. Peasant Associations are cleansed of landlord agents who in many cases managed to penetrate into them immediately after the liberation. By popular demand, lukewarm and wavering elements are replaced by more resolute ones in positions of leadership. People's Tribunals are set up. Despotic landlords guilty of serious crimes are tried and punished. When this has been done, the hold of the landlords over the locality is broken. No one any longer stands in awe of them. Their prestige disappears. They become isolated from the rest of the village people and can no longer dominate the course of events.

The second step is to ascertain the class status of the village people. In this way, the beneficiaries of the reform are separated from its targets. Such work is of the utmost importance and is carried out with great care. The question is first taken up by a general meeting of the peasants, then discussed further by small groups in the Peasant Associations. Landlords and others who wish to appeal against the category in which they have been classified are permitted to present their case before a village-wide meeting. All decisions are referred to the sub-county people's government for approval and official announcement. At the end of this stage, the class status of every family in the village is established.

The classification is made according to the definitions cited earlier. In practice, however, certain cases are subject to special treatment. A person of landlord origin, for instance, does not necessarily belong to the landlord class. There are revolutionary army men, workers, pedlars and professional people who own and rent out small plots of land but cannot be put in this category. The Land Reform Law permits them to retain 200 per cent of the average *per capita* holding in the area, and only the excess is subject to redistribution. But even the excess, or part of it, may be ex-

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empted when it belongs to elderly persons living alone, orphans, or invalids who have no alternative means of support.

As already described, a clear line is drawn between the feudal and non-feudal parts of a landlord's property. This provision also covers large farms run on capitalist lines, which the owner may keep with all equipment, and continue to operate.

The third step is the confiscation and redistribution of landlord holdings. Practice has shown that this can be done quickly without preliminary measurement, since the local people are fully familiar with the details of land ownership. General meetings, in which the poor peasants and hired labourers play the most active role, are held in various parts of each village. Middle peasants and rich peasants are invited to participate and voluntarily declare the size of their holdings. Only in the event of unsolved disputes does measurement of land take place. Decisions on redistribution are made public on three separate occasions, during a period when applications for reconsideration may be entertained. The third notice is considered final. Generally, there is no compensation for requisitioned land and property, but compensation in varying degrees is made where the subsistence of individuals makes it necessary.

The share the landlords receive in the redistribution is fixed according to the following principles: For medium, small and law-abiding landlords, a share of their own former property is reserved before the rest is divided. The property of subversive big landlords and rural despots, however, is sealed at once.

The fourth and final step is the surrender of old title-deeds and evidences of debt which, after inspection, are burned in a public bonfire. New title-deeds are then issued to the peasants to legalize their freshly-received holdings.

All the four steps involve sharp conflict, because the landlords submit to the law and the people only after struggle by the peasant masses.

Once this whole process has been completed in the base villages, the news is spread rapidly and widely. Representatives from all over the area are invited to witness the success. Except for those who stay for consolidation work, experienced personnel are sent elsewhere (as a rule, the land reform in one place produces enough trained workers to lead it in three others). All local government, army, public security and even trade and communications personnel cooperate with the land reform (for example, telephone lines are put up to connect every village with the county or sub-county centre).

Why is it necessary for land reform to start from a "basic point" and then spread "from point to area"? It is because both the strength of feudal forces and the degree of political awakening of the peasants vary from place to place. Preliminary success at one point produces greater confidence on the part of those called upon to meet difficulties at others. Moreover, this is the only way of quickly training capable and experienced leaders for wider-scale work.

In the first year after the promulgation of the Land Reform Law, 300,000 additional active leaders were trained, providing an army of workers for the transformation of the countryside.

During 1951, the land reform was carried out in territory with a total of 130,000,000 rural people. Added to the old liberated areas, where it was completed earlier among a rural population of 190,000,000, this represented a total of 320,000,000 people, or 80 per cent of all who live in the Chinese countryside. In 1952 the process will be completed in all China with the exception of Taiwan and some regions inhabited by national minorities, who are left to make their own decisions in such matters.

The facts of life in the older liberated areas have proved that such hopes are well founded. Three years after the land reform in Northeast China, the sale of cloth had increased eleven-fold. In one of the older liberated areas of East China, people tell of a middle-aged peasant head of a family of four who bought a bicycle, a thermos bottle and six electric torches after the last harvest. When a neighbour asked him what he wanted with six torchlights for four people, he replied: "My daughter-in-law is expecting twins."

What was the immediate benefit of the land reform to the peasants? Within the last year alone, 25,000,000 acres have been confiscated from landlords and redistributed among 80,000,000 impoverished peasants. In addition, considering the average land rent in the past to have been about 800 lbs. of grain per acre, the increase in the peasants' net annual income from the abolition of rent alone is equivalent to nearly 10,000,000 tons of grain. Immediately after the land reform, the peasants begin to work better and produce more. Led by a government which gives every help to agriculture, they are reaching higher output-levels through the use of new implements, more fertilizers and improved techniques. This further adds to rural purchasing power, the growth of which provides a sure foundation for China's industrialization.

## Mutual Aid

by CHU CHI-PING

WANG HAN-KUO, who used to be one of the poorest peasants of his village, received four times as much land as he owned before, in the land reform early in 1951. He could reap three harvests a year, as is common in the eastern part of Kwangtung, where his home, in Chiehyang county, is located. But a farmer needs more than good climate. Wang Han-kuo still had plenty of worries. He was short of seed, fertilizer and farm tools. Besides, in his family of mother, wife, five children and himself, he was the only able-bodied worker. One day, in a newspaper-reading group in his village, he heard how the Li Shun-ta mutual-aid team, in the northern province of Shansi, had drawn up a plan to increase production and were challenging all the peasants of China.

After long discussions in March 1951, several peasants in Wang's village set up a similar mutual-aid team, of which he became the leader. It was made up of five households with thirty-one people. All their soil was poor. The seven leading workers met every evening and decided upon what to do on the next day. They used a simple division of work, selecting the most skilled in particular jobs. Grandmothers took over the children while the younger women worked in the fields or did other productive work. Those with surplus grain or fertilizer lent to other members.

When they took stock at the end of the year, production had increased by 30 per cent over previous years. In spring they estimated that their output would increase by 462 pounds per acre of unhusked rice on the plain, and by 390 pounds on the hills. But the actual increase in harvest averaged 1,386 pounds per acre on the plain and 990 pounds on fields on the hills.

For this achievement, the Ministry of Agriculture awarded the team a certificate of merit and a sum of money. By 1953 the output of the Wang Han-kuo team had increased by 65.1 per cent in the fields on the plain, and 82 per cent in the fields on the hills, as compared with 1950, before they organized.



The outstanding increase in production attracted more peasants into the mutual-aid team. Membership grew from five to seventeen households.

Though greatly superior to the age-old system of individual farming, the mutual-aid team as an organization has limitations and disadvantages of its own. The chief problem lies in the fact that land in a mutual-aid team is managed separately by different households. Each household grows the various crops it needs regardless of what kind of soil it has. One member planted sweet potatoes on land more suitable for taros and another, with land suitable for potatoes, produced much more of them than his family could eat.

A well-off old team member would use too much fertilizer while a new member to the team, and therefore poorer, went short of fertilizer. New members hesitated to borrow from old members because they did not want to get into debt.

The members of every household were tied up with each item of work on their own land. They had to look after or participate in the whole farming process from transplanting seedlings to managing the irrigation. Each member of the household was kept busy, and there was no manpower left for large-scale sideline production, such as raising pigs and geese.

Another factor in the mutual-aid team hampering further increase in production was the system of payment for work done on land other than one's own. If the rate were fixed low, not too much enthusiasm could be expected. On the other hand, if it were fixed high, the owner of the land tended to save money and leave work undone. A number of households in the Wang Han-kuo mutual-aid team did not practise the new technique of close planting because it required more labour and therefore more pay.

The greatest disadvantage the Wang Han-kuo mutual-aid team had to contend with was that almost half of the land belonging to its members was on the hills more than a mile away from the village, and the soil there was very poor. To improve it, a large quantity of mud and turf would have to be carried uphill. But members felt that so much work would involve too much expense.

Nonetheless, the experience of three years in a mutual-aid team proved to its members that working collectively is better than working alone.

To get rid of these limitations, the Wang Han-kuo mutual-aid team was reorganized into an agricultural producers' cooperative

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on January 30, 1954. A managing committee was elected by all the members, and Wang Han-kuo was elected the leader of the cooperative. The members pooled their land as shares, and a unified plan of management of all the land, manpower, animals and implements was drawn up.

Altogether the cooperative farmed 22 acres of land. By far the largest area was reserved for growing rice. Every household gave a detailed account of the character of its own land and the quantity of sweet potatoes, taros, black beans, green beans and other crops it needed. These were totalled up and the different crops planted on the soil best suited for their growth. In addition each household had its own private vegetable plot.

With the unified management came a more reasonable division of labour, and efficiency was greatly raised. For instance, when land was under separate management, threshing was done ten times in ten different households, requiring twenty man-days of work. With land and labour under unified management, the same amount of threshing required only five man-days at the most. One person was made responsible for each item of work, such as watching the seedlings or managing the water in the paddies. Those in charge of subsidiary production, such as raising pigs, did not have to worry about their own fields.

The Wang Han-kuo cooperative has a labour force of 39. Since efficiency was raised, only 28 labourers were required to do all the work in the fields. The remaining eleven persons could devote themselves to subsidiary production, which greatly increased the income of the cooperative. They installed two big stone mills and a mechanical sifter. A contract was signed between the agricultural producers' cooperative and the local supply-and-marketing cooperative for grinding wheat flour for the latter. Payment for this work was used to buy pig feed. A pig sty was built near the mill, and by June this year thirty-nine little pigs were housed there.

The spring after the organization of the cooperative, close planting was put into effect. There was a 25 per cent increase in the number of rice plants per acre. Soil was improved by mud and fertilizer carried up the hill in relays.

To the peasants living hundreds of miles around, the Wang Han-kuo agricultural producers' cooperative became a symbol of prosperity—a place to visit in groups to learn how it was done.

## Lu Fa's Family

by CHEN CHUNG-HSIEN

THE "Big House", as the peasants call the office of their agricultural producers' cooperative, is made of baked earth. It stands in the middle of about 330 acres of land belonging to the 125 households of the Patriotic Village Cooperative in Chuhsien county, Shantung province. Fields of wheat, maize, sorghum, millet, soya beans, sweet potatoes, cotton and hemp stretch westward over the plain to the newly-reclaimed land on the hillside. There the co-op has planted pear, peach and mulberry trees, some already half as tall as a man — also some grapevines. Chicken-huts are scattered among the trees.

In the middle of the village, which is close to the "Big House", are the cooperative's stables, cowshed and a little mill. Outside the mill one can generally see bags of powdered sweet potatoes and green peas waiting to be sent to the supply-and-marketing cooperative for sale.

Grandpa Lu Fa's new home stands on the outskirts of the village, facing the "Big House". Living with him and Grandma are their youngest son Anping and their small grandson Hsien-erh. Their other children, two sons and two daughters — are all married and have homes of their own. The eldest son, formerly an army man, has settled down in his wife's village. The second son, Anli, is a leader in the farming team of the cooperative, and lives with his wife Kueihsiang in Grandpa's old house. Anping, who is not yet twenty, works in the same farming team as Anli.

The old couple are in their late fifties. Grandpa, whose face is deeply lined, looks older, but still thinks nothing of doing his full share in the fields during the sowing and harvesting. Most of the time, however, he works in the cooperative's building team. He learned this trade as a youth.

Grandpa, of course, built his new house himself. It is of mud with a thatched roof, as is the custom here. In front is a yard, enclosed by a low wall. Beyond the yard is Grandpa's little

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garden, with peach trees stretching their young branches over the maize-stalk fence.

The main part of the house consists of a living room and kitchen. The living room has a bed at either end and a square wooden table on which rests a lamp—an earthenware bowl with a wick dipped in soya bean oil. Big round crocks of wheat, maize and other grain occupy most of the remaining floor space. On the wall is a portrait of Chairman Mao, among posters showing steel plants, collective farms, hydro-electric power stations and other construction jobs.

The kitchen, smaller than the living room, has a stove with flues arranged to warm the mud-brick bed (*kang*) on which the old couple sleep during the winter. There are also a low table for meals and a couple of short-legged benches. Grandma has pasted a coloured woodblock print of the kitchen-god on the wall near the stove. A mud shed on the other side of the kitchen houses the donkey and his noisy companions, the chickens.

Outside the shed is an earthenware pot which holds some bran and some *shentzu*—the seed of the semi-wild vetch. To the family, this is not only feed for the animals but a souvenir of the past—when it was all they themselves ate. Describing those times, Grandma shows how hard the *shentzu* is by pinching a grain in her fingers. She can tell most graphically how it lay like stone in the stomach.

Under the Kuomintang, and during the Japanese occupation, Grandpa was a poor peasant and rented small plots of land from the landlord. After the harvest, half the grain he raised had to be paid in rent, and at least half of the remainder in taxes of one sort or another. During the spring sowing, food was always short. The landlords lent the hungry peasants grain to eat—on condition that they paid it back double the following autumn.

At that time the family was too poor to keep even a few chickens. They had no separate clothing for winter and summer. A ragged padded-cotton coat and a much-patched suit of coarse, handwoven cloth was the “standard” outfit. The house had no door. On winter nights, icy winds blew through the opening onto the bed where the children lay huddled together under a tattered cotton quilt.

The People’s Army came in 1945. The reign of the landlords was ended and the land was distributed to the peasants. But as most of the young peasants had gone off to support the People’s

Army, there was a shortage of labour in the village. It was not until 1949, when the people's forces won all over the country and the young men came back, that life in the village took a sharp upward turn.

The organization of mutual-aid teams, on the initiative of the Communist Party, brought almost a doubling of yields between 1949 and 1951. Grandpa's family began to eat regularly. They had sorghum, flour, wheat and millet pancakes every day. The empty doorway was filled with a pair of solid wooden doors.

In 1952, the family joined the cooperative. By 1954, its income was four times higher than it had been in the mutual-aid team. Now there is a mattress and a padded cotton quilt on each bed in the house. Every member of the family gets, on the average, a new cotton-padded suit every two years, and two ordinary cloth suits each year. The old tattered cotton coats have been ripped up by Grandma for shoe soles — made of many layers of cloth glued together and then closely stitched. Though the household still lacks many things, the deep well of past poverty is being slowly filled.

There is no clock, so the day's work is arranged by the sun. Just before dawn, you can hear Grandpa shouting to Anping to get up and fetch the water. This has to be done by letting an earthenware bucket down the well on the end of a rope. Naturally young Anping is waiting eagerly for the mechanic to come from the county town to instal the new pump which the co-op has bought. While Grandma makes the tea, Grandpa does a little gardening.

As soon as the sun appears on the horizon, father and son go off to work. The co-op has five field teams, each assigned to one section of its land. Team-leaders divide the work among the members according to their ability. When winter wheat is being sown, Grandpa generally guides the plough. Anping and his brother, who are both very strong, shift heavy loads of manure to the field.

The rate for each job is fixed according to the strength and skill it requires for each job. A manure-carrier or builder earns a full "workday" — or unit of payment for a day's work. A ploughman gets four-fifths of a workday — for a fixed area that depends on the nature of the soil. Washing the seeds ready for sowing is worth half a workday. Men and women get the same pay for the same job. Those who do more than their share earn extra.

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Little Hsien-erh wakes later and comes into the yard to help his grandmother. He drives the donkey which turns the stone mill that grinds maize, wheat or other grain into flour for pancakes. Grandma is a good cook. She knows how to make many tasty things with simple ingredients.

When the sun is halfway up the sky, Grandpa and Anping come back for breakfast. Afterwards they go to the end of the village where the co-op members have their private vegetable plots. They grow spring onions, Chinese cabbage, turnips, potatoes and other vegetables, and Grandpa raises a bit of tobacco for his pipe. After watering their plants, the men go back to the co-op fields. They come home to eat at noon, then work until the sun goes down behind the western hills. During harvest time, dinner is brought out to the fields.

Many villagers nowadays want to repair their tumbledown huts or erect new homes, so Grandpa is in great demand as a builder. Sometimes he gets home long after supper, smelling of kaoliang (sorghum) wine. This means that the hospitable owner of a new house he has built has invited him to dinner.

After supper, the radio installed by the county government is turned on and the villagers sit out under the trees listening to the news broadcasts and musical programs coming from Peking. Grandpa likes local opera. Grandma, who does not care for music, would rather chat with her daughter-in-law and watch her grandchildren at play.

Once in a while the provincial government's mobile cinema team comes to the village. The whole family enjoys the show, paying five cents apiece. They share the emotions of the hero or heroine of a peasant story, marvel at the documentaries showing the big factories and water conservancy projects being built in the country, or admire the life on Soviet collective farms which they see on the film. This year they will be able to see films at least once a month.

At home, the lamp is seldom lit. The family goes to sleep early to save oil. But Anping gets to bed a little later than the rest. Once every five evenings during the busy season, and every night at other times, he goes out to study. The classroom is an old deserted hut in the village, with a small kerosene lamp hanging near the blackboard. The teachers, all co-op members, are two young men and a girl who have finished primary school. They are inexperienced, but the class is always full of peasants eager to

learn — most of them can already read between 500 and 1,000 characters.

The little library next to the classroom has several hundred books. Anli borrows a few every day and brings them along in a cloth bag to the fields for the members of his team to read during rest periods. He is the best reader in the family, and Anping is trying hard to catch up with him.

Little Hsien-erh will be starting at the district school in the autumn of next year, when he will be seven years old. So far as Grandpa can remember he will be the first in the family to get a regular education. In Kuomintang times, only four children in the entire village went to school; now most of the village boys and girls go.

Market day is held once every five days in a nearby village. The family goes about twice a month, and it is an important occasion. On such days, Grandpa and Anping come back from work to breakfast earlier than usual. Afterwards, accompanied by Hsien-erh, they carry a basket loaded with eggs and green vegetables to be sold.

The market is thronged with people from all the neighbouring countryside. On either side of the narrow street are booths selling edibles, earthenware and general goods. By noon, their produce all sold, they return. Now their basket may contain a packet of tea, half a bottle of wine for Grandpa and some small fish and steamed bread for dinner. Anping recently got himself a fountain pen and a pair of rubber shoes. As for Hsien-erh, he is chiefly interested in sweets.

On the traditional festivals, Grandpa's youngest daughter, Anlan, comes home to visit from the village where she lives with her husband. Elder brother Anli and his wife bring their little daughter, and the house is full of good cheer, the women busily making meat dumplings and noodles while everyone talks as hard as he can. The neighbours, looking on, often say: "How the Lu family has changed!"

It is only in the last three or four years that the change has become fully apparent. Even after liberation the Lus were very reserved. They didn't mix with others or attend village meetings. Family discipline was very strict — "conservative and feudalistic" as Anli now describes it, though he never dared say such things then. Daughter Anlan was not allowed to go out of the house without her father's permission. Once she sneaked out to the

study class, but was brought back by the old man and roundly scolded.

Elder brother Anli's marriage was arranged by his parents. Kueihsiang, his bride, was a disappointment to Grandma, who thought her lazy. The young wife considered this unjust and resented it. Grandpa refused to intervene. "Let the mother-in-law control the daughter-in-law" was the convention he stuck to. But Anlan took Grandma's side, and poor Anli didn't know whether to side with his mother or his wife.

After two years of this, father and son became desperate and agreed to separate the household. They divided their land into two parts. Grandpa took about an acre and a half and Anli half an acre. Grandpa built his new house and let Anli keep the former family home. When the old couple and the daughter-in-law met in the road, they did not speak.

As soon as he was independent of his father, Anli joined the cooperative. It had only eight member-households then. The other peasants still held back. "Even two brothers quarrel if they stay too long in one yard," they said, "so what will happen when all the land is put in one co-op!"

Grandpa was among these doubters. But like most of the others, he was convinced by the co-op's 1952 harvest — over a ton of grain per acre, or 430 lb. more than the mutual-aid team average. Fifty-one households applied to join. So did Grandpa. "I can't be a fool any longer!" he said.

Immediately after the entry of the new members, a sudden announcement came over the radio: cold, rainy weather was on the way. The co-op members, who were planting the winter wheat, had to race against time. Shock brigades were organized and all hands turned out in the fields, team vying with team. The sowing of 58 acres of winter wheat was completed in record time, most of it before the cold wave.

The next year, 1953, had its troubles too — heavy rain in the summer, and a serious drought in the autumn. The water-wheels were going all the time. Long lines of co-op members carried buckets of water to the fields that lay far from the wells. When the harvest came, the co-op land yielded  $1\frac{1}{4}$  tons per acre — more than in 1952. This could never have happened when they had farmed individually.

The team in which Anli and Anping worked won the red banner in the emulation campaign. Anli was elected its deputy



leader. Anlan too went to work in the fields. She was no longer so scared of her father. And Grandpa, surprisingly, did not make much of a fuss. He saw little reason to stop his daughter from working if all the other girls were doing it. Besides, she was earning something for the family.

Grandpa even allowed Anlan to go to the county town to attend a short-term winter school, to which she had been sent as a model student from the village study class. When she brought back her graduation certificate two months later, he was very proud. Anli's wife too began to work for the cooperative at the busy seasons.

Another change was that Grandpa began to go to the co-op meetings. He had never liked meetings before, but now he became deeply interested because the discussions were so closely connected with life and work. One was about how to organize stone-cutting and carting to earn money in the winter season. Another resulted in the purchase of two new experimental ploughs. Innovations in farming technique, like the close planting of wheat and growing of a new strain of maize, were hotly debated.

At the summing-up meetings — after the ploughing, the sowing, the harvest — good workers were praised and the irresponsible criticized. Experience taught the peasants that if they scamped the work to earn “workdays” for themselves they would not benefit in the long run. A poor harvest meant less grain for each workday. Slowly, the cooperative principle that the interest of one is inseparable from the interests of all took firm root. “You learn a lot from talking things over,” Grandpa said, “and it really helps to solve problems.”

When the co-op divided up its 1953 profits, allotting 40 per cent to dividends on land invested by the members and 60 per cent to payment for “workdays”, Grandpa's and Anli's households got twice the income they had had in the mutual-aid team. Grandpa got about 2.7 tons of grain for his household, Anli got nearly 1½ tons, and Anlan got nearly a thousand pounds for her work. Grandpa was so elated that he went to the supply-and-marketing cooperative and bought his daughter a length of printed cotton.

Even Anli's wife, Kueihsiang, whose home duties had kept her indoors except when things were busiest in the fields, earned 40 workdays. The villagers praised her work, Anli was very happy, and Grandpa and Grandma too began to see Kueihsiang in a new light; nobody called her “lazy” any more. Still the old woman found it hard to talk to her daughter-in-law because of

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their past quarrels. But when Kueihsiang's little daughter was born in the winter of 1953, the old woman came to help. Then all the barriers went down in their common joy and delight in the baby.

In 1954, the membership of the co-op increased to 116 families, but natural calamities were worse than in either of the previous years. Though the yield of some crops was better, 80 acres of soya beans were ruined by drought and pest. Even so, the co-op showed a higher profit than in 1953. This was because of the lowering of production costs and the use of more natural manure in place of artificial fertilizer.

A big change last year was that the cooperative stopped paying land dividends from the harvest. Instead, it paid a fixed rent to each peasant for his land. Increases in co-op income, therefore, went wholly into swelling the value of the workday. Grandpa thought this a fine idea, with good reason. Though his household got some 130 lb. of grain less than last year for their land, they made nearly 1,500 lb. more for the work. A workday in the co-op fetched about 9 lb. of grain in 1953, but by the end of this year it will probably reach 15 lb.

A few more figures are worth recording. Grandpa's household, in 1954, received a total of about  $4\frac{1}{4}$  tons of grain, and Anli's about  $2\frac{1}{2}$  tons. Between them they sold about  $1\frac{1}{2}$  tons of their surplus to the government. Grandpa invested a fixed deposit in the co-op, drawing 8 per cent annual interest. He put a small sum in a current account in the credit co-op, at 6 per cent. New clothes and household equipment were bought. Among them were two things of which the old man is very proud. The first was a wooden gate for his yard. The other was a wooden chest, as a dowry for Anlan who got married to a fine young man of her own choice in May that year. It still hurts Grandpa and Grandma that they had no dowry for their elder daughter, married before the liberation.

That same year, Anli was promoted to team leader. Anping was praised by his team for good work. Grandpa became an "activist" in the co-op. Grandma joined the "Grannies' Team", which looks after the children during the busiest part of the harvest.

In the spring of 1955, the co-op chairman called the members together to give them some news. A tractor station was to be opened in the autumn, to serve the Patriotic Village Co-op and others in the district. It would start with one medium and two

small tractors. The medium tractor could plough 17 acres of land daily as against one-third of an acre with the ox-drawn plough. Even the small tractors could manage 9 acres a day each.

Grandpa listened attentively. The chairman, who had been a labour model in the mutual-aid team, was a man he respected. The news he had brought back after touring the Soviet Union collective farms with a peasant delegation, as well as Soviet films shown in the village, had given Grandpa an idea of what socialism would be like. And the news that tractors were actually coming seemed to bring it nearer.

"They say it will take fifteen years to reach socialism," Grandpa often remarks now, "but I think we can do it in ten. By the end of five years, if everything goes well, we'll at least have brick houses with tiled roofs." This year he has decided to buy more National Construction Bonds, to speed the day.

As we go to press, members of the Patriotic Village Agricultural Producers' Cooperative are busy carrying out their 1955 plan. If it is fulfilled, they will produce some 20 per cent more grain than last year, and dig a number of new wells. They are also going to start scientific seed cultivation, and increase the number of subsidiary enterprises in the co-op.

But above all they are waiting for the tractors to come in the autumn.

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APRIL 1955

## Students on a State Farm

by JACK KAO

**O**NE THING you can say about Erhlungshan State Farm is that "big" doesn't half describe it. The first couple of days after we got there for our practical training, we'd be tired just from walking out to the fields. All in all, the cultivated area isn't more than 16,700 acres, but if you add the fallow fields, the barren strips,

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and the land being surveyed for opening up next spring, it amounts to — well, for one farm you'd never believe it.

Forty of us students from the mechanized agricultural school in Harbin arrived at the start of the 1954 test mowing. Then we followed the whole intricate procedure of harvest right through till the autumn ploughing. I couldn't have asked for a better place. It reminded me of northern Ontario, where I grew up. There were the same rolling hills with typical pock-marked crags climbing into the mountains and the virgin forest crowding down to the valleys, filled with wild animals. Tributaries of the Heilungkiang (Amur) crisscross the whole area, reflecting the white sandbanks in their blue waters.

Erhlungshan is one of the many mechanized state farms in Northeast China (once called "Manchuria"). It lies close to the Soviet border. Night after night, we used to sit around some "founder" and listen to his reminiscences about its early days (1950), when they drank the snow they slept on, burnt their feet and blankets on the miserly fire, went into the waste-land armed to the teeth — for even wolves have to eat — and opened up 6,700 acres of land practically barehanded. The founders are regarded with special respect, and why shouldn't they be? Only four years later, we are using the most modern Soviet tractors, ploughs, seed-drills, cultivators and combines on the fields they reclaimed.

The whole farm was divided into five districts, and each district had three teams (it'll give an idea of the size of the place when I tell you that the team encampments were two miles apart). Our team was divided into four groups, each based on a machine-working unit. It had two "S-4" and two "S-6" groups (called after the self-propelled Stalinets 4 and 6 combines which we operated). We students-in-training moved around, but each had his own machine-unit to which he was attached.

Perhaps you'd like to hear how we got through a working day? We'd get up at 4 a.m. and see the unit foreman pacing the yard, chewing his breakfast while he waited for the truck. We'd gulp down our food, run out to the truck and be off to the fields at 4.30. From then to 7 o'clock there were complete and thorough repairs, checkup and maintenance. Any chains loose? Wouldn't such strong ventilation carry the grain out with the chaff (which was often the case)? Gas, water and oil checked? Enough drinking water? And who the devil left the crowbar on the conveyor?

Every minute not used during the best part of the day is so much wheat unharvested, so we'd do all we could to guarantee that not a precious minute was wasted tightening a screw or a chain that should have been looked after earlier. Up and down the machine we climbed with oil-can, spanner and grease-gun, making sure, just making sure. Then we'd sit down to rest, but immediately worry would come. There is something, there *must* be something that can still be done to prevent a hitch. So up and down we'd climb again with grease-gun, etc.

Meanwhile, the tractor mechanic would grease his machine and look to loose ends, then walk back and forth beside the uncut wheat feeling its dampness and probably wishing that someone would invent a blow-torch to dry it with (why not, I've thought of it myself?).

At around seven, or as soon as the wheat became dry enough to cut, tractor and combine engines would roar. There was the sound of a clutch slipping in, then another, and slowly but steadily, the unit would move along the uncut wheat, nibbling at its broad expanse. Then, as often as not, a hitch could happen. The rubber cylinder might be plugged (not unusual when the wheat is still damp). Amid epithets, we'd jump off and unstick it—a patience-testing process of pulling the tightly-wound stalks out, literally one by one, with our hands. This done, we'd call out "Let's go!" to the waiting tractor, and proceed as before till the next mishap.

Not all troubles were so easily remedied. Once we ran a spanner into the cylinder and broke the concave, then all work was stopped that day for repairs.

Towards sundown, with the coming of dew, the cylinder would start playing up again. Finally usually around 6.30, it would get wound up so tight that we could not possibly unplug it any more—and what with fatigue, mosquitoes and hunger, we'd finally count the tools and check out.

Back at camp there'd be supper and a short discussion on the day's happenings. Competition was continuous in work and production, between machines, between teams and even districts—and in our team we had a chart in the dining-room to mark the progress of each group. Each evening after supper when the teams had reported, the red lines would move up the graph-paper. Everyone—including drying-court spreaders, cutters, cooks, machine-unit personnel and us students—would crowd around

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and comment, or perhaps listen to some group explaining insistently why it wasn't any fault of theirs that they had lagged behind.

Then, after discussing the plans for the next day, we'd go back to our hostels. Here stories were told, jokes cracked. But we students-in-training would have to work on our special task, the thesis we had to prepare on returning to school; so we would try to resist the frolicking. The resistance would last for about 15 minutes, then we'd think of reasons why the thesis could wait, and join the fun until one by one we dropped off to sleep.

One Sunday (only one), we hiked up to one of the rivers for a swim. The water was sparkling and the white sandbanks sloped gently. The only things marring the beach were the tracks of wolves, bears and other animals. We found wolf-tracks around our hostel nearly every morning. Once on a ploughing night-shift, the tractor-driver and I each grabbed a sickle and chased a wolf for about half a mile under the moonlight. We lost him — and we also lost that night's race with the other machine with which we were engaged in an emulation drive.

You who've never followed a combine on a hot autumn afternoon, straining eyes and ears for the first signs of trouble, will never know what it feels like to participate in mechanized agriculture — in the tense race against time and the hard fight against nature. You will never know the special joy of seeing the ocean of wheat fall before the blades, race up the conveyor belt into the million whirling, roaring dervishes and rain golden grains into the bin. Food for the flooded areas. Food for the builders of our country! What a singular honour to be able to participate in such production. This is the best and most practical lesson I ever took in the glory of useful labour.

You cannot know the agonizing impatience of the early morning when all the maintenance and repairs are done and the dew still lingers on the stalks. How can I tell you about blade clearance, sieve spacing, slide angle, or ventilation? Or about wheat types? It didn't mean a thing to me either two years ago. But one thing we experienced that I can tell you about is the comrades' attitude to the work. Briefly stated it amounted to this:

As long as a single stalk stood, everything, every single thing, came second to the harvest. All through the harvest month, sleep was something no one paid any attention to. You dropped from fatigue, and rose at 3 a.m. to scan the skies for signs of rain. And eating? Nobody would leave the fields, so the cooks brought the

food out to us. Eyes became sunk and bloodshot; hair and beards grew and no one noticed. Mail lay about unopened. Nothing existed in all creation except the wheat, time and the machine.

The fight was hard, harder than I can describe. The work, strenuous enough as it was, was made doubly so by lack of technical experience and lack of maintenance equipment. For example, when the fuel feed-line of one of the tractors sprang a leak, we had to take the pipe-line to the regional centre ten miles away to be soldered, because we didn't have enough equipment to fix it ourselves.

But all through, where there should have been a spare part or a special tool there was, instead, a clever piece of inventiveness. When the breaker point on the magneto burnt out, we dismantled the magneto and, having no platinum file, scraped the point with a sickle!

Don't imagine from all this that Erhlungshan is inefficient or that agricultural mechanization is going to take years to bring into being. I've seen that this is not so. I've seen combine-operators working who only had nine years' schooling plus a four-month course in their machine. We are studying and learning, learning how to get more work out of the machine for each gallon of fuel, how to overhaul the combine so that it won't fail at any time during the month of use—at least through any fault of ours. Technical skill is improving all the time. Perhaps the most eloquent proof is that this year's profits at Erhlungshan were enough to cover the losses in the previous years since its founding.

In 1953 (partly due to the weather), all the wheat was cut by hand. In 1954, there were some temporary reapers—peasants from nearby places—but most of the harvesting was done by machines. Next year, we shall be able to do away with hand-reaping altogether. This is the rate of advance.

Mechanized agriculture in our country is still very young. We students in technical schools are being trained by our country to carry it forward. With the experience and whole-hearted help we receive from the Soviet Union, and with our own pioneers clearing the way, who can doubt that we are on the highroad to socialist collective farming?

## First Million Cooperative Farms

by CHEN HAN-SENG

IN ONLY a hundred days, in the autumn of last year, 590,000 new agricultural producers' cooperatives were organized in China. This brought their total number to almost 1¼ million. It represented the highest tide, thus far, of a constantly accelerating movement that started in 1951. Then the country had only three hundred cooperative farms. At the end of 1953 the figure had risen to 14,000. By the summer of 1955, just before the autumn upsurge, there were 650,000 with nearly 17 million peasant households as members. Clearly, a very important step has been made in China's movement to socialism.

The land reform, basically completed in 1952, had divided landlord holdings among the peasants. Most cultivators became owners of land. But the land was in small patches and could only be cultivated with small hand implements. If it continued to be farmed that way, crop yields could never be increased to keep pace with the increasing demands for raw materials by the factories or for more food for the growing industrial population. It would be impossible to make use of the tractors and combines that industry is preparing to produce. Rural incomes could not grow sufficiently to allow peasants to buy the greater volume of goods produced by the cities.

Socialist planning, by its nature, must embrace the entire national economy. It must coordinate its various sections and project their road forward. If agriculture remained scattered and unplanned, limiting the growth of production, our whole industrialization would be doomed.

The agricultural producers' cooperatives, by bringing the land into larger units and combining the labour and resources of the peasants, represent the solution. They make it possible to adopt modern machinery and turn out more produce. Industrialization, cooperative farms and the technical advance of agriculture, if properly managed, are a harmonious triangle. While the construction



of socialist industry is the key to our First Five-Year Plan, cooperative farming is the key to industrialization.

Our development toward collective farming, or fully socialist agriculture, proceeds in three stages.

The first and simplest step is the mutual-aid team composed of a few farm families. Members pool labour, field animals and implements for a longer or shorter period of joint work. But they do not pool their land or, as a rule, own anything in common. Such teams often lead to a greater yield per acre than when work is done individually.

A further step is the more stable and organized agricultural producers' cooperative. Here land is managed as a unit but still remains the private property of the members. At least some equipment is common property. Production becomes higher, as facts have shown, than in the mutual-aid team. Earnings are distributed partly on the basis of land invested, partly on labour performed. This form can be considered as semi-socialist.

As production increases more and more, so does the income from labour. So the fixed rental for land becomes relatively insignificant. This prepares the way for transition to the third stage, the fully socialist farm cooperative (collective farm), with the land owned jointly instead of separately.

All three forms of agricultural organization are found in China today. But the agricultural producers' co-op (semi-socialist) is the main point of emphasis. It is the key to the whole development at the present time.

Each cooperative of this kind must meet three main standards to succeed: production must be greater than that of the mutual-aid group or individual peasant; distribution of earnings must be just and fair; leadership must be capable of good management and of handling problems as they arise.

Let us first consider production. In a co-op, the tools, animals, fertilizer and above all labour of member-families are pooled and land is managed as a unit. So yields generally rise rapidly from the start, even before improved implements are introduced. In the many co-ops which have bought better animal-drawn ploughs to replace old-fashioned ones, they have risen again. There is sure to be another big increase when farms are further enlarged and tractors and combines come into common use.

Travelling recently in southern Kiangsu province, I saw instances of the first fruits of cooperation. The "Dawn" cooperative

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farm near Soochow was set up in 1954 by 29 peasant families. Previous to joining, they had grown 4 bushels of wheat per acre. The first co-op harvest was 5.5 bushels per acre and the second, in 1955, averaged 11 bushels. For wet-field rice, the main crop, the yield rose from an average of 57.6 bushels per acre when farming separately to 65 bushels when working together in a mutual-aid team, then to 79.2 bushels in the co-op. These successes have attracted new applicants. Member-households now number 52.

In the "May Day" cooperative near Wusih, membership rose from 31 to 45 families in a single year—for the same reason. The peasants in it had been accustomed to getting 54 bushels of rice from each acre of land but in 1955 they reached 96 bushels. In wheat they did even better, raising the per-acre yield from 8.8 to 22 bushels by better manuring and cultivation. They accomplished this in spite of adverse conditions, which included a local flood and loss of part of the crop from smut.

The Pengtsen cooperative, a few miles from Nanking, grew from 17 families to 47—over four-fifths of the whole village—in a period of two years. Here too the relation between crop yields and cooperation was seen very clearly. The individual peasants' yield had been some 38.4 bushels of rice per acre. After a mutual-aid team was formed, the members reaped 46.8 bushels. This grew to 50.4 bushels per acre in 1954, and 54.7 bushels in 1955.

Higher production means more earnings for members. These must be distributed democratically, justly and in accordance with the common interest. Otherwise the group becomes disunited and progress stops.

The main problem is to apply the principle of equal pay for equal work in terms of "work points" or units of payment for labour. There are also other evaluations to make, some even harder to settle to everyone's satisfaction.

Small farm implements are kept and used by members. Medium sized ones are often used in common and stored by the co-op. Larger ones may be rented or bought. So payments must be made for repairs, rent and sometimes purchase—as well as for the use or purchase of field animals: horses, donkeys, bullocks or buffaloes.

Finally there is the problem of how much of the harvest to allot as dividends on land that has been invested. This includes the fertility of each piece of land; the actual crop from it; its location and the amount of work needed to cultivate it.

Today, practically everyone in rural China knows what is meant by *ssu-ping* ("the four evaluations"). This is the popular name for the estimate each co-op makes of how much income members should receive for four types of contributions: labour, implements, animals and land. Where it is well applied, production moves forward and the co-op becomes more prosperous. Otherwise there is grumbling and trouble, which may even lead to dissolution.

Cooperatives are voluntary organizations. There is only one way they can function—on the principles of equality and mutual benefit. If prices and rentals for implements and animals are too high, the more well-to-do members who furnish them get richer, while the co-op takes losses in which the poorer members have to share. But if prices and rents are set too low, the owners are likely to quit the co-op. In the same way, only a fair deal all round will keep unity between those who have more land to invest and those who depend chiefly on their labour.

A co-op generally takes several steps to establish its "four evaluations". First a short-term production plan is made and some members are entrusted with making a preliminary estimate. Then the leaders and most active members make a study of experience gained, set up procedures and publicize the new rules. Afterwards the co-op proceeds to an inventory of land, members' skills, implements and animals—and to elect an Evaluation Council. The leaders of the co-op are now able to assess the contribution of each member according to the agreed-on standards, and to post their decisions on the bulletin board for discussion and revision.

Throughout the process the most thorough democracy is essential. Revisions in the evaluations may be made twice or thrice. The Evaluation Council must be representative—including poor and relatively well-to-do members, women as well as men.

What peasant would want to join an organization in whose leaders he did not have confidence? Confidence is inspired by fairness, unselfishness and devotion to the common good. Such qualities come with enthusiasm for the cause of socialism, and understanding of how to work for it.

To meet the need, many cooperative organizers ("village cadres") have been trained in special classes. Last year in the province of Hopei alone, 100,000 were trained. There are also many leaders who have learned by experience in mutual-aid teams.

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Poor leadership can be disastrous, even if all other factors favour success. This was recently shown by a co-op in Fengjen county, in Hopei. Established in 1952, it quickly became prosperous and was designated a model of its kind. But its chairman grew conceited. He disregarded the opinion of members and began to make outlays that were unnecessary or premature—for an assembly hall, for a large number of bicycles, and so on. A large bank loan was contracted, and the co-op had to pay interest on it. The members saw no sense in the whole thing and this initially promising co-op collapsed.

Very different was the picture in the Tsenghua co-op in the same province, which was started by 23 poor peasant families, also in 1952. They did not have enough implements to work their 38 acres of land, only one donkey for draught purposes and no cart. Rich peasant neighbours ridiculed the poverty-stricken co-op, predicting its certain failure. But its chairman took the right track. That winter when there was no cultivation to do, he led 17 members out on nearby hillsides to cut firewood for sale. In the meantime, the women went to repair dykes for the local government. The earnings from these activities were used to purchase a cart, a cow, another donkey, 19 sheep and some tools. Later more firewood was cut and sold to buy food and fodder, additional animals, and equipment for making bean-curd for sale. The co-op pulled through and began to thrive. By 1955, its membership had grown more than sixfold. It had a considerable reserve fund and had even succeeded in building new homes—with a total of 140 rooms—for a number of its members.\*

On the whole, leadership has been good, and the example of the well-managed co-ops has acted as the chief motor in the rapid upsurge of the movement. Of the 650,000 co-ops in existence before the summer of 1955, fully four-fifths were producing better than the average yield for the locality, the increases ranging from 10 to 30 per cent. Others had maintained the old level despite the problems involved in initiating new ways of work, and only some 5 per cent had failed to do so. It is because the peasants have seen these facts that the number of co-ops was almost doubled in the autumn.

The socialist reorganization of China's vast agriculture is a hard and complicated affair. It is not surprising, therefore, that

\*For a further discussion on the distribution of a co-op's income, see "What the Farmer Gets", on page 276.

the quick multiplication of co-ops created two widely different tendencies among local leaders. Some, elated by success, thought of nothing but rushing ahead, seeing results in numbers alone. They disregarded the need for consolidating every gain, and even took in selfish rich peasants who were really opposed to the movement. This led to some difficulties and failures.

The other tendency was overcautiousness. Some leaders were afraid that things were going too quickly to be handled, and tried to put on the brakes. Sharply conscious of the trials and problems involved, they forgot the overwhelming positive factor, that the co-ops had already proved their worth and scores of millions of peasants wanted to move forward.

Speaking to a conference of Communist Party workers in July 1955, Chairman Mao Tse-tung analyzed the immediate problem. He cited facts and figures to show that 60 to 70 per cent of our farming population are eager to form cooperatives. They are the poor peasantry and the less well-to-do middle peasants.\*

Another 20 to 30 per cent of the rural people are comparatively well-to-do and their attitude to cooperation is wavering. A few are trying capitalist farming.

Finally, a tenth of the farming population are rich peasants and former landlords. Except in areas where some 80 or 90 per cent of the peasants are already in co-ops, and in cases where the persons concerned have proved loyal to the cooperative idea, they are not admitted to membership. Bitter experience has proved that this is necessary. Such people often turn out to be active and inveterate enemies, fighting in every way to return to the old order. There have been instances of ex-landlords running away to distant provinces, pretending to be poor peasants, entering the co-ops in this guise, and poisoning field animals to create crisis and confusion. Some rich peasants have worked their way into influential positions in the co-ops, then relied on their wealth to oppress the other members. They have kept out poor peasant applicants, and even exploited mutual-aid teams as hired labour — thus nullifying the whole purpose of cooperation.

Since the great majority of the peasants want cooperative farming, it is the job of the Communist Party, and of all co-op

\*Following the land reform, the majority of the poor peasants no longer found it necessary to work as hired labourers and their economic status has been raised to what is known as "new middle peasants". However, since the average tillable land in the country is half an acre per person, and in some places less than 1/6 of an acre, as individual farmers they had little prospect of achieving a prosperous living standard.

## TWO REVOLUTIONS FOR THE FARM

organizers, to help them get it. This, says Chairman Mao, is the main current; all other questions are ripples on the stream. What is needed is a clear overall plan and better, stronger leadership. The work will be successful if the poor and less well-to-do middle peasants, who see co-ops as their own way to prosperity, are organized and helped to do the job. With the well-to-do middle peasants and other waverers, there should be no impatience; they will be convinced of the benefits of co-op farming in time, as its results show themselves. Rich peasants also should be persuaded of the advantages of cooperation, since some day they too will want to join.

The village people are to be carefully listed in their proper categories: the poor, the less well-to-do middle peasants, the well-to-do middle peasants and the rich peasants. Each co-op should be so constituted as to contain poor and middle peasants in suitable proportion. Attitudes toward cooperative farming are to be sounded out. No family should be involuntarily dragged in.

Assigned personnel have the task of helping co-ops improve their organization and agricultural technique, and of preparing mutual-aid teams for transformation into co-ops. In all their work, they are to rely on the poor peasants and the active support of the less well-to-do middle peasants.

The government makes loans to poor peasants entering the co-ops, so that they will not feel economically dependent on better-situated members. This will leave no basis for the reluctance to take in poor peasants that has cropped up in some co-ops, which have given preference to members with more tools, animals and other wealth.

Some middle peasants fear that their earnings will be less in a co-op than outside, and that the poor members will benefit at their expense. They are afraid the price and rental for their tools and animals will be too low, and that they will not be free to grow and market the crops they prefer. In fact, co-ops benefit the middle peasants. Their hesitations have no sound basis, so the policy is patient explanation. A strong co-op needs both poor and middle peasants. Both are potential good members.

The village Communists are a great force for advancing the co-op movement. More than nine-tenths of China's 220,000 *hsiang* have Communist Party committees, and there are four million Party members in the countryside.

By the spring of 1958, immediately after the conclusion of our First Five-Year Plan, semi-socialist cooperative farming will have a dominant position in rural China. From 1960, the large-scale transformation to fully socialist farming will begin. By the end of the third Five-Year Plan in 1967, Chinese agriculture will be fundamentally socialist.\*

Right now, the cooperative movement is running ahead of the modernization of farm techniques. This will change during the third Plan period—1962-67—when social and technical advance will march side by side. By then, our industry will be producing large quantities of modern farm machinery. In 20 years, big as our population and country are, we intend that China will be a modern socialist country—in her villages as well as her towns.

\*Just after this article was written, the movement for the organization of cooperatives gained unexpected momentum. By the end of May 1956, 91.2 per cent of China's farm households had joined agricultural producers' co-ops. By the end of the year, the number had reached 96.1 per cent, or somewhat more than 116 million peasant households had joined. On October 28, the authoritative newspaper *People's Daily* stated: "This winter and spring, the countryside will be fundamentally socialist"—ten years ahead of schedule.



*Yang Jung-ming*

**Blast Furnace No. 8, Anshan.**



## BUILDING UP INDUSTRY

A COUNTRY whose chief mineral resources and main factories are owned by outside investors, and used to serve their ends, cannot build the industry it needs. For this reason, before the liberation, China's industry, like that in many Asian and African countries, was laggard. It accounted for less than a fifth of the total value of farm and factory products combined. Its main output was consumers' goods of the simplest kind. The little heavy industry that existed was mainly foreign-owned. It was confined to the repair of transport and other machinery, and to the extraction and preliminary processing of minerals for export. Steel output was negligible. China did not produce even textile machinery, not to speak of heavier types. There was no such thing as a Chinese-made automobile, locomotive or turbine. In short, China's industry provided no base either for independent economic development or for national defence.

To make up this lag with the requisite speed, as the history of the Soviet Union has shown, countries newly embarked on industrialization do not need to undergo the long anarchic process that characterized capitalist development, full of aggression against other peoples and injustice at home. Post-liberation China, with the support of all sections of the people, has relied on the socialist sector of her industry to pioneer in this process.

The base of this socialist sector was formed by the nationalization at the time of liberation of imperialist-owned enterprises and the huge monopolies of the Kuomintang officials known as "bureaucrat-capitalists", who were also linked with imperialism. This sector took the lead in new construction, particularly in heavy industry, and in stimulating all other branches of production, which especially in light industry continued to be privately-owned for some years. It has now been reinforced by the voluntary, compensated transition of capitalist enterprises to joint ownership with the state.

## Why Old China Could Not Industrialize

by WANG CHING-YU

CHINA today is well launched on her planned transformation from a predominantly agricultural country to an industrial one. The Chinese people have dreamt of such a change for a century. But until the establishment of our new democratic state, it was impossible for it to take place.

The rulers of old China, from the Manchu dynasty to the Kuo-mintang, built some factories and mines. Sparse and scattered, these did not represent real progress toward industrialization. Private capitalists, at that time, also made many efforts to start industries. Frustration and bankruptcy were most often the result.

Why did all attempts to industrialize old China fail? History gives us the answer. Bureaucrats of the Manchu government set up their first factories in the sixties of the last century, at a time when the Chinese people rose up in a great movement, the Taiping Revolution, against landlord tyranny and foreign encroachment. These imperial officials belonged to what was then known as the "Foreign Affairs Clique"—led by the notorious Li Hung-chang, Tso Tsung-tang and Tseng Kuo-fan. Their aim was to make modern arms to suppress the peasants and keep the old ruling class in power. They set up the Kiangnan Arsenal in Shanghai and the Foochow Arsenal with its dockyards and ship-building facilities.

After the 1880's, the "Foreign Affairs Clique" extended its operations to the manufacture of consumer goods. Textile mills and the Lun Chang Paper Mill were built in Shanghai. Greedy for monopoly profits, the officials tolerated no rivals. In the cotton industry, the quickest money-maker, they started to take over many nascent private industrial concerns. They called these tactics "government supervision of private business" or "joint government-private management".

The viceroy Li Hung-chang (1823-1901), for instance, one of the most powerful members of the "Foreign Affairs Clique", gained control of the Shanghai Cloth Weaving Mill though he held

only half as many shares as private investors. Using the weight of his position, he then changed it into his version of a "government-supervised private business". This mill was burnt down in 1893, but Li promptly built a new one, at the same time issuing an official order forbidding private business to build in competition. He further took over other privately-owned mills, the Yu Ching, Ta Shen and Yi Yuen, making them into branches of his own enterprise. In 1895, China's textile industry had over 174,000 spindles, all under the control of the officials around the court.

Military defeat in the Sino-Japanese War of 1894-5 exposed the pretensions of the "Foreign Affairs Clique", showing that its formula for "modernization" was futile. The group lost a great deal of influence, and private capital made a new bid for the right to invest in industry. The spokesmen for this movement, from 1895 to 1900, were a group of reformers headed by Kang Yu-wei, who aimed at a constitutional monarchy and gathered around the young Emperor Kuang Hsu. They demanded the development of private industry, with full legal rights.

But events moved too swiftly to enable China to develop capitalism on the western model. The so-called Reform Movement collapsed when the conservative court clique, led by the Empress Dowager, arrested the reformers and imprisoned the emperor himself.

Meanwhile, on a world scale, capitalism had developed into imperialism. China became an open field for the industrial products and investments of the imperialist powers.

In the twenty years from 1895 through to 1914, direct investments in mines, factories and communications in China by Great Britain, Czarist Russia, the United States, Japan, Germany and France amounted to U.S.\$1,070,000,000—much more than the Chinese capital in the same branches of the economy. During this period, 6,014 miles of railway were built, 2,418 miles of which were directly in the hands of foreign powers. The remainder was also under imperialist domination, as a result of conditions attached to the foreign loans by which their construction was financed.

Coal production in 1913 was 12,800,000 tons, of which 5,100,000 tons was directly controlled by imperialist interests, while the rest was strongly under their influence. China's most important mines, such as those at Kailan, Fushun, Tayeh, and Pinghsiang, fell one after another into foreign hands. In the growing industrial centre of Shanghai, 37,000 kilowatts of electric power

were generated, but of this amount, two foreign-owned power stations supplied 27,000 kilowatts. Of the 488,000 spindles in the cotton mills of Shanghai, 339,000 belonged to eight foreign-owned concerns. Foreign capital was backed by naval units as well as military garrisons in several big cities. It was immune from Chinese jurisdiction through "extraterritoriality", an enforced arrangement under which not only offenses by foreigners but civil suits in which they were defendants, could be tried solely in foreign courts. With these privileges added to economic advantage, foreign capital became the main force squeezing out China's national industry.

The feudal governments of the time compromised with the various imperialists, linking up their own interests with them. Many private industrialists were also linked with officialdom, foreign capital or both. Among them were members of the new and powerful middle-man group used by the imperialists in their economic dealings with China, known as the "compradores". More than half of the domestic capital invested in private enterprises belonged to landlords and feudal officials. The leaders of Chinese industry had neither the will nor the economic and political strength to struggle against the increasing economic aggression of imperialism.

So Chinese industrial capital failed to develop. More and more, China became a colony, exploited at will by many foreign powers.

The outbreak of the First World War brought some changes. All the foreign powers except Japan and the U.S.A. were busy fighting in Europe and producing war goods, so their pressure on the Chinese economy relaxed. As a result, 54 Chinese textile-mills were set up in the 1914-1922 period, and 117 flour-mills in 1912-1921.

But Japanese and U.S. concerns were still on the scene, striving to grab the Chinese market in the temporary absence of their rivals. And when the war ended, the other imperialist states came back too. In the 1921-22 period, Japan set up nine new textile-mills in China. Four big Chinese textile-mills were taken over by the Japanese and two by the Americans. Buffeted by renewed foreign imports and investments, China's weak national industry declined again.

In their desperation, Chinese private capitalists joined readily with the working class and the peasantry in the great anti-imperialist revolutionary movement of 1925-26. In 1927, however,

the big capitalists betrayed this revolution, hoping the Kuomintang would back them up in their plans for industrial development. Then, when they awoke to the grim reality that the Kuomintang bureaucrats were as greedy for industrial profit as those of the Manchu empire, they dreamt of having "state-owned" and "privately-owned" enterprises developing side by side. These illusions were soon shattered. Imperialist penetration too did not lessen. On the contrary, it was greatly stepped up.

By 1931, the direct investments of the imperialists in Chinese mines, factories, and communications rose to U.S.\$2,490,000,000, almost 2½ times what they had been on the eve of the First World War in 1914. In many industries, such as electric power, textiles and tobacco, foreign capital not only greatly exceeded Chinese private capital, but held a virtual monopoly. The Shanghai Power Company, a subsidiary of the American Electric Bond and Share Corporation, a J. P. Morgan interest, generated as much power as all other plants in the country. The British-owned Yee Tsoong Tobacco Company produced more cigarettes than all Chinese-owned companies put together.

The Kuomintang, despite its flaunted "nationalist" label, gave no protection to Chinese business enterprise. On the contrary, it resorted to taxation and other measures which had the effect of destroying the ability of Chinese industry to meet foreign competition on the home market.

In 1928, immediately after it came to power, the Kuomintang introduced a consolidated tax on various commodities, ostensibly to replace the previously existing miscellaneous taxes.

In the textile industry, the consolidated tax on coarse yarn (below 23 counts) was set almost as high as that on the much more expensive fine yarn woven mainly by foreign mills, thus favouring the latter. What is more, the old local and miscellaneous taxes did not disappear at all. Besides the consolidated tax, cotton yarn had to pay producers' and marketing taxes, a special business tax and even road and dyke-building levies in some places. Within Szechuan province, nineteen kinds of additional tax were collected on cotton in transit from Chungking to Hsinching, 335 miles away.

The story of the tobacco tax was even more disgraceful. In the 1930's, when the Kuomintang was in need of money to wage civil war against the people's forces in Kiangsi province, its Finance Minister, T. V. Soong, turned to a big foreign cigarette company in China, which was a branch of a worldwide tobacco trust. The

foreign company agreed to advance large sums of money in the form of pre-paid taxes. In return, the Kuomintang government undertook to raise the tax on cheaper-grade cigarettes (made mostly by Chinese companies) and lower that on the more expensive brands (imported or made by the foreign company in China). It also agreed to cancel the duty on all advance-taxed cigarettes unsold at the end of a certain period. These concessions gave the foreign firm a tremendous advantage over its Chinese competitors, who had to pay higher rates and did not possess the funds necessary to participate in the advance-tax and refund scheme. As a result, several smaller Chinese tobacco companies, which had sprung up in the 1925-27 period, were compelled to close down.

The nationwide consolidated tax was constantly increasing. For rolled tobacco, it rose 100 per cent between 1928 and 1931. For matches, it reached 60 per cent of the cost of production; for cement, 53 per cent of the market price.

In the worst textile depression before 1927, when the Kuomintang seized power, a total of 400,000 spindles had been forced to stop operation. After 1927, there was a period when 1,500,000 spindles were idle. Prior to 1928, there were 182 Chinese-owned tobacco companies in Kiangsu province alone. By 1932 there were only sixty.

After 1937, most of the industrial areas in northern and south-eastern China were occupied by the Japanese imperialists, who proceeded to plunder them. Japan came to control 63 per cent of North China's coal output and 62 per cent of the other industrial production in the area. Orders were issued that medium and small-sized industry should be operated jointly by Chinese and Japanese capital. Actually, the "Chinese" capital also was controlled by the Japanese through traitorous collaborators. Industries which served Japanese needs were able to develop a little. Others were forbidden to expand.

In the Kuomintang-controlled areas of the wartime period, bureaucratic capital laid its hands on everything. Before 1937, this type of monopoly had not expanded so rapidly. In 1935, not counting the private investments of Kuomintang officials, bureaucratic capital made up only ten per cent of investments in Chinese industry. During the war years, however, with the so-called National Resources Commission as the centre of its activities, Kuomintang officialdom established a practically complete monopoly of coal, iron, electric power, chemicals, non-ferrous metals and many

other branches of production. Economic organs of the central, provincial and county governments, as well as of the army's "war area administrations"—all owned and operated factories for profit, as did the four big government banks. By the conclusion of hostilities, 70 per cent of all industry in areas that had not been occupied by Japan was in Kuomintang hands. The figure does not include personal holdings by government functionaries. What private enterprise remained was being rapidly stifled by official control of production materials, transport and business transactions.

After the defeat of Japan, the Kuomintang took over all Japanese and puppet-operated industries, including those that had been privately owned before enemy seizure. The bureaucratic capitalist empire swelled to enormous proportions. In 1946 the National Resources Commission controlled about 84 times as much of China's electric power as in 1941, about 21 times as much of the petroleum output and almost six times as much of the steel output. The China Textile Industries Corporation, a government concern, held 49 per cent of the country's cotton spindles and 68 per cent of the looms. The various bureaucratic cliques controlled 15 times as much yarn production and 19 times as much cloth production as in 1941.

It should be clearly understood that this form of "nationalization" had nothing in common with state operation and control of industry for the benefit of the country and people. It was military, feudal and compradore in nature, squeezing out private capitalists, oppressing the workers through low wages and the consumers through high prices. The National Resources Commission was started as a subordinate organ of the National Military Council. During the war with Japan its control of production was used not to fight the invader but to amass materials for the later civil war against the people. At the same time, it acted as a compradore for American capital, mortgaging China's rare minerals as security for loans. Like the Manchu official-militarist enterprises developed to suppress the Taiping Revolution almost a century earlier, it operated to keep the feudal and foreign yoke on the necks of the working people in town and country—and it offered little prospect of real industrial progress.

If the Chinese people had permitted this situation to continue, the national economy would have become completely colonial. After World War II, the official monopolies leaned on the United States for everything—capital, technical personnel and equipment. Raw materials such as wolfram (tungsten ore) and antimony were

shipped to the United States at low prices to return, at high prices, as tungsten filaments, alloy steel and other finished products. This was only one example of how the Chiang Kai-shek rulers sold out China's independence, both economic and political.

Anti-popular and treasonable, the Kuomintang's bureaucratic monopolies were also endlessly corrupt. Crowding out private capital, they looted the industry of which they gained control—high and low officials sold machinery and materials, remitting the proceeds to their own accounts in foreign banks. Whenever they took over a factory, efficiency and production fell. Spinning mills operated by the China Textile Industries Corporation showed a daily rate of yarn production that was only 37 per cent of world standards, and 57 per cent lower than the average for privately-owned Chinese mills before the war with Japan.

History itself proved that China's industrialization was impossible under the old society. It became possible only when the semi-feudal and semi-colonial order was overthrown by the joint effort of the whole people, when China became independent, free, democratic and unified.

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MAY-JUNE 1954

## Wang Chung-lun Outstrips Time

*by LI PO-TI*

**M**ORE THAN four years' output in one, and all of first-rate quality. This is the record of Wang Chung-lun, the 26-year-old lathe operator in the Anshan Iron & Steel Works who has been making news in Chinese papers for what he and those who followed him have achieved. He did not reach this startling record by overtaxing his physical resources, or by working longer hours at the plant. He did it by thinking things through. In our country, where to raise production and shorten the time between our present and our future is a matter of intimate concern to every citizen,



Wang became famous, and as a model worker received many honours.

The whole of an industry, as well as separate factories and individual workers in China, all have their output quotas. Without such standards, fixed after study and consultation with those concerned, planning on a national scale would of course be impossible. The quotas are reasonable, but not easy to reach or surpass without honest and devoted effort. One reason for this is that, to increase her industrial production, China must rely not only on her rising modern factories, which are still comparatively few in number, but also on the ill-assorted, old-fashioned and much-worn installations inherited from her semi-colonial past. To give an idea of the difficulties, it is enough to cite one fact. In old China, practically no machines were built domestically. Such machine-tool industry as did exist was geared for assembly and repair.

Wang Chung-lun achieved his amazing results in precisely that sort of difficult environment. Yu Jui-ying, deputy-head of the shop in which Wang works in the General Machinery Plant of the Anshan Iron & Steel Works, described the situation there as follows: "Although some improvements have been made since the liberation, we still bear many marks of having been a Japanese colonial enterprise. We are well set up for casting, for instance, but not for machining. We have many small lathes but too few big ones, and particularly too few shapers and slotters. It is a common thing for one part of our equipment to be overloaded while another has little to do."

In April 1953, this shop received its first order for certain intricate parts for rock drills. The matter was urgent. The capacity of Anshan's furnaces was increasing all the time. The iron miners in the hills around the city were using more drills and the demand for replacement parts had grown. The lathe and milling machines in the shop could produce these in half-finished form at a satisfactory pace; but then there was a bottleneck. The next process was slotting, and there was only one machine to do it, a machine so slow that it took  $2\frac{1}{2}$  hours on each part, and so imprecise that its products wore out very quickly. The miners were getting fed up. "At least you'd expect these things to last for a few days," they would say as they stamped into the shop with angry faces.

Wang Chung-lun was the leader of the shaping and slotting team. That the work was held up in his section worried him day

and night. He had mental pictures of the effects on the smooth coordination of the vast Anshan Iron & Steel Works, from mine-face to final product.

Wang's shopmates were getting restless too. Some of them said: "We need four or five more slotters. Let the shop foreman try and get them."

Wang Chung-lun, however, was determined to do all he could to solve the problem inside the shop. An idea struck him. Why couldn't a shaper be made to act as a slotter too? The only difference in their operation was that on one the cutting tool moved up and down, while on the other it moved horizontally. The machines themselves were similar, except that the slotter had a rotary table which the shaper did not. Could a similar attachment be fixed on the shaper, in such a way as to achieve the same result? To try to devise one became Wang's sole thought.

The young worker had had no engineering training. He did not know how to put a design on paper. But this did not stop him. Ordinary workers in many mills and shops in Anshan had invented numerous complicated devices to help production. The creation of such innovations had become a broad movement. If other workers could do it, why not he? So Wang Chung-lun began to sit up until all hours at night with paper, pencils and simple home-made models. He looked so tired that his mother and wife begged him to get some sleep before he became ill. When persuasion did not help, they even conspired to get Chin-hsia, Wang's little son, to play at his father's desk, hoping that this would disturb him so that he would give up for at least one night. But Wang Chung-lun carried his son to bed, soothed him to sleep, and kept right on.

After two weeks, Wang was satisfied that he had a basis for a solution. The shop foreman, to whom he took his rough drawing, thought so too. The other workers became excited and advanced useful suggestions. The technicians helped to make a proper blueprint. Wang and his mates worked during the lunch periods to build the fixture, incorporating improvements that occurred to them. When installed on the shaper, it performed much better than expected. A piece of work that the old slotter had taken 2½ hours to complete was turned out in 45 minutes — and the quality was first-rate. And this was only in the first test; subsequently, the time was brought down to 19 minutes. What was more, 14 other parts for the rockdrill, which the workshop was unable to

handle in the past, could also be made. Word of Wang's invention, called "the universal fixture" spread through Anshan and to other plants all over China. People asked, "What kind of man is Wang Chung-lun? What is his history? Where did he get his determination and his confidence?"

From the newspapers, they learned the details of Wang's life. He had got his first job at Anshan when only 14, at the time of the Japanese occupation, when the workers were treated like slaves. From the beginning, he had been conscientious and careful in all he did, out of simple craft pride. "I just thought, what kind of a workman am I if I turn out a rotten job?" he said later.

The liberation improved his material condition very much, but did not change his outlook deeply. He just went on doing good work and paying little attention to anything else. Then, in 1951, the job which he was then doing was graded lower than some others. Prompted by his old-fashioned mother, whom he always obeyed, Wang stayed away from the shop for three days. Instead of feeling more and more aggrieved, however, he began to suffer from a sense that he was doing wrong. "I used to wear rags," he thought, "now I live well; what am I complaining about?" Away from his mates and his machine, he felt utterly lost. "What can I do, all by myself?" he finally said to his mother. "I am going back."

On the same day that he said this, the shop secretary of the Communist Party dropped in to see him. He encouraged Wang to improve his skill. "The more the work, the more the pay, that is the principle of our new society," he said. "But that's only one part of it. The most important thing is to throw in one's lot with the nation's. A man can be happy and not lonesome only when he amalgamates his own interests with those of the country." This last remark had great effect on Wang Chung-lun: "I think," he said afterwards, "that it was a turning point in my life."

Gradually, he began to work in a different spirit. Ideas seemed to come to him more quickly, and he suggested many innovations. The Party secretary took to coming to his home to ask about his work and inquire if he was facing any difficulties. They became friends and talked of the past and the future. Wang Chung-lun found himself telling of an incident he had almost forgotten, how the Japanese invaders, when leaving after their surrender, had sneered that nothing could be produced in Anshan without their trained skill, except grain, and "even that won't grow very high". Then, he and the Party secretary enumerated all that had been

done in Anshan since then, the reconstruction and renovation of old plants, the building of huge, automatic furnaces and mills — and the part played by the workers of their own shop.

One day, when another worker needed an improvement on his machine, Wang Chung-lun spent many days fixing it up. When it was finally finished, he left the plant with the sound of the new device at work, and the thanks of its operator ringing in his ears. Hardly ever had he felt so good. Arriving at home and sitting down to a well-loaded table, he took a bite out of the fresh steamed bread and felt he had to say something. "I don't know if you all understand," he remarked to his mother and wife, "but I want to thank the Communist Party and Chairman Mao for making it possible for us to eat such a good supper — and for all the other things we now enjoy. I am going to work harder and harder so as never to let them down."

His mother's face darkened, and he was afraid there was a quarrel coming. But what she said made him even happier than he had been. "You think I am just an old fool?" she said looking at him sternly. "You attend all those meetings and classes and don't tell me anything. What makes you think you are the only one who is for the Communist Party and Chairman Mao?"

Things began to go on even better than they had, not only on the job but at home too.

In October 1952, Wang Chung-lun joined the Communist Party. His feeling of well-being, and of honourable responsibility, grew ever deeper. It formed the basis of his determination and success in the matter of the shaper and the slotter. This was the kind of man he was, and this was his background.

In September 1953, while people were still praising Wang's "universal fixture", the all-China Federation of Trade Unions called on all workers to join the nationwide production contest to bring the first year of the Five-Year Plan to a victorious conclusion. The way proposed was for each worker to set his own target and pledge himself to reach it. Wang knew it could be done in China. With the aid of the "universal fixture", he himself already finished his 1953 quota in July. Wang remembered that, at the time the plan was being launched, he had asked a lecturer how workers could contribute. The answer had been: "By surpassing the quota set by the state one, two, eight or even ten times, both through new inventions and through new ways of work. That this is possible has been proved over and over again in the Soviet Union."

Thinking things over, he decided that improvements in other tools and better organization of work could contribute to further gains. For example, he used to put four parts of one kind on his shaper at once, but it could be made to hold five. The reciprocation could be quickened, resulting in greater speed in machinery. After he tried adjusting the shape of his cutting tools somewhat, they lasted a whole day instead of breaking four or five times a day, saving the time previously spent in changing them. He devised a new tool-kit, from which he could pick up what he needed without looking. And he made a gadget which removed the finished product more quickly.

Having made these improvements and tested them, Wang Chung-lun drew up his plan. All sorts of pledges were being made in the production contest, but Wang's was epoch-making for China. He announced that he would finish three years' work in one! From then on, newspaper reports of his progress were scanned with interest all over the country. Would he succeed? If he did, the achievement would open altogether new domains in productivity, workers everywhere would follow his example, and the whole pace of industrialization might be affected.

Those close to Wang Chung-lun at the time were amazed at the confidence he displayed. A friend tells of how he dropped in and asked solicitously, "Well, how's it going?"

"Pretty well," Wang answered smiling. "I'm starting on my work for 1955 today."

On November 18, he reached his target of three years' work. Then he increased it to  $3\frac{1}{2}$  years, fulfilled it on December 8, advanced his pledge to four. He went at the work with the zest of a sportsman, gathering new energy from each success. "I wanted to do as much as I could," he explains. "I was running a race with time and the further I outpaced it, the better I felt." By the end of the year Wang Chung-lun had completed the output of four years, one month and 17 days in terms of his original 1953 quota.

The rest of the workers in the shop were quick to follow. Every one of them improved his tools or methods. On December 23, 1953, the shop as a whole had turned out twice the number of products set in its 1953 target. Workers in other plants caught up Wang's initiative too. Hardly a day passes in China without the newspapers carrying some new item of this kind, headed "Following Wang Chung-lun's example".

## Launching the Five-Year Plan

by CHEN HAN-SENG

WORK under China's First Five-Year Plan began in 1953, on a year-to-year basis. The complete Plan was approved by the National People's Congress in July 1955. Its purpose is to lay the preliminary groundwork for socialism in both industry and agriculture.

The centre of attention is heavy industry, which determines progress in every other field. This can readily be seen if we examine its connection with other fields, notably agriculture, in which the vast majority of the Chinese people are engaged. The very few mechanized state farms we have today have already impressed the peasants, and are inspiring them to look forward to an easier and better life. After seeing a Stalin-80 tractor on the Lutai State Farm near Tientsin, an 85-year-old peasant said: "Twenty oxen ploughing for a day can't do as much as this iron ox in one shift." But tractors and agricultural machinery are products of heavy industry. At the moment, China produces less steel than European Russia in 1913. Our output is only just under 8 lb. of steel per head of the population. Only when we can make the necessary machinery on a large scale can we have modern, prosperous collective farming.

In many lands, when agriculture was ruined by war, pestilence and depopulation, it perished for lack of large-scale mechanical means to restore it. That was the cause of the downfall of the ancient civilizations of the Babylonians in Iraq, the Incas in Peru, the Mayas and Aztecs in Mexico, and the Uighur civilization in our southern Sinkiang province. The development of heavy industry and modern engineering—plus socialism—makes it possible to reclaim vast areas of waste-land. This has been shown in the Soviet Union, and it means much to us because we have huge tracts of unused land.

Apart from machines, agricultural advance depends on heavy industry for chemical fertilizers, gasoline, fuel oil and irrigation equipment. Without these, agriculture cannot provide the necessary

raw materials for light industry, which must itself rely on heavy industry for machinery, metals and chemicals. Whether we speak of food or clothing, it is not practicable to promise large increases in production without attending to heavy industry first.

That is not to say that our Five-Year Plan neglects light industry. It provides for an average annual increase of 12.4 per cent in the output of consumers' goods in 1953-57. But this requires an even higher average annual increase in the means of production, commonly known as capital goods. To support a continuing growth of consumption, our Plan assigns priority in investment and development to heavy metals, fuel, power, engineering and so on. In China's First Five-Year Plan, 88.8 per cent of the investment in the construction of plants goes to the capital goods industries and only 11.2 per cent to those making goods for direct consumption.

The total expenditure for the First Five-Year Plan is ¥76,640 million, equivalent to 772 million ounces of gold. At U.S.\$35 per ounce, it amounts to \$27,020 million (£9,640 million sterling). About 56 per cent of the total is being invested in capital construction, of which over 58 per cent is industrial.

Standardization, specialization and integration are three "musts" of industrial development. This is especially true of heavy industry. China, emerging from semi-feudalism, still faces all the difficulties that arise from inadequate standardization, in production as well as in trade. For this reason, new factories for making prototypes and measuring and precision instruments are high on our list of priorities. A state Bureau of Standards was established in Peking last May, with working stations in 230 cities.

Heavy industry, moreover, requires many types of specialized production. For example, a hundred plants may be needed to produce the specialized parts and materials that go to make up motor vehicles or tractors. Such problems must be tackled early. Tractor plants will be set up in China during the First Five-Year Plan, but it will only be in the second that we will actually be putting out 15,000 tractors (of 54 horse-power) each year.

Investment in heavy industry comes largely from the earnings of light industry. During the three years of economic restoration (1950-52) and the first two years of the Five-Year Plan, the total production of light industry increased threefold, that of certain items like cloth and paper fourfold. Costs have been cut, productivity heightened. In 1954 all the most important branches of light industry fulfilled their production targets or surpassed

them. Yet generally speaking the output of light industry still falls behind the demands of the market.

The potentialities of our light industry are great. The question is how fast we can climb the ladder of production technique, how fast we can improve industrial management, and above all how we can obtain an adequate and steady supply of the raw materials, the source of which is agriculture. In 1954, because raw material was inadequate, we used only 80 to 90 per cent of our textile capacity, no more than 60 per cent of the capacity of our leather industry, and 50 per cent of that of our edible oil and flour industries. For the tobacco and match industries the figure was only 33 per cent.

To mitigate this difficulty it is now planned to intensify the collection of all used materials for which modern industry has a use—old cloth, used cotton, used rubber, waste paper, etc. We shall also minimize the loss of raw materials by improving their transport and storage. New factories are being built to produce sugar from beets as well as cane, to produce paper-pulp from cane residue instead of wood, to manufacture substitutes for cotton, wool, linen and silk. Some spinning mills are turning out yarn of mixed cotton and flax, or mixed wool and flax. Some cloth of mixed silk and linen is being produced.

If certain factors limit present investment in industry, this is even more true for agriculture. Our mechanized state farms are still few and mainly educational in function. We will not be manufacturing large numbers of tractors until after 1957. We have yet to develop the oil industry sufficiently to supply fuel. Large-scale irrigation works, such as the Yellow River project, are still in the stage of preparation, with surveys incomplete and hundreds of engineers to be trained.

For the present, agricultural progress must depend chiefly on better use of labour power and land, on limited technical advances such as improved animal-drawn ploughs, on small-scale water-works and land reclamation, and above all on the development of collective management. At this moment, state investment in agriculture is less important than the consolidation and extension of our agricultural producers' cooperatives.

The state has allotted for agriculture, in the five years 1953-57, the sum of ¥8,400 million. This includes afforestation and irrigation; for reclamation work by soldiers; and for long-term loans to the agricultural producers' cooperatives. It is nearly 11



per cent of the total expenditure for the First Five-Year Plan. To it we must add the new investments in farming by cooperatives and individual cultivators which, we can estimate on the basis of a recent sampling, will come to some ¥10,000 million in the course of the five Plan years. The grand total of state, private and cooperative investments in agriculture can therefore be calculated at ¥18,400 million, or more than ¥60 per acre of cultivated land. Under present conditions, this cannot be regarded as a small sum.

The output of agriculture and its auxiliary pursuits in 1957 is expected to be 23.3 per cent above the 1952 figure (representing an average annual increase of 4.3 per cent). Sugar beet, sugar cane and tobacco will show the biggest rise. The increase over 1952 will be about 25 per cent for cotton, nearly 20 per cent for linen and flax, and a little over 17 per cent for grain. As the grain production grows year by year, so will the consumption of grain products. In 1954, the average consumption *per capita* in the villages had reached 616 lb.

During the five years of the Plan 6,446,600 acres of new land will be opened to cultivation. Reclamation will be done by individual peasants, cooperatives and state farms. State farms will number 3,038 by 1957, and 141 of them will be mechanized. The latter will have 5,146 tractors, and will be cultivating 1,263,300 acres, an area 3.7 times that in 1952. Additionally, 194 tractor stations, with a total of 2,897 tractors, will be assisting the cooperatives in reclamation, and in the cultivation of 590,000 acres. In short, by 1957, tractors will be in use on 1,853,300 acres of land. This is only a small embryo of mechanized farming, since it represents less than seven-tenths of one per cent of the cultivated land of China, but it is a start toward faster progress later.

The First Five-Year Plan covers a wide range of constructive work. Though chiefly concerned with the development of industry and agriculture, it also deals with communications, commerce and education, which are required to promote and support our industrial and agricultural progress. More railways are to be constructed; during the five years freight volume will more than double, and the number of passengers carried will increase by 59.5 per cent. Internal navigation will be expanded and the cargo volume will increase over 4.2 times. Coastal shipping will be almost trebled, highway motor transport will grow over 4.7 times. There will be about 3.8 times as much air freight, and postal routes will increase by 45.2 per cent.

Stable prices and ample marketing facilities are necessary to success in building a socialist economy. The stabilization of prices in China began in 1950, shortly after the establishment of the People's Republic. It commenced with the balancing of state finances, as a consequence of which money values, and therefore commodity prices, were stabilized as well. The state stockpiles resources and essential commodities such as grain, raw materials and manufactured goods which can be used to meet the demands of the market. This prevents mischief by speculators and keeps prices at the level desired. During the five years of the Plan, the total volume of retail trade will increase by an average of 80 per cent (for cigarettes by 87 per cent, machine-made paper by 89.2 per cent, knitted goods by 105.3 per cent, sugar by 122.9 per cent and kerosene by 143.5 per cent). During the same period, our foreign trade will increase by 66.5 per cent. Such phenomenal progress in both domestic and foreign trade has no parallel in China's past history.

Our educational plan too is geared to socialist industrialization. Within the five years, 283,000 young men and women will graduate from universities and colleges; 94,000 of them in technology and engineering. By 1957, we will have 434,000 students in 208 universities and colleges, including 177,000 taking technical and engineering courses. Special training schools, night schools and correspondence schools, serving people already engaged in active work, will increase in number. As for ordinary middle and primary schools and teachers' training institutes, they will absorb no less than 5.54 per cent of the total expenditure for the First Five-Year Plan. We spent 14.9 per cent of our 1953 budget for educational and cultural purposes alone.

What will we have achieved by the end of this Plan period?

Firstly, by 1957 China will be a semi-industrial nation. In 1952, our modern-type industry produced 26.7 per cent (in value) of the total output of industry and agriculture. In 1957, this proportion will have risen to 36 per cent. The average annual rate of our industrial development for the five years is to be 14.7 per cent, much higher than the 6 per cent that was the peak rate for Germany when she was industrializing at the end of the nineteenth century, or the high boom rate of the United States after the First World War.\*

\*The rapid rise in productivity since the socialist transformation has assured that by 1957, industry's proportion of the total national product will exceed 36 per cent. This also indicates that the rate of development will be higher than that mentioned above.

Secondly, by 1957 China will have a considerable stock of capital goods for the further development of industry. Our rate of production for capital goods is higher than for consumers' goods. In 1957 capital goods will account for 45.4 per cent of the total value of industrial production (in 1952 it was only 39.9 per cent).

Finally, and above all, China will be well on the way toward socialism. In 1953 the socialist sector of our industry (state and cooperative enterprises and those under joint state-private management) produced 61 per cent of all industrial goods. By 1957 this will rise to 87.8 per cent. In the villages, at least one-third of all peasant families will be organized into agricultural producers' cooperatives. During the five years of the Plan, the volume of private retail trade will increase, but its share in the total retail trade will shrink to 21.1 per cent.\*

In brief, the job of the First Five-Year Plan is to begin socialist industrialization in China, to take the country one step nearer to socialism.

\* These projections have already been surpassed. See "The Plan: Lessons and Achievements" on page 132.

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## More Saving: Quicker Building

by CHING CHUNG-HWA

**I**N the large-scale construction that is going on all over China, one of the foremost tasks for ensuring success is the practice of economy.

We are investing huge funds in the transformation of China from a backward into an industrialized country. The total outlay for economic construction and the development of culture and education in our First Five-Year Plan alone will amount to ¥76,640 million—equivalent in value to over 933 million ounces of gold. A large proportion of this sum will go to the building of heavy

industrial projects which will take a considerable time to complete and put into production.

Where does this huge capital come from? China is not dependent on foreign loans, neither does she obtain capital by plundering other countries or by the exploitation of her own people. The sole source of capital—and this is a principle of socialist construction—is the creation of wealth by the labouring people.

It stands to reason, then, that the more we produce the more speedily and efficiently we can carry out our capital construction, and that it is imperative to avoid waste of any kind, whether of material, labour or time.

We are making great strides both in construction and production. But it cannot be denied that at the commencement of our large-scale construction there were instances of inefficiency, extravagance and waste. Some of this was due to lack of experience, but more was due to insufficient consideration of economy or practicability and to the pursuit of impressive appearances regardless of cost.

In the past few years we have already reduced costs and cut down waste considerably—in building, in the installation of equipment, in production, transport and communications. But much remains to be done and we know that the best way to overcome faults is to expose and criticize them frankly so that we can do better.

The government has therefore been conducting an economy drive for active saving in every branch of construction, in all the manufacturing enterprises and in everyday life. It set an example to the whole nation this year by reducing the personnel of government departments by almost 40 per cent, transferring a large number of workers to direct production or local government jobs where their experience was needed.

In the First Five-Year Plan, over seven thousand building projects, large and small, are being undertaken almost simultaneously. New factories, mines and power stations are going up; miles of new railways are being laid; whole new cities and districts with factories, homes, shops, schools, hospitals, cinemas and offices are being built. These are all priority tasks. On them depends the first stage of our advance to socialism.

On the big capital construction sites we are trying to use the most up-to-date building technique and to make the buildings fit to house and utilize the most modern machinery and equipment.

To do this we cannot stint expenditure, but we equally cannot afford waste. Sometimes waste has come from too much haste in planning—an over-anxiety to get the work started which has necessitated subsequent changes and thrown the whole job out of gear, left workers standing idle, tied up building materials and caused stocks to spoil. Sometimes it has arisen from poor organization, so that valuable building machinery has not been fully utilized, materials have not arrived on time, and the work has gone in fits and starts. All these and other defects have been openly criticized and discussed by the whole people; the attitude that a certain amount of waste is unavoidable or that minor, isolated instances of waste are unimportant, has been thoroughly repudiated.

On the basis of experience already gained in the practice of economy on the capital construction sites, the government has reached the conclusion that in these big projects the cost of construction and the installation of machinery can be brought at least ten per cent below the estimated cost in the original plans. If this is achieved, enough money will be saved to build an iron and steel centre capable of turning out a million and a half tons of steel annually.

There was a further tendency—to think that we can do everything at once in relation to the building of social and recreation facilities. In Shanghai, to give one example, an electrical equipment factory built a skating rink for its young workers; then, feeling that the older people might think themselves neglected they provided a recreation centre which was eventually surrounded by a fine ornamental garden. This was all very well, but it transpired that in the meantime the ventilation in the factory itself was inadequate and the workers' health was suffering as a result. The enterprise had not kept in mind the fact that the basis for an improvement in living conditions lies in more production and that first things must come first.

The design of public buildings has come in for a great deal of criticism in recent months. Anyone who has seen Peking knows the broad, lofty roofs and wonderful decorations of the old Imperial Palace or the Temple of Heaven—magnificent examples of national style in Chinese architecture. Architects and planners, with a praiseworthy desire to make our public buildings conform to the finest of our tradition, had begun to apply this kind of decoration to every kind of structure. But this proved tremendously expensive.

The Geological Institute at Changchun, built on the existing foundations of an unfinished palace intended for the puppet emperor of "Manchukuo", was crowned with a roof made from 200,000 glazed tiles. Big granite terraces, very impressive but of little use, covered an area of 718 square yards on either side of the entrance gate. The usable floor-space of the whole building was less than half the total, and the cost per square yard was 140 per cent above the amount sanctioned by the government for buildings of this kind.

Examples like this, repeated in other cities, brought the planners up with a jerk. The expression "big roofs" became the synonym for all kinds of extravagant building; films, press and radio campaigned actively against it.

After a great public discussion in which the whole people joined and after a series of exhaustive meetings by the planners themselves, new standards of austerity were agreed on. It has been found quite possible to put up very pleasing buildings in a more functional style which can later on be ornamented, when we have reached the stage at which more sumptuous decoration is possible and suitable. The limits to permitted expenditure have been tightened. Better use of space is being planned.

By the simple process of eliminating unnecessary ornament the cost per square metre of a block of offices to be built for a branch of the Railway Ministry at Wuchang was reduced by one-third. A similar revision of plans for thirteen projected buildings in Peking has yielded a saving of ¥1,700,000 and the available floor space was actually increased. Such saving means that we can get more coal or oil out of the ground, build more railways, or open up more land—and do it more quickly than planned.

Production methods and costs, both in old and new enterprises, are being subjected to fresh scrutiny as the Five-Year Plan passes its half-way mark. We have discovered instances of mismanagement, poor quality output, wasteful methods, and careless use of raw materials. It is here that the workers have shown great enterprise and initiative in making economies. Working together with the managements, and introducing economy as a basic part of the emulation drive, they have performed tremendous feats that have doubled the effect of their production campaigns.

The state and privately owned cotton mills in Shanghai, for instance, succeeded in reducing the amount of cotton used to make each bale of cloth by an average of 7.7 pounds; they did this by

popularizing a whole series of innovations — improving their machinery, seeing that no raw cotton was left in the sacks, cleaning and utilizing that which fell to the floor during spinning and weaving. The result has been that during 1954 and the first half of the current year, they have saved 2,650 tons of cotton—enough, if woven into cloth, to make over three million suits of clothes.

Examples such as this could be repeated in every branch of manufacturing industry. Some factories have started "Salvage Days" in which they endeavour to complete a day's production out of material recovered from previous waste or rejects. Others set up salvage bins into which all rejected parts or items are put, to be reconditioned or turned into useful scrap. At Anshan, for example, the electrical equipment department in April and May of this year made over 100 switchboxes and safety appliances from materials collected in salvage bins.

A remarkable feature of the government's economy drive has been the response from the youth. "Youth Economy Teams" have been formed both in factories and other industrial centres as well as in the countryside. The first such team appeared in August 1954 on the No. 5 construction site at the Changchun Engineering Company. It was followed by others on building sites elsewhere and then began to spread to the factories. In October of the same year the young workers of the No. 2 workshop in the Shanghai shipyards organized that city's first Youth Economy Team, and the idea caught on rapidly in factories all over the city. A year later, at the end of September 1955, there were more than six thousand Youth Economy Teams working in the big cities, with over 300,000 young factory and office workers participating in them.

The tasks they undertake are many and varied. They collect scrap metal and rejected building material which have been discarded around factories and sites, and organize their sorting and transformation into useful material. In the past year alone, these Youth Economy Teams have salvaged something like a hundred thousand tons of scrap metal and building materials for the state.

They gather up rejected machine parts and either repair them or send them for scrap. Copper and other metal filings are cleaned and turned back into ingots. In Shenyang (Mukden), sufficient scrap steel was recovered last year to make 135,000 ploughshares for the farmers.

Young peasants and village people organize drives to prevent waste of grain or cotton. Some 70,000 young people in Shensi province went gleaning after last summer's harvest and gathered enough grain to provide a year's food supply for almost 4,000 workers. The New Democratic Youth League aims to win a hundred million young people to participate in the movement in the countryside—it could help to increase the grain supply by tens of thousands of tons.

The drive for increased economy has great positive significance. It has already helped to focus attention on the positive gains to be made from saving, and is fostering an increased sense of responsibility towards care of state property. The economy movement is one of the guarantees that the enormous capital needed by our socialist construction can be accumulated; it forecasts the successful completion of the First Five-Year Plan.

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## The Plan: Lessons and Achievements

by YUNG LUNG-KWEI

CHINA is ending the fourth year of her First Five-Year Plan (1953-57). But already the targets set for the full period have been reached or surpassed for many important industrial products—including steel, machine tools, cement, cotton yarn and cloth, motor tires, paper and 20 others. Agricultural production too is running about a year ahead of schedule. Equally important, as Liu Shao-chi noted in his political report to the Eighth Congress of the Chinese Communist Party last September, there has been "total and decisive victory in the socialist transformation of agriculture, handicrafts, and capitalist industry and commerce."

To give more idea of the progress made, we will cite some facts from the heavy industries, the basis of economic advance. National steel production for 1956 will be 4.5 million tons, or nearly 3½

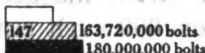


## HOW FIRST FIVE-YEAR PLAN WILL BE OVERFULFILLED

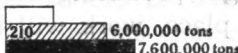
Output in 1952=100 . Output originally planned for 1957 . Present Plan for 1957



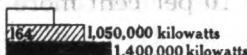
Cotton cloth



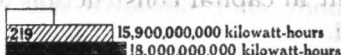
Cement



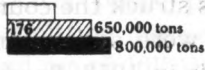
Electric motors



Electricity



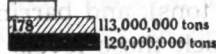
Machine-made paper



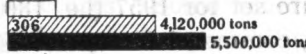
Machine-processed sugar



Coal



Steel



Generators



times as much as in 1952. China will make 27,000 machine tools, which represents a doubling over the same period. Among products it had never made before, the country is now manufacturing not only motor vehicles and railway engines but also jet aircraft, as well as the propeller-driven kind. Other new items are steel rails weighing 50 kg. per metre, and 12,000-kw. steam turbines and generators. Many steel mills, coal mines, power stations, and machine-building, chemical and non-ferrous metal plants have been built in different places. A large number of important existing plants have been technically re-equipped and modernized.

Revised annual Plan figures for industrial production for 1957 promise even greater achievements. Next year China is to produce 5.5 million tons of steel, 120 million tons of coal and 30,000 machine tools. Industrial output is to surpass the original Five-

Year Plan by 15 per cent. Industry (including handicrafts) will account for 50 per cent of the total industrial and agricultural wealth produced in the country.

The First Five-Year Plan, as originally drafted, called for work on the construction or full renovation of 694 industrial and mining enterprises in the above-norm category,\* and 445 of these were set to begin producing before 1957. With the acceleration that has taken place, work will be done on 800 such enterprises, and 500 will go into production. Apart from this, thousands of below-norm projects will also have been completed. Total investment in capital construction will be 10 per cent more than was planned.

New railways built in the first four years of the Plan are to total 2,867 miles, 335 miles more than the original five-year target.

In agriculture, grave natural calamities struck the country during three of the past four years. There were serious and widespread crop losses from droughts and floods in 1953, floods in 1954 and a typhoon in 1956. Nonetheless, grain output this year is up to the figure set for 1957 (i.e. 180 million tons), and barring future calamities, commercial crop totals will reach those levels too. This is the result of the greater productivity of an organized peasantry, of its greater ability to combat natural scourges and make up for losses by timely replanting and other means, and of large-scale technical and other help from the government.

In the socialist transformation of agriculture, the Plan called for the entry of one-third of China's peasants into cooperatives by the end of 1957. But today, nine-tenths have already done so. Calculating on the basis of output, private industry is 99 per cent converted to joint state-private operation (the figure for private trade and services, calculated on the number of enterprises, is 68 per cent). Some 90 per cent of the handicraftsmen now work cooperatively.

Does the extent of its pre-schedule fulfilment mean that the First Five-Year Plan was too conservative? This is the same as asking, "What should be the rate of development in China's socialist construction?" The experience of the past four years, of difficulties encountered and overcome, sheds much light on this question.

\*The "norm" is a measure of investment set in capital construction. It varies for different fields. In China's First Five-Year Plan, to give some examples, it is ¥10 million for a steel mill, tractor plant or shipyard; ¥6 million for a cement factory; ¥3 million for a cotton mill.

Obviously, in a planned economy, the development targets for various branches of the national economy must be definitely set out. The principle followed has been that planning should be "energetic and sound".

"Energetic" means that planning should take account of all favourable conditions, production potentials and the development of mass initiative, and that targets should be fixed according to fairly advanced standards. "Sound" means that adverse factors and possible difficulties in each period should also be thoroughly estimated and weighed, so as to ensure that the planning be reliable, practical and steady, and that disproportions should not throw the actual work out of gear.

The carrying-out of the Plan during the past four years has shown that the targets set were generally appropriate. In drafting the yearly plans, proper arrangements were made, circumstances permitting, for utilizing all potentialities so as to raise production and overfulfill the original annual targets.

On the other hand, planning is a new thing in China, and mistakes were made at various junctures. Some involved over-great haste, others an underestimation of the possibilities and a consequent undue slowness of action. Both caused temporary difficulties from which lessons were drawn.

In 1953, for example, some departments pushed building ahead rather blindly. Since large-scale construction had begun, they thought that all types of projects, both the more and the less important, could be launched at the same time. Some administrators forgot that the accumulation of funds was still in its early stages and that many handicaps had been inherited from China's age-old economic backwardness. Corrections, therefore, had to be made on the basis of centering the main effort on projects and undertakings of key significance to the national economy, and proceeding to others step by step as the situation warranted.

In contrast with this premature rashness in building was the underestimation of the possibilities for rapid socialist transformation. Some political leaders in the countryside underestimated the socialist awakening of the peasants, and held them back when they wished to go forward.

The emphasis in China's economic development on industry is properly so, since this is her weak point. But precisely in such a country, with a population over 80 per cent rural, agriculture is the basis of industrial development and requires unflagging at-

tention. When farm cooperation reached its high tide last autumn, it naturally gave great impetus to agricultural production—creating vast new raw material resources and a vastly enlarged market for industry. In its turn, the intensified economic activity made greater demands on heavy and light industry, transport, the trading system, education and cultural work.

It was in this situation that the “outstanding workers’ campaign” was launched in the factories and mines to turn out more and better products more quickly and cheaply. Its essence was that the best experience accumulated at the point of production in each industry should be spread through the industry as a whole. Outstanding workers’ conferences, held on a national scale during early 1956, defined and popularized 190 important new methods in heavy industry, 400 in textiles, 232 in other light-industrial branches and 203 in the railways. All are contributing greatly to the rousing of efficiency, the reduction of cost, and the improvement of work-techniques and of management.

Similar campaigns were carried on among workers in commerce, education and culture. They represent the integration of the workers’ socialist initiative into the forward movement of the national economy as a whole. This has been an important factor in the fulfilment of the Plan ahead of time.

Construction sites, as well as production units, have exchanged and popularized useful experience. As a result, many designing and building time-tables could be considerably shortened. To build a textile mill with 100,000 spindles and 3,500 looms, for example, a year and a half used to be allowed; now 10-12 months is deemed sufficient.

Furthermore, thanks to the efforts of administrators, technicians and workers, more than a fifth of the 141 large-scale plants completed in 1953-55 have already reached or exceeded their rated capacity. Production at the aluminium plant at Fushun, the first of its kind in China, surpassed its rated capacity by 10 per cent in the first year. Many other new units, experience now shows, will reach full capacity ahead of schedule. This too contributes to the fast growth of production.

Alongside these positive developments, leading to overfulfilment of the Plan, there have been negative ones. The great advances in agricultural organization led to some too-hasty and ambitious capital-construction schedules in 1956. Shortages of steel, cement and some other building materials resulted, and could be made up

only by drawing on accumulated reserves and stocks more heavily than was warranted by the whole Plan. In current production, many more double-share wheeled ploughs were made than the farms needed at the moment, putting an unwarranted strain on steel supplies. Agricultural-equipment factories suffered a fever of frantic activity in one period. They relapsed into temporary inaction when a halt had to be called to check the flow of surplus output.

Conservatism and rashness, clearly, can both do great harm in a planned economy. Obvious too is the importance of a proper proportion between the developments in various fields.

One of the main problems of correct proportion is that between the development of heavy and light industry. The building of heavy industry must have priority; that is a fundamental principle. China's economic backwardness, which has continued so long, can be wiped out only when she herself can supply the equipment, materials, and technical skills needed to develop the national economy of 600 million people. Therefore, during the past four years, the highest speed was set for such branches as metallurgy, machine-building, power, coal, oil, chemical industry, transport, etc, which in old China were the weakest of all.

This has proved correct. The output and range of steel products has been raised considerably. Giant plants for the manufacture of seamless tubing, heavy rails and structural shapes have been built. Many engineering works and other important plants have been set up or expanded. Without these, the complete manufacture of locomotives, trucks, aircraft and metallurgical equipment in Chinese plants, mainly from Chinese materials, would have been quite impossible.

But at the same time, the development of light industry must have due attention. Failing this, not only will the rising needs of the people remain unmet, but basic industrialization itself will be adversely affected. An insufficiency of consumers' goods, for instance, would make it hard to maintain price stability. Peasants, unable to buy what they need with their increased income, would not be willing to raise production or sell their surplus. Light industry, with its quick turnover, is a big profit-earner for the nation. Were it to be insufficiently abundant or active, these would be less capital for investment in the heavy branches.

In view of these considerations, China decided to raise the investment in the building of light industry this year—from 11.2

per cent of the total investment in all industry to 12.5 per cent. The number of above-norm light industry factories erected during the First Five-Year Plan will increase from 65, as originally fixed, to 99. Such a correction has become possible because agriculture can now supply more raw materials.

Despite its still relatively low share in the construction programme (assigned expenditures being only 1/7 of those for heavy industry), China's light industry can fulfil its production targets and, in general, satisfy the current needs of the people. This is because the number of existing factories is fairly large, and their capacity can be used more fully. Most of the private plants recently transferred to joint ownership were in the light industry field. Now that they are gradually being integrated in national planning, they can work more efficiently. Handicraft production, under its new form of organization, is also rising. Both will play an increasingly important part in the supplying of consumers' goods.

It is China's policy, while industrializing, to raise the living standards of the people step by step, in harmony with the growth of output and of the productivity of labour. Can this be done? Is it possible to raise living standards while continually investing huge sums in capital construction?

Our answer is that, based on China's experience in the last four years, a gradual rise in living standards can be ensured while industrializing at an unslackened pace. This depends on the correct handling of another question: what part of the national income to accumulate as capital, and what part to assign for consumption by the people?

National income, as we define it, is the total social wealth created in industry, agriculture, building, transport and commerce, directly serving production, minus the value of means of production consumed (including depreciation) in producing the wealth. After distribution and re-distribution, the national income falls into two categories: the accumulation fund and the consumption fund.

In 1956, the accumulation fund, which goes into capital investments, was 22.8 per cent of the national income. This proportion has proved generally correct and beneficial to China's economic development. In the coming years, the proportions will be kept roughly the same, because experience shows that this ensures a relatively high speed of industrialization. If accumulation were less, industrialization would slow down and the improvement of living standards would have no sound foundation. But

if more went to accumulation, improvements in the material and cultural life of the people would be deferred. Since our country is backward economically, with comparatively low living standards and a tremendous population that is mainly rural, this would be detrimental to the people's interests.

Since production increases constantly, the actual amount of money in the consumption fund, as well as that in the accumulation fund, is larger each year, so that the 1956 consumption fund was nearly 30 per cent above what it was in 1952. This has been reflected in a 14½ per cent general wage increase for workers in 1956, and higher annual incomes for agricultural cooperative members.\*

All the facts show that China's large-scale industrialization does not exclude a concurrent improvement of living standards. The two things do not contradict each other, in principle or in reality. Though the improvement in livelihood cannot yet be called substantial, it is constant. Immediate experience, as well as understanding of the goal, tells the people that really big advances will be made when China becomes more modern and industrialized.

Now China is preparing to draft her Second Five-Year Plan. In this work, account is being taken of the valuable lessons of the past four years.

\* See "What the Farmer Gets", p. 276, and "Fatter Pay Envelopes", p. 281.

**NOVEMBER 1956**

### **Karamai: Biggest Oil Discovery**

by TAN MAN-NI

**W**HEN OIL was struck at Karamai in the northern part of the Sinkiang Uighur Autonomous Region on October 30, 1955, it signalled a turning point for China's petroleum industry. Less than a year later, twenty test-wells, dotted over an area of about 1,500 square miles, were already producing. Exploration to dis-



cover the total area of the Karamai oil-bearing district is still going on. But whatever it reveals, it is already certain that this is the richest oil reserve so far discovered in China.

This immense field lies between two giant mountain ranges, the Tien Shan and the Altai, at the far northwest tip of China. It is located at the western end of the Dzungarian Basin. The name, Karamai, which until recently never appeared on any map, means "Black Oil" in the Uighur language.

A new road links Karamai with the older Tushantze oilfield at the foot of the Tien Shan range, about 100 miles to the southeast. Tushantze, first explored in 1935 with the help of Soviet geologists, began to produce in 1938 but was afterwards much neglected by the Kuomintang. In 1950 it was restored under the operation of the new joint-stock Sino-Soviet Oil Corporation. In 1954, after it had done its work of rehabilitation, the joint corporation was dissolved and all Soviet-held stocks were transferred to China.

The road from Tushantze to Karamai thrusts straight as a spear into the southwestern part of the Dzungarian Basin, a sandy, pebbly waste without trees, water or human habitation. It is only as you approach the end of the plain that you see the derricks outlined against the slope of Mount Jenghiz Khan.

Less than half a mile from the headquarters of the Karamai oilfield is a low hill. The ground here is covered with a heavy layer of tar which, softened by the sun, sticks to the shoes. There is a strong smell of oil. Here and there, from cracks in the ground, streams of oil flow into bubbling black pools. These surface pools, in the past, were known only to nomad Kazakh herds-men. They would take the oil and sell it in distant cities, where it was used for lighting.

In 1951, when the Sino-Soviet corporation was still in existence, it sent a geological team to look into Karamai's resources. They found oil-bearing structures, but were not optimistic. At that time, the accepted theory was that the appearance of tar on the surface meant that the oil-bearing formations had been exposed to the surface by erosion and had evaporated. A new view of the matter was taken only in 1954, when a second team, led by the Soviet expert Uvarov, explored Karamai and suggested that it had great underground wealth. He based his opinion on the similarity between the geological structures there and on the oil-producing "Russian Platform" of the U.S.S.R.



In the summer of 1955, the sinking of the first test well was begun and after three months produced a gusher.

Surveys found that the Karamai pool is, geologically speaking, a kind of stratigraphic trap in a rock formation of the lower Jurassic era. It was thought possible that the oil might originate below the surface of the "Tien Shan Deep" since the Karamai platform is higher than it, and oil in the subsurface formation tends to move from a lower to a higher level. To check this theory, the drilling of widely-spaced test wells was undertaken. Since the spring of 1956, dozens of derricks have appeared in the desert.

The second test-well spouted oil in April, the third in May. Each was more voluminous than the one before. By August, twenty wells had yielded oil, after a maximum of one month's drilling. Most of them are now producing from 10 to 20 tons of crude oil daily.

Conditions for boring are good. There have been very few cases, so far, of wells caving in, freezing of the drilling-pipes, or high-pressure subterranean water. Wells can be drilled by using low-gravity mud, and most of them are relatively shallow. All this means speed and economy.

Today Karamai is nothing like the wild, lonely place the pioneer team found last year. The road is filled with truck after truck laden with seamless pipes, huge transformers, and other equipment from factories in sixteen Chinese provinces, the Soviet Union and other countries. Hundreds of road-builders last summer were widening and reinforcing the highway. Its traffic load was already up to 300 tons of material each day.

Trucks from Karamai carry oil to the refinery at Tushantze, which is to be enlarged. Soon there will be a 34-mile pipeline to bring the crude oil to interim reservoirs, and shorten the road-journey to the refinery. The crude oil in Karamai, the tests have shown, is of first-rate industrial value, and high-grade lubricants can be produced from it.

Drilling goes on day and night at Karamai. After a well is sunk, the derrick is taken away by tractor to the next well without being dismantled. At night, the derricks are floodlit, and one can hear the distant hum of diesel engines.

A new town is rising, replacing the rough encampment of trucks, tents, prefabricated dwellings and dugouts that the workers lived in during the summer. It is overflowing with the sudden

influx of people—Uighurs and members of other Sinkiang nationalities as well as new arrivals from practically all parts of China. Experts and technicians have gone there from Tushantze and the Yumen oilfield in the neighbouring province of Kansu, workers from as far as Anshan, the steel city in the northeast, and truck drivers from Shanghai. Two thousand demobilized army men are on the job after taking a short course in geological prospecting, and geology graduates go straight from the universities.

Although a big working force has been assembled and capital construction is going rapidly ahead, neither is keeping pace with new discoveries as exploration continues. Another promising structure has been reported by prospectors at Uerho, 80 miles northeast of Karamai. Its geological conditions suggest that it may be connected with Karamai, forming a huge oil-bearing district about 1,500 sq. miles in area, underlying the whole of the Dzungarian Basin on the west side of the Manass River.

East of the river, oil-bearing structures have also been discovered during the last six years. Now the hitherto unexplored Kurban-tongut Desert, a sandy dune of 10,000 sq. miles, is being prospected. If oil is found there, as seems likely, it will mean that the whole of the Dzungarian Basin, 57,000 sq. miles in area (about two-thirds the size of Rumania), is oil-bearing, and that several more fields on the scale of Karamai may be found.

Other of China's promising areas are the Tsaidam Basin in Chinghai province, where nine test-wells have already produced, the Ordos region (on the borders of Chinghai, Kansu, Shensi provinces and Inner Mongolia), where scores of oil-bearing structures have been found, and the Szechuan Basin. In addition to the older Yenchang oilfield in Shensi, Yumen in the Chiuchuan Basin, and Tushantze, there are unexplored oil-bearing regions on the Tibetan plateau, in the Tarim and Turfan Basins in Sinkiang, on the plains of the Yangtze and Huai rivers in central China, on the Sungari and Liao River plains in the northeast, and in parts of Yunnan, Kweichow and Kwangsi provinces in the southwest.

But Karamai alone, we now estimate, may turn out to be capable of supplying all the petroleum requirements of an industrialized China for many, many years.



Shanghai Labour Daily

Shanghai merchants and clerks said it with firecrackers: "We're headed for socialism."

## CAPITALIST TO SOCIALIST

IN the long struggle for national liberation, the Chinese capitalist class divided itself into two groups. The bureaucrat-monopolists who were at the same time high policy-makers in the Kuomintang took the side of imperialism and reaction. Few in number but immensely wealthy, they did not care if they put China in pawn so long as they increased their own power and riches. But the majority of the country's industrialists and businessmen, who were being crowded out by foreign capital and the government-connected monopolists, wanted the country to be free. They either took some part in the revolution for independence and democracy or at any rate gave up opposition to it. These were the "national capitalists".

In the succeeding years, the national capitalist enterprises showed both their useful and their harmful aspects. The good side was that they helped the revival and growth of production and trade. The bad was that all capitalism breeds wasteful competition, tendencies to defraud and profiteer, and disorderly economic conditions inimical to planning. The Communist Party and the government, basing themselves on the interests of the workers and the whole people, helped the useful activities of the capitalists with contracts, a guarantee of reasonable profits and social recognition. They fought the harmful activities by restricting capitalism in various ways, and by launching a special movement against abuses—the *wu fan*.

In the winter of 1955-56, China's capitalists voluntarily and overwhelmingly took the path that lay open before them—that of proceeding peacefully to socialism with the entire country. Former capitalist enterprises became joint state-and-private. Their former owners stayed in their old positions, or moved to new ones as managers and technicians. They will draw interest for a number of years on the assets they have handed over. Then they will depend, like all citizens in a socialist society, on their own earnings.

## San Fan-Wu Fan—the Big Cleanup

by CHING CHUNG-HWA

LATE last year, at a meeting of the National Committee of the People's Political Consultative Conference, Chairman Mao Tse-tung issued a call for "increased production and the practice of economy". The people of the whole country responded enthusiastically. In government offices and state-run factories, in private industrial and commercial enterprises, they mobilized themselves to assess past work, put their internal affairs in order and gathered strength for the coming effort. To clear the decks for the use of all resources and energies for industrialization, special stress was laid on getting rid of hindrances left by the old society.

The People's Government is the cleanest and most competent in China's history. To keep it that way, to prevent it from being sullied by any bad influence, the movement to remove old abuses was first launched in government organizations and enterprises. It was especially aimed at corruption, waste and bureaucratic practices which provided a fertile soil for both. It became known briefly as the *san fan* (or Three-Anti's).

Another campaign of the movement was then launched in private industry and commerce. Here the aim was to fight such abuses as bribery, smuggling and tax evasion, thefts of state property, shoddy work and the use of inferior materials in construction and the ferreting out of government economic secrets for private speculation. The people called it the *wu fan* (or Five-Anti's).

The *san fan*—*wu fan* lasted for nearly half a year, during which the economic life of organizations and enterprises, both public and private, was subjected to extremely detailed and thorough scrutiny. The process was carried out democratically, with the fullest participation of their entire personnel. At first, many unsuspected abuses were discovered, some of them extremely shocking. But later, when the movement had reached a climax and was nearing its end, positive effects appeared everywhere. Democratic spirit was heightened. Workers became more active in production. Contractors became much more scrupulous in their work on

government orders. In private enterprises, the relationship between capital and labour became more normal, with both parties consulting as to how to increase production, raise efficiency and improve welfare provisions. A new, positive outlook, emphasizing honesty, simplicity and public spirit, spread through the country.

In June 1952, a big conference to organize the All-China Federation of Industry and Commerce was held in Peking. Over 400 representatives of private enterprise were present. All testified that good results had been obtained from the *san fan* and *wu fan*. The stains of the old society had been scrubbed away and the way unblocked for closer unity between the public and private economy in industrialization under the Common Programme of the People's Republic of China, which governs all our activities.

The happenings of the past few months did not represent any "emergency procedure" to meet a "sudden crisis", as some foreign newspapers and magazines tried to make out. On the contrary, their necessity had been foreseen a long time ago and flowed from the facts of the situation in China. The old evils with roots going back for hundreds of years still exist, and it was inevitable that they should have shown themselves once more, to some extent, in the early period of construction.

As the country was liberated, region by region, enterprises belonging to the Kuomintang were taken over and reorganized by degrees without any cessation of work. The old personnel too were retained, and influenced by persistent education. The policy of the People's Government was: "Take things over as they are; reform them gradually."

The *san fan* was in strict conformity with Article 18 of the Common Programme, promulgated on September 30, 1949, which reads:

All state organs of the People's Republic of China must enforce a revolutionary working-style, embodying honesty, simplicity and service to the people. They must severely punish corruption, forbid extravagance and oppose the bureaucratic working-style which alienates the masses of the people.

As to private capitalist enterprise, the Common Programme gave it a definite place as one of the five sectors of our new democratic economy. In the latter part of Article 26, it stated:

... all components of the social economy can, under the leadership of the state-owned economy, carry out division and coordination of

labour and play their respective parts in promoting the development of the social economy as a whole.

The *wu fan* did not change the lawful place of private business or the attitude of the government toward it. It struck only at speculative and dishonest practices that violated this provision and were harmful to the people.

It was in form, not in nature, that the *san fan* and *wu fan* were unique. They were launched as a vast democratic mobilization of the people, such as became possible only after the liberation. This was the root of their great success in unearthing and correcting the abuses at which they were directed.

Every government worker was guaranteed the right to criticize his superiors, both in open meeting and through other forms, without respect to persons or fear of retaliation. The higher the position of those found, on investigation, to be guilty, the greater their punishment. Communist Party members, regardless of standing, were held to the strictest account of all. Thus, although penalties were generally lenient, the few cases in which a death sentence was passed included two Tientsin Party members of long standing, who had been caught in large-scale misappropriation of public funds.

Most cases of corruption discovered in the *san fan*, however, involved persons left over from the Kuomintang, who in their turn were linked with unscrupulous private, commercial and industrial contractors who had bribed them. This was how the *san fan* campaign in government and public organizations and the *wu fan* in private business circles led to one another and were interlinked.

Bribery, smuggling, tax evasion, theft of state property, shoddy work, substitution of materials and corrupt misuse of government economic information were very common in the old society. They did not disappear entirely after liberation, but in some cases even found new ground to grow on. After all, private enterprise still constitutes a relatively large proportion of the economy of China. In the course of the past three years of reconstruction, it has received encouragement from the government in the form of credit, contracts and processing orders—and the number of factories and business houses increased greatly. Under these flourishing circumstances, some businessmen forgot patriotism, the Common Programme and the goal of industrialization and began to seek higher profits in the old illegal ways.

The *wu fan* campaign which fought this set of evils was conducted as thoroughly and democratically as the *san fan*. Workers and shop employees participated fully in discussion and fact-finding. This at first led to false rumours fanned from abroad, that socialism would be "introduced ahead of schedule" and the national bourgeoisie would be "eliminated", but actual facts soon disproved all such tales.

Businessmen themselves took part in the democratic process. In Shanghai, where the largest number of private enterprises is concentrated, many big industrialists and merchants, each representing a major concern, held a regular forum to discuss their own and each other's business practices, determine where they had taken illegal advantages of the government and people, and thus clear their accounts and their consciences. While the number who had committed one or more of the five transgressions, which formed the main target of the *wu fan*, was revealed to be considerable, that of serious and determined violators who refused to make amends was small. Most made full reports on the forms provided for the purpose and undertook to pay their back taxes or make other restitution, fairly assessed, for which they were liable.

The principle to which the government adhered throughout was that both the *san fan* and *wu fan* should be carried out with the purpose of improving production kept clearly in view, and that inspection should be orderly, not hasty. While inquiry was strict, the disposal of cases was carried out with leniency. Those who gave a frank account of their violations, however serious, were treated with consideration. Severe punishment was reserved for those who did not.

In accordance with its policy of "neither impeding the *wu fan* nor hindering production", the government continued to place orders and contracts with those private enterprises that were under scrutiny or had actually been assessed for violations, even granting them loans and helping them in other ways to maintain their work during the process.

Everyone who took part in the two campaigns gained an education.

The people as a whole came to see that without such a clean-up, the whole movement to increase production and save resources would be undermined, the future of industrialization endangered,



and their hope of a better life stolen. Among the kind of facts that convinced them of this were the following:

At the New Asia Hotel in Shanghai, where government purchasing agents often stopped, unscrupulous businessmen surrounded them with every form of temptation. A group of Shanghai metal merchants formed an organized gang which stole and pooled information on forthcoming government orders. They then hiked up their prices in advance.

The *wu fan* campaign also uncovered the direct harm done by unscrupulous profit-seekers to the livelihood of the people. The labour insurance provisions which Chinese workers began to enjoy in 1951 led to a great increase in the demand for medical supplies. Wang Kang-nien, a private drug merchant in Shanghai, took advantage of this to bribe functionaries who made bulk purchases and induced them to accept faked medicines. Wang Min-chuang, senior staff-member of a government-operated medical corporation in East China who had previously been a merchant, conspired with private druggists to palm off out-dated and sub-standard supplies on government organizations. In the food industry, the Ma Ling canning factory in Shanghai, which had received ¥30,000 million\* (US\$1,347,000 or £481,000) worth of government orders, substituted inferior meats for those specified and gave short weight.

The success of the movement, which made the issues involved so clear to all and heightened the people's vigilance on the basis of their own interests, will serve to prevent such brazen, unpatriotic and criminal actions in the future.

Because dishonesty was driven from industrial and commercial life, it became possible to make cuts in the prices of most commodities. In March and April, the big state-run department store in Peking reduced prices on 4,000 items, the one in Shanghai on over 10,000 items. Since Shanghai supplies most of the manufactured consumers' goods for the whole country, the effect was nationwide.

The most direct contribution of the movement, however, has been in production. Immediately after the *san fan*, workers in state enterprises all over the country began a productive emulation drive which has produced many new output records. In private factories, after the *wu fan*, the workers, through their trade unions, joined with capitalists who had determined to earn

\*In terms of old currency. The amount would be ¥3 million in terms of the currency in use since March 1955.

profits through higher production instead of tricky dealing to devise ways of streamlining both work processes and management.

When the imperialist interventionists and Kuomintang reactionaries fled from Shanghai, the centre of private enterprise in China, they consoled themselves by saying: "Shanghai is a huge dyeing vat in which everything is sure to change colour. The Communists can get along among peasants in the villages, but Shanghai will corrupt and repaint them to suit itself."

Well, what has actually happened? The dregs in the old dyeing vat did, indeed, stain some who came in contact with them. But the people of China responded by scouring the whole vat clean.

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## Capitalists Cross Over

by CHI CHAO-TING

CHINA is moving to socialism at a faster pace than at first expected. In many industries, and in the number of agricultural cooperatives, figures set for the end of the First Five-Year Plan in 1957 will be reached or considerably exceeded this year. There is also an acceleration in the socialist transformation of private capitalist enterprise.

At the time of the liberation in 1949, the only industrial and commercial property confiscated by the state was that of the bureaucrat capitalists (Kuomintang officials who had misused their position to become monopolists). By contrast, the overwhelming majority of private industrialists and merchants throughout the country kept their businesses. Many who needed help were assisted by the government with bank credits, contracts and other aid.

Late in 1955, even excluding handicraftsmen working and selling for themselves, we could count 130,000 private industrial units in China, employing two million people. There were also

4 $\frac{1}{2}$  million private commercial units. Over a million persons worked in capitalist trade firms, and many millions were small merchants.

What is happening to this host of enterprises and the people who depend on them? How will they be reconstituted and redistributed along socialist lines? When the capitalist section of the economy has disappeared, what will be the destiny of its millions of proprietors and managers?

China's policy toward capitalist industry and commerce is one of gradual, peaceful transformation. It is being carried out successfully, step by step.

In the process of transformation, the government aims to prove to the capitalist elements the superiority of the socialist way of production and distribution, and the benefits they themselves can derive from it. As for the actual transfer of property, the capitalists are being "bought out" gradually and peacefully, to avoid the losses that might be involved in any sudden change.

The results of this policy in the past six years, and the outlines of how it will develop in the future, could be seen from the speeches and decisions at the second meeting of the executive committee of the All-China Federation of Industry and Commerce, held in Peking in November 1955. Most of the 174 committee members and 51 observers who took part were leaders in some branch of private industry and commerce. They came from every province and large city in China. Their deliberations not only gave a detailed picture of the whole field. They also revealed the mental struggle which every capitalist has gone through before accepting one or another stage of this epoch-making and unprecedented transition.

Directly after liberation in 1949, many of the capitalists testified, they were under the influence of enemy propaganda and feared the very word "Communism". Some had fled on the eve of the change and returned when they heard that the People's Government had left their factories untouched and was actually helping them to operate. When they came back they saw that the nation had been unified, that peaceful and orderly construction was the order of the day, that a stable currency had replaced inflation, and that purchasing power had increased. All this was good for trade and it had been brought about as a result of the liberation of China under Communist leadership. These were the solid facts that restored the confidence of the capitalists.

The next phase of the struggle was different. In 1950-51, amid prosperity and high profits, many capitalists forgot that they were living in a China with different aims and different standards from those of the past. Becoming greedy, they resorted to old tricks such as bribery, smuggling, evasion of taxes, theft of state property, shoddy work on government contracts, and theft of confidential economic information for private speculative use. The nationwide *wu fan* campaign against such criminal acts, which took place in 1952, may be considered as the first preparatory step toward the socialist transformation of Chinese capitalists.

Many speakers at last November's meeting said frankly that they themselves had been guilty of such abuses. They told of their grateful surprise when, after the exposure and admission of their errors, the government had not only allowed them to continue in business but permitted their election to leading posts in public organizations. Thus many Chinese capitalists realized that lawless action would not pass unseen, but that the state policy was to encourage them along the new road. They were drawn closer to the government and became more law-abiding. The way was cleared for new steps.

China's policy of socialist transformation for capitalist industry and commerce is clearly set out in our national Constitution, adopted in 1954. The relevant passage reads:

The state makes use of the positive sides of capitalist industry and commerce which are beneficial to national welfare and the people's livelihood, restricts their negative sides which are not beneficial to national welfare and the people's livelihood, encourages and guides their transformation into various forms of state-capitalist economy, gradually replacing capitalist ownership with ownership by the whole people, and this it does by means of control exercised by administrative organs of state, the leadership given by the state sector of the economy, and supervision by the workers.

In industry there are three forms of state-capitalist economy:

The lowest form, government purchase of the products of private industry, became general as early as 1951. While it served its purpose at the time, the mere purchase of output does not enable the state to control production; it excludes the possibility of overall planning, and leaves the commodity market in the grip of capitalist anarchy. Therefore this form has receded in importance.

In the intermediate form, the state places orders for processing (supplying the raw materials) and for the manufacture of goods

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under government contract. This form is of greater importance and has developed rapidly. According to available data, the percentage of the total output of private industry covered by it has grown as follows:

1949	1950	1951	1952	1953	1954	1955 (1st half)
11.8	28.8	42.7	56.	66.4	78.5	83.

The higher form is represented by the state-private joint enterprise. This, in China, is the main form of transition from capitalism to socialism. To be successful, it requires preparation. It also needs a high degree of political consciousness on the part of the private capitalist involved. For these reasons, the organization of joint enterprises has been pushed at a careful, steady pace. Their growth in number is shown below:

1949	1950	1951	1952	1953	1954	1955 (June)
98	294	706	998	1,035	1,744	2,068

By June 1955, the output of the state-private joint enterprises was equivalent to some 60 per cent of the total output of all private or partly private enterprises.

This rapid development has led to a change of method in the setting up of state-private joint concerns. Up to 1955, the change-over had been made enterprise by enterprise. In the second half of last year, it began to proceed by whole trades. In Shanghai, China's greatest centre of concentration of both light industry and private ownership, eight branches of production were converted in this way. They were cotton, wool and linen textiles; the manufacture of paper, cigarettes and enamelware; flour-milling and rice-hulling. Many hitherto-separate factories were combined into larger ones, and their equipment was re-allocated for more rational use. Skilled managerial and technical personnel were also redistributed for greater efficiency. With a given sum of capital, more production could be financed.

In Peking, all formerly private industry had become joint-owned by early 1956. Peking was closely followed by Tientsin, Sian, Shanghai and other cities.

One capitalist has described the development in this way: "We used to cross one by one in row-boats. Now so many want to go over, we have to charter whole steamships."

In commerce, wholesale trade in essential commodities was taken over by the state some time ago. Private retailers now get their supplies mainly from state and cooperative sources. The progressive incorporation of private retailers into the system of state-capitalism, therefore, is not very difficult.

In the lowest form of state-capitalism in this field, private traders buy goods for cash from state-owned factories. Then they sell them retail at a price set by the suppliers, making a profit of from 5 to 10 per cent according to trade and locality. In the intermediate form, the private trader becomes a kind of sub-agent. He distributes goods for state factories, paying a deposit of from 50 to 80 per cent on delivery. After selling at the set price, he is compensated with a commission of from 5 to 9 per cent. Sample figures for August 1955 indicated that about a quarter of the country's private retailers were then operating under one or other of these arrangements.

The highest form of state-capitalism in commerce is also the state-private joint enterprise. Here too, whole trades are being changed over. Peking took the lead by reorganizing the entire cotton piece-goods business in the city into a single state-private concern. This has changed the whole shopping situation for residents of the capital. Outlets of the joint concern, carrying a wide range of goods, can be found even in neighbourhoods that had no cloth shops before. Peking has since accomplished a change-over of all private commerce. Its successful experience is being studied and imitated elsewhere.

When any private enterprise passes over to state-private joint ownership and operation, its buildings, equipment, stocks, circulating capital and other property are priced by experts. The valuation, when agreed to by the capitalist owners, becomes the private share in the joint concern.

Then representatives of both the government and the private shares discuss the proper placement of old managerial personnel. This is based on their abilities, technical skill and contributions toward socialist transformation. The aged and sick who have contributed to building the enterprise in the past are taken care of with pensions or other provisions. The workers, all of whom

continue to hold their jobs under the new arrangement, work with a new enthusiasm.

In the transformation of the eight trades in Shanghai, 563 capitalists and capitalist representatives were involved. Of this number, 22 were appointed to be managers or deputy managers of the new enlarged enterprises, 190 to be directors or deputy directors of factories, 28 as engineers or technicians, 267 as department heads, or assistant department heads. Another 26 were elected to boards of directors, and 13 were retired because of old age. Of the entire 563, only 11, who were convicted law-breakers or proven counter-revolutionaries, were not considered for re-employment.

In the transition from private to state capitalism, therefore, the capitalists not only continue to hold positions. They are helped to develop their administrative and other capabilities.

The profits of joint enterprises were until the end of 1955 distributed in four parts: taxes, welfare funds for the workers, reserve funds for the expansion of the enterprise, and dividends and interest to capitalists, which amounted to somewhat less than a fourth. Since the joint enterprises were far more economic and productive than private ones, the capitalists actually received more net income than before. For example, profits earned by joint enterprises in Peking in 1954 averaged 25 per cent of the total capital invested. One boiler factory actually earned five times its total investment. All the capitalists concerned received their share of the profits with great satisfaction.

Now that whole trades are being transformed and many enterprises are merging, this method of apportioning profits is no longer feasible. After thorough discussion at its last meeting the executive committee of the All-China Federation of Industry and Commerce agreed that profit-dividends to private shareholders should gradually be replaced by interest at a fixed rate.

Kuo Ti-huo (David Kwok), head of the famous Wing On cotton textile enterprises in Shanghai, listing the advantages and meaning of this method in a speech, said:

After the fixed rate of interest method is put in practice, the means of production (belonging to joint enterprises) can be rearranged on a national scale. The relation between capitalist personnel and the means of production will gradually lose the character of private ownership, and the idea of private ownership of the means of production will therefore gradually wear thin.

In a few years, when the living standards of the people of the whole country are raised further, private industrialists and merchants will no longer need to depend on interest for their living. Our level of under-standing will also be higher than now. By that time, to relinquish exploitation will seem a natural thing.

Is such a peaceful transformation feasible in terms of the Marxist outlook? An authoritative editorial published in the *People's Daily* of November 22, 1955, gives the following answer:

In principle, Marxism has never precluded the possibility of peaceful transition from capitalism to socialism, under certain conditions. Marx was of the opinion long ago that, under certain conditions, it would be more expedient for the working class which has seized state power to "buy off" the bourgeoisie in order to achieve the peaceful victory of socialism. Lenin, commenting on this viewpoint of Marx, said. "Marx did not commit himself—or the future leaders of the socialist revolution—to matters of form, to methods and ways of bringing about the revolution; for he understood perfectly well that a vast number of new problems would arise, that the whole situation would change in the process of the revolution, that it would change often and considerably in the process of the revolution."

Lenin himself attempted to achieve socialism through the transitional form of state-capitalism in Russia after the victory of the 1917 revolution. But owing to the international and domestic conditions that Russia faced at that time, the bourgeoisie adopted a hostile attitude toward the Soviet government. The situation at that time compelled the Soviet government to resort to measures to deprive the bourgeoisie speedily of the means of production.

China's national bourgeoisie, to varying extents, took part in the people's democratic revolution against imperialism and feudalism or adopted a neutral attitude toward it. It did this in a united front with the working class. When the People's Republic of China was founded, the national bourgeoisie gave it support. Moreover, China's economic backwardness makes it necessary for the people's regime to establish an economic alliance with those national bourgeois who are willing to accept state-capitalism.

The Chinese bourgeoisie will not be "bought out" at one fell swoop. As planned, the period is to be 15 years or less, but present developments indicate that the process will be faster. The *People's Daily* explains:

This method of buying out means that during the present period the working class, while producing to satisfy the needs of the people and the state, will also give part of the profits to the bourgeoisie. The state does not have to spend additional money to buy the means of production



from the bourgeoisie. The total sum of the profits to be given to the capitalists comes to several hundred million yuan a year, or several thousand million yuan in the entire period of more than ten years.

What will happen to the capitalists when the transition is fully accomplished? The experience they have gathered so far on the road to socialism has already dispelled their fear of communism to a considerable degree. It has mentally prepared them to go further forward. In private industrial and commercial circles, a group of patriotic and progressive people have emerged. Such men and women are not only prepared to accept socialist transformation themselves. They are also in a position to help others to accept it.

Before the meeting of the All-China Federation of Industry and Commerce began, Chairman Mao Tse-tung held an informal discussion with its executive committee. Encouraged and inspired, seventy-three representatives told the full session their experiences in the change-over to joint state-private operation, and reported the careful arrangements that had been made to ensure them a reasonable private income. They had no fear, they said, for the future when all the means of production are finally nationalized. They now understood that under socialism there would be neither economic crises nor unemployment.

Many speakers told of sons and daughters who were refusing to accept or inherit shares in their businesses. These young people, in a country moving to socialism, saw no need for inherited private wealth and did not want to be burdened with a capitalist reputation.

"Whether a man makes a success of his enterprise is not to be measured by the money it earns," said the leading Shanghai cotton textile magnate, Yung I-jen. "It should be measured by the standard of whether a certain action is beneficial to the task of socialist transformation."

This is the new attitude of the most forward-looking section of the Chinese bourgeoisie, which has not only accepted the prospect of socialism but is helping others to understand it. And it is gaining more and more adherents. The chairman of the All-China Federation of Industry and Commerce, Chen Shu-tung, put it in these words: "The socialist transformation of capitalism does not only change enterprises. It also changes men."

## Shanghai Steps Into the Future

by YEH CHOU

EVERYONE knows Shanghai; half the nation's private industry and business were once concentrated here. On January 20, Shanghai followed Peking in the voluntary transfer of all capitalist factories and shops to state-private joint ownership. Since that time, the same thing has happened in every large and medium-sized city in China, and in many small towns as well.

The day when Shanghai entered socialism was unforgettable. The streets of the great metropolis, with its six million people, overflowed with celebrating crowds. They were workers, shop assistants, handicraftsmen, owners of converted enterprises, peasants from the nearby countryside. A cavalcade of shiny limousines, filled with smiling, well-dressed businessmen and their wives and children, drove to various public offices. The news they brought was that the municipal government had accepted the mass application of the majority of Shanghai's 200,000 industrialists and merchants, who up to then had still operated on a private basis. As a result, all their enterprises were now joint-owned. And the capitalists, besides receiving interest on their assets, were preparing to become executives and employees under the state.

This event marked a decisive success for the peaceful socialist transformation of capitalist industry and commerce, a basic policy of the People's Republic of China set down in its Constitution.

Why were Chinese business people willing to accept transformation, indeed happy to do so?

These were not the bureaucrat-capitalists closely tied to imperialism and Chiang Kai-shek, whose vast monopolies had been confiscated at the time of liberation in 1949. They had suffered economically and politically in the old semi-colonial, backward China, and had accepted the people's revolution as the only way out for the nation. Some were big owners like Yung Yi-jen, whose textile enterprises were valued at 30 million American dollars, and who had pioneered in going in on a joint-ownership basis with the state. The vast majority were medium and small. But all had

benefited from the stability, honesty and increased purchasing power brought into China's economic life by the revolution—which saved many from ruin and had given them new prospects.

Yung Yi-jen, for instance, chose to stay in new China and is now an industrial leader and a member of the National People's Congress. But one of his brothers, who fled and set up factories in Thailand, has since gone bankrupt under the stress of fluctuating market conditions and imperialist competition—neither of which exists in China now.

In the six years since the People's Republic of China was established, these business people had seen their once trampled-on country grow into a great power and begin to build a modern planned economy. The government had treated them fairly, while fully explaining its socialist aims. Most of them were already linked with the growing socialist economy: working on government orders, processing government raw materials, selling goods that were supplied by a wholesale trade already largely in state hands. Their sons and daughters were studying to live and work in a socialist country and had no interest in their fathers' businesses.

Though their factories were often obsolete and economically incapable of competing with the rapidly-expanding state enterprises, they were not being forced to the wall, as they would have been by big competition in capitalist countries. On the contrary, they were offered interest on their assets and jobs commensurate with their talents, without loss of personal comfort or social esteem. The state, led by the working class, had not prejudiced their political status. Many held political positions commensurate with their ability and desire to serve the people.

I visited many private factories in the period immediately preceding the complete change-over. There I found why so many owners and managers, who had long known that the socialist transformation of private enterprise was inevitable, were now looking at it as desirable—which in fact is why the applications finally came in such a great flood.

Shanghai's engineering industry, until recently, was producing a third of all China's machines. Yu Suei-chang, former manager of the Ta Lung works, once the city's biggest private textile equipment plant, told me that it had been idle for some time before the liberation. But with the revival of the economy, the government gave it plenty of work. This saved it, like so many others, from difficulties arising from old China's economic backwardness.

Some years later, the plant was helped out of difficulties of quite a different character. Now it was falling behind the nation's economic progress. The government had ordered 500,000 spindles to be made in the period 1952-54. Ta Lung had taken the order, but could not keep up with the schedule because its equipment and administration proved inadequate. Looking around for new ideas, Manager Yu went to visit a state textile-machine plant in Shanghai. Not only was it well-organized for production, but the spirit of the workers amazed him. The same products were turned out in half, or a third, of the man-days needed at Ta Lung. "That," said Mr. Yu, "decided us to apply for joint ownership with the state."

Because new state factories could turn out textile machinery better and faster, the plant was given the job of making oil-well equipment. If Ta Lung had remained private, it could never have financed the necessary re-tooling. But the government invested ¥1.9 million for this purpose in 1955, and is putting in another ¥2.4 million this year. It also gave engineering assistance, and many technical problems were solved by the workers themselves. "During 1955," said Yu Suei-chang, who is now vice-director of the joint-owned plant, "we produced 970 different types of components for oil-drilling. This year we will be turning out more. Some smaller machine-shops which have come under joint ownership are being merged into our plant. We will soon have 2,800 workers, as compared with 1,000 in 1954."

Another factor in the Ta Lung change-over, as in all others, was that the workers chafed at their situation as compared to that of workers in state and joint-owned enterprises. There the unions were consulted on plans, productivity was higher, and equipment was constantly being renovated. More production meant more pay. The workers could feel they were participating directly in socialist industrialization.

"I've felt more confident and happy since the change than ever before in my 26 working years," said Cheng Ke-yu, a lathe operator at Ta Lung. He told of how he had not slept for several nights when he was first put on oil-drill equipment, so anxious was he to do it well, and of how overjoyed he was when drillers in the northwest sent back a letter calling Ta Lung's products "first-rate".

Many capitalists saw that even joint ownership, if it was on the scale of individual plants, would not solve problems that were the legacy of the chaotic old system—that only the new form of

passing over by whole trades could do this. In textiles, many smaller plants were confined to one process: spinning or weaving or dyeing, so that raw and semi-finished materials had to travel for many miles before they became a salable product, adding substantially to costs. Now work could be rationalized.

Shanghai had 53 small shipyards which, in the years immediately after World War II, had really been ship wreckers—since about the only kind of job they could get then was to dismantle U.S. war-surplus hulks brought from Okinawa and elsewhere, for scrap metal. Though their technicians and workers were often skilled ship-builders, their scattered facilities, even after the liberation, did not permit them to do much construction. It was only after they were combined into several joint-owned yards that they began to turn out tugs and big barges. This was a tremendous lift to morale, and it freed the big state-owned yards for larger-scale building.

Of the smaller factory owners in Shanghai, 60 per cent were people with some technical skill. For them, the movement to trade-wide joint operation has meant the shedding of burdens. One small machine-shop operator had seven workers and was constantly bent with worries about orders and wage bills. Now, as foreman in a much bigger shop, he is drawing interest besides his wage. The wife of another former small owner said to me, "Formerly my husband stayed away till all hours, but now he comes home to the family at the end of the day. He was thin and irritable; now he is gaining weight."

Two pharmaceutical chemists and an economist, former partners in the Kwang Hwa Laboratories, had banded together, before the liberation, as young graduates with a patriotic object—to produce domestically-made sulfa drugs for China's health services. But success was followed by disappointment. Kuomintang hospitals did not use their drugs, saying they were an "unknown brand". A Kuomintang health official to whom they applied met them with the gibe, "Why waste your time, we can get plenty of drugs from the U.S." The factory had to change from manufacturing to making up imported drugs in tablets. During the inflation, prices fluctuated so wildly that the funds received after sale were not enough to buy back empty bottles.

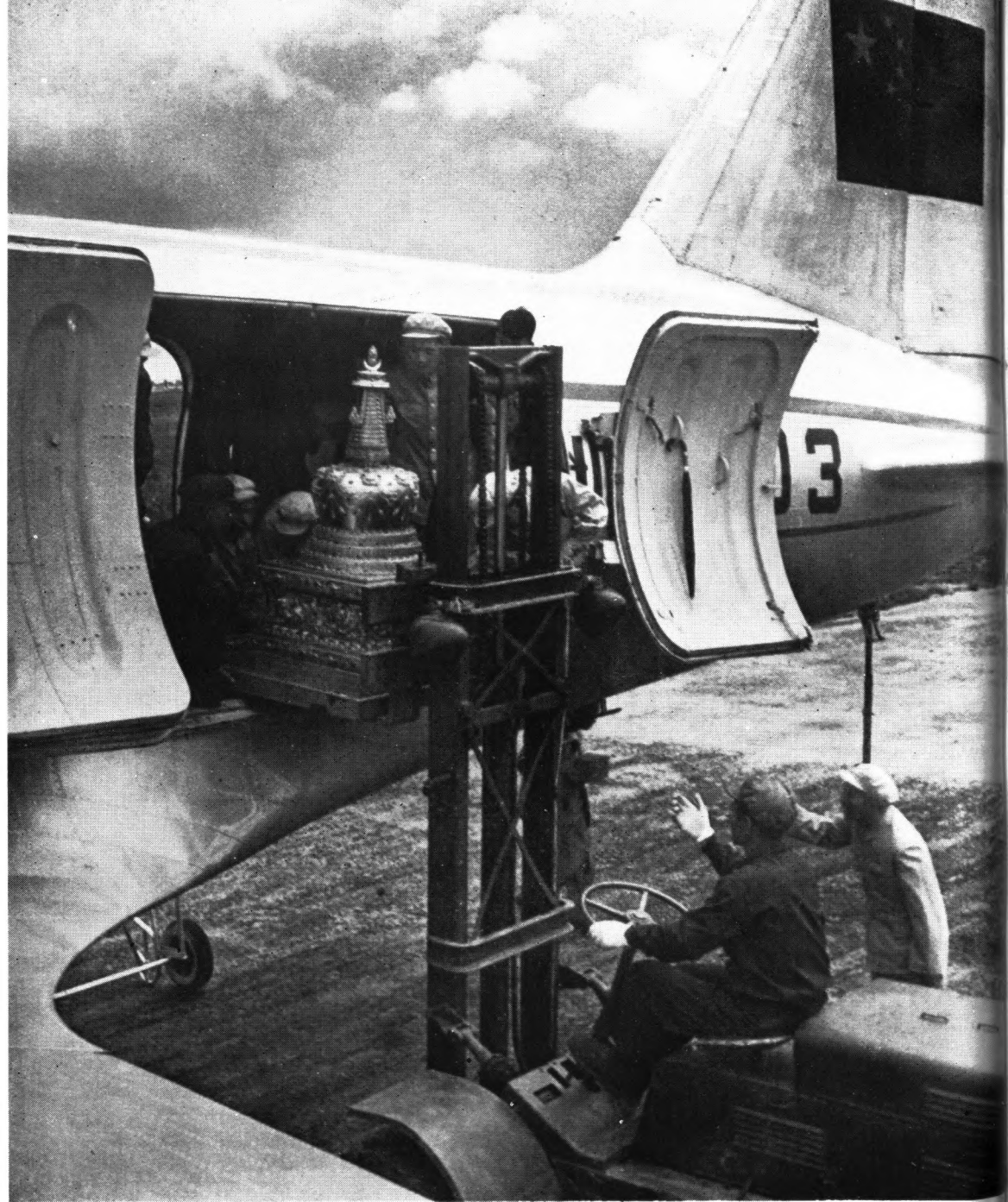
After the liberation, Wang Erh-hsi, one of these men, told me, a People's Government official called him in and gave him a big order for sulfa drugs. "But what made you come to us?" Wang

asked, flabbergasted. "Test records of your products show that they're good, and we don't believe in getting from the outside what China can make herself," the official said. From then on, Wang was devoted to the People's Government.

Today, in the big joint-owned pharmaceutical trust that has been built up out of the separate Shanghai factories in this field, the two chemists are back at research—in magnificently-equipped laboratories instead of the dusty loft they had worked in. They are doing what they always wanted to do: using their scientific training for vital public health needs. And the economist is a responsible administrative worker in the same field.

In capitalist Shanghai, with its constant economic convulsions, life was a constant gamble, even for the comparatively rich. Now the whole atmosphere is quite different. This was expressed sharply and good-humouredly by a tableau in the celebration parade on January 20. Behind a banner inscribed "The Old Three Capitalist Generations", three men followed each other. One was old and carried an abacus (counting board), symbolizing thrift and penny-pinching; he was the grandfather who built up the business. The second, his son, lolled along carrying a caged songbird, the symbol of leisured idleness in old China. The third, the grandson, carried a begging bowl, showing how most capitalist families ultimately returned to poverty. But immediately behind was another banner, "The New Three Capitalist Generations". The grandfather carried a sign saying he had gone over to joint ownership. The son wore dark blue wool, typical of a civil servant under the People's Government. Such sons don't want to inherit a business. The grandson carried schoolbooks and wore a red scarf; he was a student preparing to enter a profession, and he belonged to the Young Pioneers.

The new social standards, based on labour as the measure of honour, have changed all ambitions. One man I met told me: "I've done pretty well in the last few years. But my young daughter, who goes to school with the children of workers and public employees, used to keep asking me: 'Daddy, why must you be a capitalist?' One evening I was able to answer her: 'I'm not going to be a capitalist any more.' And you don't know how good I felt."



*Li Chao-yang*

**An ancient relic gets modern transport — Buddha's tooth returns from Burma's celebration of the 2,500th anniversary of Buddha's Nirvana.**

## BRINGING FAR PLACES NEAR

**I**N this vast land, disunity and poverty in the past were aggravated by miserably poor transport. Railways, in the main, existed only in areas fairly near the coast. As in all colonial or near-colonial areas, their purpose was to take produce out of the country and ease the penetration of foreign goods. Economic areas were so disconnected that, in time of famine in one region, there was generally no cheap and quick way of bringing grain from the rest. To ship goods from one province to another often cost more, in freight charges, than to bring them from abroad. The vast interior of China, particularly its national minority areas, had virtually no modern transport.

Now one can reach faraway Lhasa in Tibet by plane (it was previously thought impossible to land and take off at that altitude, some 14,000 feet). One can also get there by two highways, each over 1,400 miles long, over terrain previously considered impassable—and in a few years one will be able to go by rail.

Less spectacular than these feats of the past few years, but no less difficult and important, are the gradual building of a real nationwide network of railways and roads, the tremendous development of water transport, and the new seaports. These are making the resources and products of our whole vast land available to the whole people. In the far southwest, factories are built with steel from Anshan in the northeast. In winter-frozen Peking, everyone can now buy, and afford, fresh fruits from Canton and tropical Hainan Island.



## To Tibet by Road

by ISRAEL EPSTEIN

HOW shall I describe the Sikang-Tibet Highway,\* that 1,400-mile marvel of natural beauty, courage and historic progress that the Chinese people have built with their newly-awakened energies! Words are poor instruments even to attempt the task.

Scenically this must be the most dramatic highway on earth. Rising by giant mountain-range steps from the fertile, populous plains of Szechuan province to the sparsely-peopled plateau that is called "the roof of the world", it seldom drops below 10,000 feet in altitude and at times reaches 17,000 or more. For days along its course, one travels among snow peaks and glaciers of Himalayan grandeur. It runs alongside swirling mountain rivers, through high passes and deep gorges of brilliantly-tinted rock. It traverses green, flower-decked pastures high above the tree-line, and cultivated valleys strung like necklaces of emeralds on the double thread of road and stream. In the Pomi region, it crosses some 130 miles of lichen-hung virgin forest: of giant pine, fir and spruce; of cypress, juniper and rhododendron.

The views along the route are a combination of all the finest highland landscapes of several continents. I have seen here again the cactus-studded Painted Desert of Arizona, the beauties of the Rockies and the Sierra Nevadas. Other foreign correspondents on the trip have exclaimed over resemblances to the Urals in the Soviet Union, the Vosges in France, the High Tatras of the Polish-Czechoslovak border, and the glacier-lakes and sheltered villages of the Alps. But all agree that many sights here are unparalleled in our joint experience. In the crystalline air and light of these high altitudes, every colour and every outline stands out with startling clarity.

More impressive still is the human achievement that the road represents. Today, driving at a good speed over its well-metalled surface, one still sees construction teams of sturdy blue-clad

\*In 1956, it became known as the Kangting-Tibet Highway, when Sikang province was incorporated into Szechuan province and Tibet.

workers consolidating their stupendous conquest over nature. They are building stone and log embankments against landslides, and changing bridges from timber to steel now that there is transport to bring modern materials to the sites. They are blasting rock from the mountainsides, clearing the fallen stone with bulldozers to widen the road where it hangs over abysmal precipices, straightening out unnecessary curves that could not be avoided before the new machinery arrived. The spanning of the Nu River (Upper Salween) has been described often, but one must see the location to appreciate what was done. Through countless ages, this river wore its deep canyon through volcanic strata, bent, up-ended and twisted by the gigantic ancient upheavals of the earth, then carved and moulded into fantastic shapes by the force of the rushing waters. But now, within a few years, these truly terrifying obstacles fashioned by the elements have been subdued by the force of man organized into a new, cooperative society.

Only two or three years ago there was nothing here except rocks and high winds, fierce nature and the virtually bare-handed workers and soldiers who challenged her, labouring at the end of a thin pack-animal supply line, months from home, sheltered only by flimsy tents. Now the well-paid workers, some accompanied by their families, live in comfortable stone or timber maintenance bungalows — one every six miles along the entire highway. Their supply sheds are full of good tools and of fresh and canned foods. Road-machinery stations spaced at wider intervals, with brand-new equipment mainly from the fraternal people's democracies, are ready to help them with any difficult job. They have books and radios. Medical units take care of their health. Postal trucks bring and pick up mail. Mobile moving-picture vans come by at intervals to show them — and the local population — the latest Chinese and foreign films.

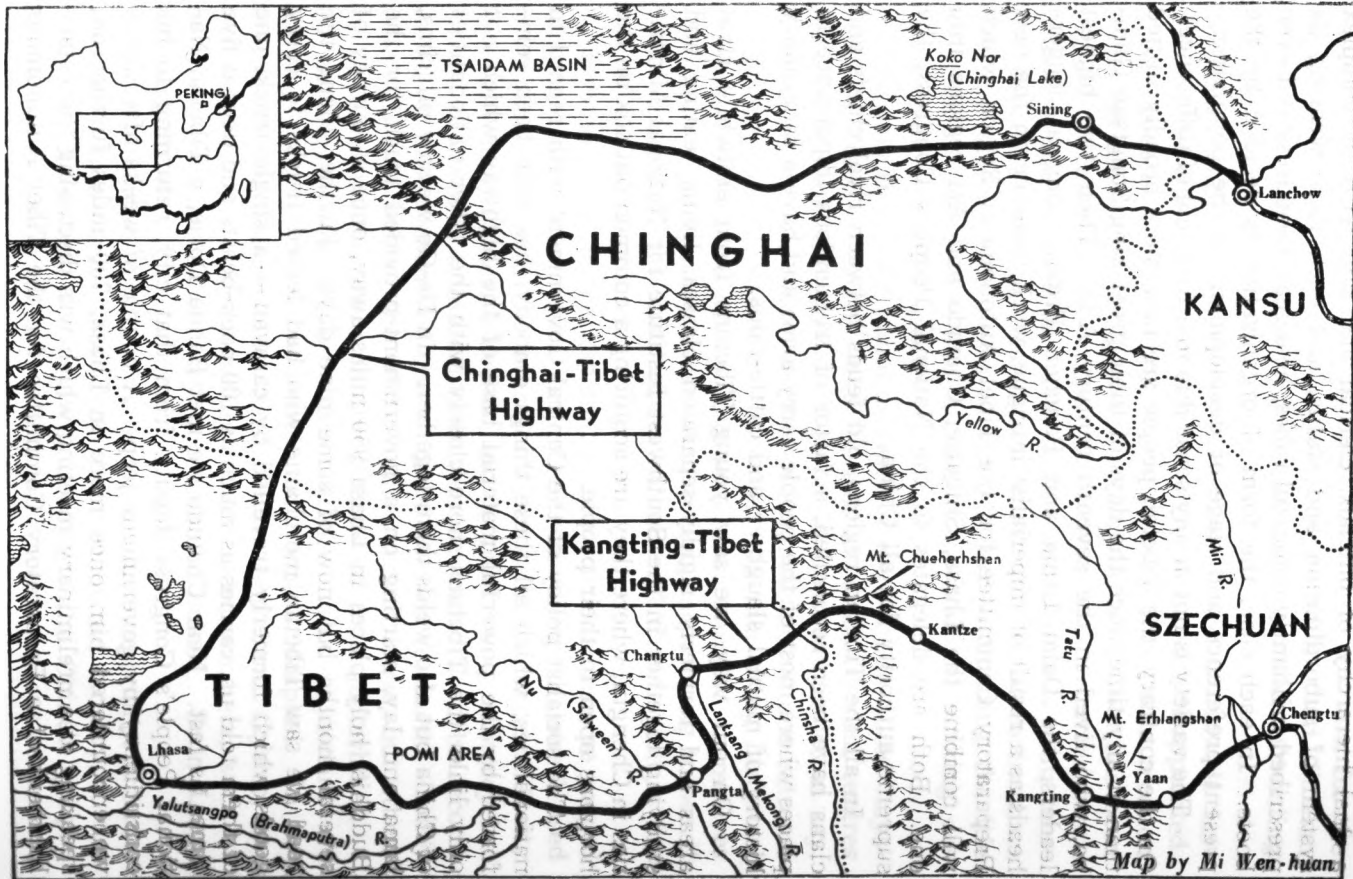
Most dramatic of all, however, is the historic shift that the road is bringing. I myself like to think of it in terms of similarities, and in particular of contrasts, with the building of the Trans-continental Railroad across the United States in the 1860's. Here, as there, the great wide spaces of a vast national territory are being unified and integrated, and the forces of a rapidly industrializing society are making their impact on an area at a much earlier stage of development. But everything else is different, because there the new force was a growing capitalism, while here it is socialism in construction.

The openers of the American West, when they met Indian tribal hunters amid herds of buffalo, exterminated the herds and killed the Indians or drove them into places that offered no subsistence. The Chinese builders came through high meadows where Tibetan pastoral clansmen, who look and live like the Navajo Indians, graze their yaks. They laid the road through valleys painstakingly cultivated by peasants who farm and build flat-roofed houses just like the Pueblo Indians of the state of New Mexico. But instead of impoverishment and displacement, they brought these people self-development and a better life.

Time and again on the road we encountered medical and veterinary stations giving free treatment to man and beast, and state trading establishments buying local products at good prices and selling industrial goods cheaper than they were ever available before — making it impossible for unscrupulous traders to bleed the local folk as the American Indians were bled. We saw several experimental farms on formerly untilled land, which not only demonstrate more productive agricultural methods but give out free implements and seeds and interest-free loans. We visited new county schools where the children study without paying any fees, where the language of instruction is Tibetan and the Han (the majority nationality) language is an optional course for those who wish to take it, and where textbooks are not prescribed from outside but compiled in consultation with the Tibetan leaders of each area.

In Kangting, which is the capital of the Kangting-Tibetan Autonomous *Chou*; in Chamdo, which is the chief city of another area; in Lhasa itself and beyond it in Shigatse, we saw the functioning of local administrative organs headed and staffed by Tibetans and run in accord with their own ideas and desires.

Such ideas and traditions vary from place to place, for reasons connected with history. The Tibetan areas closer to the main current of Chinese life were affected, even in the past, by the people's revolution. Thus in Kangting, and in Kanze where the Chinese Red Army stopped for some months in the 1930's, the Tibetan leaders include men like Sansi Yusi (Tien Pao) and General Sonam (Sha Nai) who joined the heroic Long March and worked and fought in all parts of the country before returning to their beloved homes. In these places and in Chamdo, local government committees wield the power. But in Lhasa itself, the local government still carries on under the 500-year-old system of



a dual hierarchy of officials, clerical and lay, with its complex system of subordination and status, and each rank wearing its prescribed brilliantly colourful robes, headgear, headdress and even boots. In each case, the form of organization is decided by the present preference and stage of development of the population.

The variety is not in any sense due to a fostering of differences. On the contrary, the Tibetan people are now more broadly united than at any time since the days of their great king Songtsan Gambo, who lived in the seventh century A.D. Their two highest leaders, the Dalai Lama and Panchen Erdeni, long at loggerheads as a result of imperialist intrigue, work together on the new Preparatory Committee for the Tibet Autonomous Region which will combine the Lhasa, Shigatse, Chamdo and Ari regions into one. Both are delegates to the National People's Congress, the supreme authority for all China.

In all the Tibetan regions, old feuds between rival chiefs and clans have been reconciled, a factor of tremendous importance in places where most of the people carry arms and have a sanguinary history of mutual slaughter and cattle-raids.

On our way, we saw young Tibetans from erstwhile rival areas and formerly rigidly-separated classes, living, eating and studying together in the Southwest Institute for National Minorities in Chengtu, where they are acquiring a common outlook on the horizons open to their people.

The socialist policy of the Central Government with regard to nationalities, which all these things embody, has now been reinforced by the powerful material base of the highway which not only links the Tibetans more closely with the other nationalities of China but also welds them together. In De-Ge we saw pilgrims, lama and lay, starting on a government-provided truck for the Buddhist holy places in Lhasa 950 miles away, once a journey of several months but now of some nine days. Further along the road we saw Tibetan merchants who had leased trucks to carry goods which formerly travelled by caravan — a single truck, one of them told us, carries as much as 100 pack-beasts and does it five times as fast. Near Chamdo we met Banda Dorje, a Tibetan National People's Congress deputy from that city, returning to his constituency by government jeep. A couple of weeks afterwards we encountered him once more in Lhasa, 700 miles further on, speaking at a preliminary meeting which was discussing the establishment of a Preparatory Committee for the Tibet Autonomous

Region. And in the Lhasa post office we waited our turn for the clear-as-a-bell radio telephone to Peking while fond Tibetan mothers and fathers spoke to their sons and daughters attending school in the distant capital.

Lhasa itself, of course, has always exercised worldwide fascination, and when we reached it we were in no way disappointed. Its wondrous natural situation, dominated by that noble creation of Tibetan architects, the gold-roofed Potala, is all that has been sung by travellers—and more. Its streets and costumes are a carnival of brilliant colour. The statues and paintings in its temples, lamaseries and palaces, though invariably religious in character, are often masterpieces of realistic art—depicting the life and work of the people and giving, in portraiture, striking delineations of human character.

The only things we found no trace of were the so-called “mysteries” of Tibet. The city, like the capitals and cathedral centres of feudal Europe at a similar stage of development in, let us say, the tenth century, is a combination of magnificence at one extreme and poverty and illiteracy at the other. In this living historical museum, the realities of the long-gone past unrolled themselves before our contemporary eyes. And it was encouraging to see it at the moment of the first impact of material change that is the basis of all social progress.

How immense is the gap that is being bridged can be judged from one fact. Five years ago, there was hardly a wheel used for transport in the city—even for a cart or wheelbarrow. Today there are cars, lorries, bicycles, and a great many motorcycles. Official protocol in Lhasa demands that a robed official be accompanied on all occasions by one or more liveried retainers. Today some still ride behind the officials on a second horse, but others are mounted behind them on the pillions of their motorbikes. I am writing this article by electric light. Lama physicians are studying surgery at the well-equipped People's Hospital. In the suburbs, I met peasants like Samo Guden and Samo Gyatso, experimenting with crops formerly totally unknown here, such as tomatoes, and producing very good results indeed. Soon Lhasa will have its very first factories.

At the moment of China's liberation many imperialist schemes were afoot to separate Tibet from the rest of the country, to use it as a military base for aggression against the Chinese people. The success of these schemes would have been a serious setback to

China's progress. It would have brought unmitigated disaster to the Tibetans themselves, who would have had to shoulder, in addition to the burden of medievalism, the unbearable load of colonial oppression. But all these schemes have irrevocably failed. No one who has been here can doubt that the historic achievement of the last few years is the rebuilding on a new basis of the 1,300-year-old kinship of the Tibetans with the rest of China within a people's state. This is not just a matter of the highway, or of the army defending the borders. The policy and action of the Chinese Communist Party with regard to Tibet, its scrupulous consideration for the deep religious belief and national customs of the people, is melting away deep-seated suspicions born of wrongs inflicted by the Manchu empire and the Kuomintang regime. It has reached the hearts of men and women of all classes and conditions and convinced them that there is only one road to a better future — within the vast Chinese multi-national family.

As for the pace of social change, this will have to be determined by the Tibetan people themselves. The agreement for the peaceful liberation of the region, signed in May 1951, put defence and foreign affairs in the hands of the Central Government. At the same time, it pledged to the Tibetans the right of national regional autonomy within China, and the protection of their religion and the lamaseries. The central authorities undertook to impose no change in the existing political system. They offered to help Tibet to improve its economy, educational facilities, and livelihood. In matters of reform, the agreement specified, there would be no compulsion.

On our visit we found that all these provisions are being scrupulously respected. They form the framework in which Tibet is making its earliest steps toward the goal of socialism — the ultimate prospect for this region as for the whole People's Republic of China.

## Nothing Stops the Railway Builders

by CHANG CHING-CHIH

SOME of the world's most rugged terrain is challenging the Singenuity of China's railway construction engineers and crews. Under the First Five-Year Plan (1953-57), 4,700 miles of new lines are being built in many parts of the country. Most of the new routes are in the western two-thirds of the country, which only six years ago had virtually no railways; they will help develop the huge resources of these areas. Many of them cross previously unsurveyed deserts and high mountains in the north-west and southwest. Between them, they present probably more new and varied construction problems than have ever been met, at one time, by the railway builders of any one country.

That such difficulties can be overcome has been shown on the eight rail lines already completed since the Five-Year Plan began. One of the most spectacular is the route between Chining in Inner Mongolia and Erhlien on the border of the Mongolian People's Republic, which runs through the Gobi Desert and connects with an international railway to Ulan Bator and the Soviet Union. Another is the Fengtai-Shacheng line which, though very short, runs through tunnels for 16 of its 66 miles.

Among the railways still under construction, tremendous obstacles have had to be overcome on the Paochi-Chengtuo line, between key points in Shensi and Szechuan provinces, set to be opened to traffic on July 1, 1956. "The road to Szechuan is difficult, more difficult than ascending to the blue heaven," wrote the famous ninth-century poet Li Po. The railway now goes there, over the jagged 13,000-foot-high Tsinling Mountains, for centuries a natural barrier between Northwest and Southwest China. To take it through this and other obstacles, it has been necessary to construct more than 200 tunnels; in one section they comprise 36 per cent of the mileage. Workers preparing the road-bed often had to hang from ropes over sharp precipices.

The crews blasted their way through some of the hardest granite in China. In one of the larger tunnels, three quarters



of a mile long, they met a hitherto-unfamiliar type of yellow rock which twinkled in the lamplight like iron ore, and would barely yield to even the strongest pneumatic drills. The men talked it over and found it necessary to radically alter their methods. This enabled them to move ahead at a rate of 16 feet a day instead of the previous 6½ feet.

It was a complicated process to move construction supplies over the mountainous terrain. Cables, some as long as half a mile, carried instruments, machines and materials up the sharp ascents and across the deep valleys. Other supplies were carried up over the narrow winding trails that spider-webbed the mountains. Bags of cement, for instance, would begin their journey in trucks in the valleys below the Tsinling range. When the slope became too steep, they were reloaded onto waggons pulled upward by tractors. Later on these were replaced by horse-drawn carts. On the narrow winding roads higher up, the bags were carried by small donkeys and, still higher over the tortuous peaks, by porters. Wherever possible, to save transport, workers used building materials available on the sites.

Another obstacle on the Paochi-Chengtú line is represented by the torrential Kialing River and its tributaries, sometimes flowing at the bottom of narrow gorges 300-600 feet deep. At one such place on the river, the Lingkuan valley, the Paochi-Chengtú line was laid along a high ledge paralleling the river. But its route was blocked by a sheer cliff which rose in its path. Ordinarily, the crew could have tunnelled through the cliff and continued onward. But here, if the rock and earth extracted from either end of the passage were dropped over the ledge into the narrow river gorge, it would have dammed the Kialing and caused a flood at its upper levels. At the suggestion of one of the Soviet engineering advisers on the project, smaller tunnels were dug every 164 feet at right angles from the main one, with their mouths to the river. Through them, the debris was dumped at intervals and in smaller amounts so as not to block the current.

At the southern foot of the Tsinling range, on the fertile plain of Szechuan province, the winding course of the Kialing interweaves with the Paochi-Chengtú line. So often do the two cross that, in order to save building numerous bridges, the workers in some places found it simpler to dig a new bed for the river.

In the mountains of Northwest and Southwest China, railway bridge-construction crews are erecting many long spans of stone



### Check List of New Lines

**Chining-Erhlien**, 210 miles long, opened to traffic in January 1956. It shortens by two days travel-time to Europe.

**Paotow-Chengtu** line, 420 miles long, completed in July 1956, 17 months ahead of schedule.

**Yintan-Amoy**, 440 miles long, the first rail line to connect Fukien province with the interior. Completed in December 1956.

**Paotow-Lanchow**, 680 miles long, a vital link between the northwest and Inner Mongolia. To be completed by end of 1958.

**Lanchow-Sinkiang**, 1,736 miles long, leading to China's western border. Linked with existing eastern rail lines, it will be China's first border-to-border east-west railway, and another international "through" line. Begun in 1952, it is now nearly half completed.

**Lanchow-Chinghai**, 806-mile line to serve Tsaidam Basin oilfields. This line's planned link with Lhasa in Tibet (not shown above) is now being surveyed.

**Neikiang-Kunming**, 490 miles long and the first line deep into the heart of the southwest. Tracklaying began in November 1956.

or reinforced concrete and so saving steel. At the same time, China's expanding steel industry is making possible more and more long-span steel bridges with continuous beams. Improved methods, such as prefabrication and pre-applying of stress to separate sections before they are incorporated into the whole, are now being promoted all over the country.

With the help of Soviet advisers, Chinese builders recently finished the largest stone-arch bridge in the country. Located at Sungshupo in Shensi province, it crosses a wide, rugged valley in the Tsinling mountains. Its height is more than 130 feet; in the openings between each of the piers, a ten-story building could be placed. Because of the height, material was hauled up to work areas by steel cable instead of the usual scaffolding.

The most famous bridge now under construction, of course, is the one across the Yangtze at Wuhan, on the existing Peking-Hankow-Canton line. At present, passengers on this railway must leave their train on the north bank of the river and board another set of cars on the other side, while freight cars are ferried over. But when the 5,600-foot bridge is completed, traffic will run straight through from China's northern border to her extreme south, for the very first time.

The great depth of the Yangtze at this point, normally 130 feet from the surface to the rocky bottom, made it impractical to employ the usual method of building the piers under water in pneumatic caissons. If this method were used, the pressure in the caisson would be too great for workers to stand, except in February and March, when the river is at its lowest level. Working only in these months, it would take four years to finish the necessary eight piers. A new method, hitherto never used anywhere, was therefore applied on the suggestion of Konstantin S. Silin, the project's leading Soviet adviser. While a giant jet of compressed air forced away the water and river-bottom mud, reinforced concrete tubes about 5 feet in diameter were driven down to the rock below the river. A 5-ton diesel-powered electric drill was then lowered into the empty tube to crush the rock inside it and sink the tube itself about 3 feet into the rock. Then, after the broken stone had been removed with a suction dredger, the tube was filled with reinforced concrete. Thanks to the new technique, the eight piers will be completed by the end of this year. And the bridge will be in commission by the end of 1957, two years earlier than originally planned.

In Kansu province, the city of Lanchow, the northwest's great railway hub, is the starting point of the western section of what will be China's first cross-country east-west line, and the first rail connection to the great Yumen oilfields and the Sinkiang Uighur Autonomous Region. After crossing the Yellow River and the 10,000-foot Wuhsiaoling mountain pass, the Lanchow-Sinkiang railway passes over the grasslands, marshes and alkaline flats of the Kansu Corridor, a lowland strip between two big ranges. Pushing through this area of earthquakes and sheet floods, it will touch the edge of the Gobi Desert. Inside Sinkiang it will descend to cross the marshes and lakes of the Turfan Basin, which lies below sea-level, and rise again to cross the 13,000-foot-high snow-covered Tienshan Mountains.

A big obstacle in the Kansu Corridor—one found commonly in the northwest—was the area of sheet floods. Every summer, water from the melting snows pours down the mountains, inundating the flatlands below and breaking into innumerable small rivers directly in the path of the rail route. Ordinarily, this would have required one hundred bridges. But on the suggestion of Soviet advisers, a system of ditches was built on the slope above the railroad to divert the smaller streams to larger ones before they got down to the level of the roadbed. That way only 30 or so bridges were needed.

In the Kansu Corridor, workers also met the problem of thousands of acres of alkaline soil, which looks white and powdery like fermented flour, becomes pasty in the spring and summer when the frost comes out of the ground, and offers no stable base for a railway line. To overcome this, the areas near the roadbed were resurfaced with thick layers of sand and pebbles, which are unaffected by frost boils.

Beyond the alkali flats are several hitherto-unsurveyed earthquake areas. Together, Soviet advisers and Chinese engineers visited the scenes of known past quakes to determine, from written local descriptions and talks with residents, exactly how serious they were. In some places the route has been changed to circumvent the areas of major disturbance. In others, the elevated roadbed is being widened and the slope leading up to it lengthened to enable it successfully to withstand minor tremors.

One of the new problems on the Lanchow-Sinkiang line was encountered at Tiloyen cliff, 590 feet high, in the Kulang valley in Kansu province. Years of erosion and frequent earthquakes had

shattered the body of the cliff in thousands of places, and it was feared that the vibrations of a train running alongside it would cause serious accidents from falling boulders. Some suggested cementing the cracks in the rocks at the top of the cliff; others advised removing the top rocks altogether. The engineers finally decided, for safety's sake, to blow up the whole cliff by the Soviet method known as the "spray explosion".

It took nearly three months to dig through the cliff the complicated 150-foot upward-curving tunnel in which the explosives would be planted. The shape of the tunnel was so unusual that even the best available ventilators were unable to keep the inner end properly supplied with air. Feeling that it was too dangerous to proceed, the construction superintendents ordered the workers to stop until a new method for ventilation could be found. But the men would not hear of anything that might delay the road's westward progress. On the spot, they devised a system of ten-minute work shifts, which would permit continuous operation. Shortly afterward one of them noticed a hole in the tunnel roof, into which a new ventilator could be installed. The boring was finished on schedule, and the cliff was destroyed.

Since then, the "spray explosion" method has been used on several larger obstructions on the Paochi-Chengt'u line. On one, 330 tons of explosives were set off to remove hundreds of thousands of cubic yards of rocks and jagged peaks and dump them into the valley, saving four months of work time.

Also being mastered are the shifting sands and seasonal winds of the desert. The Lanchow-Paotow route will be built so that the rails run as much as possible along the direction of the prevailing wind. This will help make sure that the roadbed will not be buried by blown sand. In some places, storm fences of wood boards and woven straw mats line both sides of the tracks to halt the sand, and windbreaks of trees are being planted along the route.

The Lanchow-Sinkiang and Lanchow-Paotow lines both pass through areas where no natural building materials, such as stones, timber or the proper type of sand are available. Here advanced methods of prefabrication have speeded up the process of haulage. Track sections fixed to the ties at workshops along the route are put into place by huge track-laying machines. The Lanchow-Sinkiang route now has four factories which supply work sites with ready-made reinforced concrete piers, culverts and abutments.

In building narrow-gauge forest railways to haul timber in the northeast, frost was a serious problem. The four-month thaw season always resulted in bad damage to the roadbed. The former method of working in winter or summer had been to dig wide, deep ditches in order to place the roadbed on ground below the frost level. But in places where winter temperatures go below  $-50^{\circ}\text{C}$ ., it was found that in addition to the ordinary frost layer on top, there was a layer of "permafrost" deep down which never thaws although the earth above it does. Digging down would destroy the permafrost layer which, as it provides a solid foundation, is an asset in this cold climate. The method now used is to build the roadbed on an embankment above ground level. Then, at a distance of at least 66 feet on either side of the roadbed, ditches are constructed to drain the spring and summer surface moisture away, so the water will not seep down and destroy the layer of frozen earth below.

As a result of successes in finding new ways of surmounting difficulties, the country is building 80 per cent more rail mileage than was originally scheduled under the First Five-Year Plan. The starting-date for several lines to be built during the second Plan has also been advanced. Among these, incidentally, is a railway that will run southwest from Lanchow to the Tsaidam oil fields in Chinghai, and on to Lhasa in Tibet, presenting problems more difficult than any yet tackled.

Truly, China's railway engineers and crews are living up to their slogan: "Make the mountains bow their heads and the great waters yield their right of way."

## Flight to Lhasa

by PAN KUO-TING

WE were on an airfield in western Szechuan province. The twin engines of our passenger plane, the *Peking*, began to warm up. I had never listened to them with such close attention as on that morning of May 29. We had arrived the day before, making the distance from Peking in 4½ hours, on the first leg of the first commercial survey flight ever to be made from Peking to Lhasa—which we were now about to complete.

I was the pilot. With me were co-pilot Wang Shan, navigator Chen Shu-tang, flying engineer Hsieh Kuo-sheng, flight mechanic Min Chuan-lin, radio operator Chou Wen-hsiung, and Liu Yi-hua the dispatcher. The dispatcher's job was to make a careful record of conditions en route so as to get ready for the regularly scheduled flights to come. Besides, we carried, as passengers, two movie cameramen, several forest surveyors and a news correspondent. All of us were in high spirits. How carefully we had prepared for this aerial voyage over the Tibetan plateau, long considered a "forbidden" area for flying! We knew we would succeed because the very first Peking-Lhasa flight of any kind had been made a few days before by Col. Han Lin of China's air force, piloting a transport. His route, incidentally, was somewhat different from ours, taking him through Chinghai province.

I myself had been "broken in" to high-altitude flying over mountains a long time ago. In 1942, when China was hemmed in on three sides by the Japanese invaders, I had flown as co-pilot over the edge of the Tibetan plateau in an effort to find a new aerial connection between our country and the outside world. Then I had started from Urumchi, in what is now our Sinkiang Uighur Autonomous Region, and flown by way of Peshawar, in present-day Pakistan, to New Delhi in India. Later when I had been promoted to pilot, I made no less than four hundred shuttle trips from China to India over the Himalayan "hump", so famous in the days of the Second World War. But our present undertaking was far more difficult. Over the "hump", then considered the world's toughest

route, we had spent  $1\frac{1}{2}$  hours above mountain ranges up to 15,000 feet high. The Peking-Lhasa run required us to spend three hours over 20—25,000-foot-high peaks.

For many years I had dreamed of trying my skill on the "roof of the world". When the People's Liberation Army moved in to free the area in 1951, I volunteered for the air-dropping of provisions. At that time we had flown only as far as Chamdo, never entering the inner areas under the jurisdiction of the Tibetan Local Government at Lhasa. And I made no landings in any of the plateau's high-altitude cities.

All these memories moved through my mind as I sat in the pilot's cockpit. When everything had been checked, we took off. Ten minutes later the Chiunglai Mountains stood in front of us like a wall. I pulled back the control stick. The plane climbed straight up to 20,000 feet. Below us the terraced green rice-fields of the fertile Szechuan Basin were replaced by a wilderness of purple mountains, many of them snowcapped, stretching to infinite horizons. We flew into a head wind of about 100 miles per hour and over a rolling sea of cumulus clouds from which the snowpeaks stuck up like craggy islands. To avoid these, we had to climb higher.

The cloud formations became heavier and denser. We went up to 23,000 feet but still could not get out of them, and flew by instruments through the white soup. Operator Chou Wen-hsiung, a man of more than ten years' experience who was our "ear" on the flight, informed me that he could get no more signals from the ground. We did not worry, knowing that this was due to the static in the clouds and would be remedied once we were out in the clear.

We flew on normally in a free air temperature  $17^{\circ}$  below zero Centigrade. Then it rose to  $5^{\circ}$  below. Suddenly, we heard an abnormal roar from the right engine. The change was so abrupt that we felt it before it was registered by the instruments. Then we found that the r.p.m. (speed of the propeller in revolutions per minute) had dropped sharply. There was a great loss of manifold pressure. The atmosphere in the cockpit grew tense. I judged that the trouble was carburetor-icing. We had lost too much power to climb higher and we could not afford to drop lower, the best thing to do in normal flight, for fear of hitting the mountains. I operated the carburetor-preheat and the engine responded well, recovering in 20 seconds.



The clouds began to disperse and we discerned a fleet of lorries on the winding Kangting-Tibet highway. We smiled at each other and exchanged warm words of praise for it and its sister, the Ching-hai-Tibet road. Without them, flying to Lhasa would have been quite impossible. Since early spring, 600 vehicles had been busy conveying fuel, equipment and instruments for the airfields, radio and weather stations that were being built to receive flights like ours and ensure their safety.

Further west, we sighted the Chinsha (Golden Sand) River, which is really the Upper Yangtze. Its name comes from the wealth of alluvial gold it is said to contain. It moved beneath us like a green snake through precipitous gorges. On either side were stretches of virgin forest. Here and there in the mountain valleys we saw towns.

Crossing the river, we approached the temporary "Midway" airfield, where we intended to land. But my earset brought a disquieting message: "Hurry on, thunderstorm approaching." Fortunately, a few minutes later, we were told to come down, as the storm had passed on. Weather in these highlands is almost impossible to predict. Strong vertical air currents rise from the mountains to make thunderstorms which shift quickly in the strong winds. For the maximum safety in flight, meteorologists had been working here in advance in snow, hail and temperatures of 20° to 30° below zero, to get the greatest possible amount of information. In more than ten weather stations freshly erected on the plateau they had set up day and night operation, listening to reports and exchanging information.

We came to earth smoothly on "Midway" field, the altitude of which is 13,108 feet. To my knowledge, a fully loaded aircraft had never landed and taken off at such an elevation before our Chinese flights to Lhasa. So far as I had heard, the highest functioning fields in the world were those in La Paz in Bolivia (12,200 feet) and Cuzco in Peru (11,440 feet). Therefore other pilots and I had made many experimental take-offs and landings, first with an empty plane and then with full load, basing ourselves on figures regarding horse-power, take-off run and landing roll, carefully calculated by the Chinese Academy of Sciences. Some of this practice had been carried out in Peking, the rest in Kunming which, at 6,270 feet, possesses one of China's highest airfields other than those on the Tibetan plateau.

When we got out of the plane at "Midway" we all felt the effect of altitude. Our heads began to ache and even ordinary movements left us short of breath. While most of the crew lay down for a rest, engineer Hsieh Kuo-sheng and our middle-aged veteran flight mechanic, Min Chuan-lin, refuelled the plane and made a thorough check of everything. Suddenly both began to feel very weak. The field doctor was called and diagnosed mountain-sickness. Before we got back into the plane we all took a lot of oxygen, because even a slight degree of oxygen deficiency might lead to misjudgments which could be disastrous in take-off and flight.

Airborne again, we set our course southwest. Soon the Tang La range came into view. This chain of saw-tooth mountains, stretching from northwest to southwest and rising 20,000 feet and more, is one of the most perilous points of the whole route. Navigator Chen Shu-tang was now the busiest man on board. It was his job to calculate the ground speed, the direction and velocity of the wind. Here we were following the course charted by our predecessor of a few days before, but many corrections still had to be made on our maps since the territory was virtually unexplored and only one plane had flown there before us. Making our way very carefully through Tang La pass, we entered Tibet itself.

The rugged mountains gave way to the open expanse of the grassland of northern Tibet. We flew low over a rolling green carpet broken by small lakes, dotted with the black tents of nomads and with thousands of yaks—the basis of Tibet's pastoral wealth.

The interval of level flight did not last long. Soon we were climbing again. We knew that we were not far from Lhasa. All the way, our young co-pilot, Wang Shan, had worked with operator Chou Wen-hsiung to make contact with the radio stations. On the remaining stretch, we alerted them to turn on the radio beacons as we flew in. This was particularly important because, flying by instruments, we had been fighting winds of great velocity and they could easily blow us off our course or into the mountains.

We felt the greatest respect for the men who had set up those ground facilities. They had gone into the uninhabited heart of the plateau, guided by local Tibetans, to build them. The advance guard of surveyors, we had been told, had had to crawl along foot-wide ledges overhanging the deep gorges of the Nu (Upper Salween) and other rushing rivers. They had crossed angry and treacherous mountain torrents by raft and braved fierce winds and blizzards, yet in only forty days the preliminary work had been completed. The

radio-station builders who followed them to work in the unaccustomed rarefied atmosphere did not have any easier job. Nor did the operators, living far from any other human habitation to keep watch and guide us on our way.

Now we caught sight of the giant Nyenchen Tang La range, the last barrier in our way. A gasp of admiration escaped me at the spectacle of a 24,000-foot-high peak, looming like a dazzling white tower over the brilliantly varicoloured rock wall formed by its fellow-mountains. Below it was Lake Tengri Nor, shining green as a giant emerald.

Finally, after flying through a narrow pass, we came into a broad, rich, well-watered valley. To our great joy, the airfield near Lhasa was now clearly to be seen. Its altitude is 14,177 feet, almost three thousand feet higher than the mountain-girt city where surrounding mountains make landing more risky. This is the highest airfield in the world. The airfield camp is now the third most populous city in Tibet—a town of hundreds of tents. Here live the people who made this aerodrome ready in a single month, a feat almost unbelievable. They are still adding to its facilities.

Three and a half hours' flying time after our start in Szechuan province, we touched down on the field. A crowd of cheering, waving people rushed toward us. At their head were representatives of the Tibetan Local Government and the Panchen Kanpo Lija, the administrative body under the Panchen Erdeni, one of Tibet's supreme pontiffs. They presented us with *hata*, the silk scarves that are the Tibetan symbols of respect.

In the Tang dynasty (A.D. 618-907), when China's contacts with Tibet began, the caravan journey to Lhasa used to take three years. After the completion of the two great trunk highways in 1954, it was cut to less than a month by auto. Now, by air, eight hours is sufficient to get from Lhasa to Peking.

The "impossible" has been attempted and performed. The main job has been done. Soon we shall be flying on regular schedule. Passengers will breakfast in our national capital. They will arrive in Lhasa well before their evening meal, in good time to see the gold roofs of the Potala Palace glinting in the setting sun.



*Chu Kang-leh*

**Tung girl, Kweichow province.**

## ONE LAND, MANY PEOPLES

**T**HIRTY-FIVE MILLION of China's people belong to minority nationalities. They make up only six per cent of her population, but occupy more than half of her immense territory.

Throughout the long past, they were subjected to persecution and humiliation. Now the supreme law of the land declares every nationality to be the equal of the others. Discrimination, oppression and any attempt to destroy the unity between them are prohibited and punished. All have the freedom to use and develop their own languages, to preserve or reform their customs and institutions. Everywhere that the minorities live in compact groups, whether the area be small, like a county, or a vast region like Inner Mongolia, Tibet or the Sinkiang Uighur Autonomous Region, they have the right to self-administration, to run local financial affairs, education, construction and so on. The central authorities help with the building of major industries and transport lines—and with subsidies, supplies and such personnel as any given nationality cannot as yet supply from its own ranks.

The minority peoples, like the rest of the country, are advancing to socialism. But their progress, in general, is more gradual. Their varying forms of society present special problems, and the speed with which social reforms are introduced is for them to decide. The government, which actively encourages such progress, consults with the working folk of each nationality, and also with their traditional lay and religious leaders. Changes are made step by step, without destroying the status and standard of living of aristocrats, tribal and clan chiefs, or the priesthood. At the same time, the common folk are enabled to get land and form cooperatives for agriculture, stock-breeding or hunting.

By the beginning of 1957, 28 million of the minority people were working in cooperatives. Another two million were getting ready to form them. Land reform was going on among two million more. Only three million had not taken either of these steps.

## Facts on National Minorities

by WU WEN-TSAO

UNTIL recently, Chinese scholars did not know what proportion of the population were minority nationalities, how many of them there are, where they are located, and what occupations they live by. One reason is that past Chinese governments kept the minority peoples so downtrodden that some were not even aware of their own group identity, while others often hid it to avoid discrimination. Sun Yat-sen, leader of the revolution which overthrew the last imperial dynasty in 1911, did indeed conceive of China as a state consisting of "five races", which fact was registered in the five-striped flag of the first Republic. But that Republic quickly fell into the hands of reactionaries, so his hope was not carried out. The Chiang Kai-shek regime had the worst record of all: it not only oppressed the nationalities more grievously but even officially denied their existence. So apart from sporadic academic work by Chinese and foreign ethnologists, not much reliable information was collected or analyzed.

All these circumstances were changed with our liberation in 1949. The minorities gained full equality of status, the rights of local self-government, and freedom to develop their languages and life as they saw fit. The People's Government, moreover, pledged itself to assist them in every phase of political, economic and cultural advancement. Serious scientific studies were undertaken with the urgent and practical purpose of enabling each group to take full advantage of its new rights.

According to the census published in November 1954, China has some 35 million people belonging to the national minorities. This is roughly six per cent of our total population of 600,000,000, the rest of whom belong to the Han majority, but it is of course a big number in absolute terms.

As for the number of minority nationalities, 45 are now separately recognized, and practically all of them have their own political representation at local government levels. Thirty are sufficiently numerous or important enough to be represented in the

National People's Congress, where they occupy 177 of the 1,226 seats—14 per cent, or more than twice their actual proportion in the whole population. Ten have more than a million people each: in order of numbers they are the Chuangs of Kwangsi province; the Uighurs of Sinkiang; the Huis who are scattered throughout the country; the Yis of the southwest; the Tibetans; the Miaos; the Manchus in the northeast and elsewhere; the Mongolians; the Puyis of Kweichow province, and the Koreans—again in the northeast.

With regard to certain other groups, the Research Institute of the Central Academy for National Minorities is still engaged in examining whether they can be regarded as separate nationalities or are really sub-groups of those already defined. The difficulty here is that scattered groups of the same minority, especially if it is at a comparatively early stage of social development, may often call themselves by separate names while neighbouring people may call them by yet others. In a recent survey made in Yunnan province, for instance, it was found that the Yi people have at least 41 such names of their own.

In cases of this kind, after the facts have been scientifically established the national name of each group of people is determined by themselves before official recognition is granted by the government. Furthermore, names previously given to the minority peoples by the Han majority, which often bear implications of contempt, are being put out of use. This is the case, for example, with the Yi nationality, whom the Hans formerly called "Lolo"—a name written in characters which included the element "dog".

Having found from experience that the People's Government is sincerely working for their welfare and progress, the minority peoples now cooperate enthusiastically in the process of identification. They disclose their origins without reserve or disguise, and in this way a great deal of fresh information about them is being revealed.

China's known ethnographic regions fall into several main areas: the northeast; Inner Mongolia; the northwest including Sinkiang; and Tibet and the southwest, including Yunnan. The two areas of greatest concentration of the minorities are the northwest, which includes 16 nationalities (12 in Sinkiang alone); and the southwest, where the slightly more than 21 million belong to more than 20 nationalities.

A glance at the map will show that, small as is the proportion represented by the minorities in the whole population of China,

they occupy huge territories—about 60 per cent of the total area of the country. Generally, these territories lie along the frontiers of our country.

Among the border peoples, the Mongolians, Uighurs and Tibetans still live in their historic homelands and are thus in a position to enjoy regional autonomy, which can embrace their ancestral lands and most of their people. But others, mainly in the south, at one time or another driven from part or all of their original habitations, are now widely dispersed in inaccessible patches of mountain and other poor land. An example is the Miao nationality of the southwest. Many groups of the Hui and Manchu people also, as a result of historical development, are mixed up among the Han majority in many places. Where compact groups exist, they too can form autonomous units. In some cases of mixed communities, joint autonomous localities (e.g. districts or counties) are set up. In all other cases our electoral system takes care of their governmental needs. Our policy of united front requires that minorities have adequate representation in both people's congresses and people's political consultative conferences at different levels.

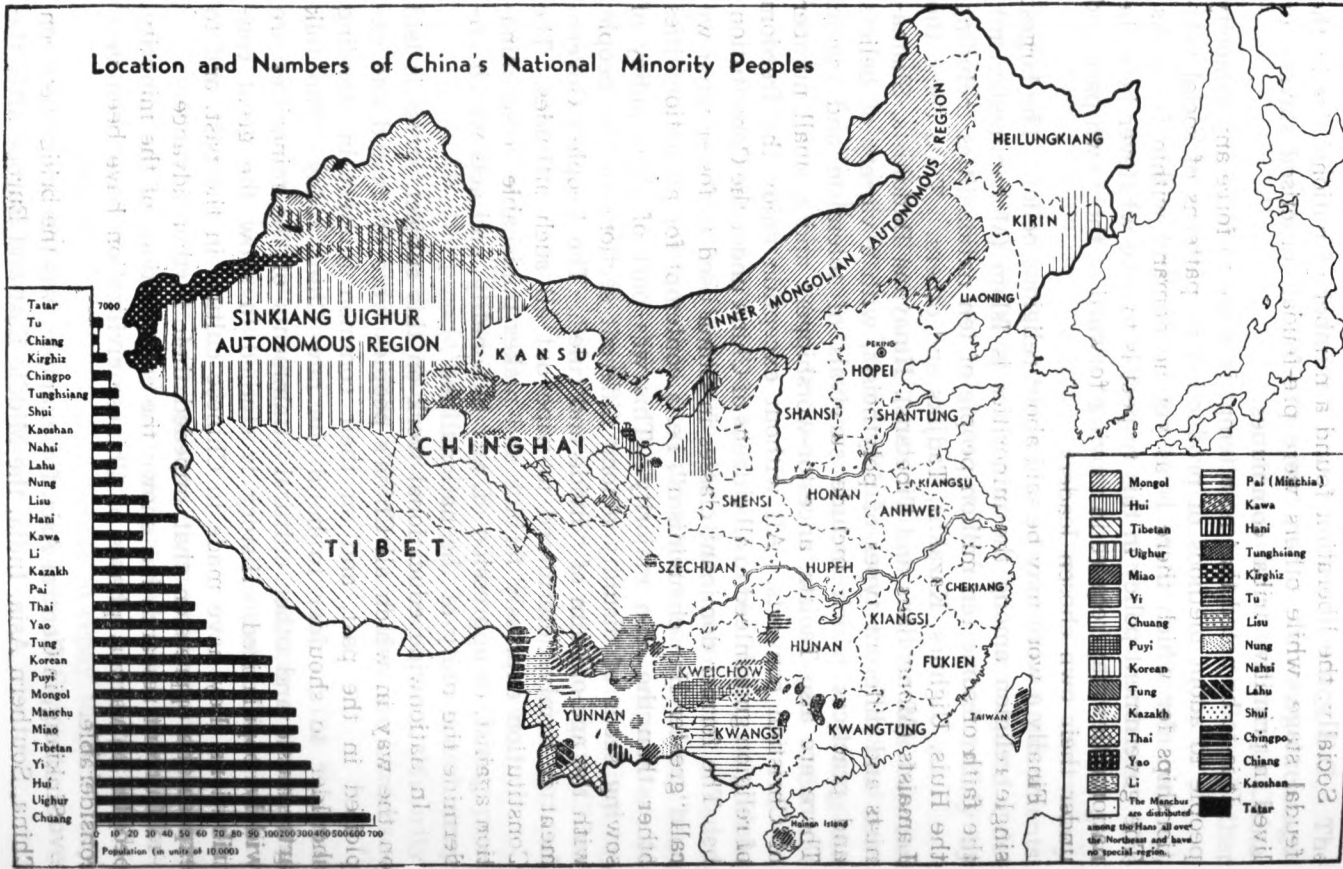
The languages of the minority peoples may conveniently be divided (very broadly) into northern and southern groups. The northern ones include the Turkic, Mongolian and Tungusic groups, all of the Ural-Altaic language family. The southern nationalities, in the main, use languages of the Sino-Tibetan family, among which are the Chuang-Tai, Miao-Yao and Tibeto-Burman groups. Today all have the right to use their own languages in education and local administration. The government has helped to devise scripts for those who did not previously have any, to improve several existing scripts, and to print books and newspapers.

As to occupation, nearly all the minority peoples get their livelihood from agriculture or livestock breeding, although there are merchants, craftsmen, fishermen and industrial workers among the more advanced, and forest-dwelling hunters and others among the relatively less developed. The agriculturists are most numerous, comprising about six-sevenths of the total. Farming methods range, depending on the nationality, from very crude to relatively efficient. Mongolians, Kazakhs, and a part of the Tibetans are mainly pastoral, some being nomads.

\* Up to May 1956, 78 national autonomous localities had been set up. They are 2 big autonomous regions, 29 autonomous *chou* and 47 national autonomous counties. Altogether 34 million (including some Han residents) live in national autonomous localities.



# Location and Numbers of China's National Minority Peoples



Socially, the liberation found a number of nationalities in the feudal stage, while others were pre-feudal, practised slavery or lived in primitive tribal communes.

It is to be noted that no attempt is made to force any minority people to adopt methods of production or patterns of social relationships for which there is as yet no demand within its ranks. The government policy in this respect is to give whatever help the nationalities may require in moving forward at their own pace and under their own chosen leaders.

Finally a word may be said about religious belief. The largest single religion among the minorities is Islam (Mohammedanism), the faith of some ten million people of ten nationalities including the Huis, Uighurs, Kazakhs, Tadjiks and others. Then come the Lamaists (Mongolians and Tibetans), Hinayana Buddhists, Shamans and different types of polytheists, with a variety of beliefs and practices which include survivals of totemism and magic. There are also Taoists, ancestor-worshippers and a small number of Christian converts. All without exception enjoy the freedom of religion guaranteed to all citizens of China under the Constitution.

The former dominant classes in China used to foster what we call "greater Han chauvinism", i.e. a contempt for all nationalities other than the Han majority. This was part of their policy of sowing seeds of disunity among different sections of the people, with the age-old aim of "divide and rule". The People's Government is firmly determined to wipe out all such attitudes. The Constitution expressly forbids and makes punishable "discrimination against, or oppression of, any nationality, and acts which undermine the unity of the nationalities".

In nationwide educational work on this subject, stress is laid on the way in which all China's peoples were oppressed and exploited in the past, and on their common interest in standing shoulder to shoulder to build the new China today. The folk arts, music and other cultural attainments of the minorities are widely popularized. History is studied to show the great contributions they have made to Chinese culture in the past, and to expose the oppression that impeded their further advance.

Current research has shown the contributions of the minority peoples to various phases of Chinese civilization have been very considerable.

Sinkiang, in Central Asia, for example, was the bridge between China, Southern Asia, India, the Middle East and Europe after the

opening of the "Old Silk Road" in the first century B.C. The Uighurs played a very prominent part in this two-way exchange, which among other things brought the Buddhist religion to China. In agriculture, melons, grapes, cucumbers, carrots, garlic and other plants were introduced from Sinkiang.

Following the Mongolian conquest in the thirteenth century, Sinkiang also became a cultural bridge with Islamic lands. The Hui people, who are thought to be partially of Arab descent, gave China many scientists and technicians. They built an observatory in Peking for which they made all the astronomical instruments, and the imperial governments, right up to 1911, maintained a department of calendar and astronomical affairs staffed mainly by Huis.

The Tibetans have always represented a strong link between China, India and Nepal. Their fruitful economic and cultural contacts with the Han people, which culminated in their joining the Chinese state on the basis of common interest, began under the Tang dynasty (618-907).

Chinese agriculture has owed much to the "Hsiungnu" (identified by many historians with the Huns who once invaded Europe), who no longer exist as a nationality but may have been the ancestors of the present Uighurs, though some experts are of the opinion that the Mongolians are their descendants. They introduced the use of draught animals for field work in North China in the second century B.C. This did not spread to other parts of the country until the twelfth and thirteenth centuries.

In music, the Chinese flute (originated by the Chiang people), the guitar, the *pipa* (a kind of stringed instrument) and many melodies were among the contributions of the minorities. Minority dances too have always had their influence, and they are immensely popular today.

Recent findings suggest that the Han people of the Yangtze valley acquired the technique of planting, spinning and weaving cotton from the Li people of Hainan Island sometime in the thirteenth century.

Since the minorities were seldom given credit for their contributions in the past, it is almost certain that much more information of this kind will come to light. In the meantime, conditions have been created for the Han people to repay the debt they owe to the minorities, and for all the peoples of China to move forward in equality and brotherhood.

## Many Languages

by MA HSUEH-LIANG

THE 35 million people who belong to China's 47 different national minorities speak languages belonging to four of the world's great linguistic families. They are the Sino-Tibetan, the Austro-Asiatic, the Ural-Altaic and the Indo-European.

Those in the Sino-Tibetan family, to which the Han (the majority nationality) language also belongs, fall into three groups: the Chuang-Tai, Miao-Yao and Tibeto-Burman. The peoples that speak them live chiefly in the southwestern provinces and Tibet.

Only languages in the second family—the Austro-Asiatic—fall into the Mon-Khmer group. They are spoken in the region between the Nu and the Lantsang rivers, which are the upper courses of the Salween and the Mekong respectively, in Yunnan province. Some linguists hold that the language of the Kaoshan people of Taiwan is of the same family, but this has not yet been scientifically confirmed.

Languages of the third—the Ural-Altaic family—are divided into the Turkic, the Mongolian and the Tungusic groups. The people who speak them in China are scattered over a territory stretching from Sinkiang in the northwest to Heilungkiang in the northeast. This vast expanse includes the famous Tarim Basin and Gobi Desert, the immense and rich Inner Mongolian pasturelands, and the magnificent forests of Northeast China. The Korean language, spoken by the Korean minority in China's northeast, has been tentatively classified as belonging to this family.

The only language belonging to the fourth, i.e. the Indo-European family, is Tadjik, a language of the Iranic branch spoken on the southwestern frontier of Sinkiang.

Among the people of the non-Chinese speaking national minorities, over 74 per cent speak languages of the Sino-Tibetan family, and 21 per cent those of the Ural-Altaic. Korean is spoken by 3.8 per cent, and the other Austro-Asiatic languages, by 1 per cent. About 0.1 per cent of the non-Chinese speaking peoples

speak languages in the Indo-European family, Tadjik, and Russian, also used by some Chinese citizens.

Each of the linguistic families and groups has its own peculiarities. In the Chuang-Tai group of the Sino-Tibetan family, the adjectives always follow the nouns, so that instead of "I have a red flower" the sequence of words is "I have flower red a". In the Tibeto-Burman group of the same family, the object is put before the transitive verb (for example, "I him like").

While the various minority languages differ greatly in pronunciation, intonation and syntax, all those which belong to the same family usually have certain common features. Nearly all the Sino-Tibetan languages have tones but not accent. With the Austro-Asiatic languages the opposite is true: they have accent but not tones. Within the latter family, certain languages spoken in China have prefixes and infixes. For example, in the Kawa language the causative form of the word *jum* (to die) is *pajum* (to kill), while *pwi-pajum* means "the killed man".

In the Ural-Altai family the common feature is vocalic harmony. This means that if there is a front vowel in the first syllable of a word, there must also be a front vowel in the following syllable. For instance, in the Uighur word *körük* (bridge), the first and second vowels are both of this category. With words beginning with a front vowel, *im* is used to signify "my", while words beginning with a back vowel use *um*. *Gol* means "hand", but "my hand" can only be *golum* and never *golim*. Uighur also has accent but no tones, the accent generally falling on the last syllable. In addition, the words have complicated suffixes which can also be used independently. As there are neither prefixes nor infixes, a word consists of two parts only: the stem and the suffix.

Though practically all the minority peoples have their own spoken language, few have an adequate written language. This is the sad result of the age-old policy of discrimination against minorities practised by the rulers of the past, most of whom were of the Han nationality. The minority peoples were then held to be "inferior" and they enjoyed no political rights or economic security whatsoever. Subjected to unending persecution and torn by internecine feuds fomented by the reactionaries, they were unable to develop culturally.

The Kuomintang regime, like its predecessors, sought to perpetuate the subjection of the minorities by denationalizing them. In 1941-43 the provincial government of Kweichow issued decrees

forbidding the Miao people there to speak their own language in public, to wear their national costume or to observe their customs. In the "border schools" set up by the Kuomintang among the Tibetan, Mongolian and minority peoples of the southwest, the Han language alone was used and the students were not permitted to speak their own languages on the school premises. The Kuomintang policy was one of the manifestations of Han chauvinism aimed at assimilation of the minority peoples. Under it, even those peoples who had written languages found it almost impossible to preserve and to promote the use of them. Repelled by this policy, families which had the money to do so often hired poor children to go to those schools so as to avoid sending their own.

Today, with the help of the Central People's Government and the fraternal assistance of the Han people, living conditions in most minority regions are improving steadily. The people have become hungry for culture and those without an adequate written language have begun to feel the need of one more keenly.

The People's Government attaches great importance to such aspirations, and has been doing everything possible to help the different nationalities to devise systems of writing in line with the requirements of their respective languages and cultures. For this purpose, the Committee for Research in Minority Languages has been set up. Moreover, the Central Academy for National Minorities, set up in Peking after the liberation, has a Language Department in which 25 dialects of 14 different languages are being taught, mainly to Han students who are expected to go and work among the people of the national minorities. In the Institute of Linguistics of the Chinese Academy of Sciences, a number of trained linguists are engaged in research work in minority languages.

Much has already been done in the years since liberation to help the minorities in reducing their vernacular speech to writing, or in promoting the use of those they already have. The first step in a work of this kind is to make a detailed study of the characteristics of those vernaculars, to find out the features which can serve as the basis for devising a written language for each nationality. Linguistic researches have revealed the following facts:

Five minority peoples—the Tibetans, Uighurs, Mongolians, Manchus and Kazakhs—have their own writing handed down from former times and there is no need for reform or improvement for the time being.

# TABLE OF CHINA'S MINORITY LANGUAGES

Family	Group	Branch	Sub-Branch	Province or Locality
SINO-TIBETAN	CHUANG-TAI	<i>Tung-Shui</i>	Tung; Shui; Mok; Yanghuang.	Kwangsi; Yunnan; Kweichow; Haitnan Island.
		<i>Tai</i>	Chuang, Nung; Puyi (Chungchia); Lao (Chi-Lao, Tu-Lao, Mo-Lao); Tai (Tai Shan, Lu, Star).	
		<i>Li</i>	Li	
	MIAO-YAO	<i>Miao</i>	Ke-tou; Tungchia and Hsichia.	Mountains of western Hunan; Kwangsi; Kweichow; Yunnan; mountains of western Kwangtung.
		<i>Yao</i>	Hsilung Yao (similar to Miao); Chashan Yao (similar to Tai).	
	TIBETO-BURMAN	<i>Tibetan</i>	Western dialect (Balti, and Ladak); Central dialect (spoken in Lhasa, Tibet); Eastern dialect (spoken in western Szechuan and among the Chia-jung peoples); Chiu; Nu-tze.	Tibet; Szechuan; Chinghai; Yunnan; Kweichow.
		<i>Kachin (Shantou)</i>	Chingpo. (Tashan); Tzai-wa (Hsiao-shan); Lashi (Chashan); Langwa (Langsu); Kaku.	
		<i>Yi</i>	Yi (Nasu, Lisu, Sani Lahu, Ahsi, Ahka Woni); Nahsi (Moso); Minchia (Paitse dialect and Nama dialect).	
AUSTRO-ASIATIC	MON-KHMER	<i>Wa and Palaung</i>	Palaung; Kala; Kawa	Area between Nu River and Lantsang River in western Yunnan.
		<i>Pu (Penjen)</i>		
URAL-ALTAIC	TURKIC	<i>Tannu Urianghal</i>	Salar	Most of Sinkiang; northwest corner of Inner Mongolia; part of Kansu
		<i>Uighur</i>	Uighur; Uzbek; Tartar.	
		<i>Kazakh</i>	Kazakh; Kirghiz	
	MONGOLIAN	<i>Khalkha</i>		Inner Mongolia; Sinkiang; most provinces of North China.
		<i>Kalmuck</i>		
		<i>Buriat</i>		
		<i>Tahur</i>		
	TUNGUSIC	<i>Tungus</i>	Olunchun; Solon.	Inner Mongolia; Sinkiang; northeast corner of Heilungkiang; lower reaches of Sungari River.
		<i>Manchu</i>	Manchu; Sibo; Hoehih	

The Tibetan alphabet is syllabic and is based on a form of Indian script used in Central Asia and India proper during the Kushana dynasty (first to third century A.D.) and Gupta dynasty (third to seventh century A.D.). It is traditionally regarded as having been invented in the seventh century by Thonmi-sambhota, a minister of King Songstan Gambo, upon his return from India, where he had studied in the Buddhist university of Nalanda. Some scholars, however, believe that it existed before that time.

The Uighur language, a branch of the Turkic group of the Ural-Altai family, had its own script as early as the fourth century. But owing to the tremendous economic, political and social upheavals that took place in Central Asia during past centuries, the Uighur people have changed their written language a number of times. In the tenth and eleventh centuries, Arab and Muslim culture began to exercise a great influence among the Uighurs. After their conversion to Islam, they began to write their language in the Koranic script, which was the Arabic script with some minor alteration. First used by the Muslim preachers, it was afterwards adopted by the people. Except for the addition of a few vowels which do not exist in the Arabic alphabet, the present Uighur script is basically identical with it, and the language itself is full of words borrowed from Arabic and Persian. Great literary works in the Uighur language have come down to us, among them *The Wisdom of Happiness*, written in the eleventh century in the old Uighur script by the famous author Yusuf.

The Mongolian writing, which came into being in the thirteenth century, had its origin in the old Uighur script which the Mongolians borrowed to record their own speech. To this day it does not differ essentially from old Uighur, except that it has seven additional symbols and more angles. Mongolian is written from top to bottom like the Han writing, unlike the old Uighur script which was written from left to right as in all modern alphabetic languages. But unlike the Han writing, the vertical lines on the left precede those on the right.

The Manchus, the nationality to which the ruling house of the last imperial dynasty to rule China belonged, used a script adapted from the Mongolian, but much more exact and phonetic. Manchu, once the court language of the Chinese Empire, was by the time of the liberation on the verge of extinction. It was then spoken only by two small groups of people, the Sibos and Solons, who were descended from former imperial garrison troops in Sinkiang.



The Sibos and Solons spoke two different patois akin to Mongolian. But after they were sent to Central Asia, together with Manchu soldiers and officers, they took over the language of the rulers, and retained it even after the Manchus themselves had forgotten their own language and had become assimilated with the Chinese. Before the liberation, the Sibos and Solons were in their turn being rapidly assimilated with the Chinese and the surrounding Uighurs. But many of them clung to their adopted language, showing great affection for it. Since the liberation a Sibo (i.e. Manchu) paper has been appearing regularly in the Inin district of Sinkiang, where these people live.

The Kazakh writing is the same as present-day Uighur in form, but differs in the pronunciation of a few letters.

The above are well-known languages with time-honoured scripts which are serviceable and more or less phonetic. Apart from these, there are less well-known vernaculars, such as those of the Yi, Nahsi, Tai, Miao, Chingpo, Chuang, Kawa, Shuichia, Lisu and Lahu peoples, whose written languages are far from being phonetic and adequate vehicles of thought. Some of them are cryptograms used exclusively by the local priests rather than writings for the common people, while others are makeshifts invented by Christian missionaries without linguistic training. The latter are known to no one but a few converts.

The traditional scripts of the Yi and Chuang peoples are imitations of the Chinese ideographs, and only the initiated few are familiar with them. The Nahsis have two kinds of writing, one pictographic and one phonetic, and neither of them is suitable for general use. The Tai also have two scripts, both phonetic. In one district they use the Shan script which is a variant of Burmese symbols; in another district the Nantai script, a variant of the Siamese, is used. The Shuichia people use a kind of writing which looks like inverted Han characters and which is no more than some sort of memory aid. The Miao people use a script invented by the British missionary S. Pollard during the Ching dynasty. It is not very satisfactory because it fails to represent the sounds of the Miao vernacular correctly, and besides it is very difficult both to write and to print. The Shantou people too have only a defective latinized alphabet introduced by the British missionary Hanson.

Christian missionaries have also devised phonetic scripts for the Lisu, Lahu and Kawa peoples. All these scripts are based on

the Latin alphabet. They are used chiefly among the Christian converts and have not been popularized. In general they are unsatisfactory and need revisions and improvements.

For national minorities with adequate systems of writing, the People's Government has produced large numbers of publications in their own languages. The Commission of Nationalities Affairs has put out Chairman Mao's works and many other important political writings and documents in Mongolian, Tibetan, Uighur and Kazakh. In 1952 alone, the People's Publishing House in Sinkiang printed some 2,600,000 volumes of translations in Uighur, Mongolian and Kazakh. A special Minority Languages Publishing House was set up in Peking in January 1953.

During the last few years the circulation of newspapers in various vernaculars used in Mongolia and Sinkiang has increased considerably.

Broadcasting stations, both national and local, have started minority language programmes. All this has helped the cultural progress of the minority peoples.

Since the liberation, research teams of trained phoneticians and linguists have been working among the non-Han peoples in the provinces of Szechuan, Yunnan, Kwangsi and Kweichow with the object of helping them to reduce their vernaculars to writing with a scientifically devised alphabet.

In 1950, the Central People's Government sent a goodwill mission to the various peoples of Southwest China. During its sojourn in Sichang in Sikang province, Mr. Chen Shih-lin, one of the trained linguists attached to the mission, devised a new alphabet for the Yi people there. It was only after careful investigation that he found that the Shuncha dialect in the Taliangshan and Hsiaoliangshan mountain ranges is the one most widely spoken and understood among the Yi people. The new script, which uses Latin letters, is based on this dialect.

Tests carried out in different places have shown that adults could be taught to read newspapers and write short articles in this new script after three months' training, six hours a day, while children could be taught to write within six months. To date, twenty textbooks in the new script have been published. They are now used as teaching material in 28 primary schools. On September 23, 1952, the first newspaper in this vernacular appeared in Sichang.

Projects for improving the Tai written language, and drafts of latinized scripts for the Miao, Chuang and Puyi peoples, have been completed and are now ready for adoption and popularization.\* Latinized scripts for the Li and Tzai-wa peoples have also been worked out, and they are being tested and improved upon. A system of writing for the Woni people is being devised.

When students at the Central Academy for National Minorities who had studied the Miao language went out to the Miao region of Kweichow province for practice in conversation as part of their practical training, they got on very intimate terms with the people there. They helped the Miaos with the harvesting and looked after the cattle during the day, and had long talks with them in the evenings. For the first time in human memory, Hans came to these Miao people not as oppressors but as equals and friends.

Such teams in various parts of the country have now, in the main, completed their tasks. They have obtained a general idea of the various minority languages. Valuable data have been collected to serve as a foundation for the creation of written languages for peoples who still lack them.

\*Since this article was written, a new system of writing, representing an improvement on the Tai script, has been officially adopted by the regional government of the Tai people.

**MARCH 1956**

## A Chieftain's Daughter

by **AHAIDATI**

**A**HAIDATI, you should have been born a boy." How many times I remember the family elders saying these words to me when I was small. As I grew older and understood what they meant, I became angry and bitter. Yes, I thought, it would be better if I'd been born a boy. Then I might have been able to fight my father's enemies.

I belong to the Yi nationality. We lived in Szechuan province and my father had the hereditary title of *tu-ssu*, conferred

on local rulers under the Ming dynasty more than five hundred years ago. The old emperors, and the Kuomintang government after them, tried to maintain their oppression of the minority peoples by a policy of "divide and rule". They used to incite local chiefs to attack one another, giving them arms for the purpose. When the contending chiefs exhausted their strength, the Kuomintang would step in and grab their territory and wealth. The chiefs, unable to fight back, would swoop on the countryside and carry off the populations of whole villages to make them slaves. Thus there were feuds among the Yis which had lasted for many generations. And all of us hated the Hans (the majority people in China) with a fierce hatred.

My father died when I was three years old, leaving me his title and his wealth. But since I was the sole heir and virtually unprotected, the Kuomintang officials decided to help themselves to most of my father's property. They set up a special "Committee to Settle the Estate of the Tu-ssu", divided nine-tenths of his land among themselves and reported to the higher government that they had "purchased" it.

Not content with this, they imprisoned my mother and our steward until they agreed to raise the rents on our remaining land and give them the extra revenue.

So I grew up thirsting for revenge. I did not play like other girls. I practised shooting. I carried a pistol in my dress and slept with it under my pillow.

My mother thought I would be less helpless if I could speak the Han language when I grew up. She wanted me to go to school and after she died, when I was sixteen, my aunt took me to Chungking to study. When I came of age I became the *tu-ssu* and chief of the tribe. In 1949, the family arranged a marriage for me. I was 24 years old and my husband, a Yi leader from Sikang, 33.

Not long after our marriage a group of bandits raided our territory, burned down many houses and took away people's property. This in itself was nothing new. But we knew that the gang who carried out the raid actually belonged to the Kuomintang county head, a man named Liu Shao-hua, who was all the time posing as the guardian of law and order. My husband spoke of this matter to some newspaper reporters, and Liu decided to take his revenge.

The Kuomintang was already nearing defeat by the people, and he accused me of helping "the enemy" and "harbouring rebels". Soldiers came to our house and arrested 20 people, but I stood my

ground and refused to let them be taken. I was the *tu-ssu* and was within my rights. Liu knew it and had to yield.

I decided to go and live elsewhere for a time. I set out for Chengtu and forty of my people accompanied me. But Liu Shao-hua, still vengeful, sent bandits to kill me on the journey. My servants succeeded in scaring them off.

In Chengtu I gave evidence of the crimes of this man and demanded that he be removed. The Kuomintang provincial government officials pretended to be sympathetic, but they were part of the same corrupt gang and had no intention of doing anything. I was still trying vainly to obtain redress when we heard that the People's Liberation Army was approaching.

Frightened, I left everything and hurried home, though my aunt tried to persuade me to stay and see what the Communists were like. I told her: "Hans are Hans and an army is an army, no matter what they call themselves!" I dared not even remain in my home in Leipo town, but went with my family and servants and hid in the mountains.

Soon we heard that the town was "liberated" and sent an old man to find out what was happening. He came back and said that this new army was not ill-treating our people, but was very friendly. He had seen young girls walking around the streets unmolested and the young men were not being captured and forced to enlist. We talked it over, and decided to go back to the town.

There a government worker named Hsu began to visit us. He told us that we Yis need not fear oppression any longer, and explained the government's policy of equality for all the nationalities. Then I was invited to a representative conference of minority nationalities. At first I was not inclined to go, yet I was curious to see what it was all about. Four or five hundred people took part, and we talked out our problems. I realized that the new government, instead of wanting to divide us, had found the way to help us unite. A consultative committee was set up and I was elected its deputy chairman.

Liu Shao-hua, the Kuomintang official who had done us so many wrongs, was brought before the people's government. There people gave evidence of his crimes; he had the blood of many Yis on his hands, and he paid for it with his life.

Shortly after liberation I was one of a big party of Yi people who were invited to visit Luhsien and Chungking, major cities in Szechuan province. We all wore our traditional costume and

spoke our own language. I was the only one out of the whole group of over a hundred who had ever been outside our district before, and even I, when I went to school, had never worn our national dress among the Hans, for fear of persecution and contempt. Now no one called us "savages" or "barbarians". We heard people—even children—address us as "brother nationalities" or "Yi brothers". On visits to factories and schools, we were welcomed with bright-coloured flags, smiles and applause.

In 1951, when a county government was formed at Leipu with representatives of both Han and minority peoples, I was chosen as its deputy head. My job was concerned with the affairs of the Yi and other minorities — with relation to finance, trade, culture, education and health.

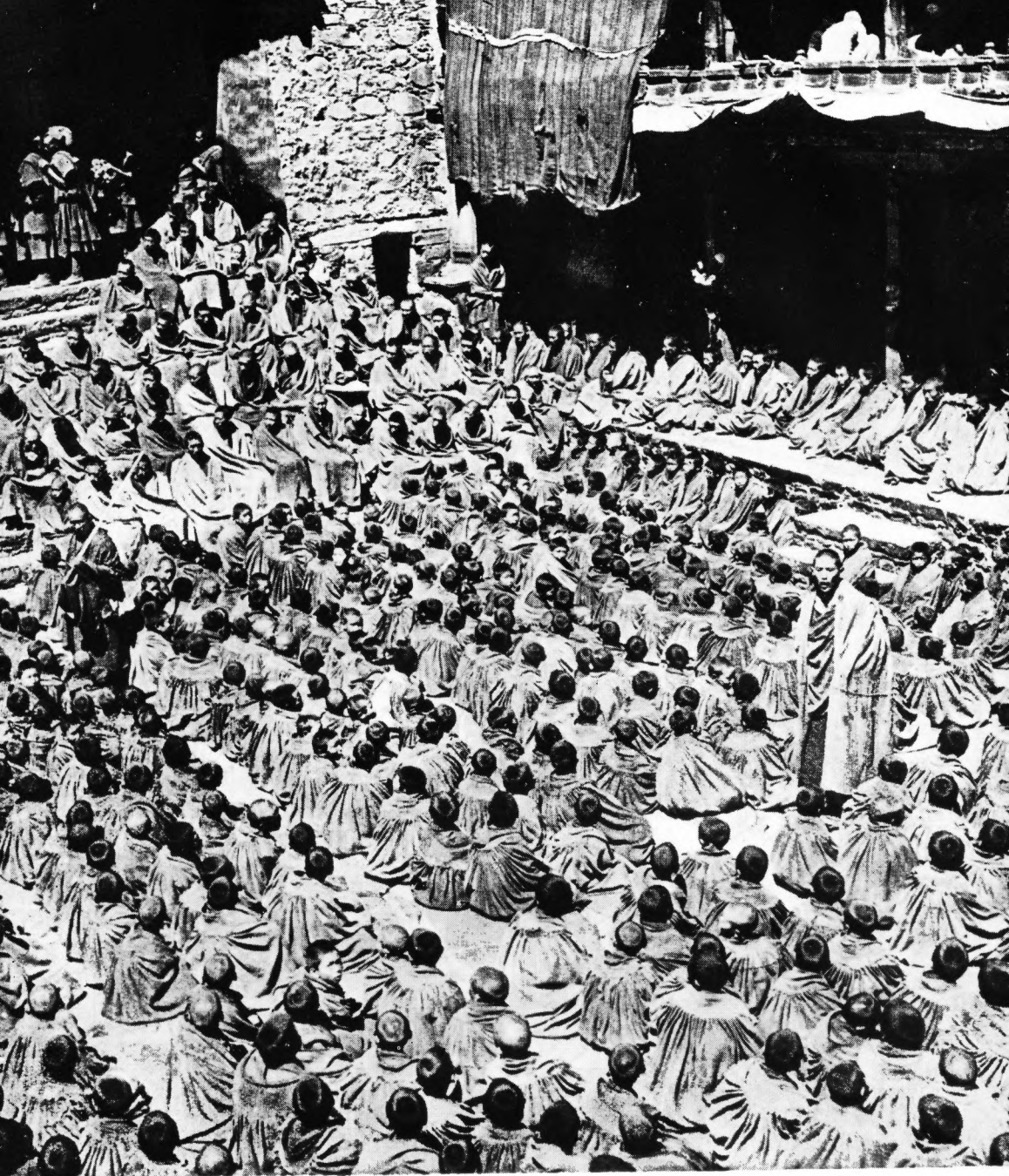
In formulating laws and settling disputes, the government respected all our habits and customs. It encouraged the Yis to settle their problems peaceably instead of fighting, and created Yi courts where all can speak in their own language. My husband was appointed to a post under the Lushan county government, where he deals with cultural matters.

Before the nationwide elections were held in 1954, I was invited to an enlarged session of the Commission of Nationalities Affairs in Peking; I took part in discussions on the section of the Constitution which concerns the nationalities. Soon afterwards, I was elected a delegate to the first National People's Congress. There are altogether thirteen Yi delegates in our great national assembly.

Now we have our own autonomous district government. Our people have never lived so peaceably or so well. The People's Government makes loans to the peasants and has distributed seed, grain and clothes to them. Over two thousand households in the district have received new farm implements. Hans and Yis work together to improve agriculture, and state trading groups come to the mountain villages with salt, cloth and other goods to exchange for hides, wool and medicinal herbs at fair prices.

For me, liberation has meant freedom from hatred and humiliation. Now I am glad I was not born a boy. When my five-year-old son grows bigger I shall tell him about the bitterness that existed between the nationalities in the past so he can appreciate the present. But he will find it hard to understand. He will know only the new atmosphere of brotherhood and friendship.





Liu Ching-jui

Lama novices at the Shigatse monastery, Tibet.

## TEMPLE, MOSQUE AND CHURCH

**T**HERE are approximately a hundred million Chinese Buddhists, ten million Muslims, three million Catholics, seven hundred thousand Protestants and twenty thousand Taoist priests and nuns. Buddhism and Islam are particularly strong among the national minorities.

Freedom of religion is written into the Constitution, in the drafting of which members of all churches and faiths took part. The views of the Chinese Communist Party, which leads the country, on this matter have been explained as follows by Li Wei-han, a member of its Central Committee.

*The people have the freedom to follow or not to follow any religion; they have the freedom to follow any religion or sect they choose; they also have the freedom to follow a faith now and not to follow it in future, or vice versa. . . . So long as there are people in our country who have religious faith we shall respect their freedom of belief and protect the religions they follow.*

The Communists themselves, he said, are materialists and therefore non-believers. But understanding history, they know why religions arose, why they will exist for a long time to come, and why their survival or fading is never a matter of administrative decree. Therefore they respect freedom of conscience in religious matters, for all citizens.

On the other hand, the government itself has taken the initiative to restore, preserve and sponsor study and appreciation of the contributions of China's religions to her cultural heritage. With government funds, temples, shrines and monasteries of historical and architectural importance have been renovated on a wide scale. Copied by contemporary artists and shown at large exhibitions in major cities, the murals and paintings from the Tunhuang caves in western Kansu province have attracted huge crowds of visitors who otherwise never in their lives would have had a chance to view them.



## How Muslims Live Today

by MUHAMMAD MAKIEN (MA CHIEN)

CHINESE believers in Islam, who number about ten million, are at last free from persecution, discrimination and every semblance of inequality. Their charter of liberties is the Common Programme of the People's Republic of China. Because most Chinese Muslims are also members of national minorities, it is especially important to them that the Common Programme does not limit itself to guaranteeing freedom for all religions but also secures to every nationality the right to develop its language or dialect and to preserve or reform its traditions, customs and religious beliefs in accordance with the wishes of its members.

These policies have been put into practice by both central and local authorities. In respect of religion, all mosques, as well as the places of worship of other faiths, are exempt from real-estate taxes, while those of historic value have been repaired at government expense. On December 6, 1950, the Central People's Government issued a special order remitting the slaughter tax on cows and sheep killed by Islamites in connection with the celebration of the Birthday of the Prophet, and the festivals of Lesser Bairam and Korban Bairam.

During these festivals, state-owned and cooperative trading agencies give special discounts on such articles as beef, mutton, rice, flour, tea, sugar and cloth. Moreover, the government has ordered that no Muslim student, worker or state employee should be required to work on the religious holidays of Islam. In Peking and elsewhere, meeting places are provided for large gatherings of Muslims on special religious occasions. At every state banquet and representative assembly, there are special tables with food and refreshments which conform to Muslim dietary laws. Such food is also regularly provided at many railway stations.

In 1952, Chinese Islamites sent a *hadj* pilgrimage to Mecca. Although the pilgrims were unable to proceed all the way to their destination as a result of external hindrances, they met with co-religionists in Singapore and Pakistan, where they stopped for

some time. Their journey made it clear to all Islam that Chinese Muslims have not only freedom of belief but also freedom of contact with their brothers elsewhere in the world. Delegates from the various Islamic countries to the recent Peace Conference of the Asian and Pacific Regions visited mosques in Peking, Tientsin, Shanghai, Hangchow, Wusih and Canton, and took part in services in some of them. They will be able to confirm, from their own experience, the fulness of rights enjoyed by their Chinese co-religionists.

Chinese Muslims are particularly happy over all these advances because of the bitter memories still fresh in their minds. For many centuries, as well as very recently in the semi-feudal and semi-colonial China of the Kuomintang, Muslims were placed under all kinds of restraints in the practice of their faith. Mosques were often seized as billets for mercenary troops who had not the slightest respect for the rules of Islam and drank wine, gambled, sang indecent songs and ate pork on the premises—even amusing themselves by forcing the priests, or Akhuns, to taste food prohibited by Islam. Kuomintang vandalism in pulling down the mosques outside Chao Yang Men, Peking, and at Mu Chia Chung Tse, Tientsin (both incidents occurred in 1948), is something that Chinese Islamites will never forget. Nor will it be forgotten that, under the Kuomintang, Muslim communities became so poverty-stricken that hardly anyone could afford to kill an animal on Korban Bairam according to the rites of the Koran. In those days, Chinese Islamites called the Lesser Bairam "The Festival of Tears" and the Korban Bairam "The Festival of Humiliation".

The Kuomintang also shed rivers of Muslim blood. Between 1941 and 1943, Sheng Shih-tsai, Kuomintang governor of Sinkiang, put to death over 100,000 revolutionary young people in that province, most of them the sons and daughters of Islamic nationalities. In 1928, the Hui\* people at Hochow (now Linhsia county), Kansu province, started an armed revolt against the misrule of the Chiang Kai-shek gangsters. In the resulting suppression, more than 10,000 of the Hui people were massacred, numberless buildings were burned down and the whole city was pillaged, leaving the surviving Hui in the pitiable position of homeless vagrants. Between 1939 and 1941, thousands of others were slain for stand-

\* The Hui people are one of the largest Muslim groups in China. They number about three and a half million and live in communities scattered through many parts of the country.

ing up for their rights in Haiyuan and Kuyuan counties, also in Kansu. It is a heartbreaking thing to record that the warlords of the Ma clan, themselves of Hui origin, betrayed their own people for Kuomintang bribes and participated in the slaughter of both Huis and Tunghsiangs, another northwest Muslim nationality.

By contrast with the dark past, when they did not enjoy any security of life, much less other rights, the liberation of China has brought the Muslims an opportunity for rapid political, economic and cultural development.

Muslim divines and laymen participated in the first session of the Chinese People's Political Consultative Conference which founded the People's Republic of China and adopted the Common Programme, as well as in all subsequent sessions of the CPPCC.

Many sit on local people's representative assemblies and hold posts in the Central People's Government, in governments of the provincial, municipal, county and district levels, and in public services of all types.

In the armed forces, all ranks are open to Muslims—and special arrangements are made for their food and religious observances.

Besides this respect for their beliefs, the people of various Islamic nationalities enjoy the right of national autonomy. Regional autonomous governments have already been set up in many places. Wherever the Islamic nationalities have a distinct language, it is used, on a par with Chinese, in court proceedings and all types of official business.

In Sinkiang, home of the all-Muslim Uighur people, who constitute a majority of the inhabitants, the currency issued by the People's Bank bears inscriptions in Uighur. These notes are not local currency but are legal tender all over the country.

As is the case with the Chinese people of all nationalities, the majority of Muslims in China are peasants. They have therefore benefited fully from the land reform wherever it has been carried out.

The many Muslims leading a pastoral life have made similar gains as a result of the fair trading policy of the People's Government. In Urumchi, the capital city of Sinkiang, a shepherd before liberation had to sell 442 lb. of wool to get a bolt of cotton cloth. Now it takes only 47 lb. of wool to get the same amount. As a

\* The largest of the autonomous regions where Muslims predominate is the Sinkiang Uighur Autonomous Region, established in 1955.

result, every Muslim around Urumchi can now afford to kill a fat sheep on the Korban Bairam, as the Koran teaches.

The agriculture of many areas inhabited by Muslims depends on irrigation. In the past two years, the People's Government has initiated irrigation projects and other large-scale construction work in these regions. As a result, Sinkiang, in 1952, had 24 per cent more land under cultivation than in 1949. The cotton crop of the province went up nearly 29 per cent, and the output of all crops together was 34 per cent higher. People's Liberation Army units stationed in Sinkiang have helped the local nationalities to restore fifteen major irrigation projects and build eight new ones. At the same time, the peasants have themselves extended the network of small-scale irrigation works, with the result that the irrigation area has increased to 110,000 acres.

In the field of culture, the People's Government has helped the Muslims of various areas to set up a very large number of schools. In Shantung province there was a considerable area, inhabited by Hui people, where not a single person knew how to read and write. Now, in the same area, there is at least one primary school in each village and half of the total of children is already enrolled. A college exclusively for Hui students, established in Peking, now has more than a thousand students. Hui primary schools in Ninghsia province have increased in number from 14 to 22, and in enrolment from 1,288 to 8,863. Sinkiang has its own Academy of Nationalities for higher education. In the same province, there are 5,500 Muslim students in 30 middle schools and over 259,500 Muslim children in 1,950 primary schools, instruction being given in the language of the pupils. Seventeen primary schools and a middle school in the Anshan district, for example, teach in the Kazakh tongue. Sinkiang has eight daily papers and three periodicals in the Uighur language, and five newspapers in Kazakh.

Side by side with political equality and economic improvement, the restoration and growth of culture and education among the Muslims of China has put an end to all phases of their enforced backwardness.

## More Ties Among Buddhists

*by CHAO PU-CHU*

**B**UDDHA, it is said, once asked his disciples: "How can a drop of water be eternally prevented from drying up?" None of them could answer him. He told them: "By casting it into the sea." Both from our knowledge of the past and from our present experience, we Chinese Buddhists recognize the profundity of this truth—that the life of the Buddhist is bound up with that of every living being around him. And this year, when our co-religionists in many lands will be celebrating the 2,500th anniversary of Buddha's Nirvana, we shall reaffirm our desire, together with all our brothers and sisters abroad, to live peacefully, to be more devout in our religious studies, and to serve all living beings ever more fully.

According to the earliest records, Buddhism first entered China from Central Asia two years before the beginning of the Christian era. Actually it may have been much earlier. The emperor Ming-ti (A.D. 58-76) of the Han dynasty, who is said to have learned of Buddha in a dream, sent a mission as far as India to search for fuller knowledge. In A.D. 67 the mission returned to the capital, Loyang, accompanied by two learned Indian monks, Dharmaraksha and Kashyapa Matanga. It also brought back the first Buddhist scriptures and images to China. The emperor built a monastery, known as the White Horse Temple (because the sacred books and images had been carried on a white horse), where the first Chinese translations of the scriptures were made.

From that time on Buddhist missionaries from India and the "western regions"—Sinkiang and parts of Central Asia—came to China frequently, and Chinese pilgrims often visited these lands. Beginning with the fourth century A.D., the influence of Buddhism spread rapidly. In those troubled times, when China was split by internecine wars, the Buddhist idea of causation, emancipation from suffering, equality of all beings and boundless compassion had a strong appeal for both rich and poor, among the Han people (the majority in China) as well as those of other nationalities. The Indian Dharmakala had founded the first ordination altar in the

White Horse Temple in A.D. 250. Nineteen Bhikshanis (ordained nuns) came from Ceylon between A.D. 429 and 433 to ordain the first Chinese nuns.

Splendid temples, most of which have not survived, were built all over the country in the next few centuries. Among them were the Buddhist grottoes and caves at Tunhuang in Kansu province, Yunkang in Shansi province, Lungmen in Honan province and elsewhere, that house great art treasures to this day. In the seventh century lived Yuan Chwang, the most famous of the many Chinese scholar-pilgrims who made the journey to India, bringing back scriptural writings and sacred images.

Such pilgrimages were very important vehicles for general cultural exchange. Chinese medicine, astronomy, architecture, music, painting and literature were greatly enriched through contact with India and other Buddhist lands. Those countries, in turn, learned silk and paper-making from China. Painting in India was influenced by Chinese painting and calligraphy, and Chinese music and pottery became known there. Translations of religious works too, were not one-sided. For example, *A Treatise on the Mahayana Teachings* and the *Tao Teh Ching*, an ancient work of philosophy reputed to be by Lao Tse, the founder of Taoism, were translated from Chinese to Sanskrit.

From the end of the sixth to the middle of the ninth centuries, various schools of Buddhism which had been assimilated into China took on specific forms there. Among them eight schools predominated.

The Tien Tai school emphasized study and meditation. The Dhyana school made meditation its main stress. The Pure Land school taught its followers to repeat the name of the Amita Buddha as a means of attaining emancipation from earthly desires and sufferings. The Three Treatises school developed directly from the Indian Madhyamika school. The Dharmalakṣaṇa school was based on the Indian Yoga. The Hua Yen school was founded on the Avatamsaka-sutra. The Vinaya school made detailed studies of the Vinaya rules. The Esoteric school practised tantric methods to attain Buddhahood. All of these sects, with the exception of the Three Treatises school, have their followers in China still.

In the middle of the seventh century, Buddhism entered Tibet with the conversion of the Tibetan king Songtsan Gambo, who married Princess Wen Cheng of the Chinese imperial family.

Songtsan Gambo sent a mission of 16 scholars to study Sanskrit and the Buddhist scriptures in India. After their return, they devised the Tibetan written language into which the Buddhist canon was translated from Sanskrit. Tibetan Buddhism, too, developed its different schools.

Today, the schools of Buddhism in China and elsewhere are generally classified into three main systems on the basis of the language of the canons used by each.

The Pali system, originating in India, also flourished in Ceylon, Burma, Thailand and other parts of Southeast Asia. In China it is found mostly in the southwest, where it prevails among the Tai people in Yunnan province.

The Han (the main Chinese language) system is followed by Buddhists in most of China. This system spread in the fourth century to Korea, and a little later to Japan. Kokai, one of the many Japanese priests who came to China during the Tang dynasty (A.D. 618-907) to learn about Buddhism, borrowed certain Chinese characters for the writing of the Japanese alphabetical system, which is based on a modification of Sanskrit tones. The spread of Buddhism from China to Japan was responsible for some of the Chinese influence on Japanese culture. In Japan and Korea, the Zen (or Dhyana) system was one of those brought from China. The Dhyana and Pure Land schools became dominant in Vietnam.

The third main system today is the Tibetan (Lamaism). It spread from Tibet into other regions of China inhabited by the Han, Mongolian, Manchu, Tu and Yuku peoples. It also became dominant in Bhutan, Sikkim and, at one time, in the present Mongolian People's Republic and parts of Siberia. The main school of Tibetan Buddhism today is the "Yellow Sect", to which the Dalai Lama and the Panchen Lama belong. Its influence is still widespread among Tibetans living in other parts of China and among the people of Inner Mongolia.

In China, the religious life of Buddhists of all three systems suffered severely in the forty years prior to liberation. Civil wars, foreign intervention and corrupt government interfered with Buddhist monastic and secular education. They also robbed us of many treasures of our religious art.

Ancient places of worship like the Tunhuang, Lungmen and Yunkang grottoes lost many priceless and sacred objects. The heads of images of Buddha were chopped off. Other fine sculptures were mutilated. Murals were torn down and shipped to New

York, London and Paris. China's rulers did nothing to protect these treasures against wanton damage and imperialist rapacity. On the contrary, they aided those who came to take them away.

Today Chinese Buddhists are helped by the People's Government not only in the exercise of their religion but also in the preservation of their historic temples and works of art. Buddhist monks and laymen helped in the framing of Article 88 of the Constitution of the People's Republic of China, which deals with religious freedom. We have been aided by the government to repair and restore temples and relics dilapidated through neglect or damaged by war. These include the temples on Mount Omei in Szechuan province and Mount Wutai in Shansi, the Lin Ying monastery at Hangchow and many other sacred edifices.

Regardless of school or sect, China's Buddhists today are joining wholeheartedly in our country's progress. To serve the people is the aim of our social system and our new state. This is in complete accord with the religious duty of Buddhists "to purify the world and benefit all living things".

The Chinese Buddhist Association, uniting all the sects in our country for the first time in their 2,000-year history, was established on Buddha's birthday in 1953. We have come together to assist the government in carrying out its policy of protecting freedom of religious belief; to spread Buddhist doctrine; to improve the cultural and religious education of monks and laymen; to preserve, study and spread the knowledge of Buddhist antiquities and the translation of the Buddhist classics. We have already located and helped to restore hitherto unknown Buddhist relics of great value such as the Maichishan grottoes in Kansu province, built in the fourth century, the Pinling Temple grottoes also in Kansu, and the Caves of the Thousand Buddhas in the Uighur Autonomous Region of Sinkiang.

Now we are preparing to open a modern training college for Buddhist monks. The Chinling Buddhist Text Society, a publishing house in Nanking which was closed down for lack of funds under the Kuomintang rule, has been reopened. It still possesses 88,000 wood blocks on which the complete Tripitaka are inscribed. A new monthly magazine, *Modern Buddhism*, circulates not only in China but also in India, Japan, Burma and other countries.

Our new-found freedom and unity have brought renewed contact with Buddhists in other lands. This began when Chinese Buddhists, led by the late Rev. Yuan Ying, Master of Dharma,



attended the Peace Conference of the Asian and Pacific Regions in Peking in 1952. Buddhists from China, Ceylon, Burma and other countries who were among the delegates issued a joint call to co-religionists throughout the world to strive together for the defence of world peace, and to support the resolutions of the conference. "In these resolutions born of mercy and wisdom," said the statement, "lies the one path essential to the realization of peace among men. . . . To defend true peace is also to defend the integrity of religion."

In April 1955, on the invitation of Prime Minister U Nu, a Chinese Buddhist delegation visited Burma. Led by the Chairman of the Buddhist Association, the Rev. Shirob Galtso (Hsijaochiatso), a Tibetan Lama, the delegation visited eleven cities, worshipped at many pagodas and monasteries, and talked with eminent Buddhist monks and other religious leaders.

In September 1955, a Burmese delegation came to China to receive a holy relic which has been lent to the Buddhists of Burma, at Premier U Nu's request, for a period of worship there. After Buddha's death and cremation, it is recorded, four teeth were preserved among the sacred remains. One of these was brought to China at an early date and buried beneath a pagoda on the western outskirts of Peking. In 1900 the pagoda was destroyed by imperialist troops, but the holy relic was saved by the monks and kept in a nearby temple.

The writer was among those who accompanied the relic, enshrined in a small gold pagoda, to Rangoon. As it was borne through the streets from the airport, thousands of people who had stood waiting for hours knelt down and bowed their heads to the ground. Dr. Ba U, the Burmese President, said "A historic desire of the Burmese people has been fulfilled today."

Contact between Chinese and Japanese Buddhists was resumed and strengthened after 1953, when Japanese Buddhists helped to bring about the return to China of the remains of many Chinese war prisoners who died from maltreatment by the Japanese militarists during the war. A number of Japanese Buddhists have visited China during recent months, as members of various delegations.

The writer went to Japan in August 1955 as one of the Chinese delegates to the conference for the prohibition of nuclear weapons held on the anniversary of the first atomic explosion at Hiroshima. The opportunity was taken to discuss many topics of common

interest with noted Buddhist scholars and monks in Tokyo and Osaka. A reception in Tokyo was attended by 100 leading Japanese Buddhists, including the vice-chairman of the All-Japan Buddhist Association. A letter was read pledging that Chinese Buddhists would work together with Japanese Buddhists, the Japanese people and the people of the whole world for peace.

This year Buddhists in Southeast Asia and India will commemorate the 2,500th anniversary of Buddha's Nirvana. Although we calculate the year by different calendar, we shall join in the celebration with reverence and joy. Delegations of Chinese Buddhists will visit India, Burma and Ceylon at the invitation of the governments of these three countries to take part in the ceremonies there.

The Chinese Buddhist Association, as part of the commemoration of this year's holy festival, is arranging and reproducing a series of writings from the Buddhist classics which have been uncovered in the caves at Fenshan, about 170 miles from Peking. Carved on both sides of some 8,000 stone tablets, these writings have lain unheeded for about 500 years.

We Chinese Buddhists are extending our relations with our brethren in other countries. These links can be greatly strengthened, for they are all seeds from the same bodhi tree beneath which Sakyamuni attained Buddhahood.

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JUNE 1956

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## Chinese Christians: New Prospects

by TING KUANG-HSUN

**F**ULL of thanksgiving to God, Chinese Christians share the joy of their fellow-citizens at having won peace and entered on the task of building a prosperous nation. At the same time they feel that the Church, in her ministry to the people and through her life of love, worship and witness, should build itself to keep pace with the country's fast-moving progress.

Our Nanking Union Theological Seminary endeavours to answer the call by preparing candidates for the ministry and for other Christian leadership. It offers training that is recognized by practically all the non-Roman Churches in the country. The course for university graduates lasts three years; for those with a lower academic standing, four or five years. The enrolment this spring, including those attending refresher courses, was about 150.

A new and very encouraging feature of the composition of our student body is the number who now come from rural areas. That is as it should be, since a large proportion of Chinese Christians live in the countryside. But it was not the case in the past. Then there was great lack of educated Christians in the villages, and there were very few rural candidates for the ministry. Here I must stop and explain the background of the new trend, so meaningful for the Church and its future.

During a recent three-week rural tour in Chekiang province, I came to understand this new trend better. There I visited eleven parishes, attended retreats and conferences with colleagues in several places, and confirmed about 700 people between 15 and 81 years of age. The Diocese of Chekiang today has over 70 churches under the full-time care of clergymen.

I found that all these churches had gained from the restoration of peace, from the ending of the cursed inflation, the land reform, the movement towards cooperative farming and the introduction of advanced methods of agriculture, which have brought the peasants a better livelihood and have aroused in them an interest in cultural life. This I saw in the little town of Kwanhaiwei. The membership of St. John's Church in that town has increased by between 20 and 60 annually in recent years. It has some 200 members, sixty other members who have been baptized but not yet confirmed, and fifty or sixty new converts under instruction.

Out of 128 members of the St. John's congregation who were working in agriculture last autumn, 66 were in mutual-aid teams and 42 in farming cooperatives. They had taken part in building dykes and other projects for irrigation and water control. Their general standard of living had risen steadily in the past few years, and last autumn's harvest set new highs for both rice and cotton.

The Church found itself benefiting by these blessings. The people's offerings broke all previous records. The building was

enlarged to accommodate additional worshipers; its walls were repainted and new vestments were made for the choir. The parishioners made a flower-garden on a piece of formerly derelict land behind the church, with stone seats to make it a pleasant resting place.

While I cannot say that the services in all rural churches I visited were always orderly and beautiful, I did see that the congregations were big, the spirit was warm, the singing hearty, and our clergy was generally held in high esteem in their parishes.

It is known to all how, in the past, misery drove men and women in despair to their knees. Now we can see that spirituality does not thrive on misery. On the contrary, the alleviation of suffering draws the same men and women, in thankfulness, to the brightness of God's presence.

Another important new fact is that our members no longer think of their Church as belonging to the foreign missionary. Nor do they think the Church belongs to the clergy only. They see her now as the Church of God, belonging to them all. This outlook makes a tremendous difference. The minister of the rural town of Tatuan told me that the annual meeting of his parishioners no longer consists of a handful of people listening passively to reports, and submissively assenting to proposals for election. More people than ever are taking part in the everyday work of the parish, and all want to put their views forward. So at the annual meetings small groups are formed, which give everyone a chance to have a say on problems of church life. The conclusions that come out of such discussion, the vicar told me, are far more representative of the opinions and interests of the whole congregation than those reached at meetings of the old type.

This being the situation in Christian religious life in China, it is easy to understand why more young men in the rural churches now think of choosing the Ministry when they come to decide on their vocation. It is, of course, unavoidable that the educational standards of some applicants for admission to the Seminary should still be low. But I am sure that in the next few years this difficulty will be overcome and ways will be found to give adequate help to all those who need it.

For students at the Nanking Union Theological Seminary, life is simple and full. There are few rules, but plenty of mutual love and respect within the community. Nanking itself is fast becoming a leading centre of learning and culture. Thus, while the Seminary

provides an admirable environment for retreat and study, the seminarists also find opportunities in the city for wider academic, artistic and cultural activity.

As for the curriculum, our visitors from abroad have expressed a certain surprise that Chinese Christians have not availed themselves of the changed circumstances to give their faith a "new look". We think this would be wrong. We have denounced and repudiated unscrupulous efforts to place the Church, the Bible or our theological teaching at the service of colonialism, racism, aggression or anything which contradicts the true nature of Christian faith. But in taking that position we were not aiming at revision of Divine Truth. We saw our stand as part of the movement of Christians to take the Bible, and the historic faith, more seriously than ever.

Our new-won freedom is freedom indeed, because in it the truth we regard as essential for man's salvation is not sacrificed or diluted. On the contrary, with untruth exposed for what it is, truth presents itself in greater purity and fullness. It calls us to love it more dearly, and bear witness to it more faithfully. Thus, we do not feel apologetic about the fact that our basic curriculum corresponds quite closely to that of traditional theological education.

Our students, on graduation, find many and varied opportunities awaiting them. Most of the recent graduates have taken up direct pastoral work. Others have been called to offer their talents in the field of Christian literature, work among children and youth, religious art and drama, sacred music, theological teaching and the sale of Bibles. One of them even assisted in producing a musical movie for Christmas.

Christian writing seems to interest our students more and more. Many contribute to their denominational periodicals. Our own seminary publishes the *Nanking Union Theological Review*, which is in the main a theological forum for the faculty; *Fellowship With One Another*, which is the students' own magazine, and an *Alumni Bulletin* for past graduates. Our professors devote much time to preparing courses and textbooks. It is our aim to do some theoretical work on subjects of special relevance for the Church in present-day China. Bishop T. K. Shen, formerly of Shensi, has done intensive study on certain liturgical problems. Dr. Andrew C. Y. Cheng is chairman of a committee which is undertaking the translation into Chinese of some of the classical Christian literature.

Throughout the Chinese Church, there is greater intellectual vigour, and a new emphasis on overcoming the divorce between theology and devotion, and between worship and life. This, with a heightened sensitivity to the "manifold brilliance" of the Bible message, is definitely bringing a healthy influence to bear on the theological and spiritual condition of the Church.

Finally, I should like to say something about the word "Union" in the name of the Seminary. Our Seminary is a venture in co-operation. On the Board of Directors and the teaching faculty, and in the student body, there are members of the Presbyterian, Anglican, Baptist, Methodist, Lutheran, Congregational, Pentecostal, Apostolic Faith, Seventh-Day Adventist and other churches. The special characteristics and needs of each denomination are given due respect, both in the preparation of the curriculum and in the planning of worship. Take, for example, the situation of my own Church, the *Chung Hua Sheng Kung Hui* (Anglican). Besides the ordinary courses in the Seminary, Anglican students are provided with special ones to meet their particular requirements. Joint services are held in the main chapel for the whole seminary, but there is also a special Anglican chapel where Holy Communion is celebrated on Sundays and on Holy Days in accordance with our Prayer Book. Special services are also held there during Advent and Lent.

We feel that our Seminary can be a meeting place for all the Churches taking part in it—and for others too, because we have received one faith and serve the same Lord, and it is His will that we should be one. We have some differences; we do not ignore them, but neither do we exaggerate them. We serve in mutual respect and esteem, entering as deeply as our humility can take us into the riches that are in Christ. This is something new. Compared with the spirit of competition and even hostility that existed between some of the church bodies in the past, we see it as nothing short of an act of God Himself.



*Liu Yu-sheng*

Scientists experiment in a lamp-factory lab.

## SCIENCE SERVES THE PEOPLE

SCIENTIFIC forces are being mustered for the job of building China into a modern industrial nation. A comprehensive long-term programme, which is being helped by the government in every way, aims to do away with China's backwardness in this respect. Its aim is to bring Chinese science abreast of the best world standards by 1967—the last year of our Third Five-Year Plan. It includes work connected with current practical problems in every field, and the promotion of fundamental research.

Implementation is along several lines. Qualified scientists and promising graduates are sent to the Soviet Union and other countries to study and work in the branches of knowledge most vital to China, so they can train others on their return. In institutes at home, foreign experts are invited to help Chinese scientists in working out problems and educating Chinese personnel. Industrial and agricultural ministries run their own research centres, which are being strengthened and increased, to apply the most advanced international results in their specialized spheres—in conformity with Chinese conditions. Engineers and technicians actually engaged in construction are learning systematically from Soviet and other specialists now in the field. Finally, to provide large numbers of new recruits for science, students and workers who have shown ability in this respect are being given good undergraduate grounding in the universities.

The import of scientific equipment, books and journals from all parts of the world has increased sharply. All scientific trainees are learning foreign languages. Data received from abroad is translated quickly and made available to all.

While present standards demand intensive learning from abroad, Chinese scientists are given every encouragement to strike out along original lines. Both before and since the liberation, some have reached the front ranks in their fields internationally.



## Geologists Uncover Hidden Riches

by LI SZE-KUANG

CHINESE geologists, during the past three years, have discovered far greater reserves of mineral wealth in our country than were ever known before. No longer thwarted by the lack of interest of reactionary rulers, or worried by the idea that their research might only serve foreign concessionaires, they now work under the leadership of the People's Government in the secure confidence that all they do will bring immediate benefit to the nation. They have also won the respect and aid of the labouring folk of town and country, on whose enthusiasm and keen observation they can now rely in the common task of searching for basic materials needed in connection with industrialization.

In 1950, the first year after liberation, 29 geological parties were sent to various places in Northeast, Northwest, Central-South, North and East China to investigate sources of coal, iron and other metals and to survey roadbeds for railways and sites for factories and reservoirs.

In 1951, the number of geological and palaeontological teams in the field increased to 83. Besides locating many new mineral deposits, they carried out physiotopeographic mapping of many areas.

In 1952, 87 teams surveyed sources of copper, lead, zinc, iron and coal. Plans for 1953 call for still deeper and more far-flung investigations of China's mineral deposits.

Although the work may still be said to have barely begun, it has already yielded significant results.

Formerly, China was considered to be poor in petroleum. Now we have discovered that the country is rich in this essential material. Numerous petrolific formations and structural units have been spotted through detailed geological mapping and the application of geophysical methods supplemented by extensive test boring.

Estimates of China's reserves of coal, iron and a number of non-ferrous metals have been greatly increased. For example, it has been proved that the coal deposits in the northeast are more

than ten times the previously accepted figure, and that a major coal mine in North China is six times richer than we had thought. In iron, one big North China mine has been found to have ten times the formerly estimated reserves.

New discoveries of mineral resources, many of them unexpected, are being made almost daily.

One of the things that makes us geologists happy is the way the people have come to appreciate how important our science is to industrialization and the active and valuable help they have begun to give us.

The Ministry for Geology is constantly receiving letters from young and old, often accompanied by parcels of mineral specimens. Kuo Hsien-chih, a peasant of Loting county, Hopei province, sent pieces of an unusual white stone and a purplish mineral which he found while building a highway last autumn. A land-reform worker from the Tapien Mountains, Hupeh province, wrote a note in which he said: "I don't know anything about geology, but I am ready to climb the steepest mountains to locate anything that may be of use to the motherland. Here are two strange rocks I have found." A trade unionist in a city in Hopei remembered that the people in his home village had ground up some sort of grey stone with which they fertilized their cotton crop and asked the Ministry to investigate because "it might be a phosphate".

In Northeast China, the search for minerals has grown into a patriotic mass movement. The people of Jehol province alone have reported over 2,000 finds of various ores, a number of which have proved so important and abundant that their exploitation has already begun. Some shepherd boys picked up an ore specimen in the mountains of Kirin and a peasant made a long journey to town to have it tested. It proved to be antimony, and a new mine now stands on the site of the discovery.

Prospecting and re-estimating our mineral deposits are not the only activities of China's geologists today. They are also carrying out fundamental research of great practical value in conjunction with their immediate tasks. On the theoretical side, they have been able to disprove old, fallacious conclusions as to China's geological structure, ancient climate and geography, often imported uncritically from abroad, and to open up new paths of scientific endeavour.

China is not new to geology. She has a tradition of original thinking and investigation dating from the distant past. As far

back as 800 years ago, scholars like Shen Kuo and Chu Hsi pointed out that certain natural phenomena such as the occurrence of shells and water-worn stones in rocks, indicated the elevation of land from water, and also that wave-like mountain ranges could only have arisen from earth movements. Obviously they had grasped the fundamental principles of geological science. This was nearly 300 years before Leonardo da Vinci, a pioneer in geology, was born in Italy. Unfortunately, these brilliant perceptions of China's great men of the past could not be developed further because of the backward social system and wretched political conditions of their time.

During the past half century, many Chinese received modern geological training. But they too could not function properly, as they had to work under governments which cared nothing about developing the country. Moreover many of these geologists were mentally moulded to a semi-colonial outlook—they lacked self-respect and the confidence to strike out on their own. This led to blind worship of the propositions of certain western scholars, even when the latter ran contrary to their own observations, and to a sceptical, deprecating attitude toward original theses developed by Chinese scientists.

Here I will illustrate with only one case: the way in which research on glaciation was held up by some 15 years. Vanished glaciers of the Great Ice Age in China are not a merely academic matter but have practical significance today in laying down plans for prospecting as well as in dealing with problems of soil development and water conservancy in the northwest. Some western scientists who interested themselves in the matter once firmly held the view that, by contrast with the situation in other parts of the world, there were no glaciers in China in this period. In 1921, our own geologists working in North China collected materials which contradicted this view, but J. G. Andersson, a Swedish citizen who was the virtual behind-the-scenes head of the Chinese Geological Survey at the time, laughed off the evidence. His attitude stopped all work on the problem till 1934, when further indications of glaciers were found in Lushan, Kiangsi province—only to be dismissed again by western experts who refused to abandon their dogmatic views. It was only in 1936, when conclusive proof of glaciation was found in Huangshan, Anhwei province, that the old fallacy was completely exploded. This time Andersson did not laugh. Instead, he wrote about the glaciation of

parts of western China in a foreign publication in which nothing was mentioned of what had been done by Chinese geologists in this field.

Harmful as is the blind worship of authority in any scientific field, it is particularly so in geology—which is regional in its very nature. Geological hypotheses which seem valid for one country or continent may find no basis at all in others. In particular, the situation in northwestern Europe and the eastern part of North America, where original formations have been repeatedly disrupted by the crustal tension of the earth, is different from that in Asia, where the integration of various geological structural systems is excellently displayed. Attempts to force our geological workers to accept certain theories worked out in Europe and America as universal truths have done nothing but sow confusion. Of course, we Chinese geologists are also to blame. Too many of us split apart into sectarian schools based on various foreign models, and competed for the “honour” of being known abroad instead of uniting to work in and for our own country and to wrest the truth from nature.

The founding of the People's Republic of China has brought new meaning to the work of Chinese geologists. It has also brought them into contact with each other and with the people. It is now standard procedure for every field survey party, or several parties linked closely together, to hold weekly seminars in which the individual members acquaint each other with new findings made during the previous week, discuss their views, criticize their methods and check their results. Meetings of local peasants and miners are called from time to time by these field workers to explain the purpose of each expedition, tell them how to recognize various rocks and ores and enlist them in the common search. Often the people have only to hear such a talk to recall places where minerals and rare fossils have already been seen.

The *san fan* and other nationwide movements have helped geologists to get rid of vanity, purely technical approaches and their former preoccupation with publishing esoteric treatises on abstruse questions which had nothing to do with real needs. Our horizons have widened. We no longer separate theory from practice, and we no longer work alone. The entire country is our classroom and laboratory. All the people are our colleagues. We are entering into closer cooperation with scientists in other fields, and with geological workers of all other countries, on the basis of equality and mutual benefit.

The Ministry for Geology was established in 1952, to direct and coordinate the whole field. It now controls the regional geological surveys of Northeast, Northwest, Central-South and Southwest China, and guides the work of the institutes of geology and palaeontology of the Chinese Academy of Sciences. Under the sponsorship of this ministry, a national conference was held to map out the tasks of geological workers in connection with the planned development of the country's economy.

The establishment of two Colleges of Geology, one in Peking and one in Changchun, is another important step forward. Under Kuomintang rule, the geological departments of the universities were poorly equipped, had few professors and students, and offered courses in general theory only. One of the new institutes, by contrast, already has 130 teachers, 1,550 undergraduates and a number of graduate students—over 1,200 more than the combined student bodies of the previously existing university departments which it now incorporates. It has departments of mineralogy and petrology, general geological survey and prospecting, hydro-geology, engineering geology and geophysical exploration. Laboratory equipment costing over ¥200,000 million\* (US\$8,536,000 or £2,916,000) has been ordered. Ten survey parties, organized among instructors and students last year, brought back over 120,000 specimens for the institute's own use. Within four years, the college will have 8,000 students.

In other parts of the country, the government has set up short-term classes for surveyors, boring-operators, analysts and cartographers which have an enrolment of many thousands.

Besides many geological libraries and exhibition halls, plans are afoot for a central file of the records of all excavation work in China and the systematic translation of useful geological literature from abroad. But perhaps the best augury for the future of our science is the eager spirit with which the young people are thronging to geology.

\*In terms of old currency. The amount would be ¥20 million in terms of the currency in use since March 1955.

## What China's Scientists Are Doing

by COCHING CHU

**S**INCE without modern science China can never achieve industrialization, it is with that aim that we are now organizing scientific research on a nationwide scale. The Chinese Academy of Sciences (Academia Sinica), which was reorganized and entirely remoulded in 1949, is the coordinating and directing centre for this work. Under its leadership Chinese scientists have made their own Five-Year Plan, closely integrated with the national plan of economic development. Now they are drafting a long-term programme for the three five-year periods which will be needed to build the basic foundation of socialism in China.

For the period 1955-1957, the Academy of Sciences has singled out eleven main items on which scientists should concentrate their efforts. They are:

1. The peaceful uses of atomic energy;
2. Problems connected with the building of new iron and steel centres;
3. Investigations connected with synthetic and natural petroleum and petroleum geology;
4. Studies in seismology and earthquake-proof structures;
5. Problems connected with conservation of resources of main river valleys, especially the Yangtze and the Yellow rivers;
6. Investigation of tropical resources in China;
7. Studies on China's natural regions;
8. Antibiotics research;
9. Research on high polymeric compounds;
10. Theoretical problems connected with national construction in the period of transition to socialism;
11. Studies on the modern and contemporary history of China.

Research work in all these branches has already begun and will be greatly accelerated in the last two years of the First Five-Year Plan.

Since liberation great changes have taken place in scientific research in China. Formerly our research workers were few and lacked equipment, and the sparse government grants were barely sufficient to pay their living expenses. Now they are all liberally supplied with funds by the government. In the past we were able to advance in those sciences which need very little laboratory equipment—such as mathematics, geology and botany. In the technical sciences and in newer fields like electronics, nuclear physics and experimental biology, our progress was weak or almost non-existent. Above all, scientific research was divorced from reality and very little of it could be applied in practice. Now science is closely linked with industry and with agriculture.

Engineers and scientists in China are helping to create the 600 major industrial enterprises being constructed in the First Five-Year Plan. These include the 156 being built with the aid of the Soviet Union, which form the backbone of our industrialization programme. New research institutes have been set up at or near the industrial centres. Laboratory work proceeds side by side with the actual application of new industrial processes.

It is very important to provide the country with a low-cost metal which can replace steel, of which the output is still low. The veteran scientist Chou Jen and other research workers of the Institute of Metallurgy and Ceramics, with the help of engineers working in the metallurgical industry, have succeeded in manufacturing nodular graphite cast iron. Work on the processing of this is being continued by Chang Cho-mei and others at the Academy's Institute of Metallurgy, similarly aided by the engineers at various plants. It has recently been demonstrated that the strength and mechanical properties of the processed iron approximate those of steel, which costs four times as much to produce. The first-named Institute's research workers are also helping to build the new iron and steel centres at Paotow in Inner Mongolia and Tayeh in the Yangtze valley. They are devising new processes in ore-dressing, smelting and carrying on other studies. Metallurgists and engineers have solved many problems in the production of special steels, which are enabling China to build railways and bridges with materials of her own production. All the structural material for the Yangtze River bridge at Wuhan, which will be the longest bridge in the Far East, is entirely home-produced. The same is true of new railways like the Lanchow-Sinkiang and Paochi-Chengtu lines.

To help the fuel industry, chemists of the Petroleum Institute of the Academy of Sciences have been working on the refining and processing of natural and synthetic petroleum. They have found how to use iron, instead of the costly rare metal, cobalt, as the catalyst for the synthetic product. The catalyst now costs one-tenth what it did before, a big contribution to mass production in this field.

The Laboratory of Scientific Instruments, Academy of Sciences, has made new optical and precision equipment like high-power microscopes, and is producing optical glass.

To find a sufficient supply of raw materials for heavy industry has been the concern of geologists and palaeontologists. Many field teams were sent out from the Ministry for Geology during the last six years to lead thousands of prospectors and surveyors to look for the needed minerals. Among the important reserves they have helped to discover are iron, tungsten, tin, manganese, chromium, coal and petroleum.

Seismologists of the Academy's Institute of Geophysics have helped to choose the proper sites for factories by establishing new seismological stations and collating historical information about past earthquakes, thus estimating the possibility of upheavals at the sites of new industrial centres. Members of the Institute of Geophysics and Meteorology, working in collaboration with the Central Meteorological Bureau, have organized a weather forecasting centre. By applying the Multanovsky-Pagava method of medium-range weather forecasting in China and the Far East, they have succeeded in inaugurating a 72-hour medium-range service in China. This has proved very valuable since its inception in 1954. It has given warning of heavy frosts, dangerous floods and high winds a day or two in advance.

Many types of scientists have been working on the government's plan for the harnessing of the Yellow River. Hundreds of engineers, geologists, botanists and soil experts have been engaged since 1950 on a general survey of the middle and lower reaches of the river and its tributaries.

In 1954 a new commission, the Yellow River Planning Commission, was organized. On the basis of maps and data gathered in the previous years and with the help of Soviet engineers, it began to work out a comprehensive plan for the control of the Yellow River below Dragon-Goat Gorge, 2,280 miles from its mouth. More than 250 engineers, technicians and scientists took part, and the plan



was finished in the remarkably short space of nine months. It envisages the development of the hydro-electrical power of the Yellow River in 46 stages, with a total capacity of 23 million kilowatts.

Agricultural scientists are working on the problem of increased production of food for the people, and raw materials for industry. In the research institutes of the Ministry of Agriculture and in the numerous rural experimental stations, ways have been found to increase crop yields per acre by improving soil fertility, selection of seed, improved means of cultivation and the control of crop diseases and pests. A group led by Li Ching-kuei of the Academy's Institute of Soil Science has been working for some time on the improvement of the laterite and red earth in Kiangsi province. It has demonstrated that 2½ million acres of waste-land in the area can be made arable after the addition of proper fertilizer and manure.

To increase wheat production in the province of Shensi, Professor Chao Hung-chang of the Northwest Agricultural College has produced a new strain of wheat by hybridization and selection. Known as Pima No. 1, this gives a yield some 20 to 30 per cent higher than that of the local variety, exhibits a high resistance to rust and has a strong stem which stands well. It was sown over 1,300,000 acres in Shensi in the year 1953, and is now being introduced in Kansu province and in North China.

China's northeastern provinces produce over a third of the world's soya beans. After three years' work, biologist Chang Kung-hsien and his research group in the Academy's Shenyang (Mukden) Institute of Soil and Forestry have raised the per-acre yield 10 per cent by treating the plant with special nodular bacteria. The method is now being applied over 3,700,000 acres of land.

Chinese zoologists have made a start on improving livestock. One new breed of sheep is cross-bred from the "Kazakh" type of Sinkiang and the "Caucasian" of the Soviet Union. It is an average 45 per cent heavier and yields six times more wool than pure "Kazakh". Many epizootic diseases which took a heavy toll of domestic animals in Inner Mongolia in the past, such as rinderpest and hog cholera, have been brought under control by the use of new vaccines. Zoologists and hydro-biologists have made new headway in combating fish diseases and in extending fish-breeding in lakes and ponds. They have also been investigating physical and biological conditions in our coastal waters, and determining the migration season of scomber (the genus containing the mackerel)

and the life history of several kinds of algae of economic importance.

In medicine and public health great progress has been made, especially in epidemiology. Several dangerous diseases such as bubonic plague, typhoid, cholera and kala-azar, all formerly rampant in China, have now been virtually eliminated. Many vaccines which China formerly had to import from abroad are now being made in our own laboratories.

As a result of the American embargo on antibiotics, Chinese chemists, pharmacologists and biologists pooled their efforts and are now able to manufacture penicillin on a factory scale, and streptomycin, aureomycin and chloromycetin in the pilot plant stage.

In the first week of December 1955, under the auspices of the Academy of Sciences, a national conference on antibiotics was called in Peking. More than 150 Chinese delegates came to the meeting to read papers and discuss the chemical and biological aspects of antibiotics. Twelve foreign delegates from the Soviet Union, Poland, Rumania, Bulgaria, Denmark, Japan, Burma, Korea, Vietnam and Mongolia also attended. The conference was a great success.

Remarkable results have been attained in surgery of the heart, the aorta and the lungs, and in the transplantation of the cornea.

For the first time in history, doctors with a western-type education, and those with traditional Chinese medical training, have begun to carry out joint research into the rich heritage of Chinese medicine. An Academy of Chinese Medicine has been set up for this purpose.

Archaeologists, historians and ethnographers have obtained a great amount of new material from relics and remnants unearthed during excavations for the construction of new factories and railways. Thousands of graves of the Han and Tang dynasties were uncovered near Sian and Loyang, immensely enriching the historical records of those periods. Over a hundred finds during the last six years have given new insight into neolithic culture and that of the periods of Yin (c. 1766—1066 B.C.), Chou (c. 1066—403 B.C.) and the Warring States (403—221 B.C.).\*

Historians have published many valuable works, especially on events in the period since the infamous Opium War of 1840-1842.

\*For more material on archaeological discoveries, see the section "Digging Into the Past", beginning on p. 383.

Philologists have been creating written scripts for some national minority peoples, and are now concentrating their efforts on the reform of the Han (the majority nationality) written language.

While problems of national construction are to the fore, basic research is not neglected. Many papers of theoretical significance in various fields of science have been published since the founding of the People's Republic of China. For example, a monograph on *Vortex Structure and Other Problems Relating to the Compounding of Geotectonic Systems of Northwest China* by the well-known geologist Li Sze-kuang, has provided a new interpretation of the geological structure of China.

In the field of applied and pure mathematics, mention must be made of Professor Chien Wei-chang's *Problems of Large Deflection of Elastic Circular Plates*, Professor Su Pu-ching's *The General Projective Theory of Curves* and Professor Chen Chien-kung's *The Summation of the Series of Orthogonal Functions*. Specially noteworthy is the publication, for the first time in Chinese, of *The Additive Theory of Prime Numbers* by the mathematician Hua Lo-keng.

Valuable work has been done in the field of nuclear physics and cosmic rays. Professor Wang Kan-chang and his co-workers have studied electron-photon showers and the decay of heavy mesons. A series of calculations worked out by Professor Peng Hung-wu and his associates concerning the binding energy of light nuclei represents a preliminary search into the character of nuclear forces. Professor Hu Ning has discussed the multiple production of mesons by high energy nuclear collisions. In the field of physics of solids, interesting experiments have been carried out in the mechanical and magnetic properties of metals and alloys. By means of his well-known torsion pendulum method, Professor Ko Ting-sui and his co-workers have made an extensive investigation on internal friction in metals. The glide of single crystals has been observed by Professor Tsien Ling-chao and Ho Shou-an, using the electron microscope.

In meteorology, Ku Chen-chao and Yeh Tu-cheng have published their monograph on the influence of the Tibetan Plateau on the general circulation. In chemistry, Professor Tang Au-chen has made a theoretical investigation into the problem of internal rotation of molecules. Professor Wang Yu and his co-workers have studied the chemistry and stereo-chemistry of citrinin. In biology,

experiments made by Chu Hsi on the heterospermious hybridization of the silkworm have made a contribution to the theory of heredity. These are but a few examples from different fields of science.

The Academy of Sciences has grown a good deal during the last few years. Six years ago, it had only 17 institutes and 200 research workers. Now there are 41 institutes and 2,373 workers. By the end of the First Five-Year Plan, as planned, the institutes will be increased to 51 and research staff to 4,600.

From 1950 to 1955, we may add, the number of students enrolled in universities and higher institutes of learning in China has been doubled. By the end of the First Five-Year Plan, their number will be three times the 1950 figure.

Beginning from the academic year 1955, students in science or engineering courses will graduate in five years instead of four. Higher educational institutions are assigning as many as possible of their best students to research institutes or sending them to the Soviet Union and the People's Democracies for advanced study. Beginning this year, the Academy of Sciences has also inaugurated a system of "aspirants", under which a science graduate can obtain the degree of "Candidate for the Doctorate" in three or four years of post-graduate work. These measures, it is hoped, will encourage and stimulate scientific research in China.

In spite of certain advances made in recent years, the sciences in China are still very backward when measured by world standards. This backwardness can be rectified most effectively by frequent cultural and scientific intercourse with other nations, including the interchange of scientific literature and exchange of visits by scientists. The Chinese Academy of Sciences already owes an inestimable debt to Soviet science. Knowledge of Soviet achievement and experience, freely handed over, has lightened its work in every field.

Visits by leading scientists, in groups and individually, have been extremely useful to Chinese science. As this article goes to press, Soviet scientists, under the leadership of Professor Novikov, are lecturing in China on the peaceful uses of atomic energy, including the application of isotopes in chemistry, biology, geology, industry, agriculture and medicine. Among the guests coming last summer were the delegation of the U.S.S.R. Academy of Sciences headed by Academician I. P. Bardin, and of the Polish Academy of Sciences led by Academician Witold Wierzbicki. The valuable

visit of Professor J. D. Bernal from Britain was one of those made on an individual basis.

China's scientists in turn have participated in a number of conferences and activities sponsored by the World Federation of Scientific Workers, the International Council of Scientific Unions and other international bodies, and have visited a number of countries abroad. They are preparing to participate in the International Geophysical Year of 1957-1958 and a number of other international conferences taking place in the year 1956. Scientific publications are now being exchanged with 57 countries.

Such contacts will undoubtedly increase. Chinese scientists eagerly expect and hope for ever broader international exchange of scientific information, and more frequent occasions for the discussion of the basic problems of common interest. In our view, such contacts would not only contribute toward the further progress of research in various countries. They would also inspire mutual confidence and instil the spirit of brotherhood among scientists in every quarter of the globe.



*Yuan Ling*

**Machines, yes, but muscle and teamwork also conquer—pounding earth on the Huai River project.**

## CONQUERING NATURE

NATURE has favoured China in some ways; in others she has been cruel to her. The country, famed for its good farming conditions in some aspects, also has a melancholy renown as the home of recurrent natural calamities—immense, death-bringing floods and droughts. From the legendary ancient emperor Yu onwards, the Chinese people have judged their rulers by what they have done to control and harness the great rivers, and to bring water to where it was needed. Most of the rulers fell down by this test; the efforts even of those who tackled the job were puny compared with what needed to be done.

The source of the trouble is the extremely uneven distribution of China's rainfall. In some areas, annual precipitation is 70 inches. In others it is less than 4 inches. Generally speaking, most of the rains come between June and September, with the rest of the year dry. In the late summer, the rivers swell and often burst their banks. The Yellow River, in full spate, has a volume of flow 180 times that at low water. Such things explain why flood and drought are twin afflictions, often in the same regions.

Today the efforts being made to tame the waters are prodigious and successful as never before. River control is no longer local: it is planned with entire catchment basins, often hundreds of thousands of square miles in area, as the unit. Flood-control, reservoir storage for irrigation, hydro-electric power development and forest-planting and other soil-conservation tasks, are all considered together.

Already, in the Huai Basin and the middle Yangtze, the flood menace has been greatly reduced by large-scale works, including some of the biggest multi-arch dams in the world. The harnessing of the Yellow River is beginning—within a generation "China's Sorrow" will be a friend and servant of man. Of course such projects are huge in scope and take much time. But now there are social and technical conditions to check the elements,



## Harnessing the Huai

*by FU TSO-YI*

**T**HE GREATEST water control effort so far in Chinese history is now under way in the valley of the Huai River, which contains over 50 million peasants and covers one-seventh of all China's cultivated land.

The work was begun in November 1950. Eight and a half months later, in July 1951, its first phase had been successfully completed. This result was achieved thanks to the planning and leadership of the Chinese Communist Party and the Central People's Government. It was brought about by the organized energy of 2,200,000 peasants who did the excavation work, of thousands of Chinese workers and technicians whose labour and ingenuity supplied machinery and installations which previously always had to be imported, and of hundreds of conservancy engineers applying advanced methods developed in the Soviet Union.

The primary aim of the project is to put an end to the constant flood menace in the Huai valley. Already, as a result of the first phase, the population is safer from floods than ever before. When the whole scheme is completed, floods will be banished altogether. Hundreds of miles of waterways will become navigable. Millions of acres of farmland will be secured against drought by irrigation. The waters of the Huai and its tributaries will begin to generate large amounts of electric power for the people.

The accomplishments to date include the creation of 1,120 miles of earth dykes, the dredging of 170 miles of river-beds, and the building of 56 concrete locks and other installations. Over 16 million cubic yards of earth have already been moved. Work has begun on 16 major reservoirs, several large dams and a great network of irrigation ditches, culverts and other drainage facilities throughout the area.

The Huai is one of the big rivers of China. Rising in the Tung Po Mountains, it runs for 683 miles through the three important provinces of Honan, Anhwei and Kiangsu. In the north, the Huai valley connects with that of the uncontrolled Yellow



River. In the south, it connects with the Yangtze valley. To the east, the Huai River flows into the Yellow Sea.

Passing through Honan and northern Anhwei, the river is fed by ten large tributaries and many smaller ones. Some of them, flowing down steep mountains, are extremely rapid and turbulent. The Huai itself by contrast is wide and deep, calm and navigable for most of the year. But in the rainy months of July and August, the inflow from the tributaries frequently causes it to flood great areas. This tendency is aggravated by four "bottle-necks" along the river's course. When in flood, the "young maiden," as the Huai has been called in tribute to its usually serene disposition, has often turned into a bearer of death and destruction.

Another cause of floods on the Huai River, and much more serious ones than the almost annual inundations of the tributaries, has been its northern neighbour, the great Yellow River. There are no mountain ridges to divide the Yellow River from the Huai. The plateau that separates them is 100 to 150 feet higher in the north than in the south. When the Yellow River overflows, its waters often come down the slope to try and usurp the bed of the Huai, filling it up with silt. This has often caused the Huai, in its turn, to burst south into the Yangtze.

For 661 years of Chinese history, between 1194 and 1855, the Yellow River emptied into the sea through the Huai and had no other outlet. During these centuries, it filled the Huai with sediment, raised the water-level in many of the lakes connected with it, and generally slowed its course. It also wrecked the whole lake system between the Huai and the Yangtze, and created a constant threat of flood to 10 million *mou* (about 1.7 million acres) of rice-fields along the Grand Canal.

In 1855, when the Yellow River abandoned its southern course and began to flow into the sea north of the Shantung peninsula along its present bed, the Huai River also changed its habits completely. Its old mouth became completely blocked with silt. Instead of reaching the sea, the Huai began to flow into the Yangtze.

The situation remained more or less constant until the reactionary Kuomintang government, caring nothing for the people, in 1938 broke the Yellow River dykes at Huayuankou in Honan for what it considered to be a temporary military advantage. As a result, tremendous areas were flooded. The Yellow River once more invaded the Huai, and flowed to the sea through the Huai for nine years, until 1947. The whole drainage system of the

Huai valley was destroyed. The mouths of many of its tributaries were stopped with mud. Much of the network of irrigation ditches in the Huai valley was completely obliterated. The bed of the Huai itself filled up considerably. The flow of the Huai River at Pengpu fell from 102,000 cubic feet per second in 1931 to 99,000 cubic feet per second in 1950. Nevertheless, the water-level rose by about three feet in the same period. The reduced capacity of the Huai resulted in a further increase in flood threats.

What the Chinese people have suffered from failure to control the Huai River may be gathered from one figure. Our historical records count no less than 979 floods along its course between 246 B.C. and 1948. In other words, the Huai has produced a flood every two years for some seventy generations!

There are three basic conditions making for floods along the Huai. They have always been the same and have been known for centuries. In the headwaters and along the tributaries of the Huai, there have not been enough installations to check and hold water. Its middle reaches have lacked storage reservoirs. In its lower valley, close to the sea and the Grand Canal, the outlets were too limited to hold the flow. It has been known for a long time that no single one of these conditions could be remedied independently. The river could be controlled only if all three types of work were undertaken at once.

Such an overall job of reclamation was precisely what old China, with its predatory special interests, clashes between regional groups of exploiters and ultimate semi-colonial subservience to imperialism, had neither the motive nor the capacity to undertake. On the contrary, the feudal and dynastic conflicts of the old society, its long decay and the disintegration that attended its death-throes, frequently destroyed even the local attempts at control in which the people themselves invested so much labour.

After the Yellow River rushed into the Huai in 1194, neither the rulers of the Sung dynasty nor those of the Yuan (Mongol) dynasty which succeeded it, undertook any measures at all.

The two subsequent dynasties, the Ming (1368—1644) and the Manchu Ching (1644—1911) did allocate great sums of money for work on the Yellow and Huai rivers. These sums, wrung in taxes from the people, were quite sufficient to return the Yellow River to its old course and dredge and adjust the entire Huai. What happened, however, was that a part was misappropriated by officials and the rest was used in a greedy and short-sighted way.

With the capital established in Peking, the Ming and Ching emperors thought only of the Grand Canal, which carried about 200,000 tons of tax rice to Peking annually for the needs of the court. Instead of getting at the root of the Huai floods, they piled up ever-higher dykes and embankments to keep them away from the canal. This kind of dyke-building merely aggravated the floods in higher areas by damming them up. When the pressure of water proved too great and the canal dykes were breached, which happened frequently, the lower valley of the Huai, in north Kiangsu, also suffered disastrous inundations.

In 1855, when the Yellow River turned once more to its northern sea exit, the Manchu empire could think of nothing but to "let nature take its course". The warlord rulers of the early years of the Republic did no better. After the calamitous floods of 1931, the Kuomintang regime, which had by then been in power for four years, began to speak loudly about conservancy work on the Huai. But the reactionary Chen Kuo-fu, then chairman of the Kiangsu provincial government, insisted that work be done in his province alone. The interests of the inhabitants of the upper valley, and the correct method of controlling the Huai, were again ignored for the interests of local landlords. Money was squeezed from the people as usual, some construction work was begun, but the whole "plan" and its execution soon dissolved in the rackets and corruption typical of "politics" at the time.

As a result of past abuses, another serious flood took place in the Huai valley in 1950, the year of its liberation. More than 40 million mou (6.6 million acres) of cultivated land were submerged. The distress that attended this flood, however, was much less than in comparable occurrences in the past. The People's Government undertook immediate remedial measures, which saved lives and property. Flood-stricken people were rapidly organized for labour, and hundreds of thousands of tons of rice were brought to feed them. Clothing was collected throughout the country, and those who had lost their own effects were re-equipped. The people, who had never experienced such care and aid from the government and the whole country before, worked with will and hope to mend dykes and otherwise limit the spread of the flood. There was no starvation.

The 1950 flood occurred in July. In August, the Administration Council of the Central People's Government, acting on a directive from Chairman Mao Tse-tung, met to consider how to

harness the Huai. In September, it adopted a resolution to initiate the giant project now under way. Water conservancy experts from all parts of the country, summoned to Peking, drew up necessary plans in the short space of two months. By November, work was in progress on the actual sites.

The time-table for the first phase was so arranged as to rid the Huai valley of the threat of serious floods from 1950 on. Successful meeting of the July deadline has made this goal a reality. When the rainy season arrived last year, the Huai was protected not only by relatively advanced works of a permanent nature but also by temporary structures to take care of current emergencies. There was no flooding in 1951.

Longer-range river control plans, for the first time in history, were based not on regional claims but on the needs of the Huai valley as a whole, the upper reaches as well as the lower, the battle against droughts as well as the battle against floods. The irrigation systems that will arise will water from six to nine million *mou* (one to 1.7 million acres) of land in the upper reaches of the river, and 35 million *mou* (6 million acres) each in the middle and lower valley. In navigation, the controlled river will carry transport where it is most needed, between points that play an important part in the interchange of commodities between city and country, producers and market. Steamers plying the Grand Canal will be able to turn westward and proceed along the Huai to points in Honan beyond the Peking-Hankow railway. The Tientsin-Pukow and Peking-Hankow railways will be connected by a new water link.

There are no natural sites for electric power production in the broad, flat Huai valley. But the new reservoir, dyke and sluice systems will provide opportunities to generate a sizable supply for the needs of both agriculture and industry in the region.

I would now like to outline in some detail how the Government Administration Council analyzed conditions on the Huai River and the remedial measures already taken and to be taken.

Generally speaking, it was found that the existing drainage system of the Huai was capable of holding only half its water load in cases of flood on the scale of 1931 or 1950. Since the rainfall in the Huai valley in July, August and September is out of all proportion greater than that in other parts of the year, the risk of comparable floods would be constant so long as this situation was not changed.

At the same time, due to the uneven distribution of rainfall, the valley generally suffered from droughts in the spring, when the peasants were most in need of water for their fields. The problem with regard to the Huai was therefore not merely to speed up the flow to the sea, but to store the water where it would be required for irrigation purposes in the dry season.

To prevent the river from becoming unduly swollen by rains, it was decided to dredge the entire drainage system of the Huai of the Yellow River silt that blocks it. To store water where it is needed, dams and reservoirs were planned at suitable places.

In the mountainous upper reaches of the Huai, trees are being planted, and small basins, tanks and dams constructed to slow the flow of water and prevent soil from being washed off the hills by torrential downpours. The sixteen big artificial reservoirs comprising the system, with a total capacity of 109,000 million cubic feet, are to be installed along the upper tributaries—the Hung, Hsi, Kuan, Pu and Ying rivers. One, the Shihmantan reservoir at the headwaters of the Hung, has already been completed. Two others will be in operation by the end of 1951. Drainage of excess water from the slopes is to be accomplished by local ditches dug by the organized effort of the people.

The new reservoirs are being supplemented by work on the Lowang, Chiaoting, Tung and Wusung lakes in Honan province. These “lakes” were formerly no more than low-lying marshes connected with the course of the river, too-frequently flooded to serve as crop-land, yet not storing enough water at the right times. The job of converting them for storage purposes is to be finished in 1951. With their help, the total storage capacity in the upper reaches of the Huai will be brought to 60 billion cubic feet, helping greatly to secure the region against flood while the new reservoir system is still incomplete. Moreover, since water will be allowed to flow into them only when flood conditions require it, the lake beds will be cultivated to produce at least one crop a year. This will greatly benefit the entire area and its people.

Lower down, in north Anhwei province, there are other marshy lakes on either side of the Huai. Excluding the big Hungtse lake, they have an area of 741,320 acres. Their capacity will be brought to 254 billion cubic feet by the end of 1951. In this way the flow of the Huai in its middle reaches will be brought under effective control.

The main control installation in the middle reaches, located at Jenhochi in northern Anhwei province, has already been built. It consists of three parts. The first is a fixed deep channel 255 feet wide. The second is a long movable dam 984 feet wide, with eight sluice gates—five of 147 feet each, one of 69 feet and three of 48 feet—across the broadened river-bed. The third is a 585-foot fixed dam at the entrance, with two sluice gates of 147 feet each and two of 69 feet.

Work at Jenhochi was begun in April and finished in July 1951. To achieve it, over 200,000 tons of industrial material, mainly cement and steel, were brought to the site. The 1,300 tons of steel sluice-gates and machinery, of a type China always imported in the past, were successfully made in Shanghai in the space of two months, and installed by technicians and workers from that city who came to Jenhochi. Concrete mixers on the dam sites were also of Chinese manufacture. The fulfilment of this project was an impressive demonstration of the organizational and industrial capacities already present in our country but never previously used.

The Shihmantan reservoir, the Jenhochi installations and the dyke construction elsewhere have already considerably mitigated the danger of flood in the part of the Huai valley that lies in Honan province, secured northern Anhwei against dyke breaches, and guaranteed the wheat crops in that area against flood damage.

The work in the lower reaches, directed mainly at strengthening dykes along the Grand Canal and renovating local waterways leading into the Huai, will do the same thing for north Kiangsu.

The removal of the perennial causes of floods along the Huai is thus already considerably advanced. With the completion of the entire project, the scourge of thousands of years will cease to exist.

## Finding the Yellow River's Source

by CHOU HUNG-SHIH

AT SINING, the capital of Chinghai province, we tried to get information about the area we were heading for. We found, however, that very few people had actually been there. Some had gone as far up-river as Huanghoyen, where our survey was to begin. Beyond that, other than that it was wild and very cold, we could get no information.

Our 62-man team set out on horseback on September 3, 1952, accompanied by 173 yaks as pack animals for our equipment and food. Our task was to survey the upper reaches of the Yellow River and trace it to its true source, hitherto unknown. Ours was part of the first complete survey in preparation for taming the great river, once known as "China's Sorrow", which frequently brought destruction to the six provinces along its 3,000-mile course from the mountains to the sea. The long caravan was an imposing sight. We were dressed from head to foot in furs, weighing in all some 40 pounds for each person. Even our trousers and stockings were fur-lined. Because most of us were city bred and had never before been on horseback, a good many jokes were passed as we started.

The way at first was easy. The road that runs along the Huangshui, one of the two big tributaries of the Yellow River in Chinghai province, led us to the beautiful and flourishing county seat of Huangyuan, surrounded by green mountains with streams rushing along at the foot of cliffs and terraced rice fields on the hillsides. We passed many pastoral people going to town to exchange their products for daily necessities. Leaving Huangyuan and going west, we passed through a river valley where a precipice-flanked road led to the entrance of the Sun-Moon Pass.

Entering this pass, we were some 11,550 feet above sea level. Now the scenery changed. Behind us lay a typical Northwest China landscape with tilled land and farmhouses. In front, we could see only treeless pastures dotted with dun-coloured Tibetan tents woven of yak hair.

Riding on, we passed herds of cattle, sheep and horses quietly grazing. Tibetan girls and boys in sheepskin jackets sang in clear voices as they tended their herds. Strong winds soon rose, and breathing became difficult. Our animals slowed down their pace and we proceeded until we came to Taotangho, where the road forked. We took the branch that led southwest to Huanghoyen.

From this point the road took us over varied country, winding alongside cliffs, over grasslands, through semi-agricultural areas and over mountains. On one mountain pass some 14,500 feet above sea level, we became quite dizzy while crossing. On our descent, at about 12,500 feet, we found warm springs bubbling up, with other streams in the vicinity already frozen. Here Tibetans with skin diseases come to pray and bathe.

Passing through another valley, we came to two places about which we had been warned—"Bitter Sea Lake" and "Drunken Horse Flat". The water in the lake is a beautiful blue, but it is poisonous, bringing death to men and animals who drink it. The vegetation on the swampy flat is dangerous too. Animals eating it drop down as though dead drunk, hence its name. There is also a kind of wild garlic here that is said to bring blindness to anyone eating it.

These two places cover a stretch of some 30 miles. As it was not good to stop where such hazards existed, we covered it all in one day's march. At Mientsaowan, where we spent the night, the water still tasted bad. The altitude was 13,860 feet and the shrubs on the hillsides were stunted, not exceeding five inches in height. After Mientsaowan, we passed through the Hua Shih ("Striped Stone") Canyon, where the greyish-white rock was veined with red.

Following two more weeks' travel in the grasslands, we were very excited to see the Yellow River at Huanghoyen. Here we started the survey, leaving the road and going into uninhabited areas where tawny wild horses and blue-grey goats raced by us. At first we surveyed on foot, but could hardly keep up with the yak caravan. So we changed our method and used our horses more, with the vanguard going ahead to set up the rods, and the cartographers following. It meant a lot of mounting and dismounting, but we covered much more ground.

There were many marmot holes in the grasslands, with the little animals sitting up at the entrances, looking at us. Sometimes the holes were so thick that our horses would step into them.



There were also boggy places we had to be careful not to fall into. In the middle of the day it was not very cold, but every afternoon the wind rose, and sometimes there was hail about the size of peas. At night the temperature would fall to  $20^{\circ}$  or  $30^{\circ}$  C. below zero. This kind of weather is quite usual in the grasslands, especially from May to July.

Continuing at an altitude of about 13,500 feet, we gasped for breath in the rarefied air whenever we bent down or walked too fast. Water boiled at low temperatures so that our noodles, which we cooked over dried cow-dung fires, were always sticky.

The wind was our fierce enemy. It often took several people to steady the surveying instruments. At times the wind and sand were so blinding that we had to wait for a lull before proceeding. The higher up the river we went, the worse these conditions became. In spite of our heavy clothing and two pairs of gloves, our fingers cracked and bled.

On the lower reaches of the Yellow River the waters swirl in tumultuous, muddy fury. Here, the water was clear enough for us to see the pebbles at the bottom. Once, in surveying the width of the river, we found it too shallow to use a raft. We all felt great respect for one of our comrades who pulled off his heavy trousers and calmly stepped into the freezing water, surveying as he crossed.

After leaving Huanghoyen we met no one and, without a guide, simply followed the river until we came to a lake marked on our maps as Oring Nor (Long Blue Lake). The maps turned out to be wrong. Afterwards, we found that the Tibetans call this lake Tsaring Nor (Long White Lake), while the real Oring Nor is the one further on, marked on our maps as Tsaring Nor. Each of these lakes has a perimeter of about 90 miles and the two are connected by streams.

Tsaring Nor has a beach like that of the sea. We picked up the pebbles from the gravel bank formed by the incoming waves and skimmed them over the surface for fun. Near us, the water was quite clear, but further on it seemed green, then blue, then a dark blue. The green hills in the distance looked as though they had fallen into the lake. Birds we had never seen before flew overhead.

When we arrived, the lake was quiet and our surveyors and a raftsmen set out on an inflated sheepskin raft to take soundings. As the afternoon wore on, the usual wind rose, and with it the

waves. Looking at them from the shore, we became very worried, fearing that the raftsmen would not be able to navigate through the storm. But the men came back safely, with all the readings required.

Where the Yellow River flows out of Tsaring Nor, we found a pile of stones with a slab about a foot high and six inches wide erected on top. The front of the slab was engraved with a Buddhist image. The other side carried the single Tibetan word *muni* (sage).

The mountain which we climbed afterwards is one of the Thirteen Immortal Peaks sacred to the Tibetans. On it were other piles of stones, the *obo* which the people here revere. The Tibetans among us added more stones to these piles for blessings. The biggest *obo* was on the summit. It had slabs incised with Buddhist scriptural texts on both sides and was surmounted by a flag.

Looking back on Oring Nor from this place, the river seemed like a yellow ribbon, cutting the blue of the lakewaters in half. This struck us because, standing on its banks, we had not noticed any colour at all.

Moving further west, we still did not meet anyone, nor did we know the way. From our maps it appeared that we were near the source of the Yellow River as shown on them—Khotun Nor, or the "Lake of Stars". But we came across so many unmarked streams that it was hard to know which one to follow. We picked the largest and, after a day's surveying, came upon a tangle of waters flowing into each other like a spiderweb in the long grass. Since there was nothing here that could be called a river at all, we sent out scouts to look for a more likely clue. Finally we picked a rivulet to the south which proved to be the correct one.

Following this for three days, we came to a marshy piece of land, narrow from north to south but three miles across from east to west. It was covered with ponds of various sizes, some of them running into the others. This was the famous Lake of Stars, and a very beautiful spot it was, with grass and shrubs growing around each pool. As our animals picked their way through them, it was like riding through some park. We all agreed it should be called "Garden of Stars" rather than a lake.

To the south was a mountain with a peak 15,180 feet above sea level. It looked like a lotus leaf turned upside down, with the snow making marks like veins down its sides. This should have been the end of our quest. At school we had been taught

that the source of the Yellow River was at Khotun Nor, at the foot of Kotasu Chilao Mountain. Was this the mountain? We began to argue about it because another river flowed into the lake from still further west. So Khotun Nor was not the real source! Excited by finding facts at variance with what had long been accepted, we went on surveying. On the Huanghotan Flat, herds of horses watched us, one of them always remaining to have a good look, then galloping off as we came near and taking up "sentry duty" a little further on. We also met lone bears which would shuffle off until they got to a safe distance, then sit on their hind legs staring at us unblinkingly, amusing us greatly.

Now we were at 14,000 feet and the great Yellow River was a small brook. When we came to a place where it branched, we again took the stream to the south. But as we crossed a pass, we met two Tibetans, the first since leaving Huanghoyen. They were very kind to us and told us that we were on the wrong path. If we had kept on the way we were going we would arrive at the headquarters of the Chumalai Tibetan Autonomous Government.

"We are looking for the source of the Yellow River," we said. The Tibetans replied by singing an old local song:

*Whence come the waters of the Yellow River?*

*From the stream of Yokochunglieh;*

*And where is the home of Yokochunglieh?*

*In the Yaho-Latahotze Mountain.*

Excited, we inquired if the mountain that had reminded us of an upturned lotus leaf was the Kotasu Chilao mentioned in the geographies. The two men answered that they knew no mountain of that name, and that the one we had passed was "The White-Faced Goddess". They told us that the sharp peak we had seen to the west was "Cow Mountain" and that the shorter loaf-like peak beside it was the "Cow's Son". The legend was that the White-Faced Goddess came every day to milk the cow, while the calf stood by and waited.

As we proceeded, the weather was invariably below zero, dropping to as low as -36° C. at night. After two days we came to the dark purple Laputze Mountains where the Tibetans do not hunt, believing the place to be haunted. There were tracks of wolves, foxes and badgers on the path we took. The mountains around us seemed to be rising and falling like waves of the sea. The majestic Yaho-Latahotze Mountain of the folk song loomed in

front of us, but it took four more days of hard surveying to get to its base. The 17,952-foot-high summit shone a dark blue. Lower down, the snow gleamed white. Streams came down the mountain gullies. The mountainsides near the foot were covered with thick yellow soil.

One of the Tibetans told us that this mountain was the axis of the Chinghai water system, with some streams flowing north into the Tsaidam Basin, others south to the Tungtien River in the upper reaches of the Yangtze. It is separated by another hill from the Yokochunglieh stream, the true source of the Yellow River, but Tibetans believe that the mountain streams seep through to its headwaters. That is why the song refers to the mountain as the "home" of the Yokochunglieh stream.

The last sixteen miles of our journey took us over another marsh with pools like those of the Lake of Stars. Finally, the Yokochunglieh stream was before us. The hillsides around were covered with yellow earth, except for one to the north where four cliffs of white rock showed.

It was a great moment for us, and we raced along the edges of the brook, laughing and jumping. Some of us bent down to stroke the pebbled bed. That night we could hardly sleep for joy, and everyone learnt the Tibetan folk-song by heart.

Before leaving, we carved an inscription on a neighbouring boulder: "Rock of the River's Source".

It took us 61 days to get from Huanghoyen to the source and back again, surveying a distance of 473 miles. We returned to Sining bringing back the data of our survey, geological specimens, and soil samples and many other things needed in planning the work of harnessing the Yellow River to the needs of the people.

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## The Yellow River Will Run Clear

by LI FU-TU

**H**ISTORY, folklore and legend in every part of the world are full of stories of man's fight against natural calamities. From time immemorial, in their helplessness against the periodic disasters which have overtaken them, men have regarded such events as punishments from heaven. Some have cursed their gods, some have preached humility. But only when human progress has reached a certain stage can people see an end to these calamities, and only where the people are themselves in power can the fullest use be made of the power and the knowledge that now exist.

China's plan to tame the Yellow River, announced at the National People's Congress, is a tremendous illustration of man's new confidence in his ability to control the forces of nature. Three thousand miles long, with a catchment basin of 287,000 square miles, the Yellow River has been at once the most beneficial and the most destructive river in China. Its basin embraces 40 per cent of all the cultivated land in the country, and nearly a third of the population lives there. It has rich deposits of coal, iron, copper, aluminium, oil and other minerals. But in the past three thousand years, it has burst its banks 1,500 times, always with attendant disaster. On 26 occasions—nine of them calamitous—the river has gouged itself out an entirely new channel to the sea. Even on quite small maps of China you see dotted lines marked "former course of the Yellow River" and indications of its previous mouths on the coastline, hundreds of miles apart.

The new plan, unlike all past plans, consists not of patching up the effects of these disasters but of tackling the cause—the constant rise in the river-bed at the lower reaches due to silt, and the heavy rainfall in summer and autumn in the middle reaches.

The silt in the Yellow River comes from the middle reaches, where it flows through a huge tract of fine loose soil—what geologists call "loess". The vast loess region here extends from eastern Chinghai province to the Taihang Mountains to the east, and from

the Great Wall to the Tsinling Mountains to the south.. Torrential rains and rivers have eroded the loess highlands for centuries, torturing the originally even plateau into bare, barren outcrops and great gullies or canyons, some a thousand feet deep. In Shensi province, where I was born, one can see a neighbouring village, but may have to walk miles to get to it because of these immense clefts. The loess that goes down the river is good earth running to waste.

Recurrent droughts and the cruel exploitation by the landlords in pre-liberation days forced the peasants in these parts to clear the mountain slopes in order to bring new land into cultivation. But as soon as the trees and herbage were gone, erosion proceeded faster than ever. As the soil was washed away from the slopes, harvests became more and more scanty, and for decades the peasants had one thought: to get away and settle somewhere where they could make a decent living.

When the Yellow River with its enormous load of silt enters the plain, precipitation becomes greater and greater and the riverbed gets higher and higher—to such an extent that in many places the water runs anything between ten and thirty feet above the surrounding countryside: what we call an “elevated river”. At Sanmen Gorge in Honan province, an average of 1,380 million tons of silt flows by each year, enough to build a dyke one yard high and one yard wide that would encircle the equator more than twenty-three times.

Most of the year the climate in the middle reaches is rainless, but in July and August there is a veritable deluge. Half the year's rain falls in those two months, and nearly all this water drains into the tributaries and from there into the river. At one place in the middle reaches the average normal flow is about 286,000 gallons a second, but in the year of the most serious flood on record (1843), it increased to close on 8,000,000 gallons!

For thousands of years the people built huge dykes along the lower reaches. There are something like 1,200 miles of them, and as far as floods are concerned they are still the main defence. All through China's history, public-spirited men have spent life-times fighting for a solution to the Yellow River problem. But the social and political conditions of their times created insuperable obstacles. The reactionary rulers of the past cared nothing for the people's welfare, so very little governmental support was forthcoming for

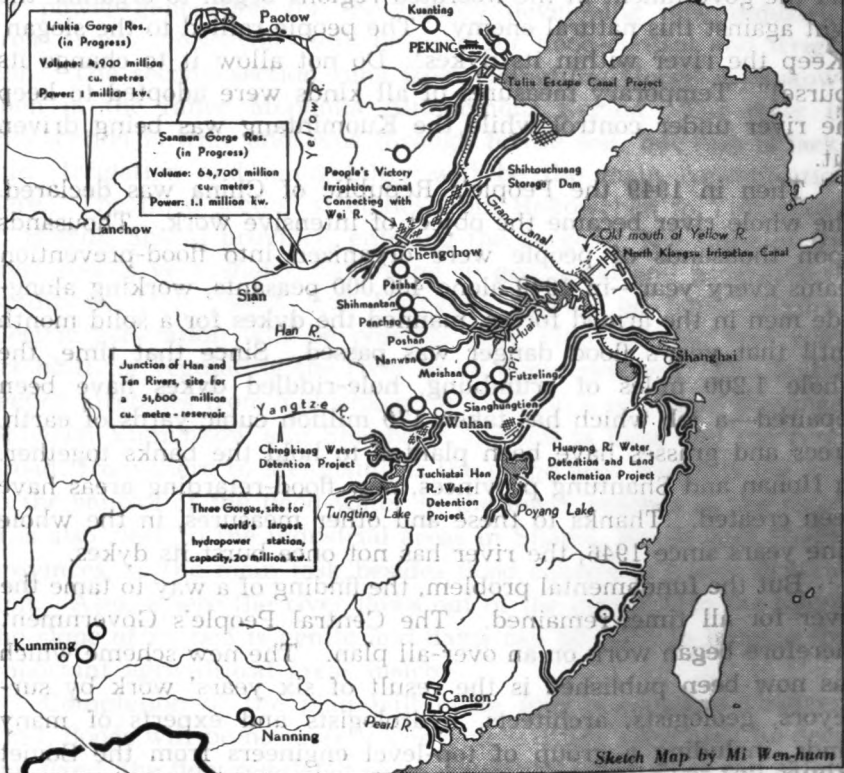
## MAJOR WATER CONSERVANCY WORKS

COMPLETED AND IN PROGRESS

- ▬ Dams
- Reservoirs
- = Locks
- ≡ Dykes strengthened

### SUMMARY 1949—1956

8 major reservoirs      11 major dams  
7,700 million cubic metres of earthwork  
33 million acres newly-irrigated.



any scheme which would help the people. That remained true right up to the time China was liberated.

The story of my uncle, the late Li Yi-chih, one of China's foremost hydrographers, is typical. He was the first to point out that taming the Yellow River meant starting with the middle reaches. But the Kuomintang government took no notice. The year 1929 saw a great drought in Shensi and Kansu provinces, and Li decided to build the Chinghui Irrigation System to bring the waters of the Ching (a tributary) to the parched fields of Shensi province. It was not easy; the Kuomintang was not prepared to spend funds on it, and he was continually at odds with corrupt local officials who tried to monopolize the water to irrigate their opium crops! He would never have succeeded except for the financial help he received from overseas Chinese in Honolulu.

From 1946 onwards, as area after area along the river valley came into the hands of the people's forces, the Communist Party and the government in the liberated regions began to organize the fight against this natural enemy. The people rallied to the slogan: "Keep the river within its dykes! Do not allow it to change its course!" Temporary measures of all kinds were adopted to keep the river under control while the Kuomintang was being driven out.

Then in 1949 the People's Republic of China was declared. The whole river became the object of intensive work. Thousands upon thousands of people were organized into flood-prevention teams every year—in 1949 alone 400,000 peasants, working alongside men in the armed forces, manned the dykes for a solid month until that year's flood danger was passed. Since that time, the whole 1,200 miles of crumbling, hole-riddled dykes have been repaired—a job which has taken 170 million cubic yards of earth. Trees and grasses have been planted to hold the banks together. In Honan and Shantung provinces, new flood-retarding areas have been created. Thanks to these and other measures, in the whole nine years since 1946, the river has not once burst its dykes.

But the fundamental problem, the finding of a way to tame the river for all time, remained. The Central People's Government therefore began work on an over-all plan. The new scheme which has now been published is the result of six years' work by surveyors, geologists, architects, hydrologists and experts of many kinds, including a group of top-level engineers from the Soviet Union.



The plan, as approved by the National People's Congress, is in two parts: a long-term comprehensive programme, and a "first phase plan".

The long-term programme calls for the building on the middle reaches of 44 dams adapted to special needs, and two more irrigation dams on the lower reaches. These dams will create a series of gigantic "steps". Four of the 44 dams have the multiple functions of flood-prevention, irrigation and power generating. Most of the silt will be stopped at the source by 24 other dams on the main tributaries in the middle reaches.

The middle reaches of the Yellow River will be divided into four sections and utilized in accordance with the characteristics of each. Starting from up-river, the first section is from Lungyang Gorge above Kweiteh in Chinghai province to Chingtung Gorge in Kansu province; the river runs between mountains and hills and the slope is very sharp. The swift-flowing water will be used for power generation for the rapidly developing new industrial areas there. Reservoirs will be used for flood-control and irrigation. The second section runs from Chingtung Gorge to Hokowchen in the Inner Mongolia Autonomous Region. The river in this section is wide and runs through fertile soil, but rain is lacking. Irrigation and navigability will be the main concentration here. The third section stretches from Hokowchen to Yumenkow in Hotsin, Shansi province, entering the gorges. The slope of the river-bed is very sharp, but owing to geological and geographical conditions, large dams and reservoirs cannot be built. Hydro-electric generation will be possible only after the big reservoirs are built for regulating the river in its upper reaches. The fourth section stretches from Yumenkow to Taohwayu in Honan province. Between Yumenkow and Shanhsien the soil is loess and the river broad; from there to Mengtsing is the gorge area which is the key to the control of the flood-water in the lower reaches of the river. It is also close to the industrial areas in Shansi, Honan and Shensi provinces, so the main task besides flood control is power generation. Also, where the river flows out of the gorges into the plains the slope of its bed is gentle and dams can be built to irrigate the important agricultural areas nearby.

Completion of the plan will mean four stupendous changes. First, floods will be no more. The course of the river will be deep and fixed, the flow regulated so as never to exceed what can safely be carried by the river-bed. Secondly, power stations will gen-

erate 23 million kilowatts, with an annual output of 110,000 million kilowatt-hours—ten times the national output in 1954—providing cheap power for industry, agriculture, communications and transport. Thirdly, the irrigated area will be nearly ten times as large as now. And fourthly, the whole river will be navigable.

The long-term programme also includes water and soil conservation in the loess region on an enormous scale. Besides preventing erosion, silting up of the bed and flooding in the lower reaches, this will lead to undreamt-of improvements in agriculture, stockbreeding and forestry on the loess lands.

The whole plan will take decades to carry out in full. But some things have to be dealt with at once—flood prevention, irrigation, and the use of the river for generating power. That is why the Planning Commission has drawn up the subsidiary “first-phase plan” of work, to be completed by 1967.

During this first phase two huge dams will be built on the main river and many smaller ones for silt detention on its tributaries. Alongside of this will go the reinforcement of dykes, scientific cropping, afforestation, the construction of thousands of small dams, ditches and sluices, and similar work.

The two big dams are to be at Sanmen Gorge in Honan province—the last huge gorge before the river enters the North China plains—and at Liukia Gorge in Kansu province. On the basis of detailed surveying and exhaustive study, the Sanmen Gorge was selected as the site for the construction of the largest and most important multiple-purpose project for flood-control, power generation and irrigation. The Sanmen Gorge dam will be 297 feet high, with a reservoir able to store 7,923,600 million imperial gallons, second only to that at Kuibyshev in the Soviet Union. Work on it will start in 1957 and it should be finished by 1961. The reservoir alone, it is estimated, will be capable of reducing the heaviest imaginable flow on the Yellow River from 8,183,690 gallons per second to 1,769,760 gallons per second—a rate at which it can safely flow into the sea through the narrow channels in Shantung province. If extraordinary floods should occur simultaneously at this gorge, on the tributaries and on the Yellow River itself to the east, the locks at the Sanmen Gorge Reservoir could be closed to retain all the waters from above for four days; this, coupled with the flood-detention measures on the tributaries, can guarantee the safety of the lower reaches. At both the Sanmen and Liukia gorges, million-kilowatt power stations will generate

a total of 9,800 million kilowatt-hours every year. The first ten years' revenue from the power output will far exceed the fifteen years' total investment in the Yellow River project.

Preparatory work is now in full swing. Fifteen hundred people are working hard to finish the surveying work for Sanmen Gorge before the year is out, so that the actual blueprints for the dam, on which we shall also be getting Soviet help, can be drawn up. Several provinces have made their own local plans, and a certain amount of preparatory work on tributaries of the Yellow River is also complete.

Water and soil conservation is very important for the Sanmen Gorge scheme. Once this is carried out, flood-water and silt will be under control, eliminating the menace to the lower reaches, whereas if the soil were not checked the reservoir would be filled with silt in about 25 years, and the whole effect of the dam would be lost. We are confident that we can make the water and soil conservation work so effective that the reservoir will be good for 70-100 years.

Even before the plan was drawn up the peasants were doing fine work on water and soil conservation. They had always done a certain amount, but only after the liberation, with the People's Government and the Communist Party to give them a lead, and especially since farming cooperatives began to spring up everywhere, could they really tackle the problem systematically. Surveying teams in Kansu, Shensi and Shansi in 1953 and 1954 saw how the peasants had terraced and banked the fields, how they had built check dams to hold surface water, silt-detaining dams and small irrigation works, and had planted trees and grasses—all comparatively simple but effective things.

Now the whole country, government and people, are behind this stupendous Yellow River plan. In the past there were a host of sayings about the river: it was "China's Sorrow" and "It will never run clear till a sage is born". "When the Yellow River runs clear" was a synonym for "never". Six years from now when the Sanmen Dam is completed, the water in the lower reaches will already be clear. It is not a sage who is going to turn "China's Sorrow" into "China's Joy", but the people themselves.

## Great Wall of Trees

by LIU CHIEH

OVER five thousand kinds of trees and other woody plants grow in China—more than in any other country in the world. While the deciduous pine hibernates in the frozen mountain ranges of the northeast, the betel and cocoanut, on torrid Hainan Island, wear summer green the year round. There are great variations too, within small areas. Dwarf trees of the arctic type cling to the snowy peaks of Taiwan, nearly 10,000 feet above sea-level. Tropical giants, a hundred feet high, flourish on the coast below.

China's forest products are varied and plentiful. She produces 70 per cent of the world supply of tung oil. Camphor, turpentine, lacquer, wax and rosins are abundant and of high quality. There is valuable timber for every purpose.

Some trees that still grow in China have no parallel in other parts of the world. Among them are the 3,000-year-old Giant of Arisan, a type of red cedar, and the *Metasequoia*, an early predecessor of the huge "California Redwood," and extinct outside China. On the wooded hills and in the deep, sombre forests, rare animals and birds have their haunts, and many medicinal herbs can be gathered.

Despite the favourable natural conditions, however, China's forest area had shrunk — by the time of the liberation — to only five per cent of her territory. This was the legacy of the feudal system that had strangled all progress for so long. The old ruling class felled timber without any attempt at replacement. Generations of peasants, driven from their old farms by landlord greed, war and natural calamities, burned the trees off wooded hillsides to reclaim new fields.

This constant deforestation contributed to the vicious circle of natural disasters—flood, drought and the impoverishment of the soils.

The last decades before the liberation were the worst of all.

The Japanese, during their fourteen years' occupation of Northeast China, cut down over 131 million cubic yards of timber

—and wantonly burnt the forests in some regions to wipe out the hiding places of the people's resistance forces. The Kuomintang regime was no better. On one occasion, it felled a tremendous quantity of timber in Szechuan province and then let the logs lie rotting for lack of transport. In all its 22 years of rule, the Kuomintang planted only a little over a million acres of trees. During the final retreat before the People's Army in 1950, Chiang Kai-shek's air force rained incendiary bombs on the forests of Hainan Island.

In the first few months after liberation, before the People's Government could institute proper control and planning, the drain on China's timber resources continued. Having no idea of conservation, certain local government bodies and army units, anxious to help the people in devastated areas and provide timber for the country's reconstruction, organized large-scale wood-cutting — without consultation with superior authorities.

This process came to a halt in 1950, when the government began carrying out an overall plan for the protection, effective management and scientific use of our forest resources.

First the people were awakened to the need for preserving and protecting the forests — now their own. In all timber areas, a widespread campaign of explanation and publicity was begun. Newspaper articles, cartoons, lectures, posters and even plays were used in this campaign.

Through local government bodies, fire-prevention and fire-fighting organizations were set up and equipment for them was provided. Villages were linked by warning systems and volunteer patrols formed to watch for fires during the dangerous seasons when it was hot, dry and windy. The common practice of setting fire to scrub or weed when reclaiming land was prohibited wherever it might endanger the forests.

Special precautions were taken in sparsely-populated places. By 1954, in Northeast China alone, over 2,000 miles of fire-lanes had been cleared around the edges of forests and along railway lines (where there is danger of sparks from passing engines). The northeast now has more than 200 forest watchtowers and its fire-fighting network has telephone lines stretching for 620 miles. Both here and in Inner Mongolia, aircraft patrols supplement observation from the ground. As a result of these and similar measures, the amount of timber lost by fire in 1953 was only about a quarter

of what it had been in 1950. In the dry season last year, very few serious outbreaks occurred.

To protect natural new growth, many hilly areas have been made into preserves. Access to them, for fire-wood gathering or grazing, is strictly regulated. Thanks to the willing cooperation of the people, this measure has proved very successful. In Heilungkiang province alone, 1,358,500 acres are protected in this way.

Government regulations also limit the proportion of trees which may be cut down in felling areas; until recently this could not exceed 60 per cent of the total in any place. A new system was introduced this year. The timber stands are marked out into strips and only alternate ones may be felled. This secures the natural regeneration of the forests.

Besides the steps taken to conserve timber resources, the government has begun large-scale planned afforestation — not only to provide materials for construction and industry but also to help control natural calamities in various parts of China.

Big shelter belts, comprising China's new "Great Wall of Trees", are being planted in many places. In eastern Honan and western Hopei provinces, the work has been completed. Other belts, in Northeast and Northwest China, are well under way. By the middle of 1954, the people of these four areas had afforested 1,625,000 acres of land. The whole programme is designed to protect nearly 52 million acres of land, including both cultivated areas and sandy wastes, which will now become arable.\*

Results already obtained show what this will mean for the peasants.

In Honan, the Yellow River had broken through all defences to change its course several times over the past centuries (one of the worst disasters in its history was deliberately perpetrated by the Kuomintang when it breached the dykes at Huayuankou in its craven flight before the Japanese invaders in 1938). Sand from devastated areas blew over the cultivated land, sometimes in such quantities that cottages were buried and wells clogged. In some parts of the province, no wheat had been grown for ten years, and thousands of peasants were forced to leave their homes to seek a livelihood elsewhere. Now the new shelter belt has stopped

\*Between 1950 and 1955, over 12½ million acres were afforested in shelter belts and other areas. The spring of 1956 saw the country's largest tree-planting campaign, during which 9 million acres of trees—an area as large as Belgium—were set out.

the encroaching sands. Leaf-mould from the trees is enriching the soil. Acreage under cultivation has increased. In 1953, tracts that had been denuded for decades produced their first crops of wheat.

Around Kaifeng, the sands that once surrounded the city wall have disappeared. They have been replaced by fresh green foliage. In what used to be the wastes of Lanfeng county, one now sees vineyards and orchards of pear and apple trees.

Another shelter belt now being planted, stretching from eastern Inner Mongolia into the northeastern provinces, will be the biggest in all Asia when it is completed in 1967. Nearly 700 miles long and 180 miles wide, it is designed to transform 42 million acres of wind-blown steppe into fertile field and pasture. During the past four years, 550,000 acres of trees have been planted. From an aeroplane, one can already see long lines of young trees stretching across the vast plain. Yields in some places have already increased fivefold.

Other belts are located along the North China coast in the provinces of Shantung, Hopei, and Kiangsu and in the northeast, protecting the cultivated land from gales that blow in from the sea.

Along the upper reaches of China's most turbulent rivers, the Yellow River, the Huai and the Yungting, trees are being planted to prevent the banks from collapsing and being washed away as silt — which was a big contributing factor to the floods of the past.

In southern China, with its warm climate and abundant rainfall, the aim of the large-scale tree planting now being carried on is to develop useful timber (especially the Chinese Fir and Horsetail Pine) and the supplies of industrial raw materials such as tung oil, rosins, camphor, rubber, lacquer, cork and tannin. Here 1,260,000 acres of trees were planted in the spring of 1954 alone.

Peasant cooperatives and mutual-aid teams are playing a big part in afforestation all over the country.

The Ministry of Forestry is constantly enlarging its knowledge of the country's timber reserves, which are not yet all completely surveyed and classified. It has trained thousands of new personnel for this work in the last few years, many on the actual job.

The first scientific programme of utilization based on such a survey has been worked out in the Changpaishan Mountains, near the Chinese-Korean border. It lays down plans for felling, for improving conditions for the growth of trees, and for the regeneration of the forests so that they can serve our needs in-

definitely. The same type of programme is being instituted in other areas.

In the Greater and Lesser Khingan Mountains, also in the northeast, 50 million acres of forest have been surveyed and photographed from the air. In this work, Soviet experts have given us invaluable assistance.

At the opposite end of China, in Tibet and western Szechuan province, great forests of spruce, fir and Chinese hemlock-spruce have been surveyed. Many of these trees, which provide excellent construction timber, are two or three hundred years old. Survey parties are mapping areas for conservation as well as for lumbering.

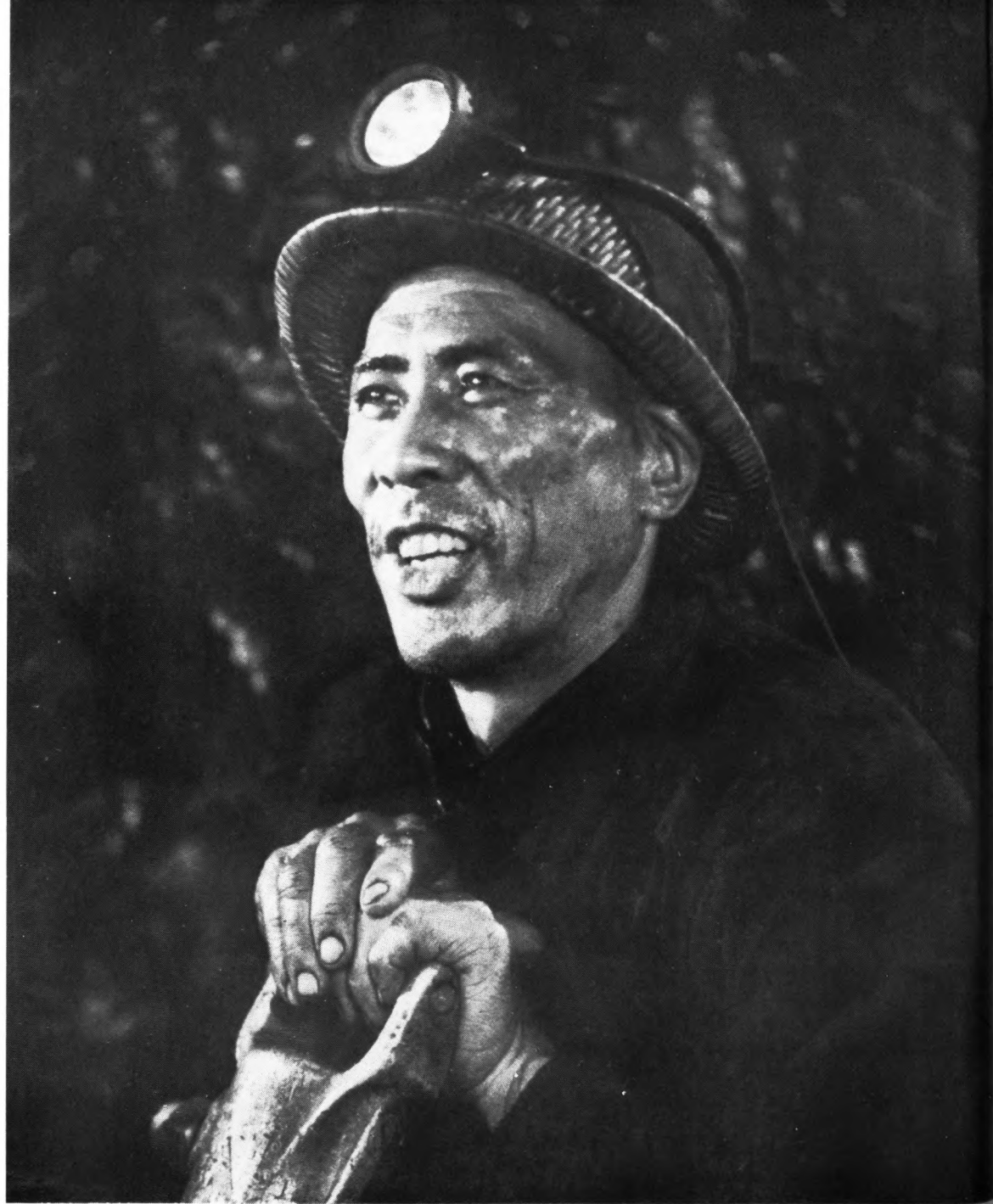
Hainan Island in the far south, where still another survey is in progress, has great stands of bitter catalpa, woods for beams of great strength and durability, Hainan agila, an excellent hardwood for furniture, and other types of timber good for ships and bridges. Large reserves of industrial timber exist in Fukien province, on China's southeast coast.

Old China was an importer of timber and other forest products. Today we are supplying our own needs which in the midst of industrial construction are much greater than ever in the past. The nation's timber output in 1953 was about  $3\frac{1}{2}$  times that of 1949. In 1954 it rose by another 24 per cent. We have begun to export rosin and cork, once in short supply domestically.

This rapid progress has been due mainly to the increasing modernization of the timber industry, especially in the northeast, where 90 per cent of the transport is already mechanized. Forest railways have been built for haulage. Tractors, lorries and power-driven machinery may be seen in the lumber camps. Work can now go on all the year round, instead of only seasonally.

The lumbermen no longer regard the forests as a "green jail". Today, in many woods, instead of the slow rasp of the hand-saw one hears the sharp, biting rip of electrically-driven blades, cutting in a few minutes great trunks which it took men several hours to sever by the old methods. New towns are springing up in the more advanced forestry areas. The lumbermen and their families, who live there, are served by hospitals, libraries, clubs, schools, kindergartens and theatres.





Wu Yin-po

**Veteran coal miner.**

## WORKERS, UNIONS AND SECURITY

**F**ROM being an oppressed class, toiling up to 14 hours a day for miserable wages, without any job security or democratic rights, China's workers have become the class that leads the state. Hundreds are deputies in the National People's Congress; scores of thousands belong to government bodies at lower levels.

Today every rise in production means not increased profits for someone else but an improvement in the workers' own living standards. Therefore the trade unions and the management in socialist enterprises have the same basic interest—to ensure that planned schedules are met and surpassed. Unions help in planning, organize "emulation contests" between workers, shops and factories, and spread news of new methods by which labour can be saved and materials economized. At the same time, they have their special role. They must see that in the common struggle for more output, collective agreements are observed by management, good conditions are provided, the workers' democratic rights are safeguarded and their proposals and criticisms receive attention. They are front-line fighters against any tendency to managerial indifference and bureaucracy. They promote the proper functioning of democratic administration now being introduced in industry in the shape of workers' councils.

## A Look at Labour Insurance

by CHEN CHUNG-HSIEN

ONE MORNING not long ago I went out to the Shihchingshan Iron & Steel Works near Peking to see how the labour insurance regulations were being applied there. The trade union directed me to Wang Sen, deputy-director of its labour insurance department.

I found Wang in his office. He was talking to a young woman in her early twenties dressed in overalls, a worker's cap and an orange scarf. I told him what I wanted and said I would wait for him to get through. But he replied: "No need, you've come at just the right time." After introducing me to the girl, Tai Hsiu-yu, he said to her: "You heard what the young man is interested in. Suppose we tell him about your case." The girl nodded her assent.

Tai Hsiu-yu, I learned, had come in to collect a pension. Three years earlier her husband, a worker in the plant, had been killed in an industrial accident. The management, as required by law, had immediately paid her a funeral benefit equal to three months' average wages in the plant. The trade union began to pay a monthly pension amounting to half her husband's last wage out of the labour insurance fund, which is also provided by the management but which the union manages and disburses.

"I wasn't working when I lost my husband," Tai Hsiu-yu said, "but since then I have gone through the plant technical school, as I always hoped, and got a job in the locomotive repair shop of the transport section. I've begun to earn, so I'm not drawing a pension for myself any more. Now the family gets 40 per cent of my late husband's wage for my mother-in-law and little daughter. Mother-in-law, who is unable to work, will get her pension for life."

"Do you find it hard to make ends meet?" I asked.

"We are getting along all right," she replied. "Even before I was working we kept on living in the factory housing estate, with nothing to pay for rent, water, electricity or coal. Granny looks

after the little girl, so I can find time, after the job, to go to night school to improve my knowledge."

After Tai Hsiu-yu had left, Wang Sen said to me approvingly, "This girl will make a fine machinist. She's bright and diligent."

"Are there many accidents involving death or serious injury?" I asked.

"No, there have been hardly any since the liberation. Every shop has its own safety inspectors, and apprentices aren't allowed on the job until they've gone through a safety course which lasts several weeks."

"What if a worker dies of ordinary illness not connected with his occupation, or if he dies after he has retired?"

"The plant pays the family a funeral benefit of two months' average wages and a lump sum equivalent to six months or a year of the deceased's last wage. While there is no pension, immediate dependents can study free in the plant's junior school, night school and technical institute. If they should die, there's also a funeral benefit."

Wang Sen then told me he would be busy the rest of the day and advised me to go around and see a few things for myself.

The first place on my list was the plant hospital. It consists of several rows of long, one-story red brick buildings in a courtyard planted with trees. One brand-new building is the outpatient clinic. In the rest there are wards for 150 patients, three to five beds to a room. The equipment is as good as in the government hospitals in Peking itself. Yet this is only one part of Shihching-shan's medical services, which are staffed by more than 40 doctors and 140 other qualified personnel. There are three maternity centres, two branch clinics and a tuberculosis consultation station in the workers' settlement, and a sanatorium. Much stress is placed on preventive medicine and all workers have a complete medical check-up once annually.

One patient I spoke to was Tsao Shih-mou, a middle-aged painter in the plant. Almost five years ago he fell from a high ladder, sustaining very serious injuries to his legs and brain. For much of the time he has been receiving treatment at the plant hospital and some of the best hospitals in Peking. His improvement has been slow but steady. Now he is an outpatient and can walk with the aid of crutches.

Until last year, Tsao was paid his full wages; with all expenses for medical treatment, hospitalization, and travel borne by

the plant management. Then he was given a disability certificate and granted an invalid pension of 60 per cent of his last wage. The trade union is now looking for a job for him within his physical capacity, but even when he begins work he will continue to get a pension of from 10 to 30 per cent of his last wage, depending on how much he earns in the new one.

An hour's walk from the hospital, the sanatorium lay through quiet fields, very different from the bustling plant neighbourhood. It stands on Fushouling hill, amid fruit orchards covering the whole lower slope.

Approaching one doorway I heard the deep voice of Dr. Liu, whom I had met once before. He was standing on the steps beaming half humorously at a young worker: "If you ask me to let you out of the sanatorium again, I'll lock you up here forever." A moment later he saw me and gave me a warm welcome. "I have a lot of trouble with these young chaps," he said, wagging a finger at his grinning patient. "They recover very quickly here — we've discharged 125 of the 172 T.B. cases we accepted here since 1952 as completely cured. But do you think that satisfies them? Not at all. They no sooner feel a little better than they start yelling to be allowed to go back on the job. They're in love with that plant, as though it was their sweetheart or something!"

For T.B. patients, as for other workers whose sickness or injury are not the result of their work, the cost of treatment, hospital care and ordinary medicines is borne by the plant. But special medicines and travelling expenses are paid for by the worker himself. So are ordinary food costs (supplementary nutrition is subsidized). If the payments become difficult for the patient, the labour insurance fund of the trade union is always there to help.

For the first consecutive months of their stay in the sanatorium, workers with T.B. get from 60 to 100 per cent of their wages, depending on seniority. If they need to stay longer, they are taken off the regular payroll but are given a monthly relief allowance of from 40-60 per cent of their wages. This continues until the worker returns to the job cured, or is certified as disabled, or until his death. If a T.B. patient loses his entire working capacity, the labour insurance fund pays him a monthly benefit for life. If he requires an attendant, the benefit is equivalent to half his last wage; if no attendant is needed, it is 40 per cent. The immediate dependents of workers with T.B., if they themselves

became ill, can consult the plant doctors free and get a 50 per cent discount on ordinary medicines and treatments.

The inmates I talked to asked me to visit the sanatorium again a little later. "You've come early," they said. "Very soon the almond, apple and pear trees will be in bloom, then you can see what a marvellously beautiful place this really is."

The next morning, I went to call on the disabled painter, Tsao Shih-mou, at his home. His three little daughters were playing in the yard. Their mother, neatly dressed and obviously a good housewife, asked me into the small, well-scrubbed apartment, saying that her husband would be back very soon. As soon as I came in, I saw a framed certificate on the wall honouring her as a model in the health campaign.

When I asked how things were, she replied, "I don't see how we could ask more from the plant. My husband hasn't been able to work for more than four years, but we have never lacked sufficient food, warm clothing, or a roof over our heads. Of course, with a family of five, things have been difficult now and then, but the union has generally helped out even without our asking. Last Lunar New Year we had overspent a little bit and my husband went to them to draw his invalid pension to be paid in advance. He pretended that it was only because our daughter unexpectedly needed some new books for school. But the union guessed the real state of affairs and, instead of paying the pension earlier, made us an outright grant from the labour insurance fund. It wasn't big, but it filled the hole in our budget. My husband was overwhelmed with gratitude.

"And this wasn't the first time the union gave us extra assistance. Visiting us once, one of their workers noticed that the children's clothes were worn. A couple of days later, along came Y200,000\* to help get some new ones. I decided to show how thankful we were to the government which established the labour insurance regulations by offering to do volunteer work at the plant. But the union refused, saying my job was to look after my husband and daughters."

Our conversation was interrupted by the return of Tsao Shih-mou, who brought along a tall, spare, apparently very aged man whom he introduced as his good friend Liang Yi. Liang was drawing an old-age pension. "Is it satisfactory?" I inquired. He

\* In terms of old currency. The amount would be Y20 in terms of the currency in use since March 1955.

looked at me for a few moments without answering, then he gave me a lecture.

"Satisfactory? Before the liberation we workers didn't know there were such things as pensions, sanatoria, maternity centres, nurseries, canteens or clubs in the world. We worked 12-hour shifts, and some men did two such shifts in a row occasionally; it was the only way they could put food in their families' stomachs. Even so, what we ate was little better than pig swill, and as for lodging, a lot of pigs had better quarters than we. Look at me, I'm only 63, but I'm sure you thought I was much older. That's what that kind of work, food and living did to a man if he survived at all.

"In those days, anyone who got too weak or old to work was just kicked out and left to starve. That I lived till the liberation was my good fortune. Seeing that my health was giving way, the trade union first had me taken off my heavy job as a coal carrier and put on light work, and then, when I was 60, retired me at 70 per cent of my wages."

Liang went on to explain that old-age pensions ran from 50 to 70 per cent of wages. A male worker is eligible at 60 if he has worked for 25 years, including five years in the enterprise concerned. Women may retire at 50 after having worked 20 years, five of them in the enterprise. If a worker entitled to retire prefers to stay on, or the plant needs him, he gets a pension of 10-20 per cent, according to length of time on the job, besides his full wage. Workers in trades that involve special hazards can retire five years earlier, men at 55 and women at 45. For seniority purposes, each year of their work is counted as  $1\frac{1}{4}$  or  $1\frac{1}{2}$  years.

Liang told me that he has a son who earns good wages working in the plant and often gives him money. "But I don't really need it," he said. "I spend it all on sweets, toys and other gifts for my little granddaughter." With these words his wrinkled face, rather sad-looking ordinarily, relaxed in a broad smile.

After a tasty hot meal at one of the canteens, I walked through the willow-lined streets of the workers' residential quarter. Seeing the long rows of red brick buildings, I marvelled at the extent of the new construction and a sentence I had heard at the trade union office popped into my mind. "We've built housing for 5,000 families since liberation but haven't solved the problem yet," they had told me there. "Too many of the workers are

getting married; not only the young ones but the old bachelors too. In the old days even a skilled man of 40 or so was often single: what woman would want to share the life we lived then? Now life is secure. The 8-hour day leaves plenty of time for home life. Wages are high. Bonuses paid for production in excess of norm often come to as much as 40 per cent above the basic rate, bringing the workers' income up further. So there are weddings every week-end. Building has to be pretty fast to keep up with that."

I recalled these words partly because my next destination was the maternity home. Arriving there, I found the spotless, freshly-painted wards filled with expectant and new mothers. The nurse who took me around told me that women workers get 56 days' maternity leave with full pay, and a special grant for layettes. For both them and workers' wives, delivery and stay in the home are free.

When we got to the babies' room, where many infants slept in white cribs, I was not allowed to go beyond the door, but the nurse inside pointed to a pair of twins with particular pride. "We have them quite often," she said enthusiastically. "Their mothers get 14 days extra maternity leave, 70 days altogether."

The plant's nursery was on the other side of the street, near the big consumers' cooperative where workers and their families can buy everything they need. It is still new and has relatively few children, but many more will be accommodated by the end of this year. Fees are very low.

Going through the rooms with their tiny beds, tables and chairs, I felt like a giant. In the playground I was surrounded by sunny-faced tots who called me "uncle". A little three-year-old boy seized my hand and told me solemnly, "I can count up to ten," then proved it by doing so.

Later that afternoon I talked with Deputy-Director Wang Sen again. When I spoke appreciatively of all I had seen, he said: "Yes, it's a good beginning, but our welfare facilities aren't nearly complete yet. Next month we're opening a special diet canteen where subsidized meals will be given to workers needing extra nourishment, and an after-hours rest home where workers who are in weak physical condition but still on the job can build up health and strength. Also we are planning a home for the disabled. Other plants already have all of these."



In reply to some questions about financing, Wang Sen pulled out a notebook and gave me some statistics. Last year the union disbursed some ¥500 million\* from the labour insurance fund in pensions and other statutory benefits as well as for the running expenses of its various welfare establishments. In addition, ¥140,000,000\*\* were paid out in special assistance grants to 818 workers in the three months December 1953—February 1954 alone. The actual cost of building welfare installations is paid, for the most part, by the plant management.\*\*\*

Just before I left, Wang Sen asked me to come to the window, through which we could see the fiery aura of the blast furnaces under the darkening evening sky. "Look at that," he said. "Today our plant turns out nine times as much pig iron as it did five years ago. We are now engaged in a labour emulation campaign to overfulfil the monthly quota. The workers know that they are the masters here. All their gains are the result of their own work, for their own future."

\* In the new currency, this amount would be ¥50,000.  
\*\* ¥14,000.

\*\*\* In May 1956, labour insurance covered over 5,700,000 workers and their more than 10 million dependants. In addition, employees in government organizations and schools have had their health and welfare needs covered directly by the government.

## NOVEMBER 1956

### Miners' Trade Union

by YING CHI-HSIEN

I HAVE been a full-time trade union worker since 1952. That was the year I was elected to the trade union committee at our pit. Before that I was hauling coal at the surface, but I'd taken a pretty active part in the trade union since its formation in 1949, which is, I suppose, why my mates voted for me.

The Trade Union Law, passed in 1950, says that in all enterprises employing more than 200 people there should be one full-

time functionary for every 500 workers. The management is obliged to free us from our jobs when we are elected, and to ensure that we return to them, or to other jobs at the same rate of pay, when our term of office is up. The management also has to provide offices and other facilities for us to do our work. The trade union pays our wages, and these must not be less than what we were getting before we became functionaries.

Our pit, Chaokochwang, employs over 8,000 people. It is the biggest of the four that make up the Kailan Colliery, second largest coalfield in China. The colliery started in 1875, but for fifty years before China's liberation it was in the hands of foreign capital, first British and then, after the outbreak of the Pacific War, Japanese. Both recruited labour through local contractors, most of them gangsters of the worst type, who hired men out in gangs to the foreign management and got a two-way rake-off from their wages.

Technically the mine was one of the better-run, because the British management had mechanized it to some extent. To this day, Kailan possesses the longest underground railway haulage system of any pit in China, and there are very strong power-driven hoists to bring the coal to the surface. But elsewhere, for example at the coal face and for surface haulage, there was no machinery. Coal was got with the pick, and carried to the railroad by men or mules; when it reached the surface it was all hauled away by manpower. Pay and conditions were very bad.

My father was a collier and our family was bitterly poor. I remember how he used to come home night after night worn out, black and filthy. The bath-house at the pit-head was so inadequate that only a small part of the men could use it, and of course there were no baths in the homes. No special clothing was provided, and scarcely a man possessed more than one suit of clothes. The contractors fired anyone at will, made forcible deductions from the miserable wages, and demanded presents at festivals and other occasions. They themselves ran gambling houses where the mine workers, driven by the abject misery of their lives, were further robbed and impoverished.

Then there were the Security Police, established by the government and the owners to "maintain order". They used to beat us up whenever they pleased and there was no redress. To get into the pit, every man had to carry his pass, his work certificate and his identity card hung round his neck. There were huge

guarded steel doors at every entrance and exit "for the prevention of riots".

As for safety, there were over 2,000 accidental deaths in our pit in the 50 years before liberation, almost one for every week. When I first began to work at the pit-head as a lad of 17, I used to watch horrified as injured men were carried out day after day.

The only legal form of "trade-union" organization we had was a Fascist-type outfit, run by political gangsters and thoroughly corrupt and undemocratic. Strikes, many of them led by underground Communists, were nevertheless frequent and often very violent. The Machiakou pit was actually closed down in 1936 after a series of strikes, and thousands of men were thrown out of employment. The management claimed that the quality of the coal was poor. Actually, Machiakou was closed because it was the most militant of the pits, and the strikers found their strongest leadership there. I can still recollect the strike of 1938, one of the biggest and most solid in the whole history of Kailan, when all the pits came out and stayed out a month. I was only 11 years old then, but I remember the workers defending themselves against the police with axes, picks and guns. They won a wage increase that time.

It was all struggle until the liberation in 1949. After that we got a proper wage system and the right to form a trade union that was really our own. In 1952, when the People's Government took over the operation of the mine, it organized a "democratic reform movement", carried out with the help of the Communist Party. We were invited and encouraged to speak out about our sufferings and wrongs. The former contractors and their agents were made to answer for what they had done. Those who had behaved with reasonable decency were given a chance to become workers in the mine, or else dismissed. Those who had committed crimes were dealt with according to law. We got a new management, and many experienced miners and other workers were appointed to leading posts. Two, who had worked in the pit for 20 years, rose to deputy directors.

After that the new administration launched another movement — to "reform production". This was aimed at changing everything that was backward, dangerous and inefficient in the actual work of the mines. Of course, it could not be a short-term thing. In fact it is still going on, but we have made a good deal of progress in the four years.

As I said before, coal-getting used to be done by physical labour. Today it is largely mechanized. We work by the long-wall method, with coal-cutters, combines, electric drills and explosives. The hauling at the coal face is now done by conveyor. Ventilation has been improved. Each miner now gets 5.1 cubic metres of fresh air per minute as against 1.6 cubic metres in the past. Surface haulage has also been mechanized. There used to be 500 labourers pushing loaded tubs at the surface. Now 86 drivers and operators per shift can take care of the whole thing.

In all of this our union has had a big part. The trade union for the entire pit, of which I am vice-chairman, has eight commissions under it. They are concerned with production, labour protection, labour insurance, wages, organization, propaganda, finance and women's work (among the miners' wives). Every member of the committee, except the chairman and vice-chairman, is responsible for the work of one of them.

The pit is divided into 36 sections, each with its own trade union committee and corresponding commissions. Within the sections there are groups, more than 800 of them. Over 98 per cent of those who work at our pit are in the union.

Let's take the production commission as one example of what we functionaries do. Every week there is a joint conference between the pit management, Communist Party and Youth League organizations, and our trade union. It discusses work problems and draws up the monthly plans and output quotas. After being agreed on, the monthly plans are submitted to the whole membership for discussion in the groups. If the groups find the quota too high, or in any other way impracticable, they let the trade union committee know and we take it up with the management. What generally happens is that the groups promise to do more than their quota. Everyone is keen to provide more coal because they know that the quicker China's economy develops the better their lives will get. They've seen that happening already. The average wage is twice what it was before, and the average daily output per man is 5 tons. In the past it seldom exceeded 1 ton.

At present we are carrying on a big drive to fulfil our share of the First Five-Year Plan before time. One of the main ways in which the trade union helps in this is by singling out and publicizing every notable achievement by any worker. These may be in producing more and faster, finding ways to save time and labour or making machines do more, or inventing a safer

method of work or otherwise helping production and welfare. We call this the "outstanding workers' movement". It is not peculiar to our mine but is being carried on by the trade union movement all over the country. In our pit, so far, we have picked 2,754 outstanding workers (90 of them technicians) and 35 outstanding groups or units. Others are constantly coming to the fore. We are sure, already, that our pit is going to fulfil its part of the Plan nine months ahead of time.

The job of the wages commission is to see that the wage policy and the system of grading laid down by the government are correctly applied in the pit, and that the wage fund is properly used. If workers have complaints or queries about their pay, rates or quotas, they come to the trade union, and the wages commission takes up the matter. We watch these things carefully. In essence, of course, the workers and our socialist management have entirely the same interests. But the latter does have a tendency sometimes, in its desire to fulfil production tasks, to pay less attention to the workers' needs, so we have to see that they are not neglected.

Generally speaking the mine workers enjoy a decent wage now. A lot of them are buying things like watches, fountain pens, bicycles and sewing machines that they could never afford in the old days. But there are still some who find it difficult to make ends meet because they have extra large families or some sudden emergency. In cases like this the trade union makes grants, after discussion with the basic group to which the worker belongs. Before the end of this year we shall help to carry out a thoroughgoing reform of the whole wage structure in line with the directives of the government and the All-China Federation of Trade Unions.

The question of safety is, of course, primarily the responsibility of the mine administration. But the trade union has a lot to do with it too. In 1953 the management decided to run a campaign under the slogan: *Half a Million Tons of Coal without a Fatal Accident!* A great deal had already been done to make conditions safer, but some miners paid too little attention to the new safety regulations, either because they were a bit more troublesome than the old ways or because they didn't see the reason for them. The union's propaganda commission and labour-protection commission worked hand in hand to keep both miners and management safety-conscious at all times.

For example, early in 1953 the administration had appointed a team of technicians to keep an eye on the roofing in the pit. But later some of them were transferred to other jobs and the team did not carry on, with the result that falls increased, and accidents happened. The labour protection commission suggested to the management that the team should be re-formed but nothing was done about it. Then the propaganda commission got a big cartoon made and stuck it up in front of the administration offices. That worked like a charm; the team was restored at once.

We formed a volunteer corps of 700 men for special duties like checking ventilation, inspecting props and reminding their mates to keep the rules—for example, to put on rubber gloves every time they handle an electric drill. We circulated leaflets about safety methods, and arranged for lectures all through the pit by an old miner who had devised a specially good way of propping. This all went with a big propaganda campaign to break down the idea that accidents and injuries were inevitable. The upshot was that our pit turned out a million and a half tons of coal in 1953-54 without a single fatal accident.

It would take too long to tell in detail all that has been done for the miners' welfare. More housing has been built in the last five years than in the whole of the previous thirty. We have pit-head baths with accommodation for 1,500, and men who need it can get artificial sunlight treatment there. We have three clubs, each with its own library, new canteens, an open-air theatre and a mobile cinema projector. Comfortable villas in tree-clad grounds, once the property of foreign managers and high-up employees, have been turned into a sanatorium, hospital and kindergarten.

We have spare-time schools and literacy classes for all who need them. Less than one in ten of the mine workers could read and write before liberation. By 1958, we shall have wiped out illiteracy and we plan to bring every miner up to primary school leaving level by 1962.

Our pit is regarded as having an excellent record in regard to recreation and welfare. I was proud to be chosen to represent our trade union at the National Conference of Outstanding Workers in Peking last May, to tell what we had done.



*China Pictorial*

**Peasant family, North China.**

## THE FRUITS OF LABOUR

**C**OOBIE STANDARDS" was the way people used to speak of the livelihood of workers in old China. Death from famine was the lot of millions of peasants. Unemployment and starvation also hit hard at office employees, teachers and professional people. Except for the few well-to-do, rags and patches were the common attire. The homeless, sleeping by the roadsides and begging their food, were a common sight in all our cities—as every past visitor from abroad knows.

Today nobody starves. Rags have disappeared. Everyone has shelter. Though living standards are still not at all high, one can see great improvements: in the neat and often colourful dress of townfolk and villagers; in the crowded department stores selling a great variety of goods; in the many new houses that have replaced the airless, crowded rooms and leaky matsheds in which so many workers once lived.

With better homes, clothing and domestic furnishings, often with such things as bicycles, watches and radios, the working people of China, for the first time, are becoming men and women "of property". And this personal property is only a small part of their real property, the country and its vast resources. They are developing for a future of ever-greater prosperity, for, as the First Five-Year Plan states: "The supreme aim of the people's revolution and socialist construction is to steadily raise the level of the people's material and cultural life."



## Clothes Go Gayer

by LIU YI-FANG

I CAN AFFORD new clothes, but I just don't know what to wear," a young woman recently wrote to the editors of *New Observer*, our most popular mass-circulation magazine. She was expressing the state of mind of a great number of women in today's China, whose thoughts have turned toward spring and summer fashions. Many signs indicate the renewed interest in styles: the great crowds at the cloth counters in department and cooperative stores; the new models and piles of cut-out materials stacked in the windows of tailors' shops; a burst of articles in the press on how to choose colours and styles; new clothes a frequent topic of conversation on buses, at work and wherever people gather.

The trend is toward skirts, at least for warmer weather, and toward brighter colours instead of the dark blue jacket-and-trousers which has been the more or less standard dress—for women as well as men—for the past few years. Before the Anti-Japanese War and the War of Liberation, the narrow slit skirt was worn mostly by middle-class women in the cities, while working women in city and countryside wore trousers and fitted cotton print tunics.

The blue suit, at first made from cloth hand-woven by the peasants in liberated areas, was adopted as a convenience by busy women in war and revolutionary work. It became a nationwide costume when, at the time of liberation, China's crippled textile industry, needing to clothe a whole country in a hurry, found it most convenient to produce great quantities of cotton—the staple clothing material—in a dark blue twill weave. Although within only a few years the industry was able to produce sufficient cloth in much greater variety, and the blue suit was no longer a necessity, the custom lingered. For women helping to build a new country, it had certain conveniences. It did not soil readily and did not need constant pressing. It was easier for work or travel than the skirt. It was hard-wearing, and in it one was fashionable anywhere, at any time of the day. Many women viewed it as a symbol of their new emancipation.

In the past few years however, the trend toward brightness has been mounting. The younger women have taken to wearing gay bows at the ends of their long braids. Under the blue jacket appeared bright-coloured blouses in one of the many tasteful small prints or plaids which have become available.

This spring, in response to popular pressure expressed in letters to the press, and many group discussions, the Women's Federation and Youth League sponsored a national style movement. They called together well-known artists and leading dressmakers from Shanghai, famed for their skill to create new clothes. Many problems have had to be faced. While the textile industry is now well-developed, there is no clothing industry and no tradition of ready-made clothes. Hence there are no professional fashion designers. It was found that some of the artists called in offered styles not practical to make up, while some of the dressmakers offered items which matched their skill, but lacked some elements of pleasing design. In some cases, knowing their own needs, working women and housewives with design experience have volunteered models, and been asked to help. Taking their cue, some Shanghai designers visited factories and villages to collect opinions and observe the women at work.

It is doubtful whether styles will show any definite trend this spring and summer season. At present they are in the experimental stage. A great variety of types are being offered. They include traditional tunics and slit-skirt dresses, frequently in new fabrics and with new touches like tri-coloured braid, dark velvet piping, or original buttons. Taken from fashion magazines abroad, western styles are being shown in which simple washable dresses in plain and printed cotton seem to predominate. A third group includes clothes designed on traditional lines, but with some basic changes like wider skirts, or pleats to make them more convenient for modern life.

All of these styles are being "sorted out" by public opinion. They were displayed at a fashion parade in April, with actresses and dancers serving as models, since China has no fashion-modeling profession. In the nation's capital an exhibition of the new designs in the Workers' Palace of Culture attracted more than 250,000 during April and May. Smaller displays have been held in department stores in city neighbourhoods and smaller towns. At every show, customers, male and female, are asked to write their comments on the styles and indicate which they like best. Sketches

of new clothes are published in popular newspapers for readers to comment on by letter. The final results will serve as a guide to dressmakers in choosing items they will concentrate on for production.

So far the poll, at least at Peking's State Department Store, shows that women still prefer the traditional one-piece *chi pao* gown, despite the fact that its high stand-up collar is considered hot for summer, and the narrow skirt was not made for getting on buses and streetcars. Its simple lines are easily cut from two lengths of material, even by the home dressmaker, and its slim unbroken silhouette shows off the figure to good advantage. Younger women, especially students, seem to indicate a preference for dresses with fuller skirts. High necklines will probably remain dominant and, for active work, slacks will probably hold their own.

Perhaps the answer will lie in the adaptations of the traditional gown. Several dresses by two women artists, Yu Feng and Chiu Ti, both firm supporters of maintaining a national flavour in dress, feature the *chi pao* with a skirt slightly flared or with hidden pleats, and a lower or open collar. Another Yu Feng adaptation is a jumper with tiny traditional-style cloth-knot buttons running all the way down one side, and a blouse trimmed with lace in the motif of one of China's minority peoples.

Even before a definite style trend has solidified, the most popular of the new clothes will be produced. In the past, when a city worker wanted a new dress, she took her material to a tailor; in the country women made their own clothes, usually by hand. In recent years some ready-made clothes, particularly suits, have been available. Last January, when tailors in every city in the land joined the movement toward socialism by banding together in handicraft cooperatives, the first step was taken toward mass-produced, ready-made clothes.

It may be several years before a complete national clothing industry develops, but this year's steps already indicate the trend. A large number of individual tailors, now working through their producers' cooperatives, are making some of the most popular styles in several sizes and colours for sale in state stores. These stores also have tailoring departments, which take orders for styles on exhibit, a factor which has cut their cost somewhat. But a majority of this year's clothes, at least, will be individually produced. For dressmakers and women who sew at home, pamphlets

are available introducing the styles and explaining how to cut and sew them.

China's working women are looking forward to less expensive garments, incorporating the skill and know-how previously reserved for the wealthy customer. In the opinion of Chin Hung-hsiang, 61-year-old proprietor of the shop which has been a Shanghai fashion-leader for over 30 years, only about 500 of the 2,300 dressmakers in Shanghai's 530 joint-owned shops are especially highly skilled. Now that they have changed to joint state-private ownership, the 500 will pass their knowledge—hitherto zealously guarded—to the others, and eventually share it with the whole nation. "In my shop," Chin said, "we will go on improving our more expensive gowns, but it will be a challenge to make low-cost dresses which combine practicality and good looks, and then produce them in quantity." The "professional secrets" he will share with his colleagues include a chart on measuring and cutting, and one on seasonal colour-matching.

The new style trend has had repercussions in other fields as well. Department stores find the demand soaring for semi-heeled pumps and other more dressy shoes, as well as stockings, lingerie and cosmetics. Some women are finding new ways to wear their long hair, while many more are taking the big step of cutting off their braids—frequently waist-length—and having permanent waves. "They come in groups," said a hairdresser, "to give one another moral support, I suppose. Sometimes there is a sudden loss of courage as I poise the scissors over their heads, but in the end the braids always come off, and they seen happy with their new permanents."

## What the Farmer Gets

by TAN AI-CHING

AT the "Flame" Agricultural Producers' Cooperative in Hopei province, the 1956 wheat crop was more than half as much again as last year's. Previously, the co-op had been of the semi-socialist type (i.e. the members, besides payment for work, drew dividends on land they had invested as shares). Now it had become completely socialist, with land and tools pooled and each person's share of the income paid solely for work done. The harvest had showed the farmers that a socialist co-op, with the better planning and organization that comes with common ownership, brought a quick increase in output. But another question remained. What would each individual and family get out of it?

For the "Flame" co-op members, as for 60 per cent of China's rural people, this was the first year of socialist organization. The answer to the question would determine what they thought of socialism. About half as many farm folk were still in semi-socialist co-ops. They were watching the others to see whether they too should take the next step. How, in other words, would collective and individual interests be dovetailed? This is a very important problem in the building and functioning of socialism, especially in the early stage, when high investments for the future must be made from current income that is still not high.

The "Flame" co-op was one of many in which a difference arose on this issue. The elected management, encouraged by the fine harvest, was anxious to make the maximum possible investment in improved production. But most rank-and-file members saw things differently. If the management committee's plan went through, only one in four would have a 1956 "take home" income that was higher than last year's. Many would be no better off than before, despite the higher yields. A large minority would actually draw less. No arguments about the future could overcome these facts. "Our fine crop would be just like a cake drawn on the wall," one man said. "You can't eat that."

The argument was finally settled to everyone's satisfaction. On the initiative of the Communist Party branch in the co-op, the entire membership met to take a hand in revising the income-distribution plan. Less was allotted to public (investment) funds, welfare and administration. Many ways were thought up of doing needed things with less outlay. Wheat and rye set aside to feed the pigs, for instance, were replaced by tree-leaves and cottonseed. On this basis a plan was made to breed more pigs, which also meant more manure and a saving on purchases of fertilizer.

In the distribution under the new scheme, all but three of the co-op's 104 households got more income than after last summer's harvest. Nearly 60 per cent actually got twice as much or even more.

So while it may not be possible to have your cake and eat it too, with rational democratic planning the co-op proved that it was possible to invest in building socialism and at the same time live better each year.

The problem faced by "Flame" was nationwide, and last April the Central Committee of the Chinese Communist Party gave its attention to such matters. Co-op harvests must meet three needs. One portion goes to pay the agricultural tax, helping to feed the cities and build the industries that will give the farmers tractors and more consumers' goods. Another is put into current production costs, welfare and public (investment) funds to develop the co-op itself. The rest is paid to members for their work. This last portion, the Central Committee decided, should be at least 60 to 70 per cent of the total. Every effort was to be made so that at least nine-tenths of all cooperative farmers in China would have a higher income in 1956 than in 1955.

This was part of the nationwide campaign for more attention to the interests of the individual. The same thing is happening in industry too, where it has taken the form of wage-rises and stress on better working and living conditions.

There had been certain deviations from this principle in China's agriculture. During the "high tide of socialism" in the countryside in the latter half of 1955, practically all the peasants, seeing the better harvest of the pioneer cooperatives, formed co-ops of their own. At that time some management committees, especially of the bigger units, were ambitious to create as many outward signs of progress as possible, and spent large sums on such things as homes, offices and clubs. One even built an auditorium that would seat

2,000. Others bought trucks, discarding horse-carts which were still perfectly good and adequate to the needs. Many members thought this was improvident. "They spend the egg-money before the eggs are laid," they complained. Some farmers didn't work as hard as they might have in the co-op fields, thinking that the results would only go for new extravagances.

On April 3, 1956, the Central Committee of the Communist Party, jointly with the government, issued a directive to correct these and other errors. At the same time, special personnel were dispatched to the countryside to help put things right. Cooperatives today must refrain from large-scale capital construction for their first two or three years, until sufficient public funds are accumulated. Even when such investment is for productive purposes and justified in the long run, says the directive, it is slow in bringing returns and results in less current earnings for members, and when premature draws their "strong disapproval". Welfare and entertainment facilities too should be set up gradually, as justified by production increases. Essential establishments, such as spare-time adult literacy schools, and nurseries to take care of children while their mothers work in the fields, should be run as economically as possible. In relation to credit loans to the cooperatives from the Agricultural Bank, the directive requires the bank to make full use of funds available for the purpose and to make sure that these are not used extravagantly. Loans may be for current production or for advances to members before the harvest.

Another mistake that had been committed was that traditional sideline production fell into neglect. In 1955, about one-fifth of all rural income came from subsidiary production—pigs and poultry, silkworm-raising, straw-weaving, brick-making, embroidery and so on. In addition, 10 per cent had come from livestock. On hill farms throughout the country, sidelines and stock-breeding had brought in an average half of all the earnings. But in the first flush of the cooperative movement, inexperienced management committees thought that all that would matter from then on was to expand production of the main field crops, grain and cotton. In the name of "efficiency", they concentrated all manpower and material resources on this, and arranged the working time of co-op members in such a way that sidelines did not get due attention. Moreover, they tended to set crop targets too high (aiming, in some cases, at a fourfold increase this year as compared with last!). Based on such estimates, they paid for a work-day in the fields at a much high-

er rate than for one devoted to subsidiary production. The result was that the subsidiary breeding of pigs and poultry fell by as much as a half in some co-ops. This in turn brought a drop in sideline income, along with a great deal of general inconvenience, and bad effects on the country's economy.

The directive required that sidelines should not only be restored but expanded. Besides increasing income, this would help people whose earnings would otherwise fall. Among the latter were some members who had been relatively well-to-do as individual peasants. They had used the carts and draught animals they owned to make something on the side by transport work. But now they had sold these to the co-op, the source of their subsidiary income was gone. There were also farmers who had had more land than labour power, and were therefore more dependent on the land dividends which cease when co-ops become socialist. Moreover, every co-op had old people and others too weak for field work, who could only participate in production if suitable sidelines were carried on.

The collective and individual benefits from this approach have been shown in co-ops which have developed varied sidelines. The big Antu country cooperative, in the northeastern province of Kirin, has organized 6,000 people for afforestation and stock-breeding. The Tungyen cooperative in Chekiang province, south of the Yangtze, took advantage of its location amid many small rivers and streams to raise fish and ducks, looked after by a cripple. Pigs are fed on a kind of water-weed grown in the ponds, and their food is prepared by old women. Every odd patch of land has been planted to pumpkins and sweet potatoes. These extra activities are expected to yield 20 per cent of the Tungyen co-op's total income in 1956. The co-op is going over to double-crop rice this year. But rational planning has provided ample manpower for both field-work and sidelines.

People skilled in weaving strawbraid and mats, and at embroidery, are also happier and more productive when doing the things they know best. In the "Patriot" cooperative in the northern coastal province of Shantung, about ten subsidiary occupations are practised, and no less than 240 members are employed on them. One is the making of dried noodles, which have a wide sale. Its chairman often says proudly to visitors, "Our co-op is prosperous and independent. We have our own blacksmith and carpentry shops, oil-pressing mill and dried-noodle factory. In the old days a land-



lord might have an oil-mill and a winery, and that was about all. We are much more enterprising."

Experience has shown that there is one sure way of getting co-op members to link group and individual interests in their outlook. This is by really democratic discussion of the distribution of harvests. There is most unity where every member is drawn into detailed calculation of the total income of the co-op, how much should go to public funds, and how much to each member. All become deeply concerned with the welfare of the collective which is so closely linked up with their own.

An example of a misunderstanding cleared up by discussion occurred in the "Five Star" co-op in Shansi province. Some members had joined it after they had already ploughed and planted their wheat. When a truly champion crop came up, they had second thoughts. "If we hadn't been in such a hurry to come in," they said to one another, "every grain would be ours." So they proposed that the wheat should be divided according to who had sowed it, but the rest of the co-op didn't agree.

"We too cultivated, weeded and harvested those fields," objected the older members. "Is our work to go for nothing?" There was a deadlock, and some of the new members quit work and stayed at home.

The Communist Party branch found a way out by comparing two wheat fields. The plot belonging to Farmer Wu Ying-kao, one of the latecomers, produced a fine yield, nearly 1,000 lb. of wheat per acre. But this was after the co-op had weeded and dressed it with great care while the crop was growing. The proof was that another piece of land, which everyone agreed was of the same quality but had not received equal attention, had produced only 800 lb. The demonstration convinced everyone that better crops came from more collective work. All now felt that a distribution based strictly on labour was fair and square. Not all such disputes were between individuals. They also occurred between smaller co-ops that had combined to form larger ones. In such cases, those whose land had done better wanted the benefits confined to their own unit. Agreement was reached through recalling that the reason for combining was a better life, and the advantages of larger-scale operation, for all members.

In all cooperatives, the basic idea of distribution is the same. It is the socialist, "From each according to his ability, to each according to his labour". The decision that 60 to 70 per cent of

the income of any co-op must be divided among individual members, stems from it. If less were distributed, and more went to public funds, it would also reduce the difference between the income of the better workers and those who didn't work so hard, or had less skill. Such differences are needed at the present stage. Well-meaning "economic equalitarianism" runs counter to the chief requirement of socialist construction — the constant growth in output and efficiency, on which everyone's welfare depends.

These are some of the ways in which the collective and individual interests, in China's newly-socialist countryside, are being brought into proper relation. They are a guarantee that the farmer's income, as well as investment in agriculture, will grow with each rise in production.

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DECEMBER 1956

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### Fatter Pay Envelopes

by TAN MAN-NI

**M**OST of the eighteen million factory and office workers in China are getting fatter pay envelopes this year, as the result of the greatest nationwide wage increase in China's history. The rise averages  $14\frac{1}{2}$  per cent, or about ¥80 (equivalent to 500 lb. of flour) per year for each of the workers in government-owned industries, government offices and the older jointly-owned state-private enterprises. Such workers went onto the new rates this summer and autumn. Those in private establishments which changed over to joint operation only in 1956, are now in the process of a similar wage reform. They may receive a higher rise.

Alongside the general increase, the entire nationwide wage system is being drastically revised to iron out disparities and create uniform rates for each job.

Let's see what the new wage levels mean, for example, to Li Lien-chih, a 41-year-old repairman in the Tientsin No. 2 Rubber

Plant. Before the increase he earned ¥64 a month. Now, as a result of the rise and promotion by one grade, he takes home ¥85, tax free.

Li is a semi-skilled workman. His pay before the reform was about average, enough to support a small family comfortably. Though he and his wife have six children, a rather large family, they were able to meet ordinary expenses without strain. They spent ¥40 for food, ¥10 for rent, water, electricity and coal, and the remaining ¥14 for clothing, books, cigarettes, candy for the children and other sundries.

But this was a very tight budget, allowing for few luxuries, and nothing laid by for emergencies. Though Li, as a worker, is covered by health, accident and old-age insurance, as well as half the expense for medical treatment for his dependants, some difficulties arose. Last year, when Mrs. Li was ill, the family had found it necessary to use Li's right to apply to the trade union for an additional grant for her medical treatment. Statistics compiled before the recent wage increase by the Tientsin Federation of Trade Unions show that 10 per cent of Tientsin's workers had to apply for such occasional grants, while 5 per cent depended on trade-union allowances to maintain an adequate living standard.

Now, with his ¥20 rise, Li's household can manage some "extras", which most average factory workers with smaller families could already afford: more meat and fruit in their daily diet, new clothing, possibly a silk dress for Mrs. Li, a radio and other more costly entertainment than film shows at the workers' cultural club.

Moreover, the money wage is not a complete statement of the real income of Chinese workers. Li, for instance, gets his health and old-age benefits without paying a cent. Many other workers also receive a subsidy for transportation to work, rent and heating. Production workers often make additional money for over-fulfilling of their quotas on piece work, bigger output or better quality on time work, savings on materials, inventions or improvement of efficiency on the job.

Although still modest, the way the Li family lives now is a long way from the hut of sorghum stalks they lived in up to 1949. For 28 years, Li had moved from one casual job to another in the factory, always fearing a layoff. Now his job is steady and safe.

This year's wage increase, while the most substantial and far-reaching, is not the first since liberation. On the eve of the cur-

rent increase, workers' income was already about 90 per cent higher than in 1949.

In the first months of China's new government, in order that commerce and industry should not be interrupted, the policy was to maintain jobs and wages such as they had been. At that time, the trade unions in mines and factories launched campaigns to abolish the most ruthless elements of exploitation, such as the "gang boss" system (with wage kick-backs to the boss) and unpaid apprenticeship.

Early in 1950, the "wage point" system was instituted for all workers in state-operated industries. This protected them from price and currency fluctuation. One wage point was equivalent to one per cent of the monthly cost of the five chief items of constant consumption (grain, vegetable oil, salt, cotton and coal) used by two persons living together. Each worker's wage was fixed in terms of these points. And the money value of each point was re-assessed every pay-day on the basis of the current market price of the five necessities. This system was necessary as long as speculation and other market irregularities affecting prices had not been fully cleared up. It was then the only way to see that the workers received an adequate real wage.

In 1955, after most of the production and marketing of the main commodities had come under state or joint state-private operation, and when currency inflation and fluctuations had long been things of the past, the point system was discarded and replaced by a fixed money wage. Prior to this, almost all workers had received one or more increases in terms of points (i.e. in real wages).

The basic principle of the distribution of social wealth in China is that the value produced by the working people must belong to the working people. Therefore, as the productivity of labour in our country rises, so do earnings. But since we must build for the future, not all the value produced can be returned to the people immediately through wages or other compensation. Some—and the figure now stands at just over 20 per cent—must be re-invested to build factories and machines which will help increase production in the future, and some goes for public services, government administration, national defense, education and so on.

The movement of wages during the past few years has been roughly as follows. During the years 1950 to 1952, they increased rapidly. The war-devastated industries were still being rehabili-

tated at that time, so productivity rose by only one-third. But the government deemed it necessary to remedy the pitifully low pre-liberation pay as soon as possible, so average wages for industrial workers went up at a much higher rate; 57.7 per cent in the three years.

The First Five-Year Plan was launched in 1953. It provided for an average wage increase of 5.8 per cent each year, and a total annual increase in the value of industrial and agricultural production amounting to 8.6 per cent. Between the beginning of the Plan and the end of 1955, wages rose by 13.7 per cent. But productivity actually went up 41 per cent, so a wage increase was due.

In February 1956, a wage conference of representatives of the unions, government ministries, and the Communist Party drew up recommendations for a new wage programme based on the needs of the workers and of the national economy. This was adopted by the government on June 16, and made retroactive to April. By the end of 1956, when the increase will have gone into effect for all categories of workers, the general wage level will be 33½ per cent higher than at the beginning of the Five-Year Plan. This means that one year before the end of the Plan, due in 1957, the original estimate for wage increase for the whole period will already have been slightly surpassed.

Another important task of this year's reform was to regularize the wage system. Before it, wage rates in different industries and enterprises had grown up in a local, uncoordinated way. A carpenter doing a certain kind of job in one factory, for instance, might be getting a much higher rate than another man doing the same job in another factory in the same industry. Such disparities infringe on the socialist principle of "to each according to his work". They have, in general, been eliminated by new nationwide wage and job-grading systems. But certain differentials, favourable to the development of the national economy at this stage, are provided for.

People in industries of comparatively greater importance to the Five-Year Plan, or those which directly contribute more to the national wealth, have received bigger increases and will have a slightly higher wage scale in the future. They include workers in the iron and steel industry, mining, power, oil and machine building. In the 1956 reform, wage-earners in heavy industries got an increase averaging 15.6 per cent. Those in light industry,

got 12 per cent; in non-industrial enterprises, 10.9 per cent; and in government offices 10 per cent.

Workers in newly-developed industrial centres and on construction sites in remote regions get better pay than those doing the same job elsewhere. This is partly to encourage recruitment for such jobs, partly to compensate them for the physical hardship due to climate, and to the somewhat rough-and-ready living and working conditions of the industrial "frontier". For instance, machine-builders in Taiyuan, one of the growing industrial centres, recently received a wage increase of 20 per cent, a good deal above the average. For miners, furnace workers and others with physically heavy tasks, rates are also higher.

College professors and highly trained personnel have higher pay commensurate with their experience, training and responsibility. A scientific research worker of the highest grade receives roughly as much as a minister in the government. In addition he may get added income for important contributions in his field.

Some groups of workers whose wages were comparatively low, such as primary-school teachers and those in rural supply-and-marketing cooperatives and in administrative offices in the villages, also received substantial rises. In connection with the reform, workers in all factories have been busy holding democratic discussions on what should be the standard of working ability at each pay level of each job. For example, to establish standards for railway repair shops, engineers, pace-setters and experienced workers representing all such units throughout the country met to draft appropriate specifications for each job. These covered technical skill, output, and theoretical knowledge required.

The draft specifications were then sent to all the shops for discussion by the workers, whose suggestions were taken into consideration in finalizing the standards. In the Changhsingtien Locomotive & Wagon Repair Shop near Peking, for instance, the 1,200 workers fell into 762 different categories according to job or level of work.

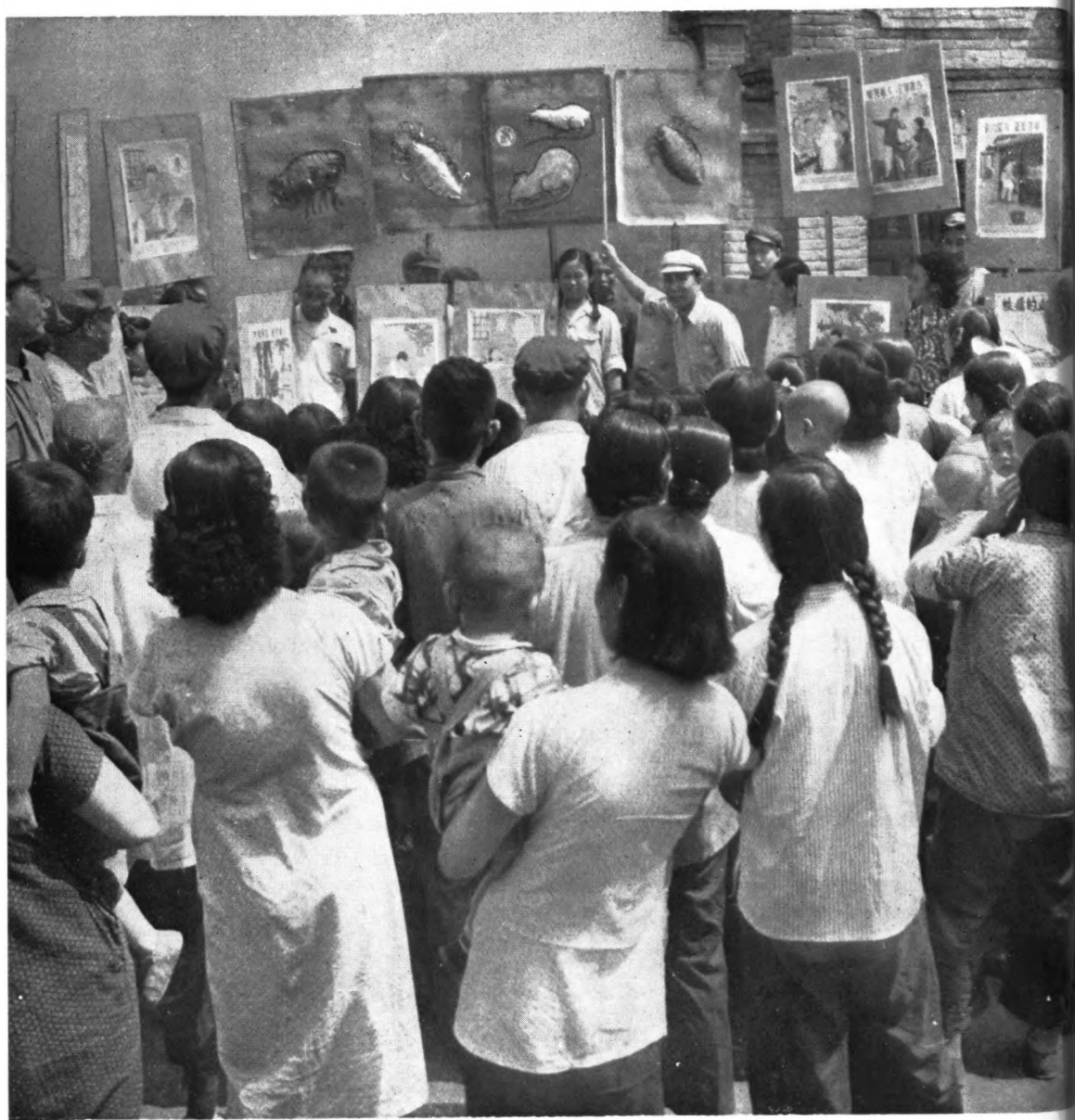
It is by using such standards that each individual can be placed in his proper job "slot". This may be done by written and practical tests, or through democratic discussions by a committee of his workmates, who best know his capabilities.

From now on, re-grading will take place regularly. Together with the factory administration, the trade union arranges for classes, lectures and library facilities in an organized study pro-

gramme to help individuals master the technical skills and to enable them to advance to higher wage categories. They also organize "tutor-learner" pairs, where older and newer workers exchange knowledge and techniques. At the Changhsingtien Repair Shop, 60 per cent of those who took advancement tests passed them and were immediately placed on higher-paying jobs, while the others advanced in rate on the same jobs.

It is also the trade union's responsibility to see that in each shop the principles of grading and advancement are carried out properly. At Changhsingtien, five elderly furnacemen were shifted to less strenuous but unskilled work. But even though they were put in the highest unskilled bracket, they complained that this was actually a demotion and meant loss of pay. One of the principles of the reform is that no one's wage should be cut. Therefore, although continuing to do unskilled work, the old men were returned to their former wage-level and rating.

As the general wage-rise came through, counters at every retail shop in the country were packed with people spending their accumulated increases, which were retroactive to April. In Peking, the consumption of meat has doubled. Radios, bicycles, watches and other expensive items are selling as never before. Everywhere, better wages have resulted in a direct rise in living standards.



*Mao Sung-yu*

A street committee teaches summer hygiene, Peking.



## FOR LIFE AND HEALTH

**T**HE nationwide struggle against disease and dirt, general in China in the past, has scored great successes. Everyone who comes to China remarks on its neatness and cleanliness, a result of the fact that the people have put their own house in order.

In the midst of the revolutionary battles of 1948-49, when city after city was being freed from the Kuomintang, the people's armies used to pioneer in this work in each place they liberated—working themselves, and encouraging the townspeople, to remove accumulations of garbage decades or even centuries old. Sewage disposal and water supply were put in order. Traditional gastro-intestinal ailments became rare, and the shocking child-mortality they caused began to go down. Inoculations were given for infectious diseases. By 1951, cholera and smallpox, two major scourges in the past, were no longer being reported. Flies had virtually disappeared in the big cities.

In 1952, to protect the country against the bacteriological warfare then being waged, a great nationwide "patriotic health movement" was launched. The people everywhere destroyed rats, mosquitoes and other pests, along with their breeding places. In factories, offices and military units, everyone turned out periodically for thorough clean-ups, and this is still being done.

Now China has a programme to wipe out all her endemic diseases—plague, malaria, schistosomiasis, kala-azar. A network of hospitals, clinics, laboratories and health extension and educational services is spreading over the whole country. The re-training of village midwives is saving the lives of countless mothers and infants.

An honourable place is being taken in the work by traditional Chinese medicine, which is reviving alongside the increase in modern medical training. Today, our western-trained doctors too are studying and systematizing it, and including its most effective weapons in their arsenal of curative means.

## Free Medical Aid for Millions

by *LI TEH-CHUAN*

**I**N 1949, when the entire mainland of China was liberated, free medical service had already long been in existence in the old liberated areas. Immediately afterwards it was extended to all areas in China then affected by disasters and epidemics and to all government personnel on the supply system (i.e. those receiving maintenance instead of salary). With the promulgation of the Labour Insurance Regulations on February 26, 1951, the scope of such service was further enlarged to include workers in industry and mining with members of their families, a total of over 10 million persons. Within the next year, the system was extended to cover all the former revolutionary bases and national minority regions, with the result that over 96 million people became entitled to medical attention that was wholly or partially free.

The fast pace of China's economic reconstruction, the strengthening and development of medical organs and the increase of their personnel, have provided a constantly increasing material base for widespread medical care. Consequently, on June 27, 1952, free treatment was made available to all government workers, including those in the educational system and state-operated economic enterprises, and also to working personnel of all people's organizations and democratic political parties, a total of several million persons.

In order to create the necessary conditions to make the new extension effective, the Ministry of Health has mobilized 350 medical graduates who will devote themselves to it entirely. It has also set aside 8,677 hospital beds, 4,687 sanatorium beds and 295 medical and health stations, including special clinics, to serve beneficiaries in this category. In the countryside, county and district health stations will take their share of the work. Additional facilities will be built in 1953 with the aim of providing 6-8 hospital beds for every 1,000 government workers.

In the meantime, the number of groups entitled to free service continues to grow. From October 1952, all teachers and working

staff in private schools were brought in. Early in 1953, the service will be spread to all university students, and to administrative personnel in the villages throughout China.

Every time the scope of free medical service has been extended, government health organizations have received many visits and letters from people who want to express their joy and gratitude. Liu Ta-peng, a government servant in Nanking, said, recalling the past: "When I was a boy in school, my father was a minor civil servant. We were poor, and he was always worrying. One day he fell ill and could not go to work, so he wrote a letter asking for sick leave. The reply was an abusive note from his superior, threatening to discharge him for malingering. He was so filled with anger and sorrow that his illness grew worse. How different things are today!"

Medical and health work in new China is developing at great speed. It is one of the necessary steps to ensure the success of our national reconstruction. Today, the chief emphasis is on service to production and the development and improvement of the labour insurance service in industry and mining. At the same time, we are training personnel and developing facilities at a fast pace to lay the foundation for a universal, socialized medical service covering every man, woman and child in China.

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SEPTEMBER 1955

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## Ancient Chinese Medicine

by LI TAO

**H**OW old Chinese medical science is can be gauged from one fact. "Oracle bones" of the thirteenth century B.C. bear inscriptions describing various ailments of the human body. *The Book of Rites*, a manual of ceremonies written in the Chou dynasty (12th century B.C. to 403 B.C.) records the court physicians' division of medical teaching into internal medicine, surgery, nutri-

tion and veterinary practice. *The Book of Odes*, a collection of ancient poetry of the same period, mentions more than a hundred different herbal remedies and drugs.

In the Eastern Chou period (770-403 B.C.) trade began to flourish extensively and there were continued wars between various Chinese feudal states. This contributed to the spread of medical knowledge from one to another. Physicians all over China were lancing boils with the *pien shih*, a stone knife which had originated near the east coast in what is now Shantung; they were using herbal remedies from Shensi in the west; moxibustion\* from Hopei in the north; acupuncture\*\* from Hupeh along the middle reaches of the Yangtze; and systems of massage from Honan in Central China. By the fifth century B.C. there were already general practitioners for ordinary people as well as court physicians for the emperors. As a means of diagnosis they observed the patient's respiration, the colour of his face and the quality of his voice.

The taking of the pulse, a great step in the history of world medicine, was discovered and added to Chinese methods of diagnosis by Pien Chueh, a famous physician of the period of the Warring States (403-221 B.C.). It spread to Korea and Japan in the sixth century A.D. and to Arabia in the ninth century. The great Muslim physician Avicenna, writing in the tenth century, mentioned pulse-taking in his *Canon of Medicine*, a book which was a basic textbook for European physicians up to the eighteenth century. In the Hindu medical classics, the taking of the pulse is not mentioned until the thirteenth century. This suggests that India too adopted this method from China.

Our ancient chronicles tell how Pien Chueh saved the prince of the state of Kuo, who had lost consciousness and been given up for dead by his court physicians. Pien Chueh felt his pulse, found that he was still alive and gave him treatment which resulted in his recovery. Pien Chueh was the first physician to attempt a summing-up of the whole of the existing medical experience. He travelled all over the Warring States, studying and practising at the same time. An enemy of superstition, he denounced all attempts to treat disease by witchcraft, and is reputed to be the

\* and \*\* Acupuncture and moxibustion, two medical inventions of ancient China, date back to before the twelfth century B.C.

Acupuncture is the insertion of metal needles into various spots on the body to stimulate and readjust the control and regulatory functions of the higher nervous system so as to bring about the desired cure.

Moxibustion is the burning of a cone or stick of moxa (wormwood or *artemesia vulgaris*) over a given spot of the body to produce a hot compress effect, to stimulate the nerves and produce a curative result. The burning does not hurt the skin.

author of *Nan Ching* (the Difficult Classic), an attempt to put pathology on an anatomical basis.

During the Chin and Han dynasties (between 221 B.C. and A.D. 220), the country was united as a single state. Chinese medicine developed rapidly. In 26 B.C. a physician named Li Chu-kuo revised a number of popular medical books, including the *Huang Ti Nei Ching* (Yellow Emperor's Inner Classic). This manual, which tradition dates back to very ancient times and which was certainly in existence by the third century B.C., has been used by scores of generations of Chinese doctors. The remarkable thing about this book is the similarity of its basic theory with that of today's preventive medicine. It states that the human body is an integral part of the universe, and that it can be protected from disease by adaptation to changes of environment. To cure an illness after it occurs, says the *Huang Ti Nei Ching*, is like digging a well after you have become thirsty, or forging weapons when the battle has already begun. Ailments must be "cured" before they arise, it prescribes, by leading a regular life with proper diet, work and rest, and by maintaining a calm heart and mind.

Another book, *Shen Nung Pen Tsao Ching* (*Shen Nung Materia Medica*), written about the first century B.C., records more than 300 kinds of remedies and their uses. It contains the world's first known prescription of mercury and sulphur for skin diseases. This treatment appeared in Arabia and India a thousand years later, and was not used in Europe until the sixteenth century A.D.

In the second century A.D. the physician Chang Chung-ching wrote the *Shang Han Lun* (*Treatise on Fevers*) and another work, *Ching Kuei Yao Lueh* (*Medical Principles and Essentials*), both of which were big factors in the development of internal medicine in the Han dynasty. They give many prescriptions for the treatment of fevers and other diseases, and name some eighty kinds of medicaments, including antipyretics, cathartics, diuretics, emetics, sedatives, stimulants, digestive remedies and antidiarrhoeal drugs—which even today serve as an important basis for Chinese medical practitioners. The *Shang Han Lun* was also widely used in Korea and Japan, where it played a valuable part in the health of the people.

Surgery also attained a high level in the Han dynasty. The renowned doctor, Hua To, performed major abdominal operations under general anaesthesia (induced by a drug). He also employed emetics to cure intestinal worms, and hydrotherapy for the

effects of wounds. He was the inventor of a form of physical exercise which imitated the movements of five animals—the tiger, the stag, the bear, the monkey and the bird—for the cure of chronic diseases.

It is a great loss to Chinese medicine that most of Hua To's works were destroyed after he was arrested and executed by a military despot of his day.

Between the Western Tsin dynasty (A.D. 265-316) and the Tang dynasty (A.D. 618-907.) the rival religious faiths of Taoism and Buddhism both used medicine to win followers. The Taoists edited many traditional Chinese medical books. The Buddhists translated a number of Hindu medical works, including those of the two great physicians Jivaka and Susruta. This led to an assimilation of Hindu medical knowledge into Chinese practice. As one result, the *Shen Nung Materia Medica*, when it was revised in A.D. 500, contained mention of twice the number of drugs appearing in the original work.

Between the seventh and ninth centuries, when Europe was still in the Dark Ages and India was split into numerous small states, China was the world's centre of medicine. Learned men from Arabia, Korea, Japan and elsewhere came to study Chinese medicine, and Chinese physicians were invited to teach abroad. The introduction of Chinese medicine into Japan dates from this period. It freed that country from healing by witchcraft, and was honoured there as "Imperial Han Medicine".

China can also claim to have established the first medical school in the world. This was the Imperial Institute of Physicians, set up under the Tang emperors in the early part of the seventh century A.D.—two hundred years before the Salerno Medical School in Italy, the oldest in Europe. Prior to that time, Chinese physicians had handed down their medical knowledge to a few favoured pupils.

The Imperial Institute had some 350 students studying in four departments—medicine, acupuncture, massage and "spells" (a practice introduced under Buddhist influence which did not play an important role, Chinese medical science having thrown off the influence of sorcery almost a thousand years earlier). The department of medicine was subdivided into sections for medicine, surgery, pediatrics, moxibustion and the ears, eyes, mouth and teeth. There was also a section for *materia medica*, where the students learned to cultivate medicinal herbs and produce drugs. Textbooks

were authorized by the government and the period of study was from three to seven years.

The existence of hospitals in China dates back to A.D. 510, when one was set up for the sufferers from a serious epidemic in Shansi province. More hospitals came into existence during the Tang dynasty, by the end of which there were government-organized hospitals for the poor, as well as leper hospitals.

During the Tang dynasty too a revised edition of the *Materna Medica* was produced, containing notes on 844 kinds of medicaments. Further valuable work was done in the eleventh century at the time of the Sung dynasty (A.D. 960-1279) by an official body known as the Bureau for the Revision of Medical Books. By this time the invention of printing had led to a fairly widespread distribution of medical literature.

Between the tenth and fourteenth centuries there was increasing contact between China on the one hand and Arabia and Eastern Europe on the other. The interflow of trade and culture quickened the progress of Chinese medicine and introduced into Europe, as we learn from Marco Polo, such things as rhubarb, cassia, China-root and ginger. Another stimulus to progress at this stage was the keen debate between various factions of Chinese physicians, each offering new ideas for the revision of the inherited knowledge.

The divisions of medicine were increased to about thirteen—including internal medicine, surgery, gynaecology, eyes-mouth-throat, pediatrics, orthopaedics, acupuncture and moxibustion, neurology and infectious diseases. Acupuncture and moxibustion increased in popularity. Life-size bronze models of the human body were made for training in acupuncture, with holes in them at the spot where needles were to be thrust in. The figures were then covered with a layer of wax and students practised sticking the needles through the wax into the right place.

Medicines and drugs became an item of China's exports at the beginning of the fifteenth century under the Ming dynasty (A.D. 1368-1644) with the growth of her shipbuilding industry; Chinese trading vessels sailed all over the South Seas and into Mediterranean ports.

In the sixteenth century Chinese physicians devoted great energy to combating smallpox, the most devastating epidemic disease of the period. More than fifty medical books were written on this subject and a special branch of medicine was set up for treating the disease. In the middle of the sixteenth century a

form of inoculation was invented; it consisted of extracting the contents of the pustules of a smallpox victim and either blowing it into the nostrils in powdered form or applying it to the nose on cotton. This method spread all over the country in the next two hundred years, and Russian doctors were sent to China to study it in the second half of the seventeenth century (through these visits it spread to Turkey). The English began to study the method from the Turks in 1717. Eighty years later, Jenner invented vaccination with cow-pox with this as a basis. It can thus be regarded as a main source of the present-day science of immunology.

In 1578, having spent 27 years in research, the great pharmacologist Li Shih-chen completed his *Compendium of Materia Medica—Pen Tsao Kang Mu*—which is not only the principal work of traditional Chinese pharmacology but also a major contribution to modern medical science. It lists 1,892 kinds of remedies and some 10,000 prescriptions. The medical substances described, 1,094 of which are of vegetable origin, are carefully divided into 16 classes and 60 species, and the book is thus an aid to botanical classification as well. The *Pen Tsao Kang Mu* has been translated into Latin, French, Russian, English, German and Japanese.

When the Ching or Manchu dynasty (1644-1911) came to power in the middle of the seventeenth century, the ruling class, fearing foreign influence and anxious to consolidate their despotic power over the Chinese people, set to work to block all trade and cultural relationships with other countries. During the reign of the emperor Kang Hsi (1662-1723), a number of official astronomers were beheaded or sent into exile for daring to conduct research into western astronomical science. A textbook on anatomy, based on the works of the Frenchmen Thomas Bartholin and Pierre Dionis and compiled by a Jesuit missionary named Dominique Parrenin (who himself translated the work into the Manchu language), was banned from circulation. The Manchu rulers tried to turn Chinese intellectuals from the study of reality and forced them to spend their time re-examining the old Chinese classics in fruitless detail. In medicine too, scholars wasted their time in hair-splitting textual criticism of the ancient books. The conservatism fostered during 270 years of Manchu rule hampered all progress—and medical progress was no exception.

Western capitalism forced open China's doors after the Opium War of 1840, and the East India Company set up clinics in Macao and Canton. But at that time it is doubtful whether the efficacy



of western clinical medicine was in any way superior to the Chinese. It was only after ether was first used as an anaesthetic in 1846 and antiseptics in surgery were introduced in 1867 that western medicine began to move ahead. Then the Chinese people began to think of western surgery as efficacious. But their attitude towards western medical science in general remained suspicious because it had entered China on the heels of the invaders in the aggressive Opium Wars.

The revolution of 1911 led by Dr. Sun Yat-sen put an end to the feudal autocracy of the Manchu empire, but in 1912 the warlord Yuan Shih-kai betrayed the revolution and plunged China into even deeper servitude to the imperialists. In official circles traditional Chinese medicine began to be regarded as unscientific and backward, and government schools were established to teach western medicine only. Finally, in 1929, the Chiang Kai-shek regime tried to make it illegal to practise Chinese medicine altogether. This aroused a big popular protest culminating in a demonstration led by nearly 300 Chinese physicians in the Kuomintang capital, Nanking. Though forced to give way to this protest, the Kuomintang continued to place obstacles in the way of the development of Chinese medicine and to foster disunity between physicians of the two schools, western and Chinese.

The People's Government, soon after its foundation, set to work to heal the breach. This was one of the basic principles laid down by the First National Health Conference it sponsored in 1950, which turned the whole medical profession toward service to the workers, peasants and soldiers, and toward emphasis on preventive medicine.

Last year the *People's Daily*, China's leading newspaper, explained government policy toward traditional Chinese medicine in greater detail. On the one hand it affirmed the value of Chinese medicine, its rich experience and the great contributions it has made to the people's health over many centuries. On the other, it pointed out the shortcomings that had restricted its scope and growth. It called on those trained in western medicine to unite and work with the doctors of Chinese medicine so that the traditional theory and experience may be systematized, put on a scientific basis and made an integral part of modern medical science.

Instructions for practical measures in this regard have been issued by the government to all public health departments. The Ministry of Health's Department of Chinese Medicine, set up after

the liberation, has been enlarged, and a national academy for research into traditional medicine has been set up in Peking. Shanghai, Nanking, Peking and other cities have opened hospitals of traditional medicine and centres for acupuncture. Peking also has an experimental institute for acupuncture and moxibustion, which is endeavouring to provide a theoretical basis for these procedures in the light of Pavlovian teaching on the role of the higher nervous centres in health and disease. Good results have been attained in the treatment of disorders of the nervous system and the digestive and locomotor organs.

Many hospitals of western medicine in China have opened departments of traditional medicine, or invited practitioners of the latter to join their staffs as consultants. Courses in Chinese medicine will shortly be included in the curriculum of a number of medical colleges, and doctors of western medicine are studying important Chinese medical books, which are now being re-published. The Chinese Pharmaceutical Society is planning to standardize several hundred traditional Chinese drugs in the next five years. And the Chinese Medical Association, formerly open to doctors of western medicine only, has instructed all its branches in the country to admit experienced Chinese physicians to membership.

It will take many years of cooperation and research to absorb the heritage of Chinese medicine into the general stream of modern medical practice. The completion of this task will bring a great advance in China's health service, and enrich medical science everywhere.

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APRIL 1956

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## Old Cure Saves Lives

*by* CHU HSI-YING

**L**ATE last summer 32 children between one and 14 years of age left the Encephalitis B ward of Peking's Children's Hospital. They returned to their homes and schools, well and sound. They

had made medical history in recovering from a frequently-fatal illness which has baffled modern medicine.

For their lives and health, the children had to thank an Encephalitis B treatment practised by doctors of traditional Chinese medicine for the past 300 years. Recently it was given a clinical test under modern scientific checks in a hospital in Shihchiachuang, Hopei province. Involving 54 patients between the ages of one and 61 over a period of two years, the test showed the treatment to be 95 per cent effective. Among the patients, 51 survived. All three who died had arrived in an advanced stage of the disease. In those who recovered, no after-effects were observed.

The treatment then received official recognition from the Ministry of Health, which is recommending it throughout the country. This is yet another illustration of how, under the policy of the People's Government, doctors with western-type training are investigating and learning from traditional Chinese methods which for centuries have been producing results.

Encephalitis B (or Japanese encephalitis) is the most deadly variety of that terrible disease. It occurs chiefly in children under 15, and is caused by a virus which attacks the central nervous system. Defying modern medical efforts in many countries, the death rate has remained between 30 and 50 per cent. Recovered patients often suffer from impairment of hearing and speech, paralysis and mental illness. The disease is not amenable to treatment with antibiotics such as penicillin, streptomycin and aureomycin, nor to the sulfa drugs, plasma and serum therapy.

Though Encephalitis B became known to world medicine only about 30 years ago, when it reached epidemic proportions in Japan, Chinese medical works have listed similar symptoms and signs for 2,000 years—under the name “summer pestilence”. The *Book of Fevers* of the Han dynasty (206 B.C.—A.D. 220) mentioned “summer pestilence” but gave no cure. The treatment now used was described, in its basic form, in a special book written 300 years ago.

In new China, the incidence of Encephalitis B has been greatly reduced by preventive measures such as inoculation with a special vaccine and control of mosquitoes, which carry the disease. But it still occurs, and in treating it the old method has proved unrivalled.

The first hospital trial, after the Shihchiachuang test, was made in Peking's new Children's Hospital. Of the 34 patients who came

in with Encephalitis B, 32 recovered, the other two again arriving in a very late stage of the disease. The traditional treatment was administered by Dr. Chiang Chien-an, a physician of Chinese medicine with 30 years' experience. Dr. Chiang, as part of the new move for cooperation between western and Chinese medicine, has become a member of the hospital's Chinese Medicine Department. He is the son and grandson of traditional practitioners, by whom he was trained. Recently he enrolled in the Chinese Medical Association, formerly open only to western-type doctors.

Working with Dr. Chiang was the head of the Encephalitis B ward, Dr. Pei Li, who had been trained in western medicine. Dr. Pei has since told of how doubtful she was at first about treating such a serious illness by "old fashioned" remedies. Such attitudes used to be common. Frequently unaware of the practical results gained by traditional Chinese medicine, and too sceptical even to investigate them, many western-trained physicians had scorned the national medical heritage as "unscientific". Such contempt had been fostered under the Kuomintang, when Chinese doctors had been expressly forbidden to enter modern hospitals. But their art did not die out, because the people knew it was effective in many cases.

When old Dr. Chiang came to the Encephalitis B ward, he applied his own methods to the study of the patients' symptoms, such as high fever, pathological drowsiness, vomiting, occasional convulsions and coma. He paid particular attention to respiration, pulse, the appearance of the tongue and facial expression, compounding different prescriptions according to each child's condition.

One patient he treated was four-year-old Pao Chien-ping, a pedlar's daughter, who was expected to live only a few days. Before he saw her, the little girl had been given injections of penicillin as well as sulfadiazine, aspirin and other drugs by mouth; all without result. Dr. Chiang found her rigid on the white iron cot, with a temperature of 40.5° C. (104.5° F.). He at once removed the ice-bag from her forehead, saying that the abrupt coldness would bring down the fever for a time, but would only accelerate it in the long run. He also ruled out strong medicines to make the child sweat, claiming that it was "like squeezing oil out of husks" and a further drain on the already weakened patient's strength. Young Dr. Pei found herself agreeing with this, recalling cases of severe weakness following sweating.

Dr. Chiang also vetoed the use of stimulants such as coramine, or sedatives for restlessness and convulsions. These, he said, were bad for an already upset nervous system. While he agreed that lumbar puncture was a useful scientific method for diagnosis and for checking changes in the illness, Dr. Chiang urged that this too be used only two or three times during the illness so as not to upset the patient. He placed very great emphasis on rest and complete quiet.

Diet which had consisted of milk, eggs and other foods containing energy-producing proteins and fats was changed to a thin rice porridge and fruit juice. A rich diet during fever, said Dr. Chiang, would only be an added burden to a weakened digestive system—"like trying to put out a fire by adding fuel to it".

As for active treatment to "counteract the poison and cleanse the fever from within", Dr. Chiang prescribed a variety of medicines dissolved or cooked in water. One of the ingredients he gave to all Encephalitis B patients was gypsum, commonly used in Chinese practice to lower fever. This was a surprise to the western-trained Dr. Pei. Her only previous knowledge of a clinical use of this finely-ground white powder was to make plaster casts for fractures. Dr. Chiang mixed the gypsum in water with rice powder and other ingredients to make "white tiger soup". Little Pao Chien-ping drank a small teacup of it, mixed with other medicines, four times a day for five days. Her temperature dropped 2° C. after the first day of this and other Chinese medicines, and was normal by the third.

The thirty other drugs Dr. Chiang used in treating the disease included dried Chinese wild blossoms, known as "gold and silver flowers" (*Lonicera japonica* Thunb.), husks of the wild *shou tan* flower buds (*Forsythia suspensa* Vahl.), and mulberry leaves. The function of all these was to lower the temperature. The roots of two wild herbs, *yuan sheng* (*Scrophularia ningpoensis* Hemsl.) and *sheng ti* (*Rehmannia glutinosa* Libosch., *R. lutea* Maxim.), were used to build up energy. Medicines for calming the nervous system and treating comas and convulsion were made from the horns of the Siamese rhinoceros and Tibetan antelope, from cow bezoar, musk, tortoise-shell and Baroos camphor from Borneo. As Pao Chien-ping was so weak, she was given ginseng root after the third day to encourage her natural resistance. This is widely used by western-trained doctors in China. Toward the end of the six-day treatment, she was given dried *yuan sheng* and *peilan* (a

fragrant orchid; *Caumarouna odorata* Aubl.) to "cleanse the remaining poison".

At the end of the six days, Pao Chien-ping no longer showed symptoms of the disease. After a few additional days of rest she was sent home cured.

Young Dr. Pei, who had been sceptical about the old treatment, was now convinced. Today she is among the many western-trained physicians who have enrolled in courses to increase their knowledge of Chinese medicine.

In Encephalitis B cases in the Peking Children's Hospital, modern methods are used to ascertain the progress of recovery. Continued injections of penicillin are given in pneumonia, which occasionally complicates Encephalitis B. Other western medical procedures used are nasal feeding when the patient cannot swallow, and supplementary oxygen when required.

Proposing that the Chinese treatment for Encephalitis B be adopted throughout the country, an editorial in *Chien Kang Pao*, official journal of the Ministry of Health, stated that the traditional way of treating the disease remains superior to any yet devised by modern medicine, and has shown a 40 per cent lessening in the death rate as compared to the modern treatment. It urged medical personnel to overcome any remnants of a contemptuous attitude against old Chinese medicine and to study it further.

"To be sceptical is an attitude allowable and necessary in science," the editorial said. "But this is entirely different from subjective denial of a true fact. . . . When you are sceptical about something, you continue to study it and find the conclusion. That is the way in which science advances. Subjective denial which ignores facts is the arch-foe of science."

There is no doubt that this ancient Chinese cure has proved itself in saving lives and preventing morbidity. On the other hand, modern science does not yet know the reason why it is so effective. Now the pharmaceutical properties of the many drugs it employs are being tested in laboratories of the newly-established Academy of Chinese Medicine in Peking. There scientists are trying to learn which of these ingredients are effective in curing Encephalitis B, and why. In testing the drugs, it may find new uses for them which we do not yet understand. Research is also continuing as to the actual effect of the Chinese treatment on the virus, and on the final effects on the body when the disease is treated in this way.

The final cure, which may develop through the application of modern scientific analysis to the old methods, may differ considerably in form from the one Dr. Chiang applied. But it will still owe a great debt to the skilful physicians and pharmacologists of ancient China.

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OCTOBER 1956

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## Tent Clinic in Sinkiang

by BASIL DAVIDSON

**I**MAGINE a country of snow-capped mountains that tower in giant ramparts round the fringes of the worst desert in the world. Between these mountains and this desert, and strung out like rare green beads on a necklace, there lie many oases, large and small, and in these oases men have managed to live for as long as history remembers, and no doubt much longer. Above them in the mountains, wherever good pastures can be found, other kinds of men have also found a home, tending their flocks and living the nomad life that you will find all the way through Central Asia.

These peoples of Sinkiang — situated in the far northwest of China — numbered in 1949 between four and a half and five million. They were for the most part a ruined people deep in misery, their survival rate dangerously low, their health undermined with diseases for which no cure, let alone prevention, then seemed possible. Cholera, smallpox, typhus, syphilis; these were some of the troubles they suffered from.

They had few doctors, just how few nobody could tell. Nobody knew the appalling truth until the People's Liberation Army brought in its wake the chance as well as the determination to find out. Then it was discovered that the whole of Sinkiang, through these last years of the old regime, had six fully qualified and ten partly qualified doctors.

Even this handful of medical practitioners, scattered across a country half the size of Western Europe, had practically no drugs left to use. They had no hope at all, in that black past, of getting more. When my friend Dr. Habibullah Tadeyev went down to the southern oasis of Yarkand (Soche), beneath the mountains that lead southwards over into Kashmir and Afghanistan, in order to take charge of Yarkand Hospital a few weeks after liberation, he found an absolute lack of drugs for everyday ailments. But he found forty kinds of drugs, he tells me, for rare ailments: none of them had been used, so far as he could tell, for years. Misery and demoralization were the reigning spirit among the handful of half-trained nurses and quarter-trained medical staff that he found at Yarkand Hospital.

It will not surprise anyone familiar with China today that the medical position at Yarkand should have changed. But it may surprise them to know just how much it has changed. As I lately saw for myself, the Yarkand oasis now has six fully qualified and eight partly qualified doctors, almost as many as the whole of Sinkiang seven years ago. They include two surgeons, one pediatrician, one ear-nose-and-throat specialist, and one gynaecologist.

This progress refers to the settled populations of the oases that string around the burning rocks of the Takla Makan Desert. Even more interesting perhaps, because more difficult to achieve, is the progress among the stock-breeding nomads of the Tien Shan Mountains and the plateau of the High Pamir. For these nomads are exceedingly remote, difficult to reach, and seldom settled in one place for more than a few months.

It was through looking into this side of things that I came to have the pleasure and the valuable experience of meeting a team of Chinese medical specialists led by Dr. George Hatem, known in China as Ma Hai-teh. I knew that he and his colleagues, Dr. Chen and Dr. Yin, were working on preventive medicine among groups of Kazakh stock-breeders in the Tien Shan. But I also knew that they were far away and hard to reach, somewhere near the snow line of a range of peaks that march along the frontiers of Sinkiang and of Soviet Central Asia. I had had little hope of being able to meet them, let alone visit them. But the seemingly impossible is regularly possible in China nowadays. I was able to visit them and stay with them for several days.

I was in the north Sinkiang town of Inin (some two hours' flying from Alma Ata on the north and Urumchi, the Sinkiang capital,



on the south) when Dr. Ma came in from the mountains on some mission connected with his work. He dropped into my hotel to see me, having heard that I was there, and suggested that I go back with him to see what preventive health work was doing for the Kazakh people of the remote Tien Shan. Next day we took off in a Soviet Gaz 69, a cross-country vehicle of great capacities, and drove for twelve hours.

Ma Hai-teh is a youngish man around the age of fifty, I should say, whose many years in China have not removed a full and fruity command of the American language, nor habits of hospitality and easy-going friendliness that make Americans, when that is how they are, the best of people. Like his late friend and fellow-worker, Norman Bethune, George Hatem threw in his lot with the cause of China's revolution when many of the hardest years had yet to be endured. It is not easy to get him to talk about himself. But I rather think, from diligent questioning, that he came to China in the first place, after qualifying in the United States and a period of post-graduate studies in Syria, to specialize in tropical medicine. But 1935 found him in Yenan, and the hard fighting years that followed found him as a medical practitioner and surgeon in the ranks of the People's Liberation Army.

After the fighting was done, there came the period of reconstruction. So far as medicine was concerned, it was time and again a task of building entirely new institutions. Among many new medical organizations established after 1949, not the least important was the Central Research Institute of Skin and Venereal Diseases. It was of this Institute that Ma Hai-teh became a member.

Of his own work and that of his immediate colleagues he told me as we drove into the mountains. "The job of our team, and of teams like ours, is to cover the great grasslands of Mongolia and Turkestan, Tibet and so on, to find out what's never been known until now, the real state of these peoples' health. Especially, we are working on the organization and establishment of preventive medical work among the minority people, Uighurs and Mongols, and Kazakhs and Kirghiz and a host of others, and on the training of local doctors."

This preventive work, he went on, had to be seen against the background of China's long-term plan to eliminate principal diseases and epidemics within twelve years from 1956. Last year he and his colleagues, Dr. Chen and Dr. Yin, were in the grasslands of Inner Mongolia, towards Hailar not far from China's northeastern

border, and also in the mountains of western Kansu. This year they are in Sinkiang and later on they will be moving into the hills and valleys of Chinghai province where it adjoins Tibet. Next year they will go into Tibet itself.

Dr. Ma and his colleagues stay three or four months in selected areas. In that time they conduct a preliminary survey of several thousand cases both in order to chart the condition of local health and welfare, and to take a more or less numerous group of local doctors through the whole process of registration, statistical recording, health examination, treatment, and so on. "We initiate a process of preventive medical work that can be carried on by the region's own doctors—men and women, for the most part, who are drawn from the minority peoples themselves, and who have already had three years' medical training."

Late that afternoon we went up by a steep pass through the foothills of the Tien Shan and emerged into a wide grassland plateau encircled by remote mountains. Late that night we reached a little river and a group of yurts; this was Balak-Su. From here the Soviet frontier is only one day's ride on a good horse.

Three days at Balak-Su were something to remember. Dr. Mussojan, the Kazakh doctor who is in charge of the Sinkiang branch of the Institute of Skin and Venereal Diseases, had decided that Dr. Ma's team should begin its work with a relatively numerous group of Kazakh nomads whose summer pastures are in the neighbourhood. In this exceedingly remote corner of China, accordingly, I found a circle of 16 yurts whose inhabitants, apart from Dr. Ma and his two colleagues and Dr. Mussojan, included 35 doctors of Uighur, Kazakh, Uzbek, Kirghiz and other Sinkiang nationalities, as well as nurses and a complement of laboratory workers. There could scarcely be a more impressive proof of the fact that China's revolution reaches into the farthestmost regions and leaves nobody and nothing uncared for and untouched.

Next morning, after a good night's sleep on a camp-bed in Dr. Ma's yurt, I watched the patients beginning to arrive. They came in from their yurts that were pitched on green hillsides, men and women and children riding, for everyone rides in Kazakhstan, and presented themselves for registration. "We get about 150 a day," Dr. Ma said, "and now we're nearly at the end of our preliminary survey of about 3,000 people near Balak-Su." After they have had some months of practical experience under the guidance of Dr. Ma's team, these local doctors, who are under Dr. Mussojan's general

command, will then branch out on their own. They will systematically cover all these mountain and pasture-lands from one end to the other, examining, prescribing, inoculating, until the loneliest yurt is reached and the health of its inhabitants attended to.

I watched the people coming on their horses. Not far away a small tent was pitched by itself. Dr. Ma told me why, and it was an interesting story. Some days ago a woman had ridden in with her husband and brother. She was desperately ill, barely able to sit on her horse. But her family, believing that she would certainly die if nothing were done, and having heard that "the Peking doctors" were encamped at Balak-Su, decided that she must endure the pain of travel and ride in search of them. She rode for four days across these giant mountains, but she was still alive when they arrived.

The "Peking doctors" examined her and said that there was no reason why she should die. She would have to have a minor operation and careful treatment for several weeks. So her husband and her brother pitched the tent they had with them, purchased food for her and left her with blankets and household necessities, and rode back to their flocks the way they had come. Every morning, as I saw while I was there, she came up for treatment. The rest of the time she cooked for herself and lay under her blankets and felt glad.

Now the good thing about this story, to my mind, is not that doctors should do their best for a sick woman, but that Kazakh families should ride for days in search of doctors—with the certain knowledge of not riding in vain. And I heard of many such cases. In the grasslands of Inner Mongolia, for instance, it is evidently a regular practice now for stock-breeding nomads to ride in with their tents and household gear whenever a medical team is working in the neighbourhood, and camp around it for as long as their health problems require. "In these grasslands, where people are always on the move," Dr. Ma said, "we don't build permanent hospitals. We establish medical centres and equip them with what they need, and then people come with their own tents and beds and bedding. These temporary 'hospitals' last for as long as they need to last, and then everyone moves. One day the 'hospital' is there, the next day everything has vanished over the skyline."

All this, of course, refers to the work of preventive medicine and minor ailments. Surgical and serious cases are sent either to proper hospitals established in places of permanent settlement or

else still further afield. A British pioneer in the field of accident surgery, Dr. Horn, who is also working in China, told me one day that he had just treated, in Peking, a little Mongol girl whom the Inner Mongolian authorities had sent down from distant grasslands, since they had no specialist of that kind themselves.

These doctors are laying sound health foundations for peoples whom the Chinese Empire and the Kuomintang had left to shift for themselves as well or as ill as they might. Upon these new foundations the Chinese Central Government, and the governments of the two big autonomous regions (Inner Mongolia and Sinkiang, with Tibet now about to make a third) are in the course of building a whole structure of preventive and curative medicine. Within a few months from now, for example, the Sinkiang Uighur Autonomous Region (named after the largest minority in Sinkiang) will celebrate the opening of one of the most extensive and well-equipped medical universities in any part of Asia. Already its buildings on the outskirts of Urumchi, as I saw this summer, are near completion and partially in use; its laboratories, besides being air-conditioned, include some of the best equipment that is anywhere available.

The consequences will be many. By the end of 1967, for example, this medical university is to provide Sinkiang with as many as 1,680 fully qualified doctors. From six doctors to 1,680 in 12 years is no small achievement. What is perhaps still more important is that these new medical battalions will be drawn from the peoples of Sinkiang itself.

Dr. Ma and Dr. Chen and Dr. Yin, an indomitable trio, will have left Sinkiang by the time this article appears. They will be bumping and jolting on their truck across the grasslands of Chinghai, disappearing into blue distances that border on the mountains of Tibet, their passage little more than a cloud of dust and a fearful thrill for countless little shepherd boys. But behind them in the hills of Sinkiang, far up where green pastures disappear beneath snows that never melt, more than 30 well-trained doctors will be hard at work, applying what they have learnt as they move from one uncharted valley to another. They will have sown a harvest of knowledge, understanding and practical relief that will now come up, year by year, a thousand fold. And this is what good government really means.



*Chang Shui-cheng*

**Peking spinner.**

## WOMEN COME INTO THEIR OWN

**I**N 1950, two important laws were passed providing women with rights they had never had before. The Agrarian Reform Law gave each peasant woman a piece of land to hold in her own name, so that she was no longer a propertyless dependent of her husband, father or brother. The Marriage Law emancipated women from being themselves property. It gave them the right to marry whom they pleased. It illegalized age-old feudal customs like forced marriage and the sale of brides.

On cooperative farms and in factories, women are entitled to equal pay for equal work, and are doing all sorts of jobs to which they previously had no access. Special provisions, such as the 56-day paid maternity leave and the widespread founding of creches and nurseries, enable them to combine work with family life. One finds women, today, in responsible positions in all fields of government and public affairs. There are 7 women ministers, 146 women deputies in the National People's Congress, scores of women factory directors, many women county and district heads and farm co-op chairmen.

But even with laws and regulations that proclaim their new status of equality, women know that there is a long fight still to be waged against ideas, customs and habits rooted in thousands of years of male supremacy. In 1953, for example, there was a nationwide educational campaign of this kind. Women are struggling too, alongside the men, for the greater productivity of China's socialist economy and the victory of the socialist outlook—which will provide the material and other conditions for full emancipation.

## Making the Marriage Law Work

by FANG YEN

THE biggest popular movement in 1953 was a tremendous educational campaign to publicize the Marriage Law and to enforce it. The movement was initiated by the Central People's Government and carried out in all parts of the country except the national minority regions, where the land reform has not yet been completed. It was an offensive on a grand scale to end remnants of the feudal bondage of women, and to uproot the backward outlook connected with it.

The law itself was promulgated in 1950. Its main aims, as stated in various provisions, were:

1. To abolish the feudal system of arbitrary and compulsory marriage, which was based on the idea of the superiority of men over women and ignored the interests of children.
2. To substitute for it the new democratic marriage system, based on free choice of partners, monogamy, equal rights for both sexes and the protection of the lawful rights of women and children.

Bigamy, concubinage, child betrothal and the purchase of wives were prohibited. Men and women were granted equal status in the home, equal rights to choose their own occupations and an equal title to family property. The rights of both parents and children were defined. The remedy of divorce was made available in appropriate cases.

This was a historic charter of freedom for family relations in China, and particularly for women. It led to a complete change of atmosphere and outlook among many millions of people. Equality of men and women in the family as well as in social life began to change from ideal to reality.

But the old customs, deeply rooted for thousands of years, could not be overcome by legislation alone. Much work and struggle was still necessary. In some places, particularly the more newly-liberated rural areas, the situation was still very backward.

In northern Kiangsu province, East China, in the first half of 1952, the number of betrothals arranged by parents was nearly twice that of engagement by free choice. Child betrothals still existed. Many marriages were still on a buy-and-sell basis..

In a county of Shansi province, North China, bridegrooms were still paying a picul (110 lb.) of wheat for every year of a bride's age up to 18. From Northeast China, a case was reported in which a bride's father made a list of the "presents" his prospective son-in-law was expected to contribute. They included summer, autumn and winter clothing, leather shoes, cloth, gold and silver ornaments and cash. This was one of many similar cases.

Even such barbarous customs as child marriage, "wait-for-husband brides" (grown women engaged to infants), keeping of slave girls, renting of wives and abduction of widows had not completely disappeared. Young village women were still committing suicide because they could not marry the men of their choice, and those who exercised their freedom under the law were sometimes killed. Though such tragic waste of young lives was far less than before liberation, it was still considerable.

In other words, despite great progress in many places, the stubborn remnants of the old marriage system were still damaging the prosperity, security and happiness of the people of new China.

Latest of the series of social reforms launched since the establishment of the People's Republic, the Marriage Law could be carried out successfully only after the land reform had smashed the economic basis of feudal customs and ideas—and given women property in their own right. Coming at this time, it has had the effect of liberating great social forces for participation in China's planned national construction.

Since it aimed at the old system's hold on the minds of the people, its method was one of persuasion and education.

Before beginning on a nationwide scale, the campaign was carried on experimentally in sample villages, factories and streets. By this means, the problems likely to be encountered in each area were made clear and the correct methods of work discovered. One such unit was the rural sub-district of Chengyu, in Szechuan province, with a population of about 4,000, a place where the progressive forces had no history of strong influence before liberation. This is what happened there.

When the Marriage Law team arrived in Chengyu, they found that domestic relationships there had changed little from the age-



old pattern. Seven out of every ten family grievances involved the beating of wives, who under the old buy-and-sell marriage system were regarded as chattels by their husbands and parents-in-law. In the agricultural mutual-aid teams, women did not get equal pay for equal work. Seventeen child-brides, living in their husbands' families, were maltreated and forced to do the work of adults.

The movement at Chenygu went through three stages. The first was the training of local leaders. The second was the education of the entire population. Last came the election of model families, conclusion of the family-harmony pacts and establishment of organs to arbitrate marriage disputes in the future.

Training marriage-reform workers took four and a half days. The trainees were 160 village administrators, functionaries of the peasants' and women's associations and members of the Communist Party and the New Democratic Youth League. It soon turned out, however, that at least half of these were themselves influenced by feudal ideas. Some had beaten their wives. Some were women who had themselves been mistreated.

Four reports were given at the outset. They dealt, respectively, with the law itself, the crimes of the old marriage system, the merits of the new system and how to reform the old-type families. In the panel discussions that followed, the marriage-reform workers were invited to illustrate these points from personal experience or knowledge. But this brought little result. Men who had beaten their wives were afraid of disgrace or penalties. Women who had been oppressed feared further trouble at home if they spoke up. The tendency was to mention only small things that had happened in the remote past. Some of the men insisted that wives had to be "punished" occasionally, and there were women with such an inferiority complex that they agreed. So long as this atmosphere persisted, it was impossible to expose feudal concepts thoroughly, or to expect the villagers to lead others in the movement.

Panel discussions were therefore abandoned and a general meeting held. Here, gradually, actual cases came out. A woman told how the idea that women were "trash" had led to the drowning of girl babies. Another related how her sister had died of a beating. One woman had a simple skin infection on her back. Her husband, instead of agreeing to medical treatment, had threatened divorce. When this had been brought up at the panel, the husband was so furious that he had wanted to walk out, and said, "If you think she is any good, you can have her." But after he

saw the sympathy his wife's story evoked from the big audience, he stood up and pledged to help her get cured. Criticism of the old system was unleashed and its barbarous character clearly revealed. Thus a good foundation was laid for further work.

After this, the newly-trained marriage-reform workers of Chengyu carried the movement to the people. They spoke at mass meetings of their own inner struggles during the period of training. A further 219 persons were taught to propagate the Marriage Law in ballads, megaphone lectures, exhibitions, lantern slides and plays. When the general outlines had been explained, many discussions by smaller groups were organized.

As a first experiment, they called family meetings, seeking to encourage wives to reveal ill-treatment by husbands or mothers-in-law. But this was soon abandoned because it only caused quarrels. Instead, the people of different categories met separately. Mothers-in-law were asked to recall how they had suffered from family tyranny when they themselves were young brides. Wives were helped to get rid of all sense of inferiority, husbands to discard feudal ideas of male supremacy. Among the young men and women, the chief subject of discussion was freedom to choose their own partners.

The people began to see not only the evils of feudal marriage but also how it impeded production. Many asked help in "untying knots"—reasoning out long-standing misunderstandings and resentments. Special meetings were held for this purpose, after which family mutual-aid and mutual-respect compacts were signed. Finally, model couples and families were elected and publicized.

When the campaign started in Chengyu, there were 205 family disputes there. When it ended, 199 of them had been solved to the satisfaction of the parties.

Throughout the country, according to partial statistics, 3,477,000 marriage-reform workers were trained, not only to carry on the movement but also to promote and administer the Marriage Law on a long-term basis. State publishing organizations produced over 2,890,000 books and 1,165,000 posters and picture brochures for the campaign. In the East China administrative region alone, 1,154,900 lecturers and 30,000 amateur theatrical troupes were in the field. And the press and radio were full of Marriage Law material.

The emphasis everywhere was positive—on inculcating democracy in family life. While the Marriage Law prohibits arranging

of marriage by third parties, there was no attempt to break up arranged marriages that already exist—only rebuild them on a basis of true equality. Similarly, while there is now freedom of divorce, every effort was made to conciliate disputes. Divorce was granted only when facts showed that the parties could not possibly continue as man and wife. The same principle was applied in long-standing cases of polygamy and concubinage, both of which the law now forbids. It was made clear to the women that no one could force them to continue in such an arrangement, but if the parties lived peacefully and wished to continue it, they were allowed to do so. This happened occasionally among older people.

Thanks to the campaign, practically everyone in China knows the law. Old, oppressive practices have been dealt a blow of unprecedented severity. Men who still think women “inferior” no longer dare to maltreat them—for fear both of social criticism and legal penalties. More important, more and more of them are voluntarily discarding such ideas.

True freedom of marriage is rooting itself firmly in custom. During the movement, in March 1953, more than 9,000 couples were married by free choice in five cities of Hopei province alone, while 500 young men and women publicly tore up contracts of betrothal arranged without their consent.

The campaign gave wide publicity to happy marriages. Now more and more of them are to be seen. In such homes, husbands and wives show more mutual consideration; mothers-in-law no longer regard their daughters-in-law as slaves, and the younger women respect the older ones. “Democratic consultation” has become a way of life.

Many families which were on the verge of break-up have been reconciled. Husbands and wives, estranged for years, have started life all over again. Housewives who never used to step outside the home are joining organizations, community activities, literacy classes and night schools. Freed from serious family frictions, both men and women have more mind and energy for work. Of particular importance is the cracking of feudal prejudices against women in agriculture. The fight against family oppression is thus of direct benefit to production in factory and farm.

Though the campaign was not equally well conducted at all points and results were not always uniformly successful, it has laid a firm foundation for further advance. From now on, the law will be administered on a regular and universal basis. The domestic

relations work of the courts has been strengthened with a large number of specially trained women transferred from other posts. In the meantime, education in the principles of the Marriage Law is to continue without slackening.

It is therefore certain that the new democratic marriage system will triumph throughout our vast country. The backward areas in this respect will catch up with the more advanced ones, and the old feudal morality, with the countless miseries it caused, will disappear forever.

MARCH 1955

## How We Became Equal

by SHEN CHI-LAN

**I**T'S EASY enough to talk about the freeing of women. But it isn't a thing that happens of itself, even when we have a government that makes laws to give women equality with men. My own experience and the struggles I've shared with other women in our district show this very clearly. We have to make an effort for ourselves. We become really equal when we start to work outside the home, when we win our right to the jobs that men do and to get equal pay for equal work.

I live high up in the Taihang Mountains, in the northern province of Shansi. Our part of the country used to be one of the poorest in China. The landlords had ground the peasants down for hundreds of years and we women had always carried two burdens—the oppression of the landlords, and the power the men had over us. Children's marriages were arranged when they were still small, and the boy's family had to pay money to the girl's parents. When a girl was twelve years old or so, she would be carried off to her husband's home in a sedan chair. As likely as not, she had never set eyes on him before.

Once in the husband's family, she was just a household slave. She spent her life cooking, sewing, fetching water, grinding corn. The husband, who had also been married without being asked, used to vent his bitterness on the girl by beating her on the slightest excuse. Whenever the mother-in-law got annoyed, she'd beat the young bride too.

In 1938, the Eighth Route Army came into these mountains and set up a guerrilla base to resist the Japanese. They weren't just soldiers—they brought a lot of completely new ideas with them. They taught us how to struggle against all our oppressors—not just the Japanese but the landlords and money-lenders too. Expressions like "human rights" were then just as new to the old people as they were to me, a mere youngster. It was good for women, particularly, to realize that they could speak out about their wrongs and get help in setting them right.

Things didn't improve at once. Even after our village had been liberated, Liu Kai-chen's mother-in-law beat her with an iron poker because she couldn't carry a heavy pail of water uphill from the well. Liu Kai-chen ran out of the house and was so scared to be beaten again that she spent the night in the open. Next morning, she went to our local government to beg for help. They sent a comrade with her to her home, to explain to the old mother-in-law that times had changed, that she might find herself in prison if she beat her daughter-in-law again.

You can imagine what a stir this caused among the other women! From then on they began to try and learn more about the new government and its ideas.

In 1941, new marriage regulations were passed in part of our country. This was possible because we were in an area liberated by the Communist Party, not under the Kuomintang government or the Japanese. The old kind of marriage in which women were bought and sold was forbidden. No one could force a girl to marry a man she had not chosen. A wife also got the right to divorce her husband if he was cruel. Before that time it was considered quite all right for a man to send his wife away if he wished, or even sell her, but no woman could leave her husband. He had paid money for her and she was his property—that's the way it used to be.

As you can imagine, it took some of the men a long time to swallow the change. Chin Chuan-lin, a shepherd, went right on beating his wife after the new law was passed. Marriage law or

no marriage law, he said, he'd bought her and he was going to do what he liked with her. She went to the district government three times to ask for a divorce, and each time the government workers tried to reconcile them. But though Chin Chuan-lin pretended to listen, he didn't improve, and the fourth time his wife asked for a divorce it was granted. Now she's married again and is quite happy, but Chin hasn't got another wife to this day. Of course, he's an exception; most of the men have learned that a woman is a human being too.

In 1948, we had the land reform. Man or woman, everyone got a share on the same basis. We saw our own names written down in black and white on the title deeds! Single or married, a woman had the right to decide what she would do with her land—sell it, give it to someone else if she wanted to, or keep it in the family. Husbands had to stop using the old proverb: "If you come, I shall feed you. If you go, you can't take anything with you." It didn't apply any more.

But even the ownership of property didn't make us fully equal. The men still said, "Ten stars are not as bright as one moon!" By this they meant that ten women are not as good as one man. They kept on repeating that we could not do as much work as they did, or do it as well.

I must admit that a few of the women gave some ground for this, especially the ones from the better-off families who had never worked much anyhow. One, named Chang Chun-hua, even said: "Whoever wants to be emancipated can be emancipated; as for me, I'd rather remain as I am." She meant she wanted to live off her husband who was able to feed her well.

But those who were used to work, like "Auntie" Wang Chaoken, thought that working alongside the men in the fields was the only thing that was needed to win true equality. Still, even that wasn't enough. I myself had tilled the soil since I was a girl—my father died when I was just a baby, and I had to help my mother. After I got married, at eighteen, I went out to the fields too and worked as hard as a man, but nobody gave me any credit for it.

I often talked this over with a neighbour called Han Chunlan. Once she said: "We could go on working for the rest of our lives without getting any further. We're both young. We've got to fight for equality and recognition." Her words made a deep impression on me, but we didn't find the real way forward till later.

Now I'll tell you when our real emancipation came. It was when we organized an agricultural producers' cooperative in our village. This happened in the winter of 1951 and brought a lot of problems. The soil is very poor around here, and we soon found that to live better it wasn't enough to cultivate crops, we'd also have to raise more livestock and plant fruit trees. Our cooperative held meetings to draw up a five-year plan for this, and to work out the way to fulfil it. If we were to do what we wanted, we discovered, we needed to add a third to the labour force. Where could the additional workers be found except among the housewives? They were essential!

Afterwards Chairman Li Shun-ta of our cooperative had a good talk with the men. He told them they would have to help the women come forward and learn skilled jobs. "We must bring them in," he said. "If we don't, the co-op will be like a cart with one wheel off. It'll go round in circles and never move ahead."

Those of us women who were already working in the fields went round to persuade the others. We explained all about the cooperative, and how all the work they put in would be recorded in their own book so that the harvest could be distributed accordingly. The idea attracted most of the housewives and they agreed.

At first, it wasn't easy for them. They weren't as skilful as the men and much of the work seemed hard. The men still had old ideas of superiority. For a long time, a woman's day in the field was only counted as half a man's—it took another fight to change this. I remember how Chang Fang-yun, a strong fellow and a good farmer, led the women to hoe a field of millet. When we managed to do as much as he did, he got rather annoyed and said, "Now I'm going to use the new-style hoe." It was a type of tool we hadn't seen before, and he thought he could keep ahead with it. But my friend Chang Hsueh-hua said boldly: "I'll try that new hoe too!" To our leader's astonishment she was soon handling it very well.

At last, at a meeting, one of the older men—an expert farmer—spoke and asked the others:

"Are the women as good as men at weeding?"

"Just as good," the men admitted.

"Isn't it true that women are much faster at thinning out the millet shoots than men? Is there any reason why they shouldn't get equal pay?"

None of the men could find any reason against it—and so it was decided.

After the next harvest, when the wives brought home the grain they had earned themselves, the husbands finally began to understand that the women were equal—in the family as well as the cooperative. Ma Yu-hsing, the farmer who leads one of our work teams said to me just recently: "There are still some jobs that are too heavy for women. But when we get tractors and machinery in the future—there'll be nothing the women won't be able to do."

So it was work that was the key to equality. Now we have our say in all decisions, in the village and in the home. "Auntie" Wang has become such a good farmer that she earns more than her husband. At times he even does the cooking and looks after the pigs, the ox and the new donkey they bought a short while back, while she goes out to work. Also she's been trained as a midwife and is in charge of the health work in the cooperative. What a change from the past!

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AUGUST 1956

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### A Village Nursery: How It Grew

by SUN TAN-WEI

**T**HE YARD of the children's nursery in Nankau village east of Peking is a bustling place just before 7 a.m. A procession of mothers leading their toddlers, or carrying their precious bundles in their arms, passes through the woven rush gate in the fence of high sorghum stalks. They are greeted by Hau Shu-min, the head nurse, a vivacious young woman of 21. Her long plaits flap against her gay print smock as she bends over the children.

There are a few words of instruction from the mothers: "Little Orchid had an extra big bowl of rice porridge for breakfast, so she won't need much lunch this morning unless she's hungry."

Then the youngsters are deposited with Hau Shu-min and the five older women who are her assistants, and the mothers are off



to work in the surrounding fields of maize, millet, cotton, wheat and vegetables.

Only a few years ago, a nursery for farm children was unheard-of in China. This one, formed in 1954, is still in its fledgling stage. It is a sample of how the people themselves are meeting needs arising from their new circumstances.

As the children settled down to their play on the morning of my visit, the nurses told me how and why it had been done. In the past in Nankau, most of the women had not worked in the fields except as extra help during harvest.

But in Nankau as everywhere else in China, the formation of a cooperative farm provided a host of new jobs. Paid equal wages with men for the same jobs, an increasing number of women wanted to work outside the home. But who would mind the children when both parents were away? The first and obvious answer in a Chinese family was, of course, grandmother. But not every family had a grannie. Or, in many cases, several young children were more than an elderly person could cope with.

The mothers took their problem to the cooperative management and demanded help. The co-op suggested the village Women's Federation should organize a day nursery. This was a new idea and the Federation wasn't sure it knew how. Finally the job fell to Chang Yung-fu, the tall efficient young bachelor in charge of village welfare work. Despite teasing about the "Women's Federation's new member", he went around collecting ideas from the women to guide him in doing the organizing.

The first problem was to find the right people to care for the children. Strong and energetic women preferred to do farm work, which they viewed as a symbol of their new emancipation. Those who could not work in the fields often lacked the strength to keep up with a roomful of lively youngsters. Young girls in their teens lacked the nursery experience and patience. Finally it was decided that women who already had small children would be the ones for the job, as they were likely to stay at home anyway.

On May 1, 1954, in the middle of the spring planting season, the nursery opened with 14 children, seven boys and seven girls. The ages were between forty days and five years. The place was the home of Tien Shu-ying, a thirty-year-old woman who had a five-year-old daughter and a new baby son. She and another young mother, with three children, had been chosen as attendants.

"The first day was miserable," said Tien Shu-ying, who has now stopped being a nurse, but talked to me as she came to deposit her own two youngsters. "We couldn't do anything right. Women whose children had never been away from home left their field work to listen at our gate in case their babies were crying. They generally were. They missed their mothers and most of them cried all day. And the older ones began to fight and tear apart the pretty wooden toys and stuffed dolls the Women's Federation had bought."

One of the later crises was over the carrying of the small babies. Chinese babies are accustomed to a lot of cuddling and are carried about in their mothers' arms right up to the time when they begin to toddle. Women with children at the nursery claimed that the attendants picked up their own children more than those of the others. So one nurse after another resigned, including Tien Shu-ying herself.

"We preferred working in the fields where we women can laugh and have a good time together," she said. "At the nursery we had to bear the constant complaints of our neighbours." Throughout the 1954 and 1955 field-work season, the nursery limped along through several new attendants, several resignations, and at one time nearly went out of business, as no one wanted to bear for long the emotional wear and tear of bored, unruly children and critical mothers.

Early in 1956, the Nankau village co-op merged with eight others to form the May First Collective Farm, with 1,472 families and about 3,134 acres of land. One of the collective's rules was that women were not permitted to do outside work unless they had made adequate provision for child care. An immediate solution was needed. It was decided, to avoid friction, to choose as attendants those women who had no small children of their own.

Four young women from Nankau, including Hau Shu-min, were chosen and sent to hear lectures on child care, learn games and songs and observe procedures for a week in a training centre in Peking. When they returned they were put in charge of the various branch child-care centres which were set up. Chosen to assist them were a number of older women who the collective thought should not do field work, and whose children were grown. This solution proved more successful.

The Nankau nursery routine runs something like this. After the mothers leave, the children's faces are washed and their hair

combed. Then the older ones do simple exercises in the yard. Circle and singing games are followed by a quiet story hour. Ten o'clock brings another wash, followed by the mid-morning snack of rice porridge. Mothers come in from the fields at this time to feed the youngest babies. Then there is play, or perhaps an excursion to pick flowers, until noon, when the children go home with their mothers for the mid-day meal, returning at 1.30. Nap-time comes next, after which the routine is much the same as in the morning. Sunset brings the procession of mothers who, still wearing on their heads the small white towels that all peasants use as sun-protectors, claim their own for the night.

Mothers now have confidence in the nursery. "My children get better care than if I left them with their grandmother, who is unable to run all over the village after them," said one. "Years ago, if a child hurt himself or fell into a river and drowned, we used to say there was nothing to do but be resigned to fate, but now that's no longer necessary," added another.

The May First Collective now has 12 nurseries, including several new branches set up this summer. They handle 176 children, enabling 132 mothers to work. Several problems have been solved, but many still remain. The physical facilities for the nurseries still lack much. Some have no houses, so the nurses' homes are used.

The problem of payment, which had caused some trouble in the beginning, has been settled. If the collective paid all the expenses, the members with no children would consider it unfair to them. But a fee which would make the nursery self-supporting would be too high for mothers to pay. So now mothers give the nursery an average one-eighth of their wage for a full day's work, no matter how many children they have, and the difference is made up by the cooperative. The clinic of the co-op furnishes medical care and preventive injections.

Recently three-year classes for nursery workers have opened for 900 students in 11 major Chinese cities. But the demand for child care is so urgent, and such huge numbers of women are needed, that it will be a long time before the village nurse can have real formal training. Despite this, even in remote parts of the countryside the people are successfully meeting the problem, and mothers are going out to work confident that their children are getting good care.



*China Pictorial*

Those who know, teach — at a village literacy class.

## TOWARD SCHOOLING FOR ALL

**E**DUCATION is part of socialist building. To speed industrialization, universities must turn out many thousands of engineers, and workers must be literate and have proper vocational training. To run a cooperative agriculture requires peasants who can keep accounts and read up on scientific farming. Social services need doctors and many other kinds of personnel.

Between 1950 and 1952, higher education in China was reorganized to meet the country's new requirements. Special stress was laid on scientific and polytechnic institutes, as well as special ones for metallurgy, geology, mining, petroleum technology and various types of engineering. Training in agriculture, forestry, medicine and the fine arts has also expanded. College and university enrolment, 116,000 in 1949, is 380,000 today, with many of the new students coming from worker and peasant families. Particular attention is being given to the training of students from the national minorities. Night sessions and correspondence courses make higher education possible for older people already at work.

In the meantime, secondary and primary schooling is advancing at a galloping pace. There are more than 50 million Chinese children in school, twice as many as before liberation. Universal compulsory education is not yet practicable, due to lack of teachers and facilities, but will be in force by 1967.

Fully half of China's young and middle-aged workers and peasants are now studying in spare-time courses to wipe out illiteracy. The elimination of this scourge, a heritage from the past, is aided by the simplification of the Chinese characters, and a phonetic alphabet to make it still easier has now been worked out. Its introduction, however, will be gradual, as people speaking various dialects must first learn the standard national language. "Literacy," says Vice-Premier Chen Yi, who is in charge of this work, "will unearth the spiritual wealth of hundreds of millions of our people, and this in turn will produce immense material wealth."

## New Path for Higher Education

by CHIEN TUAN-SHENG

**I**N common with all other branches of Chinese national life today, higher education is being rapidly adapted to the needs of the First Five-Year Plan. Old colleges and universities are being reconstructed, and new ones are being set up. The task is as difficult as it is gigantic, but much has already been accomplished.

Colleges and universities, of the type common in other countries, grew up in China only recently. The oldest, Peking University, was founded in 1898. Prior to 1919, when the May Fourth Movement\* ushered in a new era in the history of the Chinese people, institutions of higher learning were few in number. They grew considerably in the twenties and early thirties. In 1949, on the eve of liberation, China had some two hundred colleges and universities with a total enrolment of about 130,000 students. Nearly one-tenth were operated by foreign Christian missions, and three-tenths were in private hands.

Whether these institutions were Chinese or foreign, public or private, their standards were generally low. Their curricula had been built up haphazardly at the whim of the controlling persons or interests. They bore little relation, or even ran contrary, to the needs of the Chinese people.

Not only in missionary universities, but also in government ones, lectures and reference books were often in foreign languages. All this was not regarded as strange. In old China, the reactionary governments considered higher education as a form of window-dressing, while Christian missions and private groups saw it as a means of promoting their particular interests. Moreover, the lack of economic development meant that students were often unable to find useful work on graduation. It became a common saying in those years that "graduation means unemployment".

With the founding of the People's Republic of China, a radical reform of the country's educational system was undertaken. It was governed by the principles laid down in the Common

\*Launched by the students in Peking, this movement spread across the country as a protest against imperialism and feudal oppression.

Programme of the People's Republic, which requires that education be national, scientific and popular; that it be linked with the tasks of national construction in the service of the people; and that its methods unite theory and practice.

In the sphere of higher education, the aim of the reform was to rid the colleges and universities of courses with reactionary content, and to prepare for the adoption of progressive scientific curricula and teaching methods. Higher education was to be developed in a planned manner. The reform was carried out step by step.

Generally speaking, university professors in China, especially those who had been teaching for some years, were conservative in their ideas. They clung to things to which they had been accustomed. They insisted on offering the courses they used to offer, and were reluctant to teach new ones. They were slow to consider present-day needs. They were inclined to pay special attention to the few so-called "gifted students", and were unwilling to spend sufficient time on the greater number of students whom they considered "ordinary" or "poor". They emphasized abstract research which often bore no relation to useful knowledge, and the choice of subjects was sometimes purely arbitrary.

A trait which became known as "sectarianism" also characterized many teachers. Graduates of one university despised graduates from others, thus creating cliques in the faculties. Teachers who had studied in a foreign country tended to claim superiority for its academic standards, to the disparagement of those of other foreign lands and of China herself.

In October 1951, at a meeting of the National Committee of the People's Political Consultative Conference, Chairman Mao Tse-tung declared:

The remoulding of ideology, primarily the ideological remoulding of the various types of intellectuals, is an important condition for the thorough carrying out of democratic reforms in various fields and the gradual carrying out of industrialization in our country.

Shortly after, in the "self-education campaign" of 1952, teachers, through a series of discussions, were asked to examine and re-evaluate their attitudes, ideas and methods in the light of the needs of the country.

Though the movement of self re-education as such did not last longer than a few months, it stimulated a process which has continued and is being deepened. The university teachers, like



workers in all fields of present-day Chinese life, have learned by their own experiences that the method of criticism and self-criticism is the best way of improving one's work. They are retaining things that are good and eliminating those that are bad.

In about three-fourths of the colleges and universities, many desirable changes have now been effected. All colleges and universities in China have become public institutions. All private and missionary schools have been placed under public supervision and are now maintained by the state.

To assure efficiency and economy both in expenses and in personnel, schools have been integrated into three main types. There are now universities which comprise faculties of philosophy, letters and sciences, both natural and social; polytechnical colleges; and professional colleges specializing in the fields of engineering, medicine, agriculture, jurisprudence, teachers' training, the fine arts, or finance and economics. There are also professional colleges below university standing which generally provide a two-year programme of training.

As a result of this systematic reorganization, which has not yet come to an end, there are now 201 colleges and universities in China instead of the 227 that existed at the beginning of 1950.\*

Peking University, which in the past was comparatively strong in philosophy, letters and sciences, has further strengthened itself by incorporating the related faculties of Tsinghua and Yenching universities. The engineering colleges of Peking University and Yenching have been transferred to Tsinghua, making the latter a polytechnical institute of high standing. The agricultural sections of both Peking and Tsinghua universities were amalgamated with the North China Agricultural College to form a very strong agricultural school now known as the Peking Agricultural College.

Another result of these reforms is the increase in the student body. Instead of the 131,509 students registered in 1950, there are now 202,107 students in China's universities and colleges, and a further rise of ten per cent is expected by autumn, 1953. Tsinghua University, for example, has 5,168 students, as compared with 2,414 in 1950.\*\*

To meet the needs of China's reconstruction and industrialization, emphasis is placed on engineering, geology, and basic con-

\* By 1955, as the process of integrating smaller schools with larger ones continued, there were 194 colleges and universities.

\*\* In the 1955-56 academic year there were 292,475 students in China's colleges and universities. Of these, 4,822 were post-graduates. Tsinghua's enrolment was 8,647 in September 1956.



struction, all prerequisites to the development of industry. Twenty polytechnical institutes have been formed by combining the technical colleges of the old universities. There are also 26 newly-established institutes in the fields of steel, mining and geology. Great importance is also given to medical and teachers' colleges.

This emphasis on engineering, medical and teachers' colleges does not exclude expansion and improvement in other branches of higher education. The fact is that all branches of education are being expanded. For instance, the six colleges for nationalities are all new; there are two special colleges, one in the northeast and the other in Sinkiang, for the training of students of the national minorities as leaders in the cultural and general development of their own peoples.

The location of colleges and universities reflects a better balance in terms of geography. In old China, nearly half of the 200-odd colleges and universities were situated in about seven big cities; the 201 colleges and universities of today are more evenly distributed. Their sites are also chosen with an eye to the practical work in view. Mining colleges are located near mining centres, and textile colleges near places where the textile industry is either flourishing or has prospects of growth.

Since many of the colleges and universities are newly established and many more are being enlarged, the government is spending big sums for spacious grounds, buildings and new equipment. A vast university town is being built up in the northwest suburb of the capital. Entirely new colleges and universities, such as the People's University of China and the Central Academy for National Minorities, have risen over the wheat fields, and older ones like Tsinghua and Peking universities have been greatly extended. What is true in Peking is also true elsewhere. China's northeast, which had almost no institutions of higher learning under the old regime, is now studded with new institutions.

In teaching and training, new ideas and methods have taken the place of the old. A college or university undertakes a number of "disciplines", in which a student specializes. A number of related "disciplines" combine to form a faculty or a department of instruction in order to facilitate both academic direction and administration. The teaching and research staff associates engaged in one well-defined field or subject (for instance, modern Chinese history or algebra) form a "pedagogic research group". It may be said that the "discipline" is the unit of professional training, the pedagogic

research group is the unit of teaching and research, and the faculty or department, the unit of academic and administrative direction.

In the faculty or department of civil engineering of Tsinghua University, there are five disciplines—industrial and civil construction, industrial and civil structural engineering, water supply and sewerage, highways and city roads, and surveying. There are seven pedagogic research groups—structural theory, timber and steel structure, highways and city roads, surveying, soil mechanics and foundations, water supply and sewerage, reinforced concrete structures and building materials, and field construction. A student takes four or five years of training in any one of the disciplines to become competent in the field he has chosen.

It is the pedagogic research group that draws up the teaching programme or course outline. Being the collective output of the groups, programmes and outlines must be adhered to by every teacher. Within them, however, each individual teacher prepares the lectures in his own way, so as to transmit his ideas in a personal and therefore most effective way.

A conscientious teacher works up his lectures assiduously and thoroughly. He must see to it that the students comprehend the subjects he is teaching. The demand for learning on the part of the student must be satisfied. Failing to help the student master the course means failure in the duty of a teacher. It is now customary for the teachers in the same pedagogic research group to give "trial lectures" before their colleagues. In this way they can judge what errors need to be corrected and what improvements must be made. By such mutual aid, the teachers help one another to work better.

In former days, it would have been considered preposterous for one teacher to offer advice to another, especially a senior one. Now all accept collective preparation for lecturing as a reliable method of eliminating mistakes and of ensuring comprehension by the students. Collective preparation for lectures is also a great blessing to younger men and women, who formerly were not able to conduct courses on their own. Shortage of university teachers is a very acute problem in China today. This shortage is being partially overcome by helping larger numbers of young graduates and assistants to become competent lecturers.

Today the cardinal principle, in accordance with the Common Programme, is the unification of theory and practice. In this respect, the reform of teaching materials and methods is not enough. In the course of his training, the student must actually go to the

shops, farms, mines and hospitals for practical work. More than that, the teachers must also acquaint themselves with the actual operation of workshops, farms, mines, hospitals and other enterprises connected with their specialities. At the People's University of China, ever since its inception nearly three years ago, the department of factory management has maintained close relationship with a number of factories and often acts as adviser to them. Not a few of its graduates have been given posts of responsibility immediately upon completing their courses. One of them became a very competent manager of an important machine works in the northeast.

With the People's Government doing its best to provide for new grounds and buildings, books and equipment for the academic work, and adequate salaries, medical care and stipends, the colleges and universities of China have become happy communities as well as better institutions of learning.

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SEPTEMBER 1956

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## Middle School Teachers Needed

by CHEN HSUAN-SHAN

**O**NE of the most pressing problems in China's whole educational system is the supply of middle-school teachers. Young people who have finished middle school are needed everywhere in the country. Universities and technical colleges are crying out for tremendous numbers to train up as scientists, engineers, technical experts and research workers. Factories and mines want them as draughtsmen, skilled workers and administrators. The newly-formed agricultural producers' cooperatives desperately need people with junior middle-school education to help in management, accountancy and technical matters.

But the supply of young men and women educated up to junior middle school or university entrance level cannot be increased

unless there are many more teachers for them. To train such teachers takes time. Moreover, the trainees themselves must have passed through middle school. Thus there is a kind of spiral element in the problem that makes it particularly difficult to solve.

First responsibility for overcoming this shortage falls on the teachers' training colleges. Last summer there were 40 of them, with 60,000 students (primary-school teachers are trained elsewhere). The 1956 autumn term opens with 13 additional colleges and a further 65,000 students — three times more than there were in 1951.

These big reinforcements will help gradually to fill the need, something it has hitherto not been possible to do. Last year, for example, 12,000 new teachers emerged from the training colleges. But the intake of new pupils into the middle schools was over 470,000 and would have been much more if facilities had existed. On the basis of one new teacher for every 28 pupils in the junior grades (13 to 16 years) and one for every 25 in the senior grades (16 to 19 years), which is the aim, the number of new teachers last year was at least 5,000 short.

It takes two years to qualify for junior middle-school work, and four years to get a senior middle-school teacher's certificate, so it is clear that the gap will not be closed for some time. To provide education up to 16 years of age for all children even in the major cities and industrial centres, and to make a proportionate increase in the number of senior students, China needs nine times the present number of middle-school teachers, which is 160,000. It is planned to achieve this goal in 1967. By then there will be 150 training colleges with more than thrice today's number of deans, professors and so on. Twelve years is by no means a long time for such a programme, especially if one looks at what China had to start with.

In 1949, when the people took power, there were only twelve teachers' training colleges for the whole of China. And though most of the universities had education departments, their enrolment was very small — only one in ten students. Teachers in general had a very low place in the social scale, and academic standards were poor. Teachers' training was looked on as the last resource of students who wanted to get into the university but could not pass the entrance examination for any of the other branches. Students were not required to specialize in secondary school subjects, and spent much of their class time in training for

school administration, or in topics quite unrelated to the actual state of affairs. For example, Yen-ching University offered a course in what was called "frontier education"—for national minority peoples. But the Kuomintang government had not the slightest intention of providing education for these peoples; no student then would have dreamed of working elsewhere than in the cities.

Such was the situation that the new government faced when it began its educational planning. The first big step in this regard was taken in 1952, with the general reorganization of all China's institutes of higher learning. Whole departments were combined and interchanged between different colleges and universities so that each could specialize more effectively. In this great shift-around, teachers' training colleges were established as separate institutions, and the education departments in the universities were attached to them.

An example is the East China Normal College in Shanghai, which is now one of the three largest of its kind in China. It has taken over the colleges of Letters and Sciences of the Kuanghua and Great China universities, and the education departments of five other universities. The Peking Normal College has absorbed the colleges of Letters, Sciences and Education which had formerly belonged to Fu Jen University, the Education and Psychology departments of Yen-ching University and the Education Department of Peking University.

This kind of amalgamation was accompanied by the establishment of colleges in the interior provinces, which formerly had none. Now every province in China, with the exception of Ching-hai, has at least one teachers' training college. Of the big autonomous regions, the Inner Mongolian and the Sinkiang Uighur Autonomous Regions each have theirs, though Tibet as yet does not possess any.

Along with the physical reorganization, a standard educational programme was laid down for all the training colleges. Main subjects taught in the colleges now are Chinese, foreign languages, mathematics, physics, chemistry, biology, history and geography. Besides these, there are departments of pedagogy (educational theory and methods), physical training, music and fine arts. Not every establishment, however, has all these departments. For instance, Honan province, which has two teachers' training colleges, has given one over to science subjects and the other to the arts.

The standard programme for each department includes courses in psychology and teaching methods, and courses of Marxist studies. Great emphasis is put on teaching practice. This begins in the student's second year, with observation visits to schools; in their last two years the students spend up to twelve weeks actually taking classes in junior or senior middle schools under the guidance of experienced teachers. During that period, they join their pupils in out-of-class activities like sports, discussion groups or the editing of wall-newspapers. Parent-teacher meetings are an important new feature in all schools today, and the student in training starts to take part in them even before he becomes a full-fledged teacher.

Marxist studies are regarded as part of the general equipment of all teachers. The new generation in the schools is growing up in a developing socialist society. An understanding of the basic philosophical, historical and political ideas that provide the motive force for China's advance is therefore of great importance to teachers in their general work.

The teaching content of every course in the standard educational programme is laid down in skeleton form by the Ministry of Education. Professors and lecturers in the training colleges use a method of preparing their courses which has proved very successful in the U.S.S.R. All those instructing in the same subject, or closely related ones, join together in a "teaching and research group", to which post-graduate students and assistant lecturers are also attached for training. Each instructor writes his own lecture-notes, after which the whole group meets for discussions on method and content. All new experiences are pooled, the teaching material continually being enriched in consequence.

The majority of students who enter the teaching profession come straight from middle school. Training colleges also admit primary-school teachers who want to advance to middle-school jobs.

Apart from their regular work, teachers' colleges now offer a great variety of spare-time training, refresher and correspondence courses. Practising middle-school teachers who wish to improve their knowledge, and primary-school teachers who want to prepare for middle-school jobs, can now obtain a diploma in this way. All forms of tuition are free, and the courses last for three or five years according to their nature.

## Teacher of Her People

by HAN TZU

**O**N a raw, blustery evening in the winter of 1952, a short, sturdy, dark-complected young woman trudged into the village of Majihchiaio, high in the Taliangshan mountain range in what was then Sikang province.\* Her name was Yueh Chiao, and she was the new teacher. On her back was a big pack containing clothes, bedding and food. She had walked 25 miles that day over rain-slippery mountain paths, through tall forbidding forests and quaggy marshes.

The villagers, who like herself were of Yi nationality, knew of Yueh Chiao's coming, and weren't too happy about it. At that time they were still organized on a more or less tribal basis, and elements of slavery continued to exist among them. Remnant Kuomintang forces still lurked near this freshly-liberated region. When word came that the village was going to have a school, many rumours had been spread: "The new government will remove all the children from their homes and their parents will never see them" was one. "The teacher is coming to take all the Yi children and turn them into Hans"\*\* was another.

Yueh Chiao, born in another district where the population was a mixed one, could speak the Han language as well as her mother-tongue. Her appearance and behaviour made the villagers regard her as "half a Han". What's more, she was not of peasant origin, but the daughter of a sort of bailiff who used to collect tribute for local chieftains.

Another thing that made Yueh Chiao unusual was that she had had an education. Her parents had sent her to a Han school (there were none for Yis then) when she was only six years old. That was not because they were particularly enlightened. It was because a soothsayer had prophesied that, if this child remained at home, she would "bring misfortune" to her family. So boarding school was adopted as a solution.

\* Since July 1955, part of Sikang province, including the Liangshan Yi Autonomous Area, has been incorporated in Szechuan province, the rest in Tibet.

\*\* The Hans are the majority nationality of China.

From the school, Yueh Chiao went on to a teachers' training institute. When she graduated, a couple of years after the liberation, she was asked to go and open a school in the wild, remote mountains. She agreed willingly. Fired with the new ideas, she was eager to help lift her fellow Yis out of their age-old backwardness.

At Majihchiao village, the girl got no welcome at all. People went into their cottages when she approached, hurriedly closing their doors. She called on a man named Mahiaho, who held the hereditary rank of *tu-ssu*, bestowed on local chiefs by past Chinese rulers to aid their control of minority tribes or clans. Mahiaho had some contact with the district people's government and finally agreed to let her sleep in his barn. But no provision was made for the teacher to get or cook her food. The village, where everything was exchanged by barter, had neither market nor shop. When Yueh Chiao offered money for what she needed, nobody wanted it. For the first few days she lived on the rice and dried vegetables she had brought with her.

But the new teacher held firm because she knew what to expect and what she wanted. She had been sent by the "government"—a word which to the Yi people, in the past, had meant nothing but plunder, oppression and the press-ganging of young men for the Kuomintang armies. It had been explained to her when she set out: "You yourself, by the way you act, will have to prove to the people that our new government is different, that it regards all nationalities as equals. Make friends with the chiefs, keep close to the people. Even if you can get only one pupil, teach him."

It was a responsible task for a 21-year-old girl. She began to tackle it by trying to win the confidence and respect of her cool host, the *tu-ssu* Mahiaho, most influential of the villagers. A widower, he lived with his two small sons and a daughter. Yueh Chiao took every opportunity to help with the housework, being very careful to conform with local custom and ask permission before doing anything. She performed little motherly services for the chief's children, mending their torn clothes and encouraging them to wash and keep their hair combed. They soon took to her, and never tired of listening to her songs and stories.

After a few days, the father's hostile reserve began to break down. He offered her food and wine, and told the neighbours to let her have vegetables and other produce. Some time later, he



had a rough partition put up in the barn so that she did not have to sleep amid the cattle. When Mahiaho began to call her Ah Chiao—to match the names of his children, Ah Po, Ah Tse and Ah Chu—she knew she had been accepted.

Along with their chief, other villagers began to thaw. An early friend Yueh Chiao made was Shamalolo, wife of a second *tu-ssu* who lived not far away. Shamalolo, who had two children, was as suspicious as everyone else at the idea of a school. But she liked to talk to the young teacher, and told her many stories of the blood-feuds between rival clans that had made life miserable for the local Yis in the past. Before these had been settled through mediation by the new government, she said, it had been dangerous to travel even to the next village three miles away, and she herself had never been there. So you had to give the liberation credit—at least for that.

Ah Chiao, as everyone called her now, told Shamalolo something the woman had not so far understood, just why the government had exerted itself to reconcile the feuds. The old Kuomintang officials, she explained, had found the old tribal quarrels very useful, and indeed had fostered them so they could “divide and rule”. The People’s Government, on the other hand, was interested in uniting the Yi people so that they could fight together against poverty and backwardness.

“I myself was called a savage and a barbarian by my schoolmates because I was a Yi,” she told the interested Shamalolo. “I was even afraid to go out and play during breaks, but crouched at the back of the classroom, hiding from the Han children who mocked at me.” Later, in the teachers’ training school, she had been made the scapegoat for a theft which she had never committed, and had had to leave. It was only after the liberation that the school’s new principal had asked her to come back. She had been warmly welcomed, and provided with a special living-grant.

“Why do you think the government has sent me here?” said Ah Chiao. “It’s because it wants us Yi people to govern ourselves, and to do it properly we must know how to read and write. Only witch-doctors were literate up to now, and the kind of writing they use in their magic is of no use for writing down ordinary talk. Last year the government invented a new script that can be learned quickly by anyone.”

When Shamalolo suddenly became very ill, Ah Chiao, merely by writing a letter, was able to arrange for her to go to hospital.

That was what finally caused the woman and her husband to give up their suspicion of schooling. When Shamalolo returned, cured, they asked if Ah Chiao would teach their children.

In the middle of January 1953, Ah Chiao opened her first class. She had three pupils, two belonging to Shamalolo's family, and one other. The classroom was a corner of the barn where she lived; she had swept and decorated it to make it as pleasant as possible.

By now she was friendly with several more neighbours, visiting their homes and helping them with problems. In the same month that her "school" began, the government sent supplies of cloth to the village for making winter garments. But many of the poorer people had never worn anything better than rags and sacking, with an old sheepskin to cover them during the winter. Most of the women did not even know how to make the cloth up. Ah Chiao taught them to cut out and sew, and herself made 18 garments for various families. As she went from house to house, she also talked about how to improve health through cleanliness, and urged the people to kill rats. She persuaded them by counting up how much grain they lost each year from these vermin. Over 2,000 rats were killed in the village, much food was saved, and people began to say: "This new government is really something different. It is concerned to help us improve our lives!"

By the end of the school's first month, six more pupils joined. But lessons were still irregular. The children, like their parents, did not know the meaning of study; they came to school and went home whenever they felt like it. Ah Chiao began by teaching singing and dancing, which the children enjoyed. When they were tired, she would let them sit in a circle, out of doors if the weather was fine, and tell them stories. Sometimes she joined in "knuckle-stones", their favourite game. Between games she would make pictures with the stones, outlining the shape of a man, a horse or a flower on the ground, and the children thought that it was fun to copy her.

Then she started forming letters in the same way. "What's that?" the children asked. "This is writing," the teacher replied, and explained what it meant to be able to send a letter to a far-away place instead of having to go there yourself and talk. "Teach us to write, teach us to write!" clamoured the children. This was a big victory.

The most uphill work, however, was to inculcate discipline and habits of study. Once, as the teacher sat reading, Ah Po, Mahiaho's 11-year-old son, suddenly snatched a brand of wood from the stove and thrust it against her cheek. For an instant the pain almost made her lose her self-control. The boy threw down the stick and crouched in the corner, trembling with fear. All the others watched to see what she would do. Ah Chiao buried her burned face in her hands for a moment, then went over to Ah Po slowly and patted him on the head. "Don't be scared," she said. "Tell me why you did it!" He stared at her and remained silent. She did not press him, recalling that he was a neglected, motherless child, and so very much depended on her behaviour.

A few nights afterwards, when Ah Po was not feeling well, she sat beside his bed tending him. Suddenly he said, "I was bad to you the other day. I didn't feel like studying, and I thought if I hurt you you would beat me. Then I wouldn't come to school any more. But I want to study really . . ."

All the people began to talk about the teacher who did not beat her pupils. By the middle of the summer there were fifteen children in the class. And when money arrived from the government to build a new schoolhouse, all the villagers proved eager to help in the work. One morning Ah Chiao awoke to find all the men gone. When she asked where they were, the women laughed and would not tell her. At dusk one of them called, "Come out and look!" The men were coming back loaded with reeds which they had cut for thatching the schoolhouse roof.

In August, Ah Chiao and her pupils were ensconced in their new building, two stories high, with classrooms, an office, sleeping quarters and a kitchen. The children, by now, were keen to study. Their parents were quite friendly. But having had it thrust down their throats so long that all Yis were "backward", they were still sceptical about whether their children could really learn.

Village opinion was completely won over only at the end of 1954, when five of the earliest pupils could already write simple letters in the Latin script devised for the Yis, and twelve could do simple arithmetic and read the newspaper. The different families, whom Ah Chiao informed regularly of their children's progress, now began to take great pride in these accomplishments. "You see!" they said, "Yis can read books!"

As for the pupils, they adored their teacher. Whenever she went off down the mountain for a meeting with the county education authorities, they came to see her off. When she returned, they would run to meet her like a flock of young birds. Once when she had been away for some days she found several blades of grass in the drawer of her desk. They had been put there by the children, one at a time, to count the days of her absence.

And it was not only the children who had come to love and rely on Ah Chiao. The Yi women came to her constantly to talk about their problems and unburden their hearts. An 18-year-old girl named Ah Lu, for instance, was a victim of a pre-arranged marriage. Her mother-in-law treated her abominably and she had run away from home several times. Ah Chiao could not interfere in family matters, but she gave the young wife courage by painting the future. She showed her that, with the general progress that was now assured, the backward customs and attitudes of thousands of years were bound to change quickly—as they had done in the rest of the country. “If you hadn’t told me of socialism coming,” Ah Lu said gratefully, “I would have had only one way out, to kill myself. Now I have something to work for and look forward to.”

In all her free hours, the teacher was besieged by people who came to talk. It was only when she was preparing her lessons by lamplight that they left her to herself.

By late 1955, the village school had thirty-five pupils, five of them girls. A second teacher had arrived to help. Ah Chiao was elected a “first-grade model teacher” for the province and traveled, as a delegate to the National Conference of Young Builders of Socialism, to faraway Peking.

## First Step to Language Reform

by LIN HAN-DA

**A**MONG the resolutions adopted by the National Conference on the Reform of the Chinese Written Language,\* which was held in Peking in October 1955, was the first programme for simplifying the writing of Chinese characters. This programme was submitted to the State Council for official ratification. Additional resolutions passed at the conference included one on the promotion of the use of a common speech for the whole nation based on the Peking pronunciation, and the early publication—for public discussion and trial—of a phonetic script to replace the present form of writing. So the reform of the written language, for which a great deal of preparatory work has been done in the past four years, has actually begun.

An experimental group of "simplified" characters was introduced in Chinese newspapers and other publications some months earlier. Most of these simplified versions have been in everyday use for centuries, but this is the first time they have been given public recognition. A scholar who took part in official examinations in the Manchu dynasty would be disqualified if he used even one simplified character in his written thesis. Even recently school-children who used simplified characters would be criticized by their teachers.

The Committee for the Reform of the Chinese Written Language, a permanent body, was set up in 1952 for the specific task indicated by its name. The two most important aspects of its work are the preparation of a phonetic programme and the systematization of the Chinese characters. The former is the ultimate object; the latter is an interim measure, the first steps of which have now been taken.

The significance of this simplification cannot be fully realized without some knowledge of the Chinese written language. To begin with, it bears no resemblance to a phonetic language spelled

\* Strictly speaking, the written language referred to in this article is called the Han language, or the language of the Han people, who constitute over 90% of the Chinese population. The minorities have their own languages. For details, see "Many Languages" on p. 190.

out in a definite number of letters. It is made up of block-like characters varying greatly in number of strokes and with no indication of sound. The fundamental strokes are as follows: 丶, 一, 丨, 丿 or ㇏, ㇏, ㇏, ㇏, ㇏ or ㇏. In origin, many of the characters were pictures of actual objects (see chart on next page). But today their resemblance is too remote to be recognizable.

To express abstract ideas, two or more pictures were used in a single character. For instance, 𠂇 written alone was a picture of a man standing, but when two of them were put together back to back 𠂇𠂇, its meaning was "opposite" or "contradictory". When they were written one following the other 𠂇𠂇, its meaning was "to follow", "accompany" or "obey". In the same way 日 "sun" and 月 "moon" were combined to make 明, meaning "bright", and 人 "a man" standing by his "word" 言 made 信, meaning "honest" or "sincere".

Another group of characters is composed of two parts, one indicating the meaning and the other the sound. Let us take the character 包 pao for example. Originally it was written ㇏ meaning "embryo within the womb". When it is combined with 魚 (魚 meaning "fish") to make 鮑, it means a kind of shellfish—the abalone. When combined with 雨 (雨 meaning "rain") to make 雹, it means "hailstones". In both cases, 包 is merely a sound-indicator, while the meaning is indicated by the other component. The majority of the present vocabulary is made up in this way.

The brief explanation of early development enables us to see why Chinese characters have become a massive structure of strokes and contain a number of components which may also stand independently. Sometimes the components may be as many as six or seven, with more than thirty strokes. To the eye of a philologist, these characters may appear intelligible and picturesque. But to an ordinary reader, they are difficult strangers whose acquaintance can be made only by excruciating efforts.

Of the fifty to sixty thousand characters in the Chinese language, only six or seven thousand are in current use today. If we count the strokes of the two thousand most commonly used characters, we find only 28% contain less than eight strokes, the rest having from nine to twenty-seven strokes.

We are grateful to a language in which our entire history is recorded and which will continue to be useful for a considerable length of time. However, the difficulties that are inherent in its

## Evolution of Some Chinese Characters

B.C. 1700—1400	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵
B.C. 776—250	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵	𣎵
B.C. 250—A.D. 25	日	月	山	水	雨	木	目	馬	魚
A.D. 25—220	日	月	山	水	雨	木	目	馬	魚
A.D. 380 —present day	日	月	山	水	雨	木	目	馬	魚
Meaning	sun	moon	moun- tain	water	rain	tree	eye	horse	fish

nature are self-evident. In the first place it is very hard to learn. When children see the written characters, they are puzzled as to their meaning, sound and structure. The difficulty is particularly great in making attempts to write them. Imagine a child who has to learn first, as usual, her own name, which reads like this: 劉麗豔 *Liu Li-yen*. The given name, *Li-yen*, which means “charming and beautiful”, has altogether 47 strokes. Many common characters are no better. Take 聽 *ting* meaning “to hear” and 學 *hsueh* meaning “to study”; both are much too complicated for a beginner to grasp. No wonder a school teacher found over ten different ways of writing 聽 “to hear” in compositions of his 42 pupils!

For this reason the time consumed in learning the Chinese written language is much more than that taken in learning any phonetic language. While a Sinkiang Uighur, whose language is phonetic, needs only four years to graduate from primary school, the Han children need six years. Our illiterate adults usually need 400 to 450 hours to learn 2,000 characters, averaging 11.2 strokes each. After the Vietnamese people changed their written language, formerly modelled on the Chinese, to a phonetic one, it took only 100 hours for an illiterate adult to learn to read popular literature.

The second difficulty is concerned with the technique of type-setting, indexing and telegraphic transmission. Type-setting to-

day is still done by hand, which is two-fifths slower than linotype. In looking up a word in a Chinese dictionary, one often wonders under which radical it appears (radicals are the 251 component parts according to which characters are classified in dictionaries). Even when one knows which radical is concerned, it takes a long time to find it. Chinese telegraphic messages are transmitted by numbers according to a prepared code. This involves coding and decoding, not to mention the errors that are likely to occur and the time factor.

The fundamental solution to these difficulties is to make the Chinese written language a phonetic one. Chairman Mao Tse-tung pointed out as early as 1940 that our written language must be reformed when conditions permitted, and again in 1951 he added that we should follow the universal trend towards the phonetic script. In order to accomplish this, we need a period of transition to make necessary preparations. Meanwhile, the existing written language has to be reformed by making it the least cumbersome possible. The present step as outlined in the first programme is essentially to reduce the strokes of 516 characters and 56 components and to eliminate unnecessary variants.

A few examples will suffice to give a graphic picture of what simplification means even to those who do not know the language:

雙 (18)	双 (4)	a pair
義 (13)	义 (3)	righteous
頭 (16)	头 (5)	head
萬 (13)	万 (4)	ten thousand
蟲 (18)	虫 (6)	insect
竈 (22)	灶 (7)	kitchen stove, oven

These examples taken at random are by no means the most complex of the 516 characters to be simplified. And that ungrateful girl who blames her parents for naming her "charming and beautiful" will certainly be happy to see the characters reduced from 麗豔 to 丽艳, and her family name from 劉 to 刘.

The choice of the 516 simplified characters was determined primarily by their degree of acceptability and usefulness. Over 300 of them have been used already among the people for centuries, though seldom in print. So people have no difficulty in recognizing them. But this number was too small to satisfy the general demand. Consequently some 200 more characters were added. The same principles governed the choice of these. One



is to simplify various components and apply them to the various characters in which they occur. This will be explained later. Another is to introduce for general use certain simplified characters otherwise prevailing only in limited circles. For instance, the use of 疗 *liao*, meaning "to heal", for 療, is nowadays no longer limited to medical people. The third way is to coin some new characters on the various principles that have operated in the simplifying process in the past. So by the principle of making part stand for the whole, 醫 *yi* meaning "cure" and 聲 *sheng* meaning "sound" are reduced to 医 and 声 respectively.

How many strokes are eliminated by using the 516 new characters may be seen from the 141 simplified ones that are already in use. They average 7.9 strokes each, as against 16.1 strokes each in their original form. The time saved in writing is very considerable. A normal-school teacher has made experiments with his students, showing that they could write 62 simplified characters per minute against 21 elaborate ones.

The following characters, though not listed among the 516, are actually simplified through their components.

	Original form	Simplified components	Simplified form
to read	讀	讠 (言) 类 (貴)	读
calf	犢	才 (才) 类 (貴)	犊
to offend	讀	讠 (讠) 类 (貴)	渎
to continue	續	纟 (糸) 类 (貴)	续

The same component part, as may be seen in the above description of the structure of Chinese characters, may occur in several or even scores of characters. So the simplification of one component means *generally* the simplification of the characters of which it is a part. In this way the number of characters affected is considerably increased. As present 56 simplified components have been recommended. They were first chosen because they are most widely used.

In addition to simplification, the unnecessary variants, of which there are a tremendous number in the Chinese vocabulary, are to be eliminated. These variants have the same sound and same meaning, but are written in different ways. In a modern dictionary containing 13,908 characters, it was found that 3,000 were variants. Even in our telegraphic code-book, which should

be made as practical as possible, one-eighth (or 200 characters) are variants. Some common examples are 窗 *chuang*, meaning "window", which has five variants: 窓, 窓, 窓, 窓, 窓 and 櫓 *lu*, meaning "oar", having four: 櫓, 櫓, 櫓, 櫓. All of these versions enjoyed equal rights in printing and writing, with the choice depending on the whim of the writer. This gives no end of trouble to printers and typesetters, and to readers who do not happen to know them all. Beginning from 1956, the first batch of variants, numbering 1,114, will be banned from all publications and typewriters. This will greatly help to narrow the inflated vocabulary.

The simplifying process has been continually at work in the evolution of the Chinese written language. Simplified characters were found even in our earliest writing 3,500 years ago. Since then, people have never ceased to simplify the characters which they found hard to write. Although simple forms were looked down upon, still they gained continuous popularity. As a matter of fact, the present simplification programme is the confirmation of a popular tendency.

The public response following the publication of the draft simplification programme was most gratifying. Some 200,000 people took part in discussions held all over the country. Over five thousand written commentaries, individual and collective, poured into the Language Reform Committee. They made great contributions to the revised programme. School teachers, typists, printers, army men, peasants, proof-readers, etc. wrote to the press, voicing their hearty approval. Many were impatient for a phonetic script. Failing that, others wanted to simplify all complicated characters at once.

The reasons why the introduction of simplified characters will be gradual are two-fold. First, though this takes more time, consideration must be given to the literate as well as the illiterate. A total change would make the language hard to read for the literate. Moreover, many simplified forms must be tried out by people for some time before they can be finalized. Secondly, there are technical difficulties involved. The moulds for casting types are now carved by hand. The pace of simplification must be coordinated with the time required for preparing new moulds.

While the characters in the first programme are being put to use step by step, the Language Reform Committee is proceeding to the preparation of a second programme. At the same time, the people's inventiveness in devising simplified characters will be

greatly sharpened and will undoubtedly provide many new ones for the committee to study or adopt. So the objective to be achieved is to standardize the way of writing of each character, and to have a definite number of characters for current use.

Parallel to the simplification programme, steps have been taken to pave the way for the final adoption of a phonetic script. The most significant one is the largescale promotion of the common spoken Chinese based on the Peking pronunciation. The people will be urged to use it as a common means of communication in their social life. Administrative measures will also be taken to see that school teaching, especially in language lessons, will be conducted in the common spoken Chinese. In addition, philologists are studying the problem of levelling out the comparatively minor discrepancies that exist in the present vocabulary and grammar. All these active preparations indicate that China is determined to make a radical change of her written language so as to fulfil the common desire of her united people. It is easy to see that a standard phonetic language will greatly help in wiping out the large percentage of illiteracy and push ahead the constructive efforts of the people. But before this can be accomplished, the value of simplified characters should not be underestimated.\*

The Chinese people have long been aware of the necessity of reforming their written language. Many proposals have been made in the past, but they were never thoroughly carried out, for lack of organization and leadership. Only today, when China is truly united, has the reform become possible.

\* Since the Language Reform Committee in February 1956 published a draft scheme for a phonetic alphabet and set up a sub-committee to implement it, the fact that China will eventually have a scheme of phonetic writing has been generally accepted. The proposed alphabet has been the subject of lively discussions at all levels, with as many as 10,000 people participating in meetings on it held by local people's political consultative conferences. Between February and July 1956, over 4,000 letters, individual and collective, had poured into the Language Reform Committee's mailbox from Chinese residents overseas, Chinese students abroad and foreign sinologists, most of them approving of the change and suggesting improvements on the draft. On the basis of the suggestions and discussions, by the end of 1956 agreement had been reached on phonetic symbols to represent most of the sounds of the Chinese language except three, which were still in question. The State Council, the highest government administrative body, was scheduled to approve the final phonetic alphabet plan early in 1957.



Chi Lien-po

"Happy Couples", a thousand-year-old folk dance, Kiangsu province.

## WRITING AND THE THEATRE

**I**N contributing their share to the birth of a new socialist culture, writers and dramatists are drawing on China's classical and popular traditions, which date back thousands of years. They are also learning from the best work done elsewhere in the world. Their aim is not to copy but to depict present-day life and feelings with an artistic power no less than that of the masters of the past. To facilitate this, classical literature, folklore and the spoken epics and stories of the national minorities are being printed in large editions.

On the stage new plays share the boards with ancient dramas, some of which were long forgotten, and the work of playwrights of the democratic awakening of the 1920's and 1930's—which exposed the evils of those days and helped awaken people to the necessity of the revolution. Theatre-goers also flock to performances of Shakespeare, Ibsen, Shaw, Chekhov and Gorky.

Current novels, poetry and plays, it must be admitted, too often lack the richness and sure touch of the best older work. The mainstream of the present is the building of a new life by the workers and peasants, while most writers and playwrights are too often intellectuals of progressive views but quite different class origin. To understand the problems and feelings of the new heroes, many are now working in the factories and the villages. In the meantime, the works of worker, peasant and soldier authors are also beginning to appear.

## Bright Future for Peking Opera

by MEI LAN-FANG

THE classical Chinese theatre has a long history. It embodies, in drama form, many features of China's rich and ancient cultural heritage. Its technique has been perfected over many centuries. It is an art that is popular in origin and is still loved by the people of our country.

Because of these characteristics of the classical theatre, the Ministry of Cultural Affairs of the Central People's Government is helping us who work in it to accomplish the task of making an art of the old society serve the people of the new. On the one hand, this involves building on the patriotic, progressive and democratic content which our repertory draws from its popular roots. On the other, it means removing the backward, reactionary overlay it acquired in feudal, and later in semi-colonial, China.

This needed reform is not confined to the plays. It also requires the re-education of the performers. In old China, actors and actresses were an oppressed group on the lowest rung of the social ladder. Their grievances and bitterness against the ruling class were those of the people, but they were also confused in politics and constantly, though often unwittingly, influenced by feudal ideas. Now the status of actors in China has changed—they occupy the same honoured place as literary writers and other intellectuals who express the thoughts of our liberated people and light their way forward. To serve the people consciously and effectively, as they want to do with all their hearts, they are working hard to get rid of the reactionary admixture in their basically healthy outlook.

In reforming the old repertory and enriching its content, performers of the classical stage work in close cooperation with our best new writers and artists, some of whom have joined theatrical troupes as playwrights and directors while others meet with actors and directors to create new works collectively.

The principle followed is that art belongs to the people. Such art must cleanse itself of features introduced by former ruling

groups against the people. Therefore we seek to preserve and develop the group of classical plays that has always expressed the noblest national traditions—the industry, courage and intelligence of the Chinese people; their resistance to oppression and foreign invasion; their love of the motherland and of freedom. On the other hand, we no longer want those plays which used to foster a servile mentality on behalf of feudal rulers, or were harmful to the people because of undesirable elements of brutality, horror, obscenity and superstition. Where plays are dual in character, containing both healthy and unhealthy features, we introduce the necessary revisions.

Examples of good old plays which we continue to value highly are *The Fisherman's Revenge*, a forthright tale of a labouring man's battle against tyranny, *Mu Lan in the Army*, depicting the high patriotism of China's counterpart of Joan of Arc, and *Fighting the Chin Intruders*, showing the Chinese people's resistance against foreign invasion. Legend and myth also contribute many true and noble themes. *Liang Shan-po and Chu Ying-tai* tells of the rebellion of two young people against the feudal marriage system. *Meng Chiang Nu* is a protest against arbitrary conscription of labour under the ancient despotism (when the Great Wall was built). *Lovers of the Milky Way* is a legendary story that dignifies both true love and honest labour. The appeal of such dramas is universal and unfailing.

To reform the classical drama is to save it. Were it allowed to stagnate in its previous condition, it would never answer to the sentiments of members of the new society.

In revising or rewriting old dramas, some difficulties were at first encountered. Inexperienced revisers with a dogmatic, un-historical and unrealistic approach changed the snake-spirit in *The White Snake* into an ordinary girl, and introduced present-day life and ideology into the mythical *Lovers of the Milky Way*. Such errors have been criticized and corrected. The aim is to preserve the original simplicity, beauty and wholesome imagination in our best-told legends, not to reduce everything to the same form. With regard to all plays, writers are consulting with performers and playgoers. They are finding the right solutions to problems through discussion and controversy.

There are now many dramas adapted from old ones which enjoy great success when staged. *The Premier and the Commander-in-Chief Reconciled* is a combination of three former plays

on related subjects, with the theme of united resistance to foreign invasion. A patriotic and magnanimous premier makes a moving appeal to an arrogant general and achieves unity in the government, as a result of which his weak country defeats the strong aggressor. The main lesson of the play is brought forward far more vividly than in its three original components, in which it was present but not sufficiently clearly expressed.

Some old plays need only slight changes of emphasis. *The Drunken Beauty*, for instance, deals with the private life of the famous Yang Kuei-fei, concubine of the Tang dynasty emperor Ming Huang. The previous version contained erotic, vulgar elements which have been excised. The new version rises to heights of theatrical art in expressing the central theme of the play, the forlorn depression behind the outward pomp of a woman of the royal harem.

Among the newly written plays, *Three Attacks on Chu Village* is the most successful, though it is not without flaws. It depicts an episode in the great Sung dynasty peasant uprising which is described in the famous novel translated into English as *All Men Are Brothers*. We see on the stage not only the successive battles, with the cunning tactical tricks resorted to by both sides, but also the vivid contrast between correct and incorrect strategy, and the results of each.

The Chinese people have always loved the theatre, and audiences have always been very exacting in their criticism of performances. Playgoers who held actors in admiration, however, used to judge them mainly by technical skill. As for the ruling-class spectators who alone had access to the theatres in which the very best performers played, they hardly regarded actors as human beings.

Today the theatre is open to all the people, who judge plays not only from the point of view of technique, but on the basis of their content and artistic truth. Nobody despises classical actors. On the contrary, they are held in high esteem by both the people and the government. Four are members of the supreme organ of state power, the Chinese People's Political Consultative Conference. Many others are delegates to local people's representative conferences, or hold office in cultural organizations and government departments concerned with culture.

Great changes have also occurred in the interrelation between today's actors and their audiences, in most of which workers,



peasants and soldiers are now in the majority. The heightened consciousness of both performers and playgoers is illustrated by many instances, some of which I describe below.

During my recent performance of *The Warlord of Chu Bids Farewell to the Lady of His Heart*, the whole theatre exploded with laughter when the warlord exclaimed: "It is heaven's will that my kingdom should fall; my battles have been well fought." This used to be considered a pathetic passage. No one had ever laughed at it in the old days. But when I thought it over, I got over my surprise. The reaction was correct and showed the standards of our new audiences. The spectators saw clearly from the play that the warlord's own weaknesses were at the root of his failure. They thought it ridiculous and unworthy of sympathy for a man so blind to his own faults to indulge in empty rhetoric.

In the course of our troupe's tour in the northeast, an actor recited some old lines: "It's but a woman's nonsense, and worth nothing." This caused an immediate murmur in the theatre, in protest against the insult to womanhood.

In still another instance, an actor permitted himself to make a vulgar, low gesture. Such "embellishments" used to draw bursts of hearty laughter. This time too, the audience laughed, but in a derisory way, expressing contempt for the performer who could resort to such a trick. Both he and the whole troupe received many critical letters afterwards, while others were written to the local press.

I myself have given up *Fei Chen-o and the Tiger General*, which was my favourite for more than thirty years because I had been taught to act in it by the best tutors and had spent much time elaborating my own role. It was in this play that I also won the most applause during my tours abroad. In the past, I gave little thought to its content, concentrating my efforts on bringing the performance to a high pitch of perfection. Now that I realize the gross error of glorifying a despot's lady-in-waiting, who avenges her master by assassinating the leader of a peasant revolt. I have put it aside without the least feeling of regret.

Both entry into our profession and the practice of it have become different. In the old days, we performers of the classical stage looked back on our training period with horror. Young people learning the theatrical art were forced to suffer both physical and mental torment. Now the old system of apprenticeship and "adopted daughters" that served as a shield for such inhuman

exploitation has disappeared altogether. So has the system of theatre-brokers or contractors, which subjected all the actors to extortion.

In China today, the rising generation of students for the classical theatre are not only taught dramatic art but receive a regular education as well. They will graduate both as good actors and good citizens of the new democracy. Thousands of boys and girls attend the Experimental School of Classical Drama in Peking and similar institutions in other parts of the country, where all schooling is free of charge. In the organization of theatrical companies, the old contractor system is being replaced by the democratic co-operative form with considerable success.

In accordance with Chairman Mao's call to "create new things out of the old", theatrical workers are developing every style of the classical drama that is beloved by the people—the most widespread *ching chu* (or Peking opera) as well as the *ping chu* of North China, the *yueh chu* of Chekiang province, *tsu chu* of Hupeh province, *chuan chu* of Szechuan province, *ching chiang* of Shensi province, etc. In the growth of our national arts, we seek to achieve a situation of "all flowers in full bloom".

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AUGUST 1956

## China's Modern Theatre

by CHEN LIN-JUI

THE arrival of a "modern drama troupe" had created a stir in a village in Hopei province. Large crowds gathered before the makeshift stage. But no sooner had the curtain risen than the peasants began to murmur: "What kind of play is this, with actors in ordinary clothes and talking among themselves instead of to us?"

Then the plot unfolded—it was about life and problems in an agricultural producers' cooperative. The audience gradually quieted down, falling into almost rapt silence when the climax

was reached. On their way home, one could hear such remarks as: "So village folk like us can be the subject of a play. I never knew that before!" or, "That rascally landlord, I'm sure I saw him once in another village."

Throughout their lives, these peasants had seen only the traditional Chinese drama, done in gorgeous costume, combining song, dance and dialogue. That was why they were surprised at the simple scene unfolding on the stage. But though new to China outside the big cities, the ordinary play as the West knows it is quickly winning a position all over the land. It is close to real life, and leaves no gap between the stage and the audience except the physical one. Its popularity has rapidly extended, especially since the liberation. By 1955, it was estimated, some 100,000 amateur theatre troupes of this kind had been organized by peasants and workers.

When China's first National Modern Drama Festival was held in Peking in the spring of this year, greetings poured in from all parts of the country. There were complaints too—about difficulty in getting tickets, and insufficient numbers of performances given by various companies. In Peking, the 50,000 tickets available for the festival were sold out in four hours.

The event brought together 41 professional companies, numbering some 2,000 actors and other workers of the theatre. They came from many localities, including the far border-lands of Sinkiang in the northwest and Yunnan in the southwest. Four were army companies and two were organized by trade unions. They saw each other perform and spent their spare time in discussions and mutual criticisms.

Among the 49 plays put on at the festival, the dominant note was struck by those dealing with industrial construction. Nearly all of them portrayed tense conflicts between old and new ways of working and living, between backward and forward-looking thinking. Many of their heroes were workers who took the initiative in overcoming difficulties arising in industry. The stumbling block in their way was frequently the conservatism of administrators who underrated the energy and ability of China's liberated workers.

*The Gas Problem* is a play of this kind. A newly rehabilitated coal mine is still full of gas, a threat to the life of the miners. Lu Wan-chun, an old worker saddened by the memory of lives lost in gas explosions in Japanese days, is determined to work out

a solution and enlists the help of an experienced engineer. But the mine manager, an old revolutionary who has become too much the official, condemns Lu's project as "risky" without adequate examination. The manager's deputy, and old comrade-in-arms, differs with his chief. He comes to Lu's support and the gas is successfully pumped out, to the joy of the miners and their families. The director, who is demoted, realizes how he has hardened and ossified, and starts to work in a new way.

The fight against backward, selfish attitudes is also reflected in the workers' personal lives. The pretty young textile worker Liu Lien-yin, in the one-act play of that name, is a Communist Party member. She is deeply in love with Chang Teh-yu, also a Communist, leader of the record-breaking team to which she belongs. Their mutual regard and affection seem to rule out any possibility of quarrels. But a quarrel comes, when Chang sends an inexperienced worker instead of one of his best men to help a "rival" team that has fallen behind. The girl protests indignantly. Chang, in a fury, leaves her. Liu Lien-yin, though in emotional agony, faces the situation bravely. She tells him his self-seeking attitude is bound to damage the public spirit among the competing teams. Only after painful struggle does the impetuous Chang realize that she is right. This gentle girl's firmness of principle not only saves the character of the man she loves. It reveals the morality, private and public, of Chinese workers today.

The conflict of attitudes also marks the plays on rural themes. The central fact in China's countryside, nowadays, is the organization of cooperatives and the difficulties that arise in the transition from private to socialized agriculture. The big thing is that the peasants understand that cooperatives are the best way of improving their life. This is reflected in *You Can't Suppress It*, in which some villagers pool their resources and establish a co-op in spite of the rejection of their application, as premature, by the local government. In *The Waves*, members of a co-op take the steps necessary to put it on a firm basis despite the disapproval of a township official and sabotage by rich peasants.

Co-op members who cling to old, selfish habits are amusingly portrayed in some plays. In *The Divided Heart*, the keeper of a common storehouse carries a bag of fertilizer to the land. A woman living nearby immediately concludes he is taking it for himself. She "gets even" by stealing another bag for her own use. Their mutual suspicions, one unfounded and one all too just, cause

hilarious laughter in the audience. This is a successful comedy as well as a sign of the healthy development of the cooperatives.

Besides human conflicts in building socialism in town and countryside, there were dramas portraying the heroism of the rank-and-file fighters in the days of the Long March (1934-35), the war against the Japanese invaders (1937-45) and the War of Liberation (1946-49). Some of the characters created by the writers of these plays will live long in the hearts of the audience. Outstanding among them is the Battalion Political Officer in *Across Rivers and Mountains*, which deals with the Long March.

There were also plays on other subjects. *The Impostor*, by Lao Sheh, is a satiric comedy based on a real-life incident. A fake "revolutionary" who rose to high position by inventing a "past" for himself, is lashed and ridiculed. Towards the end the laughter of the audience becomes menacing. The pretender emerges in all his pitiful ugliness. The credulous bureaucrats who let him rise don't escape scorn, either.

*The Bright Sky*, first play in 12 years by Tsao Yu, one of China's best dramatists, deals with quite different people. They are the top-ranking doctors and scientists in a U.S.-established medical college, taken over by the people after the liberation. Ling Shih-hsiang, a well-known bacteriologist, lives in and for his laboratory. He is grateful to the Communist Party for supplying every facility for scientific study, but "hates to talk politics". His faith in "science by itself" is shattered by the U.S. germ warfare in Korea, which he disbelieves at first but admits after examining the evidence himself. For Ling, this is genuine tragedy. But it does not strike him down. He goes to Korea to use science for life against science for death.

China's national minorities have made many contributions to her music and dance. Now they are doing it for the modern drama. Three fresh, vital plays at the festival reflect a recurrent fact of present-day life—the reconciliation of formerly mutually-suspicious national groups through a policy of unity and respect for all.

*Like Brothers* tells how the army that freed the Hui people on the border of Chinghai and Kansu provinces encountered trouble because it did not inform itself on their way of life. With the good intention of restoring peace, it ordered the surrender of all rifles, not realizing that many of the people made their living by hunting. This played into the hands of the hidden foes. The situation was remedied, but not without high cost.

*Konbar Grassland* shows the effect of a correct approach. A Tibetan chieftain and part of his people, in western Kansu province, are at first wary, even hostile, toward a group of government workers. But the latter, patient and sincere, win their confidence and cooperation. In a third play, two warring tribes of the Kawa people in Yunnan province are brought together in friendship by the efforts of a People's Liberation Army unit.

Also staged were plays in the languages of the minorities, written by their own playwrights. From Inner Mongolia came *We Are All Sentinels*, in which a Mongolian herdsman and a woman help arrest a conspirator. The Uighurs of Sinkiang brought *Cause for Joy*, in which a peasant finally makes up his mind to join an agricultural cooperative. The Korean minority in Kirin province presented *Story of Chun Hang*, a popular folk-tale. The first Mongolian company was established in 1951, the first Uighur one in 1954. But they already compare very favourably with those from other parts of the country in production, acting and scripts. These companies travel on horseback from place to place on the wide grasslands or in the Gobi Desert, bringing their art to scattered nomad settlements.

Now a few points about the origin of the modern drama in China. After defeat in the first Sino-Japanese War of 1894, the whole country seethed with patriotic fervour and indignation against the corrupt imperial dynasty. The traditional drama could no longer satisfy. New plays appeared to convey the message of the time. Today we can recall with a smile actors who came on stage in European dress, waving horsewhips but singing in the old opera style. At the time, however, this was something earnest and impressive, because new things were being said in a new way.

"Legitimate theatre", in the European sense, began in China in 1908, when a group of students returned from Japan. They had already performed Chinese versions of *La Dame aux Camellias* and *La Tosca* in Tokyo. In Shanghai, they opened with *Uncle Tom's Cabin*. Soon a real company was formed, and after the revolution of 1911 the movement spread to all parts of China. The new drama was close to the new currents in politics. Many of its actors took part in overthrowing the monarchy, and not a few lost their lives.

But a setback came immediately thereafter. When power was seized in 1912 by the warlord Yuan Shih-kai, many companies

were persecuted. Lack of new plays was also a factor. Sometimes actors had no scripts and improvised on the stage.

The works of European dramatists like Ibsen and Shaw were introduced after the May 4 Movement of 1919. It was then that China's modern drama took the position it was never to abandon in the fight against imperialism and feudalism. Many amateur dramatic societies were established, especially in the period of the first revolutionary civil war in 1924-27. The plays they produced carried sharp social messages, condemning feudal marriage, the despotic warlords, or the oppression of the workers. The revolution suffered a serious defeat through the betrayal and massacres of Chiang Kai-shek. But the voice of drama was not silenced and, by 1930, the Left Dramatic League was formed in Shanghai. The stage took part once more in the battle for progress, sowing a fighting spirit among the people in the face of Kuomintang oppression.

In 1937, the outbreak of the War of Resistance against Japanese Aggression ushered in a new era. Dramatists and actors in Shanghai threw themselves into patriotic effort. A part of them finally found their way to Yenan, the revolutionary centre. The rest remained in the Kuomintang area, travelling and performing, calling on the people to fight the Japanese invaders to the end. They too kept contact with the Communist Party.

In 1949 these two forces met once more in Peking, at the first National Conference of Writers and Artists held after the liberation. Their members have become the backbone of many of today's companies.

In those long years of war, dramatic troupes faced a host of difficulties. Now, actors and producers have everything they need at their disposal. The festival showed what strides they had made in the six years since the liberation. Both production and acting were of a high order.

But "the play's the thing". It is even more encouraging, therefore, that many new playwrights have appeared. Most of the scripts used in the festival were written by young writers, or others who were trying their hand at playwriting for the first time.

The author of *Homecoming* succeeded in portraying a new type of peasant woman. As the play began, she was eagerly awaiting the return of her husband, who had been away for years on revolutionary work. Her happiness soon turned into bitterness. He came only to ask her for a divorce. Quickly she re-

covered from the crushing blow, granted his wish and dismissed him with the pride that comes of the new, independent position of women in China.

*Household Affair* was written by Chen Kwei-chen, the wife of a locomotive engineer. Though she has had only three years of schooling, she already has eight plays to her credit. It pained her to see some workers' families in a state of confusion—husband and wife quarrelling, children fighting and crying, dirty clothes scattered all over the floor. It was because of this that she picked a busy trade union chairman as her "hero", and laughed at him because he saw only his own work and did not help his wife to set their house in order.

Alongside the growth and accomplishments of China's new theatre, the festival revealed problems to be solved and shortcomings to be overcome.

Many plays showed a tendency toward a stereotyped and abstract approach on the one hand and photographic naturalism on the other. In theme, they repeated the conflict of two forces, positive and negative. There is nothing wrong in this, it is the essence of life, but many playwrights turned it into a formula and made their characters little more than mouthpieces for their arguments.

*The Gas Problem*, for instance, had good human touches in its subsidiary plot. But in the main plot one could not quite understand why the director should be so opposed to pumping the gas out of the coal mine. In fact, one could not help thinking that it was only because opposition was needed to make the formula: conservatism versus progress. The same play was criticized for over-naturalism. The audience was informed of many technical details connected with ridding mines of gas, the uses to which natural gas could be put, and other details that belong in a textbook. The effect was to clog and draw out the performance, and to obscure, instead of sharpen, the intended message.

Over-simplification of conflict may also account for weakness in characterization. A good many of the *dramatis personae* were too simple to be interesting. Often they were limned as hot-tempered, mild-looking, etc., but these superficial traits were like colours on a flat-painted figure. The thoughts of such characters seemed to move in a very narrow sphere. The peasants in plays about farms were often indistinguishable—apart from setting, costume and plot—from the workers in similar ones based on in-



dustry. In fact, people in new China are not at all like that. We are living in an age in which rapid changes are taking place, and the human emotions and hopes are varied and intense. Our playwrights still have much work to do.

In discussions around the festival, a new question was raised: how can the modern drama learn from China's tradition of the theatre? Ancient though it is, the traditional drama continues vigorous; its heroes, heroines and villains live in the people's hearts and minds. In the days of the May 4 Movement, the old drama was condemned out of hand as "feudal and unscientific", particularly by promoters of the modern play. But the attacks did it no damage. Instead, they stimulated the traditional theatre, because it began to borrow what it could use to advantage from the modern.

Now, many say, it is time for China's new drama to learn from the old. The two modes are different. What can be learned remains to be seen. Most of all, perhaps, it is the creation of deep, many-sided characters that win the people's love.

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## New Novels for New People

by FENG HSUEH-FENG

**I**N the popular new novel *Sanliwan Village*, the young peasant Wang Yu-sheng decides to divorce his wife. Upset by an argument over the family budget, she has scattered the tools with which he is assembling a new grain roller for their cooperative farm. Young Wang bursts into a meeting of village leaders, themselves elected from among the peasants, and pours out his grievances.

"Hsiao-chun and I can't go on," he cries. "When I wanted a divorce before, you all tried to convince me I should educate her. Well, it seems I'm no good as a teacher. . . If you insist on keeping me to it, I'll clear out of Sanliwan, tonight."

"Do you want the Youth League to write a letter of recommendation to take with you when you run away?" asks the local secretary of that organization. Wang is a Youth League member.

Wang's elder brother eases the tension. "Let's talk about the divorce later. Tell me first how your grain roller is coming along."

"It's because she wrecked it that I'm here," Wang protests.

"We've got 520 stacks of grain standing waiting to be threshed," says Chang Lu-yi, the co-op chairman. "If that roller isn't ready, all our work will be delayed, and so will the distribution to members."

"So what do you think is more important, that or your personal affairs?" asks the brother.

"I know, but what can I do if she doesn't let me work on it?" Wang retorts. Then, not waiting for an answer, he goes on, "I could move my things and work over here." Without another word he runs to get his tools.

As soon as Wang is out of earshot, everyone begins to laugh. "There's an interesting young chap," says a village committeeman. "When you turn his attention to the job, he forgets about his divorce."

This is an example of the characters and situations one finds in new Chinese novels. The novel in China is very old, but never before did it centre on everyday people in the course of their working life. Now, from the rich, complex life and struggles of the liberated people, our writers have drawn a multitude of personalities and situations reflecting their present and their path to the future.

In our new novels one meets working people in factories and on the land, fighters of the People's Liberation Army and the Chinese People's Volunteers, Communists and Youth League members, women and children of a kind never seen in our land before. They are no longer exploited or oppressed; their problems and difficulties come with the shouldering of new responsibilities. Their stories mirror the strength and progress of the new society, the immense influence of social change on people's feelings and ideas.

Among the readers of novels, too, there are more and more working people. Authors today write about and for the common man. The relation between literature and the masses is close.

Realistic and revolutionary writing has been the mainstream of modern Chinese literature since the anti-feudal, anti-imperialist movement in culture that began in 1919. But the understanding

that authors themselves must live with the workers, peasants and revolutionary soldiers, and write to help them move life forward, is more recent. It was generally accepted only after Chairman Mao Tse-tung's famous talks on literature and art in Yen-an in 1942.

Even with this orientation, works that appeared soon after the liberation tended to skim over the surface of the new life; they did not yet penetrate deeply into its manifestations among the people. Since then, our writers have gained more first-hand knowledge. Quite a few have participated in such events of nationwide importance as the land reform, the movement to resist U.S. aggression and aid Korea, the campaigns against corruption and the criticism of bourgeois ideas throughout the whole field of Chinese thought. Many of the novels published during the past three years show a much greater grasp of what is new in our life.

The peasants and their struggles have long figured in Chinese literature, as foreign readers know from translations of *Shui Hu*,\* a novel of agrarian uprisings a thousand years ago. Lu Hsun (1881-1936), father of the new literary movement, created a whole galaxy of peasant characters. During the Anti-Japanese War (1937-45) and the War of Liberation (1946-49), many writers fought alongside the peasants against invasion and oppression. Their works, describing events before the liberation of the whole country, include Ting Ling's *The Sun Shines over the Sangkan River* (1949) and Chou Li-po's *The Hurricane* (1949). Both deal with the wartime land reform in North China and were awarded Stalin prizes.

After the establishment of the People's Republic, land reform was carried out all over the country, wiping out feudalism. Then the cooperative movement began to lay a basis for socialist agriculture. These processes represented struggles between classes, between the old and the new, and were reflected in novels with a rural setting. The newest depict peasants working their own land and combining voluntarily to build socialism. Best among them, to date, is Chao Shu-li's *Sanliwan Village*, which was published last May.

The action begins in September 1952. The villagers want to enlarge their agricultural producers' cooperative and dig a new irrigation channel. But the old-fashioned Ma family remains outside the co-op; it will not let the channel cross its land. Gradually, the breath of progress touches even this conservative household. One of the daughters-in-law, a Youth League member and wife of

\* An English translation by Pearl S. Buck is entitled *All Men Are Brothers*.

a man serving in the army, wants to move out because she can no longer bear the tyranny of her mother-in-law and sisters-in-law. The youngest son rebels against the arranged marriage his parents have negotiated. When the second son invests his land as a share in the cooperative, old Ma and his wife see they must move forward too, and finally apply to join. The problem of irrigation is solved at the same time.

Interwoven in the plot are the love stories and marital conflicts of three young couples. Portraying a host of characters of all ages, the author passes judgement on passive and backward tendencies in the village and shows the vitality and attractiveness of the new.

The author's rustic humour, graphic description and power of creating images, which marked his earlier *Changes in Li Village* and *Registration and Other Stories* make this new book absorbing reading. It is the deepest and most successful of all Chao Shu-li's writings. He, like many other literary people, is now in the field, in the heat of the upsurge of the cooperative movement. We shall soon be reading the results of their experience.

Other changing aspects of village life, such as the reform of the marriage system, have also found expression in a number of short stories and plays.

The Chinese people have not forgotten, nor will they ever forget, the struggles that led to their liberation. The heroism of our recent yesterdays inspires us in overcoming all difficulties as we build socialism today. Chinese writers are still describing those great, grim battles, in which the people's strength was tempered.

The most representative and successful of such books is *The Defence of Yen-an*, written by the combat correspondent Tu Peng-cheng. The author spent the years 1947-49 with a company of the People's Liberation Army. He marched with the soldiers, taught them to read and write, cooked and carried water for them, watched them fight and fall in battle, helped the wounded and stood guard when necessary. His novel, the result of this experience, took four years to complete. He rewrote it nine times before he was satisfied.

The story tells how the people's forces in the northwest, though outnumbered ten to one at the beginning of the Yen-an campaign, destroyed the opposing Kuomintang forces within half a year. It opens with the distress of the soldiers when they are ordered to make a strategic withdrawal from Yen-an, long the centre of the Chinese revolution. It ends with the march back to Yen-an, amid news of triumphs in other parts of the country.

The company is often encircled. Sometimes, marching across arid country, they have no water and bite their cracked and blood-stained lips in an agony of thirst. But "with the great earth of China under their feet and the hopes of the Chinese people on their shoulders", they retain their optimism and will to win.

The unity of people and army, one of the most important factors of victory in the War of Liberation, is brought out by the old peasant Li and his family. When enemy forces try to make him guide them, he jumps over a precipice, rather than betray the company which he knows is lying in ambush. The whole novel shows how the new man grew in China, amid the stresses and strains of history's great decisions.

Other works on the military theme deal with the Chinese People's Volunteers, whose presence in Korea was an expression of internationalism as well as patriotism. Very moving is Yang Shuo's *Three Thousand Li of Mountains and Rivers*, a novel about Chinese railway workers who organized a transport brigade and volunteered for Korea in a body. It is also the story of a young couple who delayed their marriage to volunteer, the girl as a telephone operator and the young man as a munitions carrier. When he gives his life on an important mission, the girl forges her grief into new strength in the fight for world peace.

Many Chinese writers spent time on the Korean front and produced reportage, sketches, novels and plays as a result. Among the novels is *Nameless Hill Now Has a Name*, by the veteran writer Lao Sheh.

Industrial workers, as characters in literature, are something new in China. To depict them is a very important task. They are the leading and most rapidly-growing detachment of China's advance to socialism. So far, we must admit, few good works of this type have appeared. But this could hardly be otherwise. Our industrialization has just begun.

More and more writers are taking jobs to gain experience in industry, or staying in factories and mines to familiarize themselves with life there. Among the earliest of the results was *Moving Force*, produced some years ago by the self-taught woman novelist Tsao Ming. It describes how the workers restored a war-wrecked power plant in the northeast. Tsao Ming now lives in the steel centre of Anshan, and is working on a new book.

Lei Chia's *Spring Comes to the Yalu River*, first novel of a trilogy called *Hidden Power*, was published in 1954. It is set in a

paper mill, also in the northeast. In the director of the mill, Ho Shih-chieh, the author has created a well-drawn image of a Communist in a responsible position, who consults the workers on all problems, and enlists their strength to find the solutions.

A few months ago, Chou Li-po, author of *The Hurricane*, published his first industrial novel, *Molten Steel*. He wrote it after a year at the Shihchingshan Iron and Steel Works near Peking. The scene is set as the People's Liberation Army drives the Kuomintang out of the plant and leaves a team, led by Liu Yao-hsien, to get it going again. The technicians, and some of the workers, are dubious about whether it can be done. Liu patiently searches out the more active and optimistic among them, and unites them for the task. The first job is to repair the blast furnace. The efforts of the new administrators and the workers inspire some of the technical personnel who gradually throw themselves into the fight.

The most vividly portrayed character is the worker Li Ta-kuei, a straightforward, steady man who is quick to realize that the new society is the workers' own. The sharp struggle of the early days, when enemy agents were still everywhere, is dramatically shown. When some of them try to set fire to the plant's laboratory, Li leads his workmates to save it. On another occasion, he picks up a hand grenade that has been thrown at the powerhouse turbine and gets it out of the way though he himself is wounded.

In this novel, we see many aspects of the struggle for socialist industrialization. They embrace the complex class struggle as well as the fight to master new techniques.

Literary critics have welcomed *Molten Steel*. The steel workers themselves are very enthusiastic about it, and have bought many copies. They say it is faithful to their life in detail as well as in general. "The language is just the way we talk," was one of many favourable comments.

We are all proud of the new writers that have appeared in the last few years. Among them are Kao Yu-pao, author of an extremely interesting autobiographical novel of the same name, and Chen Teng-ke, whose *Living Hell* creates an unforgettable picture of how the people brought light out of the dark past. In the book, a heroic village mother substitutes her dying daughter for a People's Liberation Army man the Kuomintang garrison has ordered her to bury alive. This soldier then succeeds in rallying the men and women of the village for guerrilla struggle. Together with the advancing people's forces, they drive out the enemy.

Both Kao and Chen are peasants who got their schooling in the army, and whose writing talent was discovered and fostered after the liberation.

For the first time in history, we have national minority writers whose works are translated and recognized everywhere in China. Outstanding among them is the young Inner Mongolian novelist Punsek. In *Golden Khingan Mountains*, he tells of the battle to establish the new life in his native region.\*

Never in the past did writers in China enjoy the freedom and opportunities now open to them. It is not only that they have more chance to get close to life. They are relieved of material difficulties, which used to stifle so many talents before they could flower.

The Union of Chinese Writers has a plan to help members and non-members entering the literary field. Those whose only income is from writing can apply for grants or loans on work which is in progress. Members who work at other jobs can ask for time off to write. The Union helps with living expenses if such leave of absence is without pay. Travel expenses of members in search of material may also be covered. Non-members are considered for the same benefits if recommended by the Union. The Union is planning to build apartment houses where writers can live.

With no worries about livelihood, writers will be able to devote more energy to creative work, and to overcoming various weaknesses from which many novelists still suffer. One of these is the tendency to fall back on abstract schemes, instead of presenting living human beings and real life. Positive heroes could be brought out more roundly than they are. Writers often do not probe deeply enough in dealing with the contradictions in China's social life as she moves to socialism. Yet only the depiction of these contradictions can show what is newborn, advancing and irresistible and what is old, dying and rotting away. Thus literature can more actively help the re-shaping of life.

The other problem is that of better artistry. The people want a variety of styles and forms suiting the many-sided content of our new life. They want books that can be enjoyed by the great mass of readers.

\* Available in English in *Chinese Literature*, No. 4, 1954 (Foreign Languages Press, Peking). Other novels mentioned in the article available in English are *The Sun Shines over the Sangkan River* by Ting Ling, *The Hurricane* by Chou Li-po, *Changes in Li Village and Registration and Other Stories* by Chao Shu-li, and *Living Hell* by Chen Teng-ke. All are published by the Foreign Languages Press, Peking.

## The Debate of the "Red Chamber"

by YUAN SHUI-PO

FOR several months past, a spirited discussion has been going on throughout China about a two-hundred-year-old novel, *Hung Lou Meng* (*The Dream of the Red Chamber*). The novel is so well known and loved that its main characters live as real people in the minds of millions of readers. Indeed they have come to personify certain admired or despised human qualities. When the novel first began to circulate, there was a saying: "All discussion of books and poetry is useless if one does not talk about *Hung Lou Meng*." The present discussion began in literary circles, and then spread to the universities and the public. It has filled many columns of the press, been the subject of widespread debate and attracted attention outside the country.

Why should nationwide attention be given to such a matter? It is because this controversy touches on the entire problem of how the Chinese people, who are transforming their whole life and thinking to socialist ways, are to regard the literary and artistic heritage of their past. And this, naturally, has a bearing on what is to be done in the sphere of culture from now on. This immensely long novel—120 chapters with 900,000 words—centres on the tragedy of two young lovers, Chia Pao-yu and his cousin Lin Tai-yu, both members of an eighteenth-century aristocratic family. Brought up together from childhood, they fall in love. But Pao-yu, heir to the family fortune, is tricked by his elders into marrying another cousin, considered more suitable as a daughter-in-law because of her wealth and tractable disposition. Tai-yu dies, broken-hearted. Her young lover, shattered by her death and unable to withstand the suffocating atmosphere of this household, finally becomes a monk.

Around this tragedy the author groups several hundred other characters. Masters and servants, royal personages and slaves, parents and children, brother and sister, husband and wife, all have their parts. The life and relationships of one aristocratic family in its immense mansion present a microcosm of Chinese feudal



society. We see the first challenges to the oppressive institutions and conventions that held this society together—forced marriage, subjection of women, limitless power of landlords over peasants, the antiquated civil service examinations and the stifling “proprieties” based on these things. The scene is laid at a moment in Chinese history when the first beginnings of capitalism were emerging, while the feudal system was already showing clear signs of decay.

Along with economic development, ideas in eighteenth-century China were also undergoing a violent change. The main characters in *The Dream of the Red Chamber* are not merely in rebellion against the old society, they are searching for something new. The young lover Pao-yu, surrounded by luxury, waited upon by maids and menservants, has lost all interest in the aristocratic life whose surface glitter cannot hide the rottenness beneath. In his father's eyes he is a black sheep and a fool because he dislikes attending the family school and despises the approved ambition of becoming a court official. But in fact, he is a very intelligent lad whose fine perceptions, talent for poetry and art, and understanding of literature are revealed in the book. Pao-yu is out of tune with his world because he cannot bear the intrigues and vulgarities of the people among whom he moves, because he esteems high human qualities, wherever found, and respects no class distinction between master and servant, rich and poor. Himself one of the privileged, his sympathy is always with the weak, the persecuted and the unfortunate, and he offers this sympathy generously and sincerely, without regard to the social position of the other person. In a society where women were oppressed and humiliated as a matter of course, he comes to the defence of despised young actresses, takes the blame for maidservants and says something inexpressibly shocking in that patriarchal society: “The finer elements between heaven and earth are centred in women; men are but the dregs.”

In his quest for liberation of the spirit, Pao-yu finds a companion in Lin Tai-yu. Flying in the face of conventional morality, Tai-yu dares to love the man of her choice. She too loathes the aristocratic world and will not stoop to servile conformity to gain her desires. Beautiful and talented, equipped in every way to gain wealth and position by adhering to the code of conduct required of a young girl, she repudiates hypocrisy and convention and tries desperately to keep her personality and her love intact.

Therefore the love of Pao-yu and Tai-yu won the sympathy of readers, even though in the old society it led only to tragedy. The irreconcilable hatred of these two young people for feudal institutions and passionate search for freedom have won undying and ardent response from generation after generation of Chinese youth.

The author of *The Dream of the Red Chamber* was Tsao Hsueh-chin (1724-1764), himself the son of a rich aristocratic family which lost both wealth and position before he had reached the age of 20. It was in the second half of his life, which he spent in poverty, that he wrote the novel which won him everlasting fame. His ideas were undoubtedly abreast of the most progressive Chinese thought of that time, and this, with his literary talent and realistic style, enabled him to write a great work of art that is justly loved by the Chinese people.

Past interpretations of the novel have varied with the society in which they were made. The feudal rulers of the Manchu dynasty classed it as "licentious" and "immoral"; orders were issued at different times for the destruction of both the book and the wood-blocks from which it was printed, and scholars who wrote favourably of it were ordered stricken from the official rolls which alone gave hope of government employment. After the establishment of the first Republic in 1911, the growing bourgeoisie regarded it as a book to be read for sensual pleasure and entertainment. Chinese bourgeois intellectuals of the 1920's and 1930's over-emphasized certain expressions of nihilism and despair that occur in the novel, and, in line with their tendency to look down on our national tradition, minimized or even denied its literary value. During the last thirty years, a school of thought grew up, led mainly by Hu Shih—a "pragmatic philosopher" who was once the president of Peking University and has been one of the intellectual mainstays of the Chiang Kai-shek regime—which classified the book as a piece of autobiographical escapism. From the very outset of the revolutionary period that began in China in 1919, so rich in self-sacrificing heroism and achievements, Hu Shih and his followers did everything possible to deflect the minds of young people from the real struggles of the day, into scepticism and sterile pursuits. The fact that they tried to deprive this great novel of its deep historical significance as a passionate revolt against feudal society, was part of their outlook in all other matters.

The present discussion began over the evaluation of *The Dream of the Red Chamber* by Yu Ping-po, a one-time collaborator and follower of Hu Shih, who has made the novel his special subject of study since 1921. He has written numerous books and monographs interpreting it as mystical, non-committal and naturalistic, concluding that the author wrote it as a lament for his ill-spent life, "to repent of his love experience", and asserting that he had no intention to "praise or to condemn" anyone or anything. The rebellious, critical spirit of the book was ignored. The Buddhist precept that all human desires are empty was, in his opinion, the whole content of the book. Yu Ping-po devoted years of research to obscure and unimportant details of the author's life, collecting evidence to back his speculation on the possible intimacies of the hero with some of the female characters, to the exact location of the feudal family home which is the scene of the novel, and even to the exact seating arrangements at an evening party described in one chapter. Entangled in this maze of irrelevancies, Yu Ping-po wrote: ". . . the book is a nightmare in the world of Chinese letters. The more you study it, the more puzzled you become." After three decades of study, during which the book continued to be loved and avidly read by the people, and ran into innumerable editions, Yu Ping-po concluded that it "cannot be classed among the great works of Chinese literature". In this judgment, as an "unquestioned authority" on the subject, he was followed by some other editors and critics.

It is characteristic of the new wind blowing in China that the battle of ideas which has now broken out around *The Dream of the Red Chamber* should have been precipitated by two very young students of classical literature. Li Hsi-fan, who is 26, is a research student at the People's University in Peking; his friend Lan Ling, 22, teaches in a Peking high school. In the spring of 1954, they read a new critical essay on the novel written by Yu Ping-po, and found themselves in disagreement with many points in it. This made them turn to his previous works, which they re-examined in the light of Marxist theories of literary criticism. After talking and thinking it over at length, they wrote an article and submitted it to *Wen Shih Che*, an academic journal on literature, history and philosophy which is published by Shantung University.

These two young men differed strongly from Yu Ping-po on the question of the basic concept of the novel, and of his inter-

pretation of the author's motives. They pointed out that the book is a great work of realism, a vivid reflection of the society of eighteenth-century China, not merely an autobiographical mirror. "The emotion that flows from this book," they wrote, "is an absolute repudiation of the life of the feudal aristocrats." They brought sharp criticism to bear upon Yu Ping-po's "art for art's sake" approach, which had led to a consideration of the novel apart from its social and historical background. By studying *The Dream of the Red Chamber* purely as a matter of personal interest, they said, Yu Ping-po had entangled himself in isolated incident and detail and had failed to recognize the social tragedy it portrayed as the problem of a whole era.

A number of people who read the article by Li and Lan recommended that it be reprinted in *Wen Yi Pao* (*The Literary Gazette*), a review published by the China Federation of Literature and Arts. *Wen Yi Pao* did this, but accompanied it with an editorial note to the effect that the writers were "two young men just beginning to study classical literature" whose opinions "are obviously immature".

The country's leading newspaper, *The People's Daily*, sharply criticized *Wen Yi Pao* for this. It condemned its failure to recognize the article as a correct challenge, based on the Marxist viewpoint, to bourgeois ideas concerning China's classical literature. It also took the paper to task for not paying sufficient attention to contributions by young writers. "This is not the attitude of *Wen Yi Pao* alone," it wrote. "Many publications and organizations go after the 'big names' and ignore lesser lights. . . . To them, a handful of writers and critics are 'authorities' above criticism, as if they were always correct. Many people having fresh ideas are unable to make themselves heard."

*Wen Yi Pao* took note of these criticisms and began to examine the whole question. The leading body of the Federation of Literature and Arts called a joint conference with the Union of Chinese Writers; it met in eight sessions early in December. Prominent writers such as Kuo Mo-jo, Mao Tun, Chou Yang, and Feng Hsueh-feng attended and took part. The limitations of Yu Ping-po's approach and method in his *Studies in The Dream of the Red Chamber* were examined and analyzed. Yu Ping-po himself, who continues to hold his important research position in the Department of Literature of Peking University, participated in the debate and recognized the points made as justified.

The conference also passed a resolution condemning *Wen Yi Pao* for regarding its own authority as unchallengeable in matters of literary criticism, arrogantly overlooking much creative work and impeding the healthy development of free discussion. The executives of the two organizations called on *Wen Yi Pao* and other literary publications to get rid of such tendencies and to improve their work.

Kuo Mo-jo, chairman of the Federation of Literature and Arts, summed up the conference with suggestions for the future tasks of literary and artistic criticism. He called for a fight against remnants of the bourgeois outlook, for the extension of free academic discussion, for the promotion of positive criticism, and for encouragement and help for young writers and critics. Even though imperialism has been thrown out of China and the country is moving to socialism, Kuo Mo-jo pointed out, bourgeois ideas have continued to enjoy influence in academic, literary and art circles—this being particularly true of the ideas of Hu Shih, who was promoted as a “big name” in Chinese scholarship for so long with the complete backing of imperialism and the reactionary Kuomintang.

The controversy about China's great classical novel has thus stimulated a far-reaching intellectual movement to sweep away the falsehoods of the past. The Chinese Academy of Sciences (Academia Sinica) and the Union of Chinese Writers have sponsored a series of further discussions, which are still continuing. Conducted on even broader lines, they are subjecting to critical review the whole range of philosophical and political attitudes found underlying work in history, literature and science in the past thirty years. The way is being cleared for really scientific ideas, true to history and the people's interests, to advance unobstructed.



*Yu Cheng-kuo*

**Traditional orchestra, Peking.**

## MUSIC, ANCIENT AND MODERN

IN the last thirty years or so, there has been a strange duality in the Chinese musical world. The few special schools and conservatories that existed taught western music, while China's traditional music was looked down on and remained scattered among the people—in the villages, in little ballad-houses dark with age, in the fingers of itinerant performers who strolled down the streets strumming on the *pipa* or played for hire at weddings and funerals, and within the walled courtyards of scholars' families. The more difficult instruments, such as the ancient seven-stringed lute, or *chin*, had fewer and fewer exponents. A stage concert of Chinese music was unknown. Even the world-renowned Peking opera was not taught in any regular school, but only in the theatres themselves, where the actors took child-apprentices.

The revolutionary movement, however, has long been interested in rescuing and reviving China's musical heritage. Much work along this line was done in the liberated areas during and immediately after the Anti-Japanese War, but it was of course local in scope. In the past seven years it has become nationwide. Research-workers and composers have travelled far and wide, making tape recordings of folk songs and of the work chants of fishermen, boatmen, hunters, blacksmiths and builders. Ritual music, dating back to the days of Confucius, has been re-discovered. Old musical scores, written in Chinese characters, are being deciphered and played.

Musical education has leaped forward. China now has distinguished soloists on western instruments and several good symphony orchestras. Composers have been experimenting in all kinds of styles, forms and combinations. These are works written specially for orchestras using Chinese instruments, or ensembles blending western and Chinese instruments.

## Traditional Chinese Instruments

by LI YUAN-CHING

CHINESE musical instruments have a history of several thousand years. References in ancient writings, specimens excavated by archaeologists and the great variety used by musicians today all testify to the creative genius of the Chinese people in this field. Besides inventing many wind, string and percussion instruments, Chinese musicians at various times have assimilated the music of neighbouring countries, and re-made and developed foreign instruments for their own needs. Such borrowings have not been one-sided. Enriching itself from many sources, the music of old China also influenced that of adjacent lands.

Since the liberation, Chinese musicians and musicologists, under government sponsorship, have been studying the musical legacy of both the majority Han people and the national minorities. It has been established that 3,500 years ago, when China was gradually changing from a primitive communal society to a slave society, many musical instruments were already in existence.

Some instruments, as well as oracle bones on which the names of others were inscribed, have been found on the site of the capital of the Shang dynasty (16th to 11th century B. C.), near Anyang in the present-day Honan province. These substantiate later historical accounts and show that, at that time, many types of musical instruments were played, and musical and dance activities were engaged in on a large scale. Unfortunately, most ancient musical instruments were made of materials that did not preserve well, and have therefore been lost to us. We may assume that instruments made of bamboo or other woods were more popular among the people of those early days than those made of metal, pottery or stone, which have survived.

An example of the latter is the *shih ching*,\* excavated at the ruins of the Shang capital in 1950 by the Chinese Academy of Sciences. It is very well made. Though buried for over 3,000 years, it gives a ringing musical sound when struck.

\*The *shih ching*, or stone chime, is illustrated in the article "New Archaeological Discoveries", by Hsia Nai. See Fig. 1 opposite p. 390.



The *hsun* (Fig. 1) is a very interesting ancient wind instrument. It was made of pottery, with six holes, and could be used to play a simple melody. Survivals of this early instrument may be found even today.

About 1000 B. C., the more advanced areas of China were emerging from a slave society to a feudal society. Following the change in the social system, culture flowered. Theories on the social effect of music were developed. Ritual and music began to be regarded as essential means of establishing and holding together a feudal state. Confucius (551-479 B. C.) was one of the most outstanding thinkers and teachers of the feudal era. An enthusiastic music-lover himself, he was an important promoter of ritual and music, and his teachings on the subject dominated musical aesthetics in later feudal times. From the *Book of Odes*, the collection of poems and ritual songs which he personally edited, we can learn much about the court and popular music of that time.

Many scholars contemporary with Confucius paid special attention to the social effects of music. In their writings they mention the names of over a hundred musical instruments, the rigid system to be followed in court performances, and the classification of musical instruments, with some specifications as to how they are to be made. These authors also show a knowledge of acoustics.

The musical instruments of early Confucian times were the ones that worshippers of the ancients in the later feudal period were most interested in reviving. Because most of the originals were lost, they were painstakingly reconstructed from the books, or simply from imagination, and placed respectfully in court buildings by the officials. Isolated from the people, they did not develop as they might have under other circumstances.

The *pien chung*, or bell-chimes (Fig. 2), *pien ching* or stone-chimes, and *fang hsiang*, which are equivalent to the *glockenspiel* in the modern symphony orchestra, were the largest and most valued percussion instruments in the court orchestras of ancient China. They consisted, respectively, of sixteen bronze bells, stones or pieces of iron of different thicknesses which could produce sixteen notes forming a chromatic scale. They were thus easily modulated.

Recent study has proved that in China, as far back as 2,300 years ago, standard pitch was already known and the twelve notes of the chromatic scale had been identified and named. Though

the Chinese people are noted for their use of the pentatonic scale to create beautiful and intricate music, it is not true as sometimes supposed, that all Chinese music is based on the pentatonic scale. This is proved both by the ancient musical instruments themselves and by our modern folk music.

A harmonic wind instrument peculiar to China is the *sheng* (Fig. 3). Popular in ancient times, it is still often seen and heard today.

The oldest Chinese string instrument that has been found (Fig. 4) is made of wood and dates back to the time of Confucius. It has twenty-three strings, and appears to be the forerunner of the modern *cheng* or *ssu*. There is good reason to believe that our archaeologists, in their future work, will unearth the originals of many other musical instruments described in the old literature.

The dynasties of Han (206 B.C. — A.D. 219) and Tang (A.D. 618-907) were remarkable for extensive communication between China and countries lying to the west of her. In these periods, many musical instruments were brought in from Central Asia and India. Among those which came from Central Asia and was adopted and modified by the Chinese was the *pipa* (Fig. 5), a fretted guitar-like instrument with four silk strings. Improved by Chinese musicians, it has become truly a national instrument still popular today; indeed it is no longer to be found in the countries of its origin.

During the Tang dynasty, visitors from countries to the west of China could be seen everywhere in the capital, Changan (the Sian of today). They enriched the culture of the Chinese people, especially those of the capital, with their music and dances, both secular and religious. The Tang emperor Hsuan Tsung, whose musical talent far exceeded his administrative capacity, founded a college of music in the year A.D. 714. He himself taught there and composed for the court's music and dance troupe. Hsuan Tsung invited many folk artists, as well as many from abroad, to his court. The best of them were selected for further training. In this reign, music and dance in the imperial palace reached new heights, greatly influencing the later development of Chinese music.

According to Chinese historians, many types of music were used in the Tang period. The music for state banquets included that created during the preceding Sui dynasty (A. D. 581-617). Besides this, there was the music of the Turkic peoples of Liang-

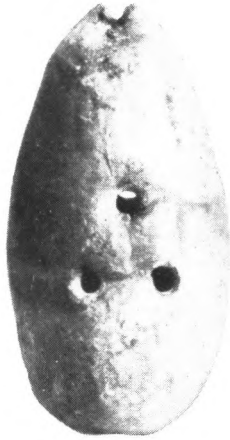


Fig. 1

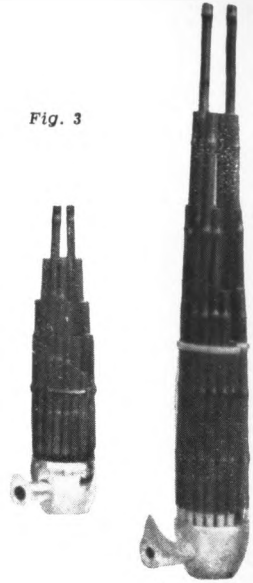


Fig. 3

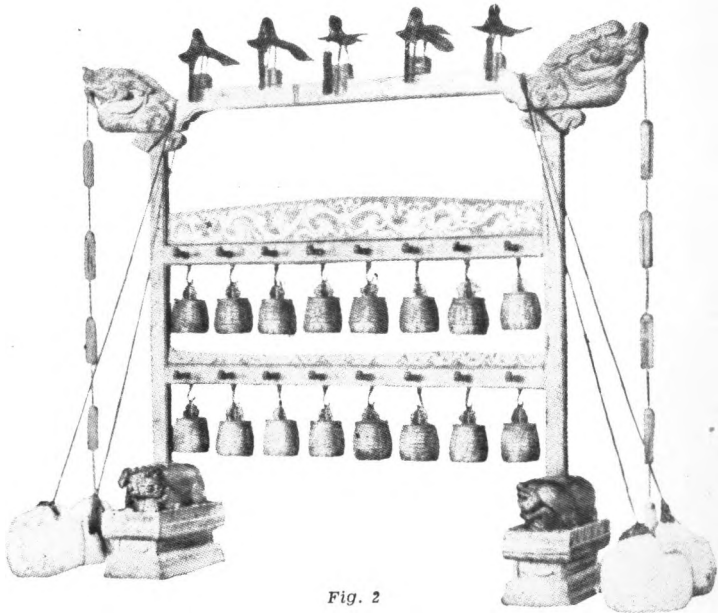


Fig. 2

ANCIENT CHINESE INSTRUMENTS: Fig. 1. The *hsun*, a wind instrument (1066-771 B.C.); Fig. 2, *pien chung*, or bell chimes; Fig. 3, the *sheng*; (continued over)

# MUSIC: ANCIENT AND MODERN



Fig. 7



Fig. 5

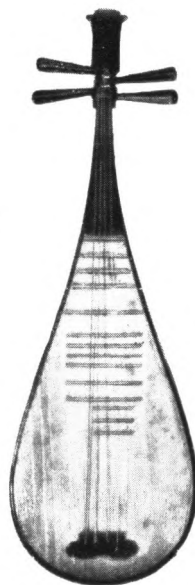


Fig. 6

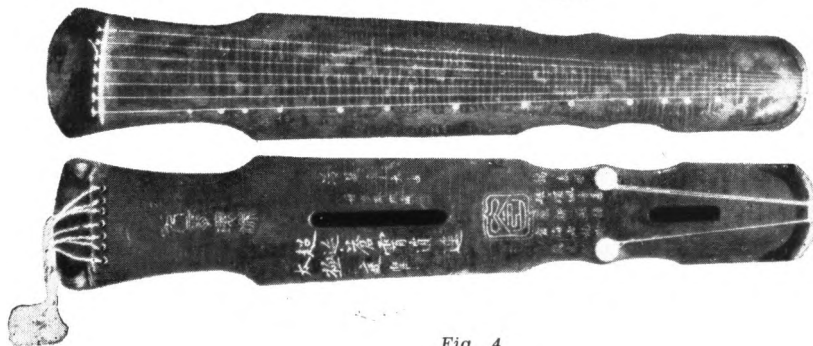
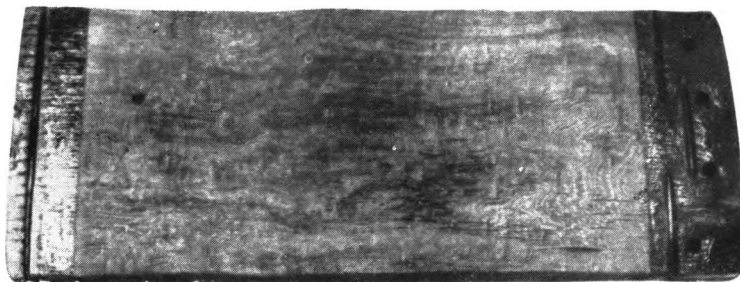


Fig. 4



TRADITIONAL STRINGED INSTRUMENTS: Fig. 4. China's oldest stringed instrument, forerunner of the *cheng* or *ssu* (6th century B.C.); Fig. 5, the *pipa*; Fig. 6, the *chi hsien chin*, or seven-stringed lute; Fig. 7, the *san hsien* (left) and *er hu*, or Chinese fiddle (right).

chow, the modern Wuwei in west Kansu; of Kucha, Khotan and other areas in what is now Sinkiang; of Central Asia to the west, and the Vietnam and Khmer (Cambodian) peoples to the south.

About a century before the founding of the Tang dynasty, the *chi hsien chin* (Fig. 6) had become the favourite musical instrument of our literary men. It appears to be descended from a similar instrument placed horizontally on the knees for playing, as depicted in stone sculptures of the Han dynasty. Some of China's greatest scholars are known to have been performers on the *chin*. A tremendous amount of attention was given to its improvement and development, and over 160 sets of books about it, as well as much specially-written music, have been preserved. The volume of the *chin* is so delicate that it cannot be used as an accompaniment for dances. Some instruments of the Tang dynasty spread to Korea and Japan, where they have survived to our own day.

In China itself, as a result of many wars, most of the ancient instruments and music, so brilliantly developed in the Tang dynasty, had regrettably disappeared in the Ching (Manchu) dynasty (1663-1912). The Ching despots themselves were largely responsible for this great loss through their extreme ideas of reviving only the oldest music, which impeded the improvement of existing instruments. Despite these efforts, however, the growth of operatic drama led to the development of musical instruments used by the accompanying orchestras, such as the flute and stringed instruments like the *san hsien*, a three-stringed unfretted guitar, and the *erh hu*, a kind of two-stringed fiddle (Fig. 7). Percussion instruments such as gongs and drums remained most popular.

During the Ching period, many musical instruments of the various national minorities were brought to Peking, but were only kept as curiosities in the imperial palace. Since they were simply stored there, they had no influence on the music of the people, unlike those that came in during the Tang dynasty.

After the intrusion of foreign influence into China, western musical instruments also appeared in our cities, making steady headway. Used mainly in the schools, they presented a stiff challenge to the national musical instruments, and performers on both began to compete for audiences. This was accompanied by the appearance of two extreme parties. One had the set idea of using only what came from China's own past, rejecting everything from abroad. The other considered Chinese instruments obsolete,

and wanted to use western ones only. It was not until the new movement in music which developed under working-class leadership, particularly during the Anti-Japanese War, that Chinese musicians, combining theoretical study with their actual practice, came to a correct estimation of our national instruments.

Both types of musical instruments were used in propaganda work during the revolutionary wars. Orchestras and bands combining national and western instruments performed in the revolutionary bases. Since liberation, the cities are learning of the music and dances of the national minorities. Their instruments, many of which were previously known only locally, are being produced and sold commercially. From them we are gaining a fuller knowledge of our varied musical heritage.

Today, western instruments are being used more and more widely. But they cannot replace the national musical instruments which are so deeply rooted in the lives of our people. It is also clear, however, that many of the instruments we now have cannot adequately convey the thoughts and emotions of the people in this new age. Hence there has been a sharp demand for their improvement. It is now being met by further developing many instruments, giving them greater volume, standardizing their manufacture in graduated sizes and modifying them so that they can be more adapted for playing in harmony.

This work, when completed, will be of great help to the advance of Chinese music as a whole. It brings closer the time when national instruments will be used in combination with those from the West to sing our new life. It will also contribute toward the interchange of musical experience and culture between China and other countries, enlarging the area of mutual understanding and doing its part toward world peace.

## What Kind of Music for China?

by HO LU-TING

THE ITEMS that received the greatest attention at the four-week Music Festival in Peking last summer were the traditional tunes played on Chinese instruments, and songs and local-style opera arias performed by folk-singers from different regions. New works—choral, instrumental and orchestral—also occupied a considerable part of the programmes. But our ancient heritage, as the Festival showed, is still the best aspect of China's musical culture. Musicians all agree that it must be preserved and enriched. A more controversial problem, however, and one of quite long standing, is how to set about creating a new national music, expressive of the spirit and sentiment of modern China.

Now it is my opinion that a national music, like a nation itself, is formed over a long period of history—and that it is not formed in isolation. Musicians of various European countries, in the past three or four hundred years, influenced one another to such an extent that terms like the baroque period, the rococo, the classical, or the romantic can be applied to western music as a whole. But did this have the effect of submerging national characteristics? On the contrary, it produced in the nineteenth century such unmistakably national composers as Grieg, Chopin, Debussy, Smetana, Dvorak and Russia's "Big Five".

In China too, one of the great flowerings of music occurred in a period when musical culture was being assimilated from abroad, from India and Central Asia, during the Sui (A.D. 581-618) and Tang (A.D. 618-907) dynasties. Professor Yang Ying-liu wrote in his *Outline History of Chinese Music*: "The secular music of the Tang people was a kind of creative combination of pure Chinese and *hu* (foreign) music."

As for folk songs and local operas, their different styles are closely related to the speech, customs, natural surroundings and social life of the respective regions. But these operas did not take shape in isolation either; they too were affected by external influences. When an outside form first clashes with a local one,

some kind of incongruity is inevitable, and immature works result. After a time, however, the outside influence is assimilated and becomes part of the main stream.

Among our musical instruments, for instance, we now regard the *hu chin* (two-stringed fiddle), the *pipa* (a fretted guitar-like instrument) and the *sona* (a horn) as Chinese. But all three originally came from what were then the foreign countries of the "Western Regions" (now Kansu and Sinkiang), and still retain their foreign names.

In Europe, from the seventeenth century onwards, there was a great vitality in the arts and sciences as the various countries moved away from feudalism and modern society arose. But China, under the rule of the Ching dynasty (1644-1911), experienced no basic social change and remained stubbornly aloof from outside contacts. One result was that her musical culture stagnated until after the turn of the present century, when western influences began to impinge on it.

That clash, when it came, was a sudden one, and Chinese music entered a very chaotic period. On the one hand there was the deep ocean of our musical heritage—consisting mainly of folk song, local opera and narrative ballads, along with the traditional orchestral and instrumental music. On the other hand there was modern European music, an idiom entirely new to the Chinese people, both in its formal aims and its technique of composition. The collision of these two widely-differing forms produced conflict and argument that has been going on ever since. And the recent Music Festival again debated the old issues: between "foreign" and "domestic"; between "scientific" and "backward." This debate continues. Professional and amateur musicians, ordinary music-lovers, all are taking part in it.

Nobody has been heard actually to deny that China's traditional music has any artistic value. But it is looked down on and regarded as backward by some people, who are accustomed to the western musical tradition only. Others, on the contrary, take a narrow national view and repudiate anything western. In the discussions at the Music Festival, I heard this opinion: "The leading musical authorities these days are all trained in the western way; they talk about creating a national music but there is danger that they may strangle traditional music under the slogan of enriching it with western elements." And some people asked



jealously: "What percentage of the music played at the Festival was western, and what percentage national?"

What do such people mean by "national"? To their ears, only songs sung in the folk style and music played on traditional instruments was national; everything else seemed western. Therefore they reached the conclusion that western music dominated the Festival. But were not all the works performed there written by Chinese composers? We have far too few musical theorists and highly-trained composers, so perhaps some of the works were immature. Nonetheless, they certainly represented a genuine attempt at modern national style.

Groups of musicians have been travelling round the country, going into the villages and into national minority areas. They have collected songs and musical scores, written down tunes and lyrics, made tape recordings, and interviewed traditional ballad-singers and local musicians. Much of the material they gathered was subsequently arranged for concert performance, and some of the adaptations have been very popular with music lovers both at home and abroad.

But success in this direction is still comparatively rare. On the whole, as the Music Festival revealed, folk songs often lose much of their original flavour and feeling after professional musicians have gone to work on them. Why? I think it is because we have been taking these matters too lightly. The arranger must have a thorough understanding of the nature and style of every single folk song he tackles, of its pattern of development and its relation to the people among whom it is sung. Otherwise he cannot avoid damaging its integrity or spoiling the original style. To be able to write pretty accompaniments is not enough; a musician must also know what folk song is and how it is born.

European music underwent a long process of development, from folk song and religious music to such complex forms as grand opera, chamber music and the symphony. A great body of theory was built up through the study and analysis of the works of great composers. The simple musical instruments of the people went through a series of improvements to become modern string, wind and percussion instruments with their rich variations in tone, colour, volume and quality.

In China, during her prolonged social and economic stagnation, the arts and sciences were retarded. That is why, even though we have an incomparably rich heritage of traditional music and a

living, vital folk-art, we have not yet produced composers of the calibre of Mozart, Beethoven, Tchaikovsky or Chopin. We still have no body of musical theory, and no stable, organized educational system for training composers and musicians. Even our system of notation is inaccurate.

As for musical instruments, they have a rich variation in timbre, but most still retain their primitive forms and have not been perfected over a long period by master-craftsmen like those of the West. The majority have no fixed pitch and their compass is narrow. We possess no bass instruments like the 'cello and the double-bass. In these respects we are behind the West. If we refuse to learn from it, we shall be the losers.

Those of our musicians who have a fair grip on western composition know very little about traditional music, and often do not have enough feeling for the new life. The result is that their work lacks spontaneity. Those who know traditional music well, on the other hand, are ignorant of western technique, so find it hard to compose good modern works. There are still others, one must say, who know a little of each and produce a mixture of both. But when you pour two half-bottles of vinegar into one bottle, it's still a bottle of vinegar. How can you blame people for calling this sort of music "neither Chinese nor western", or "a sort of conglomerate"? Still, it must be admitted that it is impossible to train large numbers of composers overnight. So we have to study and experiment at the same time.

To create a modern national music, I think, we should study western technique and apply it to traditional Chinese music. We can certainly adopt the western system of notation. And since any traditional Chinese music can be played on western instruments, we can use them all. We should also study their essential characteristics so as to improve our own instruments.

In such things as harmony and counterpoint, Chinese and western music have the same basic principles. But only we ourselves can devise our own national style and enrich the texture of our music.

In relation to form, we can also recognize the same general principle in the two traditions. For instance, the sequence of movements in a Chinese musical work—"the introduction, the elucidation of the theme, the change to a fresh viewpoint, and the summing up"—is essentially the same as the western three-part song form (AABA). But the western form has gone on from there

to more complex manifestations, such as the fugue and the sonata. We can compose traditional-style music in these forms. Some of our musicians have already attempted it.

When I say we should study western techniques, I do not mean that we should imitate them or refashion Chinese music to make it accord with western models. I think a knowledge of western technique, theory and experiences should help us to seek out our own pattern of development, and to build up the necessary theories so that we can create forms suitable to our purposes. Such a new national music, composed according to a new technique and played on improved Chinese instruments, will be different from the traditional music played on the old instruments. But it will still be national in form, and intensely Chinese.

During the period when the Chinese people were fighting for their freedom we needed songs that would encourage and inspire. The traditional Chinese melodies, we must remember, were not adequate for this situation. Except for a few north Shensi ballads, our folk songs generally lacked a fighting spirit and rhythm. A whole range of new, fighting, patriotic songs came into existence during the Anti-Japanese War, most of them in march-time, with a strong western influence in their melodies. Among them was Nieh Erh's *March of the Volunteers*, now China's national anthem, and Hsien Hsing-hai's famous *Yellow River Cantata*, written in a modern choral form. It is difficult to imagine that if either of these composers had stuck entirely to traditional forms and melodies their work would have been so stirring, so apt for its time, so right for the people.

Now, as our country moves into a new historical period, we must create songs for our own generation, with new elements that broaden the scope of our traditional music rather than detract from it.

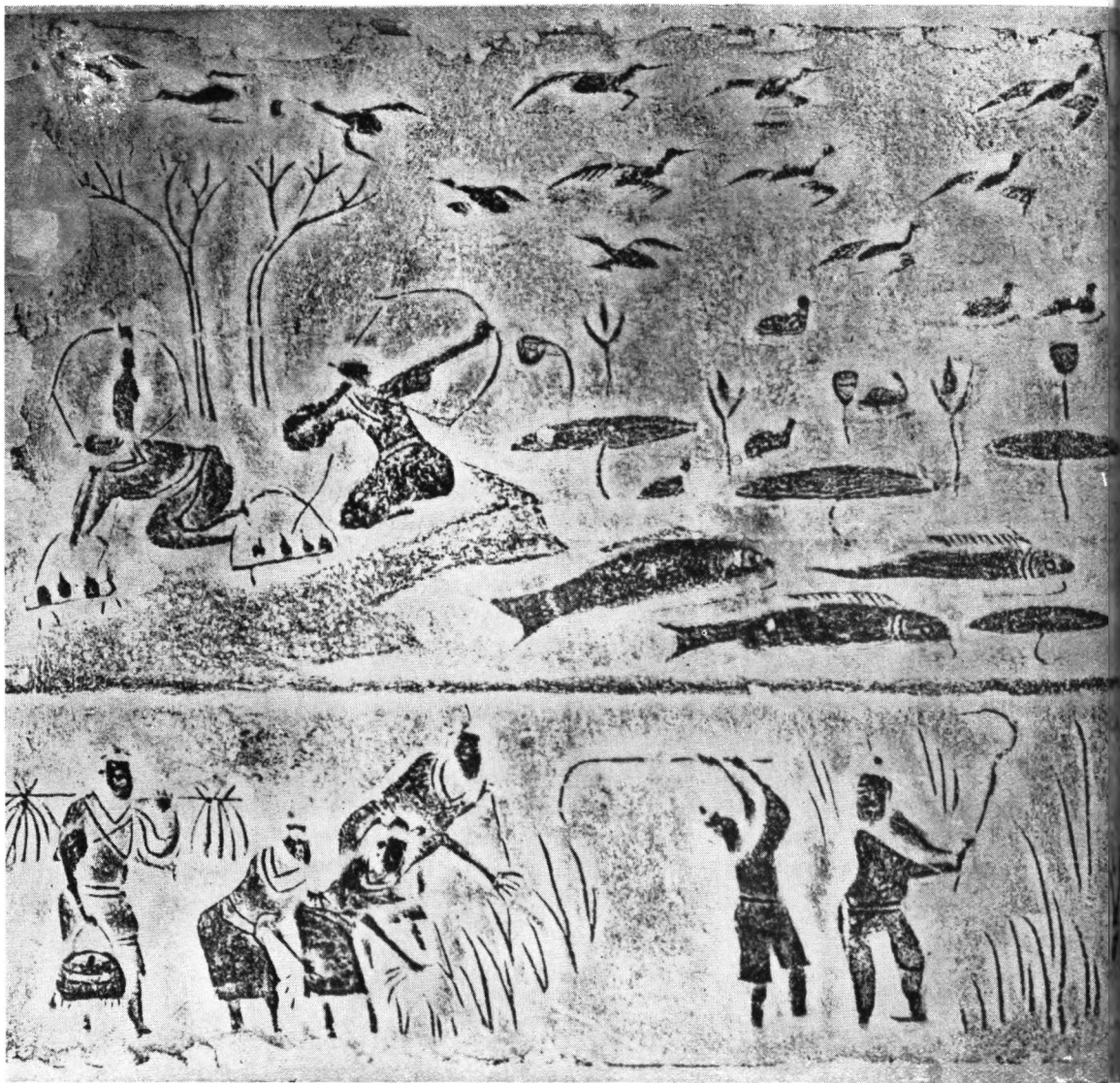
Argument has also arisen as to whether more stress should be put on the development of the traditional orchestra or the symphony orchestra. Some people are for "coexistence", but hold that the traditional orchestra should receive the main emphasis. I agree that we must give special attention to organizing and training more traditional orchestras, because this will help to spread understanding of music and delight in its performance. Traditional instruments are simple in structure, easy to master, and inexpensive to buy. Factories, farms and schools can all afford to have them. So I think our composers should write more works

for such orchestras, and that the Ministry of Light Industry should get some experts to study how to improve the traditional instruments, standardize their pitch and so on.

Having said this, I still consider that the symphony orchestra should be the main point of emphasis in forming China's new musical culture. What we call "western" musical instruments have been developed to a very high degree of perfection by musicians and craftsmen in the different countries. The potentialities of a symphony orchestra are far greater than those of the Chinese traditional orchestra. A symphonic ensemble can play both western and Chinese works, and give the latter a richer tone and colour than ever before.

China has an astonishingly rich variety of local opera styles. It is neither a simple process nor a short one for each such style to be formed and perfected. Why then do our musicians often look down on the folk artists? It may be because many of the latter cannot read music and have had little general education. But it is necessary to remember that the folk-musicians have attained their artistry after long years of arduous training, and the music they perform is the fruit of hundreds or even thousands of years of tradition. Local operas are a composite art. Our musicians, most of whom are trained in the western tradition, must themselves learn the elements of Chinese literature, drama, dancing, art and history—as well as Chinese traditional music—before they can take an effective part in adapting or improving local operas.

As for the folk artists, all the educational opportunities they used to lack are now open to them. They should therefore study modern music, or at least learn to read it, so they can work with the composers to collect and edit our rich musical heritage.



Hunting and farming, East Han dynasty (A.D. 25-220) brick-carving.

## DIGGING INTO THE PAST

**W**ORKERS building a railway through Szechuan province thought they were digging for construction for the future. They uncovered valuable finds of pottery and jewelry over 2,000 years old. Such has been the case in many parts of China, whose soil, especially in the great river valleys that cradled her early civilization, is packed with layer upon layer of relics of successive human cultures. Between 1949 and 1956, over 200,000 important objects of archaeological and palaeontological interest have been unearthed in various places, both during work on new dams, railways and factories, and through systematic archaeological excavations.

In addition to further finds at Choukoutien, where Peking Man lived 500,000 years ago, human fossils of the Early Stone Age have been excavated in North, Southwest and South China. More than 300 sites of the Neolithic period have come to light—some as far away as Sinkiang in the west, Hainan Island off the south coast, Inner Mongolia to the north and Kirin province in the northeast. Their wide distribution disproves previous ideas that prehistoric societies in China were more localized.

The life of early historic times has been further illumined by the unearthing of workshops for making bone artifacts or casting bronze vessels dating from the Shang (Yin) period (17th to 12th centuries B.C.). Large groups of bronzes of the Chou period (12th to 5th centuries B.C.) have been found in the northwest, and iron tools and vehicles from the period of the Warring States (403-221 B.C.) in many parts of the country. A vast number of tombs dating from the Han dynasty (206 B.C.-A.D. 220) have been excavated. They include a whole Han city now being unearthed at Loyang, Honan province, revealing city walls, houses, granaries, wells, roads and aqueducts, and a Han village at Liaoyang in the northeast.

These treasures are of value not only for the light they shed on Chinese history, but also as source material for the study of ancient farming and manufacturing techniques.

## New Archaeological Discoveries

by HSIA NAI

SINCE the Institute of Archaeology was set up in 1950, Chinese Sarchaeologists have achieved outstanding results.

In 1950, excavation work was begun once more at Anyang (Honan province), capital of the Yin dynasty (c. 1700-1200 B.C.). Chinese archaeologists had begun work there in 1928 and continued it until the Japanese invasion of 1937, obtaining a mass of extremely important material.

The resumption of activity in 1950 resulted in the uncovering of a further portion of the royal cemetery first found in 1934. A large tomb and 17 sacrificial pits were brought to light. The tomb had a burial-pit 26 feet long, 39 feet wide and 26 feet deep, with two sloping passages opening out from its north and south walls. Interred in it, together with the dead, were ceremonial vessels of bronze, stone and pottery; bronze weapons and bridle fittings; stone, jade and bone ornaments.

Among the finds was a stone chime of grey limestone which is in perfectly preserved condition and gives out a clear, ringing note when struck (see *Fig. 1* opposite *P. 390*). A conventional tiger, beautifully engraved, decorates its face.

The neighbouring sacrificial pits contained decapitated human skeletons. These pits were dug in orderly rows, but the skeletons, usually numbering ten to each pit, were found in contorted attitudes, crowded together. Sacrificed men (some decapitated), dogs and horses were also found in the burial-chamber and passage-ways of the large tomb.

In another cemetery at Anyang, archaeological workers found 17 more graves, much smaller in size, generally containing grave-furnishings such as pottery, bronze vessels and weapons, and personal ornaments. The same site revealed some ruins of the dwellings of the common folk of Anyang in the Yin period, with large numbers of earthenware, stone and shell utensils in daily use among the poor. Here an ox scapula with an inscription of 16 characters was unexpectedly recovered. This find seems to

indicate that the secret of writing had begun to leak down to the ordinary people of the time.

An exhibition of relics from the Anyang excavations was opened to the public in Peking in August 1951, and is still on display. More than half a million people have already visited it, showing eager interest in the specimens displayed as well as in the diagrams, maps and imaginative reconstructions of Yin society. Such broad interest in archaeology is unprecedented in China. It is a source of encouragement and inspiration to our scientific workers.

In the autumn of 1950, the Institute of Archaeology undertook the field training of research students on a more or less systematic basis for the first time. Hueih sien, in Honan province, north of the Yellow River and about 50 miles southwest of Anyang, was chosen because of the known richness of its sites. Excavations were carried on at Liuliko and Kuweitsun, both east of the town.

This too produced excellent results. Until 1950, almost nothing was known of material remains of the Yin dynasty outside the Anyang region, but at Liuliko several dwelling sites and a cemetery used by the common people of the period were found. Dwelling or storage pits were excavated, filled with ash and earth mixed with objects of daily use. One, almost 38 feet deep, reached down to the present underground water-level. The potsherds, stone and bone implements and uninscribed oracle bones were of the same kind as those found on the typical Yin site at Anyang.

Altogether, 16 Yin tombs were uncovered here in the 1950 expedition and 42 more in 1951. Most of them belonged to the common people and contained a few simple bronze and pottery vessels, as well as stone or bronze weapons. Rich graves belonging to slave-owners were few, and their contents had been plundered by tomb-robbers. These diggings provided complementary data to archaeological materials from the Anyang region and enlarged our understanding of the society of ancient China, based on the slave system.

The Liuliko cemetery evidently fell into disuse for a long period, but was used again during the period of the Warring States (c. 450-200 B.C.). By that time, Chinese society had passed from slavery to feudalism. Local princes, many of whom had arisen in various parts of China, were interred in deep pits with great pomp and magnificence. Unfortunately, most of the princely tombs had



been violated. Near one of them, 19 chariots and their horses were buried in a large pit (*Fig. 2*). The wood of which the chariots were made had decayed and perished a long time ago. Careful digging, however, revealed their outlines in discolourations which had resulted from the replacement of timber by soil. Several of the chariots were reconstructed from data given in the field records. This discovery is of great significance for the study of the means of land communication in ancient China.

The site near Kuweitsun was a mound that once covered over 7,000 square yards. In the centre of this mound were three large, square tomb-pits, each 53 feet deep and measuring 56 to 62 feet in diameter at the mouth. Up to 400 labourers at one time worked on their excavation, with such enthusiasm that the whole huge job was finished in a single season. At the bottom of each pit was a wooden structure containing coffins and grave-furnishings. All three had been plundered more than once, but enough evidence remained to show that the chambers and coffins had once been crammed with precious objects.

The remaining contents included large numbers of real and bone cowrie-shells, fragments of gold and jade ornaments, vessels of bronze and pottery. A bronze horse-head, once fixed to the end of a chariot pole, was also found. It is a masterpiece of metal-work, finely modelled and beautifully inlaid with gold and silver in scroll patterns (*Fig. 3*). A shallow pit at a corner of the western tomb yielded hundreds of jade objects and a number of glass beads. A gilt-bronze belt-hook, inlaid with jade discs, was found in a tomb of medium size. It had probably belonged to a courtier or junior member of the royal family. Its exquisite execution testifies to the high skill of metal-workers at that time.

The contents of tombs of the third century B.C. at Hueih sien included many iron tools: axes, adzes, picks, spades and ploughshares. These were probably used in digging the pits, indicating that iron had already become a cheap and common metal and was being worked into efficient production tools.

In the spring of 1951, the Institute of Archaeology sent two exploratory parties to Honan and Shensi provinces to trace prehistoric remains along the valleys of the Wei and Yellow rivers. The Honan party visited 15 prehistoric sites south of the Yellow River, between Chengchow and Minchih. Trial excavations were conducted at three of them—including the famous type-site at Yangshao village, while surface-finds were collected at the others. The

data secured by this expedition indicated that a mixed culture, containing elements of both the Yangshao and Lungshan cultures, existed in several places. All three cultures represent material remains of the creative activity of the Chiense people during the late neolithic period.

The Shensi party explored nine prehistoric sites around Sian. The earliest remains they found belong to a neolithic culture of plain red pottery, sometimes mixed with painted red pottery more or less akin to that of Yangshao. A later neolithic culture produced implements of stone and bone and a large amount of pottery, such as cord-impressed *li* tripods with a handle, and vessels with basket-impressions. These were found in an intermediate stratum between the painted-pottery layer and remains of the early Chou dynasty, dating from about the end of the second millennium B.C.

Generally speaking, the new prehistoric discoveries disprove the theory, favoured by foreign archaeologists, that Chinese civilization was not indigenous but imported. They correct the undue emphasis given by these archaeologists to certain similarities between the painted pottery of the Chinese neolithic culture and that of the west. The stress is now back where it belongs—on the active elements and internal development of the ancient Chinese culture.

Two imperial-family tombs of the later Ming dynasty, brought to light in the course of building activity in the suburbs of Peking, were excavated by the Institute in 1951. Funeral steles found in the tombs testify that they contain the remains of royal concubines of the Emperor Wan Li (1563-1620) and his grandson Emperor Tien Chi (1604-1627). Both tombs were marked with mounds above the ground. The hypogea (underground buildings) were of brick, consisting of two vaulted chambers. One of the tombs was roofed with glazed tiles. The antechamber was used as a storehouse for funeral furnishings and also as an offering-hall. In one, a stone throne was placed on each side of the door leading to the main chamber, with an altar set before each.

Although tomb-robbers had taken away most grave furnishings of any pecuniary value, three coffins were found intact. The bodies were dressed in embroidered garments with gold and jade belt-clasps, and wore gold bracelets and earrings. Headdresses carried elaborate ornaments in granulation and filigree-work, inlaid with precious stones and pearls. A silver basin, bronze

mirrors, wooden combs, cosmetic boxes and sycee (boatshaped silver ingots) were inside each coffin.

In the antechamber of this tomb were a series of wooden figurines representing civil officers, army generals, eunuchs and servants deputed to serve the dead in the next world. Glazed pottery and porcelain vases, fine white ware with floral designs painted or carved before glazing, were also found.

The splendour of the funeral furnishings, especially the jewelry, bears witness to the greatness of Chinese craftsmanship in the later sixteenth and early seventeenth centuries. It also reminds us of the luxurious and idle life of the heads of the ruling class, based on the exploitation of the toilers.

In the suburbs of Nanking, two royal tombs of the period of the Five Dynasties (A.D. 907-960) were excavated by the National Nanking Museum in 1950-51. These magnificent mausoleums of local rulers of the southern Tang kingdom had been violated, probably within a few years of burial, when the kingdom was conquered by the Sung dynasty. In recent years, they had been violated again.

Each tomb was covered with a large tumulus. Both were constructed of brick, but the bigger one had an inner main chamber of stone. Each contained no less than three main chambers which were built on the same axis. Small subordinate chambers were systematically arranged on each side. All were faithful imitations of wooden architecture with its characteristic pillars, architraves, beams and brackets, painted with coloured designs. The ceilings and walls were also painted in brilliant red, green and blue. In the tomb with the stone chamber, the walls at each side of the door to the inner chamber were carved with a figure of a vigorous warrior, painted in various colours. Intended as princely abodes for the dead in the next world, these tombs are outstanding works of architecture.

Few of the funeral objects in these tombs have survived. Among those found were pottery figurines of civil officials, warriors, ladies-in-waiting and dancers. Pottery figures of animals were discovered, while the porcelains (white and celadon ware) were almost undistinguishable from those of the Sung dynasty. Also present were fragments of jade slips, on which the funeral eulogy was inscribed in gold-leaf inlay.

Changsha, capital of Hunan province, was the seat of local rulers from the end of the third century B.C. to the beginning of

the present era. A large number of ancient tombs was discovered here in 1936-37, when the finds were gathered by local people and sold to antique dealers, both Chinese and foreign. In 1951, when large areas in the suburbs were laid out anew in accordance with the post-liberation plan of municipal construction, the Institute of Archaeology was put in charge of excavation work in order to salvage all archaeological material of value.

A total of 162 graves dating from the fourth century B.C. to the present era were uncovered on four sites east and north of the city. They can be divided into two main groups: those belonging to the period of the Warring States and those of the West Han dynasty. Interspersed among them were some graves which perhaps belonged to the short Chin dynasty period.

Tombs of the earlier group had vertical shafts 26 to 30 ft. deep. Some had wooden chambers at the bottom, which had survived almost intact under water and were surrounded on all sides by a layer of white preservative clay. Wooden coffins were placed at the centre of each chamber, while the space between the coffin and the chamber-walls was crammed with funeral furnishings. Inside the coffin, discs of jade, stone or glass were usually placed near the head and sometimes the feet of the body, which occasionally lay on a wooden board carved with a fine open-work scroll pattern. The funeral deposits consisted of wood sculptures, lacquer objects, weapons, and bronze and pottery vessels.

The wooden figures are remarkably well preserved. Facial features and details of the clothing are carefully indicated, affording important archaeological evidence on the inhabitants of the Chu kingdom of the fourth or third century, B.C. (*Fig. 4*). The pottery is of grey earthenware covered with black slip. Bronze mirrors found in the grave are very thin, have a tiny fluted loop at the back, and are very gracefully ornamented. Silk ribbons and cloth were also found in well-preserved condition. Of special interest were some bamboo slips inscribed with archaic characters, the earliest specimens of inscribed bamboo slips so far discovered.

The tombs of the ruling class of the West Han dynasty (second and first centuries B.C.) were larger and richer. The average size of tomb-shafts was about 8 to 11½ ft. wide and 16½ ft. long. They were shallower than those of the Chu tombs, averaging about 10 feet in depth, and were surmounted by large mounds. Two princely tombs, however, were found at respective depths of 30

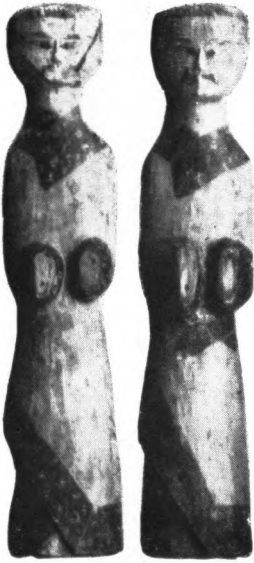
ft. and 16½ ft. One measured 69 by 43 ft., the other 38 by 14½ ft. The wooden chambers at the bottom of the shafts were not as well preserved as those of the earlier period. Each consisted of two parts, a main chamber intended chiefly for the coffin with some funeral objects, and a forepart consisting of two magazines for funeral deposits. Other tombs of this period had also probably been lined with timber, but the wooden structures left no traces except square post-holes and parallel furrows on the tomb-shaft floors.

While both the royal tombs had been violated several times, the surviving furnishings gave an impression of great wealth. Other tombs, probably of nobles and high officials, also yielded funeral deposits richer than those of the earlier period. Bun-shaped gold ingots, each weighing 8.8 ounces (equal to a catty in the Han system), were buried with the dead along with *wu-shu* coins. Long iron swords, some provided with jade guards and jade belt-clips, had superseded the bronze short swords of the earlier period. The bronze mirrors had a large central boss at the back and a new type of decoration. A bronze cauldron was inscribed with a date equivalent to 49 B.C. New forms of pottery in the grave included incense burners and miniature stoves. Porcelainous stoneware, very hard and covered with a pale brownish glaze, appeared for the first time. Wooden slips with inscriptions were also found in the royal tombs. Found likewise were lacquer objects, jade amulets, soapstone discs and vessels, and wood sculptures.

Of special interest were the wooden models of a boat and several chariots. The boat was 4 ft. 3 in. in length, with a cabin, 16 oars and a long helm for steering. The chariot had two wheels with 16 spokes each, and two poles to which the yoke was bound.

The corroding soil of Changsha is unfavourable for the preservation of skeletons, which have disappeared completely from all tombs except two. But the wood, lacquer and textiles were preserved wonderfully in waterlogged conditions. This expedition, which made the first scientific excavations in South China, has contributed greatly to our understanding of the development of the artistic genius of the Chinese people.

Archaeological discoveries made in the course of construction have been reported from many parts of China. We are still far, however, from meeting the demands of the people on archaeologi-



*Fig. 4*

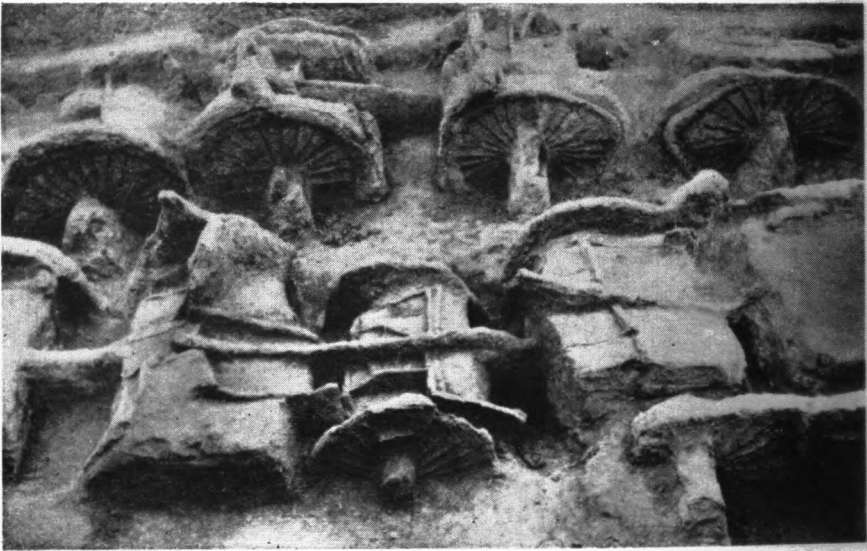


*Fig. 3*



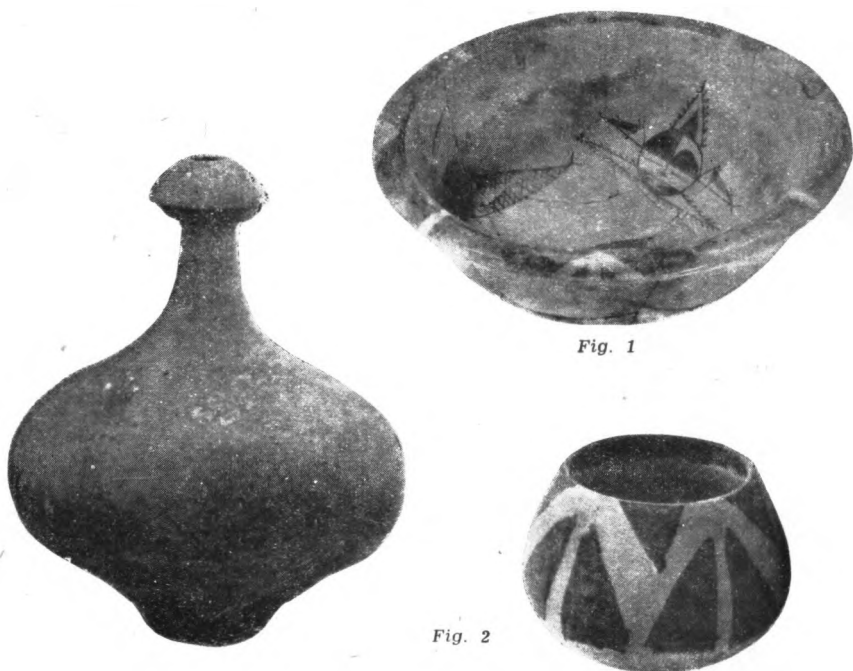
*Fig. 1*

*Fig. 2 (below)*



FROM RECENT EXCAVATIONS: *Fig. 1.* Musical stone of the Yin dynasty (17th to 12th centuries B.C.); *Fig. 2 and 3,* chariots and bronze ornament from a chariot-pole from the Warring States period (403-221 B.C.); *Fig. 4,* wooden tomb figures (4th or 3rd century B.C.).

DIGGING INTO THE PAST



FROM THE YANGSHAO VILLAGE AT PAN PO: Above, the largest rectangular house; Fig. 1, pottery basin with face and fish design; Fig. 2, commonly-used vessels. (See "A Neolithic Village" on page 391.)

cal science. A large number of young men and women must yet be recruited and trained in new methods which link theoretical study with practical field work.

The successes of the past two years are thus only the first fruits of the struggle for more serious and scientific study of China's ancient past.

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MAY 1956

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## A Neolithic Village

*by HSIA NAI*

THE PRACTICE of keeping in close contact with the constantly increasing number of industrial construction sites, now standard among China's archaeological organizations, has yielded new and important finds. Among the most exciting is the discovery of a complete neolithic village at Pan Po, east of Sian in Shensi province, during the building of some factories there. Pan Po is one of the two or three hundred neolithic sites located since 1949. Largest and best-preserved of those already excavated, it gives the fullest picture so far available of the life of neolithic man in China.

Preliminary investigations, begun by local archaeologists in October 1953, revealed that the settlement belonged to the Yangshao painted-pottery culture (named after the place in Honan province where it was first discovered). Important detailed results were obtained in 1954-55, when work was continued by a team sent by the Institute of Archaeology of the Chinese Academy of Sciences, assisted by museum personnel and by university students who were receiving special training during the work. Much excavation still remains to be done. But the additions made to our knowledge of the people of the Yangshao culture are already impressive. It may also help us to assign a proper date to the Yangshao culture, hitherto supposed to have flourished around the second



half of the third millenium B.C. But that was only a guess. Now we hope to establish the absolute chronology by applying to charcoal found in the village the new dating method using Carbon 14.

For the first time, we can see how the Yangshao people built their houses. The discovery of remains of millet in a covered pot proves that they cultivated that grain, which is still the staple in the area. We had examples of their pottery before; now we can examine the kilns in which it was made. The pottery itself, it turns out, carried designs depicting human faces and fish, as well as the previously familiar geometrical patterns. We have also acquired more information on burial customs.

We may conclude that the people of that time lived a settled communal life. Besides farming, their main occupation, they engaged in hunting, fishing and the gathering of wild food. Their chief working tools were stone objects made by the polishing or flaking technique. Pottery was used for cooking and storage. Skills and arts were at a fairly high level. One large rectangular house (described later) was apparently the communal house of the clan. Tombs and kilns, as well as dwellings, were arranged in a definite way. From such evidence, we infer that the Yangshao people of the Shensi-Kansu area engaged in collective labour and had a fairly developed social life.

Previously discovered Yangshao culture sites were located in Honan and Kansu. This is the first one in Shensi, which lies between these two provinces. It thus helps to establish the relationship between older finds.

Internationally, the Yangshao ceramics show similarities with those of the somewhat later Tripolye culture in the Ukraine (c. 1900-1400 B.C.), which also showed the early use of bronze, and the earlier painted pottery cultures of Iraq and Iran. But, having its own original style, it is not derivative.

The village at Pan Po, covering an area of about 2.5 acres, is located on the right bank of the Chan River. Abundant water and fertile yellow loess earth gave the ancient settlers good conditions for agriculture. They did not suffer the need of shifting from place to place due to soil exhaustion by primitive methods of cultivation. Hence the cultural deposits, accumulated to a depth of three metres in some places, give evidence of long-continued occupation. The best-preserved section of the village consists of four distinct layers of houses and other structural remains of the Yangshao culture.

The circular shape of the huts at the lower levels suggests that these people copied, in their permanent houses, the temporary shelters or tents used earlier. The huts were small, about 5 metres in diameter, with wattle and daub walls. In one that is rather well-preserved, the roof had been crushed in. Its debris, consisting of a wooden beam and a layer of burnt clay with reed impressions, were found on the floor. Around it the broken clay walls, 5 to 10 cm. thick, were still standing to a height averaging 22 cm. (in one place 38 cm.). Post-holes showed the position of wooden upright supports. The floor and the inner surface of the walls were finished with a thin coat of plaster. In the centre of the house was a pear-shaped oven, on either side of which were six pillar-holes systematically arranged in pairs. The door was at the south side. The porch or covered entrance, 70 cm. wide, was separated by partition walls from the main room.

Side by side with the circular huts were rectangular or square houses with rounded corners. They too were porched, opened on the south and had plaster-finished floors and walls. Measuring 4 to 5 metres on each side, they were usually half-subterranean, sunk about a metre below the original ground-level. Stairways, one of them with four steps, descended from the porch to the house. The main rooms contained the debris of ovens and pots. Near the middle of each main room, a big post-hole showed there had been a single supporting pillar.

Sometimes several houses had been superimposed, due to renewal of buildings. Some were over ground, with clay walls baked by fire. One had twelve upright pillars 15 to 22 cm. in diameter, arranged in three rows of four, serving as supports for the roof and a framework for wooden planking. This house had five superimposed layers of floor, seemingly baked by fires, and was divided into two rooms by a partition wall from west to east.

The biggest building was rectangular and measured 12.5 metres from north to south. The east-west measurements are hard to gauge, since the western part has disappeared. But assuming that the pillars were at the centre of the room, they may have reached 20 metres. The clay wall is a metre thick. Part of the floor of this house was destroyed when a tomb was dug through it in the Tang dynasty.

It was in a small pit under the original ground level that the excavators found the covered pot of grain, which the Hopei Agricultural Institute later identified as millet. There were storage pits,

usually in the shape of a rounded pocket larger at the base than at the mouth, near every house. They were about a metre in diameter and a metre in depth.

Over 40 burial-jars containing the remains of small children were found among the houses. The jars were usually flat-bottomed, large-mouthed pots. They were made of coarse ware and, in most cases, purposely perforated with a small hole at the bottom. A small basin or bowl of fine red pottery was the usual cover. Some of these jars were grouped in small cemeteries.

In a separate cemetery for adults, to the north and northeast of the settlement, 130 tombs have already been cleared. The rectangular tomb pits, some two metres deep, were arranged in rows. Typically, they contained a single corpse in extended position (in contrast to the contracted or flexed position of burial among the Yangshao people of Kansu). Five or six pieces of pottery were generally placed near the legs or feet of the dead. They normally included coarse jars, fine bowls, and small-mouthed bottles with pointed bottoms. Painted vases with high necks and fine pots covered with fingernail impressions were found occasionally. In one tomb, the corpse was encircled at the waist by a string of 63 disc-beads made of bone. There was an ear-pendant of green stone near the left ear.

The painted pottery of the Yangshao people has long been celebrated. Six kilns in which it was made were found in the eastern part of the village. The upper parts of the kilns, including the baking chambers and chimneys, had been largely destroyed. Nonetheless, it was possible to see that the kilns were of two types, each with a different design of the firing chamber or furnace.

In a specimen of the first type, the furnace was a pocket-shaped pit. An aperture on the south side served for feeding fuel and withdrawing ashes (a lot of wood ash lay near it). A part of the perforated floor of the baking chamber had survived, the perforations being 15 cm. in diameter and 30 cm. in length. The flame from the furnace came directly upward into this chamber through flues in the floor. The greenish tinge of the furnace-wall, and its extreme hardness, showed the high temperatures used in firing. The furnace was 1.3 metres in height and 1.9 metres in diameter at the bottom.

Most of the kilns so far excavated are of the second type. Here the furnace is a cylindrical tunnel, placed almost horizontally.

The distance between the aperture of the furnace and the base of the baking chamber is over 2.1 metres. The flame came laterally through the tunnel, then passed upward into the baking chamber through the air-ducts and holes. The baking-chamber floor was 85 cm. in diameter, perforated by 10 small rectangular apertures around the periphery. Underneath it were three air-ducts. Several unbaked pots of coarse ware were found in one such kiln.

Discovery of the kilns throws much light on the ceramic technology of those remote times.

Two kinds of pottery, coarse and fine, were manufactured in the village. The potters built up vases of various forms out of well-levigated clay, applied elaborate designs to their burnished surface in black paint, then fired them evenly till they became orange or brick-red. On a few pieces, a white slip was applied to reduce the porosity of the pots before painting.

The favourite types of painted pottery were flat-bottomed vases with wide mouths, long-necked bottles, basins with overhanging rims, and round-bottomed bowls. Most of the designs were geometric—zigzags, concentric circles, triangles, and trellis or net patterns. But a few of those found were zoomorphic, including fish forms and human faces, and these were of especial interest. The human face, though conventionalized, was quite life-like. Eyes, nose and mouth were vividly indicated. Fork-shaped and pointed decorations on the head seemed to represent ornaments worn by the people.

Also common were small-mouthed vases with pointed bottoms, made of plain fine red ware and usually decorated with thread-impressions. Other decorative designs were employed for such ware: pit-impressions (small triangular or circular pits jabbed into the soft clay by a pointed implement), fingernail-impressions and cord-impressions. Sometimes the pots were grey or blackish in colour, due to control of firing.

The coarse ware, red or grey, was tempered with sand. It included most of the cooking and large storage-vessels. These were quite commonly decorated with applied strips of clay in relief. Cord-impressions were also frequent. The *ting*-tripod was rarely found and the *li*-tripod not at all. Though both forms were to become favourites later, they had not yet become current. The coarse jars and vases usually had red bowls of fine ware as lids. In some cases the lid was a potsherd purposely chipped into disc-shape.

All the vessels were hand-made. Some retained clear traces of the ring-building method. They were certainly not made on the potters' wheel. Not one of them shows wheel marks.

Other ceramic objects included spinning whorls, balls, knives or millet-cutters, and hairpins. Pottery rings were found in great profusion, as were "rubbing-pieces". The latter were made of fine red ware, generally rhombical in shape, and rectangular or square in cross-section. They were very hard and their flat surfaces were full of small pits. They could be used for rubbing or scouring and, judging from the frequency with which they occurred, were employed in daily life; but just how it is not clear. The small pottery balls were probably used as slingshot for hunting.

Over 900 bone artifacts were also found. They included needles, borers, chisels, spatulas, spoons, hoe-blades, arrow-heads, harpoon-heads and fish-hooks. Some of the needles were perfectly preserved, with the small eye finely made. Borers and awls, also numerous, were made from fragments of the long bones of animals, with the pointed end highly polished by use. Most were round in cross-section, but some were triangular or flat. The arrowheads were of various shapes, some conical, some flat and triangular, some prismatic in cross-section. The spatulas were probably used to shape and polish pottery vessels before firing. The fish-hooks were extremely well executed. The large bone hoe-blades were probably used in agriculture.

Of the 600 stone tools recovered, the majority were broken or incomplete. Most of them seem to have been made by the polishing method; only a few by flaking. Among them were axes, adzes, chisels, hammers, disc-shaped maceheads, knives or millet cutters, hairpins, small balls and millstones.

The commonest type of stone axe was oval in section, in contrast to the square-section axes found on Yangshao sites in Honan. The adzes were all small, and were probably used for woodwork. Quartz arrowheads were made by chipping, those of red stone by polishing. Both types were usually broad, thin and short. The highly-polished stone balls, like those made of pottery, were for use in slings.

Agriculture flourished at this early period. The millet-cutters, hoe-blades, storage pots and grain pits all show this. The villagers seem to have tilled the soil with bone-bladed hoes, and cut their crops with stone or pottery knives. They ground their grain with stone millstones, and cooked their food in pots.

These early ancestors of the Chinese people also raised domestic animals. Bones of swine, dogs and sheep were found around the village. The people hunted with stone or bone-tipped arrows, and with stone or pottery balls shot from slings. They fished with hook and line, and also with harpoons. They wove cloth, as shown by the pottery spinning whorls, and by the impressions of loosely woven linen on the coarse pots. But they did not yet know the use of metal.

Work at Pan Po village will continue in 1956. Two-thirds of the site still remains to be uncovered. When this is done, we shall learn still more about the Yangshao, one of the chief neolithic cultures of China.

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JULY-AUGUST 1954

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## More Relics of Peking Man

by PEI WEN-CHUNG

CHOUKOUTIEN is a small town some 31 miles southwest of Peking, at the foot of the Western Hills. The Peking Man (*Sinanthropus pekinensis*) and Upper Cave Man were found here, along with huge quantities of animal fossils of different geological periods. As the home of one of man's earliest ancestors and of the oldest known human culture on the earth, this location occupies an important place in the study of anthropology, palaeontology and archaeology. The fossil material found here is very abundant.

Attention was first drawn to Choukoutien when many animal fossils were found by local limestone quarry workers in what is now called "Dragon Bone Hill", one of the low mounds around the town. Knowing that there was a market for such things in traditional Chinese medicine shops, the workers naturally collected and sold them. Hearing about this, scientists in Peking came out to obtain specimens.

Systematic excavations began in 1927. In 1929, the first complete skull of Peking Man was found. During the decade 1927-37,

many fossils were recovered, including four complete skulls, a number of fragmental skull bones, maxillae (upper jaws), mandibles (lower jaws), and more than a hundred isolated teeth in addition to those attached to the jaw-bones. In addition, limb-bones and other parts of the skeleton of Peking Man were collected. In all, it is considered, these finds represent over sixty individuals of both sexes and different ages.

Choukoutien, which was devastated by the Japanese invaders during their occupation and totally neglected by the Kuomintang during its return to power in 1945-49, is now the scene of large-scale restoration and development. The rubble and refuse which had accumulated on the sites of previous diggings have been cleared. The destroyed administration buildings have been rebuilt, water-pipes and electric lighting introduced, and lime-quarrying operations moved further away. Funds granted by the People's Government to the Chinese Academy of Sciences for work here are already in excess of all pre-liberation expenditures from the beginning of the excavation in 1927 onward. A number of new finds of relics of Peking Man, as well as of other material of interest, have been made.

Today, scientific research has established that Peking Man was one of the earliest human beings, having lived in the Middle Pleistocene period, or 400,000 to 500,000 years ago. Of all other human relics, only the Java Man may be older. As is shown by his low forehead, his thick skull, the distance between his ears, and his protruding eyebrow ridges, Peking Man still had much of the nature of an ape. His forehead, for example, though much higher than that of a modern ape, was much lower than a modern man's. Peking Man represents the human family in one of the earliest stages of its development, the stage of the Ape Man, whose hitherto discovered fossil remains include *Pithecanthropus* (Java Man) and *Homo heidelbergensis* (Heidelberg Man).

The discovery of Peking Man brought new confirmation of Darwin's deduction that a "missing link" must have existed between ape and man.

In the same cave with the fossils of Peking Man, large numbers of stone artifacts and bone tools which he used were discovered. A rich store of animal fossils of the same geological age were also found. Though the tools were very crude, close inspection revealed evident traces of human skill having been applied in making them. Scorched animal bones and stones

unearthed in the same layer showed that Peking Man had already learnt the use of fire.

A study of the animal fossils proves to us that the climate of Choukoutien during the life period of the Peking Man was warmer and moister than it is today. The abundant fossils of horses, cattle, deer and other animals suggest the existence of rich pasture land. The fossils of leopards, tigers and bears indicate that there were also great forests. It is easy to visualize the river where the Peking Man went to drink in front of the hill, because its bed is still visible today.

Another important discovery, at the top of Dragon Bone Hill, was the finding of fossils of the Upper Cave Man. The Upper Cave Man lived in the Late Palaeolithic period, or about 50,000 to 60,000 years ago, hundreds of thousands of years later than the Peking Man. At that time, man had already developed into *Homo sapiens*, the species to which we all belong. Upper Cave Man, as his remains prove, had already evolved finer tools. He used bone needles, and drilled shells, animal bones and teeth for body ornaments.

Apart from caves in which the human relics were discovered, animal fossils of different geological periods were found in large quantities at some twenty other sites on Dragon Bone Hill and elsewhere around Choukoutien.

Though Choukoutien was of such cultural and scientific significance, the Kuomintang government paid little attention to it. From 1927 onwards, the American Rockefeller Foundation began to finance excavations and research on Peking Man. Though the work at Choukoutien was nominally under the charge of the Cenozoic Research Laboratory of the Geological Survey of China, the Rockefeller Foundation had actual control. Most of the major discoveries were made by Chinese scientists working there, of whom I was one, but we were not allowed to carry on further research on them. Instead, we had to hand the precious finds to foreign scientists for investigation and were left to deal with such material as they considered secondary, or felt that they had already investigated sufficiently. The Americans regarded us simply as collectors, not as colleagues.

In 1937, when the Japanese invaded North China, excavations at Choukoutien were forced to stop. The most precious fossils, including those of the Peking Man and the Upper Cave Man, disappeared during the war. Originally they had been in the custody



of the American-operated Peking Union Medical College, under conditions set by the Rockefeller Foundation. Then, shortly before the college was occupied by the Japanese, they were secretly transferred to the American Embassy in Peking, which prepared to send them to the United States. In 1945, after the surrender of Japan, the Americans declared that they did not know what had happened to these supremely important relics of man's past.

In the difficult years of the Anti-Japanese War, the Japanese army fortified Dragon Bone Hill at Choukoutien and destroyed the building in which we had set up our field work. Three old workers who had taken part in our excavations were killed because the enemy suspected them of being in touch with the people's anti-Japanese forces. All scientific work ceased, and even the trees on Dragon Bone Hill were cut down.

The liberation created the conditions for a great new awakening of culture and science in our country. It also brought the rapid restoration and new development of work at Choukoutien, to which reference was made at the beginning of this article.

In 1949, under the direction of the Laboratory of Vertebrate Palaeontology of the Chinese Academy of Sciences, the excavation work interrupted for twelve years was resumed. Three teeth of Peking Man were discovered, as well as stone artifacts and fossils of animals such as the rhinoceros, hyena, elephant and horse. In 1951, two further teeth were found. Four new sites, yielding many more animal fossils, were discovered.

Research work also took a big step forward. Among the animal fossils unearthed before liberation which had remained in our laboratory in Peking, we identified parts of the humerus (upper arm bone) and tibia (shin bone) of Peking Man. This was a very important find. Professor Wu Ju-kang and Mr. Chia Lan-po, both anthropologists of the Laboratory of Vertebrate Palaeontology, have completed a thesis on it which will soon be published.\*

Study of these relics substantiates the famous theory of Engels that "Labour created Man". While Darwin had solved the problem of man's origin by showing that he is the result of evolution rather than of creation by God, the great naturalist failed to give the real cause for this evolution. It was Engels who pointed out that the decisive factor in the evolution from ape to man was labour. In very early times, when part of the vast forests of the earth vanished owing to climatic changes, one branch of the ancient apes

\*It has since appeared in *Acta Palaeontologica Sinica*. Vol. II, No. 3, 1954.

which had previously lived in these forests was forced to come down to the ground to find sustenance. Conditions on the ground were far harder than those in the forests, where the apes could pick fruit from the trees at any time. It was now necessary for them to dig up wild plants, catch small animals and struggle constantly for food. The apes had to use their fore-limbs more than they had done in the past. Through work, their hands became more dexterous, until at last they became so specialized for the purpose of obtaining food, making tools, etc., that they were no longer used for walking. When the ape began to stand erect on his hind-limbs, a decisive step was taken in his development into man. The hand, Engels pointed out, was not only the organ of labour, but was in itself the product of labour.

This view has been proved to be true by the researches of Wu and Chia, who found that the upper arm bone of Peking Man bore much resemblance to that of modern man, while his shin bone was still much more like that of the ape. It was because the arms played a more direct part in labour that they were the first to develop.

As man's ancestors began to work together and to fight collectively against animals and the forces of nature, language — the means of communication and understanding — was also evolved. The ape's organs of speech and his brain began to develop. A series of changes in other organs also resulted. This was how the ape gradually became a man.

Anthropologists have differed in their views on Peking Man. Boule and Vaufray of France, for instance, held that Peking Man was too primitive to make stone artifacts or use fire. They supposed that a more evolved human lived at Choukoutien and was the creator of the Choukoutien culture. Peking Man, according to them, was merely the prey of this "other" man, who hunted and ate him and used his skull to make a sort of container. This theory based itself on the fact that, amongst the fossils of Peking Man, skulls were relatively plentiful but limb bones were few. But its flimsiness can be seen from the fact that, after many years of excavation, no fossils or remains of any other kind of human being have been found in the same stratum as Peking Man (Upper Cave Man belongs to a totally different period). The evidence in our hands points to only one conclusion: that Peking Man had already evolved far enough for him to be able to make tools and use fire.

Last autumn a permanent exhibition was opened in several halls in Choukoutien. In the first two are models of Peking Man and Upper Cave Man, together with the stone and bone tools which these early men used, and traces of their fires. The body ornaments of Upper Cave Man are also on exhibition.

In the following three halls, animal fossils and rock specimens from other sites in Choukoutien are shown. Models of fossil man discovered in other parts of the world, as well as modern man, are displayed for comparison. The last two chambers contain the bones of mammalian fossils which lived at the same time as our ancestor. Charts and statistical tables on the walls make for a clearer understanding of the exhibits.

Since last year, over twenty thousand people have come to Choukoutien and seen the sites and the exhibition. The Chinese people of today are proud of Choukoutien, with its remains of the oldest human culture.

The People's Government has decided to make Choukoutien into a permanent national park, with facilities for large numbers of excursionists. At the time of writing, the afforestation of Dragon Bone Hill is under way. From now on, it will serve as an important centre of scientific research, and for the popularization of anthropological knowledge amongst our people.



*Chu Po*

A tale told in Uighur, Sinkiang province.

## OLD TALES AND NEW LAUGHTER

THE best-loved folk tales of China, fanciful or humorous, are like those cherished among other peoples. They extol the ordinary man and honest, straightforward feeling. They lash out at fraud, hypocrisy, and the arrogance of wealth and power.

Alongside three stories which are centuries old, this section contains one in which an old form is put to modern use. "Buying Monkeys" is a script for the *hsiang sheng*, a satirical dialogue in which one performer carries the narrative and the second acts as a foil. *Hsiang sheng* used to be a "sidewalk art" but is now a favourite in theatres and on the radio. Vocal mimicry, changes in facial expression and gesture heighten the effect of the witty, imaginative lines. Behind the fooling and fantasy is caustic common sense. Its butt, today, is often inefficiency or bureaucracy, wherever it pops up as an obstacle to progress under our new conditions.

## Three Sons-in-law

### *A FOLK TALE FROM KIANGSU PROVINCE*

ONCE UPON A TIME, there was a man who had three daughters. The eldest daughter married an official. The second married a warlord. The third was married to an ordinary peasant.

On a certain festival, all three sons-in-law went to pay a visit to their father-in-law. The third son-in-law, who came on foot, got there a little earlier than the others. He was about to go in when the eldest, still sitting in his sedan-chair, cried out in a loud voice.

"My position is higher than yours. I should enter first."

While they were arguing, the second son-in-law rode up on a fine horse. Trying to settle the quarrel, he said to the youngest one:

"Let us each make up a verse. The first line must describe what is above our heads; the second must testify to our past merits, and the third line must tell how we came to this place today. Elder brother and I will start. If you can outmatch us, you shall go in ahead."

The eldest son-in-law thought a minute, then began:

"The top of my sedan-chair is perfectly round.

Ten years of study brought me where I am.

Four carriers lift me; in the centre sits a veritable god."

The second son-in-law followed with:

"My war helmet is perfectly round.

A hundred battles brought me where I am.

A fine horse carries me; on top sits a veritable god."

After they had finished, the third son-in-law pointed to his peasant hat and said:

"My straw hat is perfectly round.

Years of work brought me where I am.

I walk on my own feet; beneath me are two veritable gods."

## OLD TALES AND NEW LAUGHTER

The first and second sons-in-law were surprised and angry at having been thus outwitted. But since they could not think of another retort they had to let the peasant go in first.

At dinner, the two elder men tried to win back their prestige. Once again they proposed a verse-competition. The eldest son-in-law said:

"Position I hold,  
And power too.  
Among the people, I am lord.  
Wealthy I shall always be,  
All the money flows to me."

The second son-in-law chimed in at once with:

"Bows I have,  
And arrows too.  
Of an army I am lord.  
Should I wish any man to die,  
Before my eyes his corpse will lie."

The third son-in-law capped this with a shorter verse:

"I have an ox  
And a plough too.  
If I didn't work,  
No food for you."

Seeing that they could not beat the third son-in-law in rhyme, the official and the warlord started to think of some other way. But they were interrupted. Someone ran in and yelled that the kitchen was on fire.

The elder sons-in-law didn't know what to do.

One cried majestically: "Servants, put out the fire!"

The other barked an order: "Troops! Forward into action!"

But the third son-in-law just stood up and said: "Don't make such a lot of noise. Watch how your master carries buckets."

So saying, he went and put out the fire.

## The Chastity Arch

### A FOLK TALE FROM SHANTUNG PROVINCE

**L**ONG, LONG AGO, there lived a rich man who had a beloved son. This son fell mortally ill. Many famous doctors were sent for but none could cure him. Finally a witch was consulted. She said, "Fetch his betrothed. Let the joy of marriage cure your son."

The rich man had arranged to marry his son to the daughter of a nearby landlord. Now he informed her father that the wedding must take place in two days. Invitations were sent out. Musicians were employed. Pigs and sheep were slaughtered and stoves were built in the courtyards. By the time the red sedan chair had been decorated to bring the bride, every one was exhausted.

The landlord was stunned when he got the message. "What if the boy dies?" he lamented to his wife. "Then our daughter can never remarry and her life will be ruined. But if we refuse and the lad recovers, it will be even worse. We will lose our chance of allying ourselves with much money and make a powerful enemy."

Since the children had been betrothed in infancy, no one in the rich man's family knew what the girl looked like. So the worried parents finally decided on a trick. A trusted steward was sent to another village to buy a girl who would pose as the sick man's bride. If he got well, it would not matter. Being only a slave, the girl could be counted as a part of their daughter's dowry.

On the day appointed, the red bridal sedan chair stopped at their door and the maid was sent off. But at the very moment she arrived at her destination, the bridegroom breathed his last. The rich man turned white as a sheet. Loud wailing broke out throughout his great house. The bride was hurriedly re-clothed in widow's weeds. The gay lanterns were taken down from the corridors. The red ribbons on the trumpets were changed to white—the colour of bereavement—and funeral music was played. The wedding guests turned mourners.

The young bride sobbed most bitterly of all. Everyone thought her grief was for the young man. Nobody knew she wept for her sad fate of a slave.



Some time later, as was the custom, the bride was sent back to visit her own "parents". The rich man sent a chaperon with the following message for the landlord: "If your daughter remarries, both our families will be shamed. If she remains a widow, I will set up an arch of the finest stone to commemorate her chastity for centuries to come. A skilled stonemason will be hired to build it, starting on an auspicious day."

The landlord replied piously, "A married daughter is like a cup of water poured out in the street. She will be part of your family while she lives and a ghost of your family after death. Although ill-fated, she is of noble birth. She will never mar the reputation of her ancestral house."

Calling the slave-girl, he said to her, "If you take the road laid out for you, you will eat well and dress in silks. If you don't wish to do this, here are a rope and a knife. Go to the mill and end your worthless life as you please."

No young girl wants to die. The "bride" returned to the house of the rich man.

It took a year to bring the stone from a famous mountain quarry. Then a skilled stonemason dressed, carved and polished it for another year and two months. In the first year, the face of the young "widow" was grey with gloom, her gaze was fixed and she did not answer when spoken to. But in the second year, her complexion changed to pink and white.

"It is like a plum blossom against lilies," some said. "She must be reconciled to her fate."

And others remarked: "Look at her great limpid eyes. Who would have thought she would grow so beautiful? She does not look like a doomed woman."

The chastity arch was finished at the end of the third year. Standing before the rich man's house, in front of the great gate, it bore characters of praise, painted red against a gold background. It was a splendid sight. The gentry came from miles around to offer congratulations.

The time drew near for the ceremony at which the constant widow would appear. But on the day fixed, she was nowhere to be seen. They looked in the front courtyard for her. They looked in the back courtyard. But they did not find her.

On the night before, she had eloped with the young stonemason.

## The Wisdom of Avanti

### TWO UIGHUR STORIES

#### *Moving House*

ONE night four thieves broke into Avanti's home. Moving with the utmost caution so as not to wake him, they seized his furniture and belongings and made off.

They were barely half-way across the yard when they noticed there was a fifth man with them, carrying some small articles in his hands.

"What are you doing here?" whispered one of the thieves.

"It's only me," said Avanti. "I've been wanting to move for a long time but I couldn't afford a cart for my things. It's very good of you to help me."

#### *Rabbit Soup*

A HUNTER brought Avanti a rabbit as a gift. Avanti, delighted, made it into a fine soup for him. A week later a knock came at the door.

"Who's there?" asked Avanti.

"The friend who brought you the rabbit," replied the hunter. Avanti again invited him to eat rabbit soup.

A few days afterwards five or six people came to call. "We are the friends of the friend who brought you the rabbit," they announced.

Avanti regaled them with soup and tea. The news got round, and shortly afterwards nine or ten people came to Avanti's house.

"We are the friends of the friends of the friend who brought you the rabbit," they said expectantly.

"That's splendid! Come in!" Avanti greeted them cordially.

He showed them into the room, and then brought out a bowl of muddy water.

"What's this?" asked the guests, turning up their noses in disgust.

"Why this—" said Avanti, "this is the soup of the soup of the soup of the rabbit my friend brought me."

# Buying Monkeys

by HO CHIH

**C**HANG and Li enter the stage from opposite sides. Li greets the former like an old friend.

**Li:** Oh, it's you! Why, I haven't seen you for ages. My, how thin you've grown! I haven't seen you behind the counter at the State Department Store lately.

**Chang:** No, I was promoted to be a buyer.

**Li:** Congratulations! And what have you been buying?

**Chang:** Give you three guesses.

**Li:** Thermos bottles? Silks? Bicycles?

**Chang:** No. Monkeys!

**Li:** Monkeys?

**Chang:** Yes, monkeys.

**Li:** You mean monkey-style storm coats?

**Chang:** No, real live monkeys. You see, it was like this. One day last September I had just come back from a trip when a rush order came from the Chief Buyer. It was brought to me when I'd already gone to sleep. The envelope was marked "Urgent! Urgent! Urgent!"

**Li:** It must have been very important.

**Chang:** Well, I tore it open and read: "Buy fifty monkeys from the northeast at once." So I jumped out of bed, bought a train ticket and off I went.

**Li:** Just a minute! What would the State Department Store do with monkeys?

**Chang:** That's what I asked myself. Then I thought, well, perhaps the monkeys can keep watch.

**Li:** Well, imagine that!

**Chang:** Next, it occurred to me, perhaps the monkeys can act.

**Li:** You mean the store was going to start a circus department?

**Chang:** Finally I figured, maybe the monkey hair could be spun into yarn.

**Li:** You'd need more monkeys for that, wouldn't you?

**Chang:** (irritated) Well, what would you have thought?

*Li:* Hm . . . I'd have suspected that there was some mistake in the message.

*Chang:* So did I, at first. But I couldn't get hold of the Chief, and Mr. Muddlehead had been transferred to another department. I couldn't imagine why there should be a mistake once he was gone.

*Li:* Who?

*Chang:* Mr. Muddlehead, the former secretary of our Buying Department. It's a nickname. He was a queer one, Muddlehead, always came late, left early, and spent all his time at the telephone.

*Li:* What a loafer!

*Chang:* Well, one day the Chief himself—he's a funny chap too, with a mania for sending written memos to everyone, even about unimportant things—told Muddlehead to write a note to Wang, another buyer. While Muddlehead was writing it, he got a phone call from his sweetheart asking him to take her to see the film, "Cold, Cruel Heart". She wanted him to go right away. So he rushed the memo and took it to the Chief, who signed it without reading. After this Muddlehead said he had a stomach-ache and asked for sick leave.

*Li:* Did he get it?

*Chang:* Sure, and he went straight to the cinema.

*Li:* What about the memo?

*Chang:* It said: "Get goods tomorrow from the Chinch Warehouse, Chinchow." Wang took the train to Chinchow, 800 miles away. He searched all over, but could find no such warehouse. So he put through a long-distance call to the Chief. It turned out that Muddlehead had written "Chinchow" instead of "Chinchow Road".

*Li:* Where is Chinchow Road?

*Chang:* Round the corner from our department store!

*Li:* What happened to Muddlehead?

*Chang:* He got transferred to be a tally clerk in our own warehouse.

*Li:* He couldn't cause any trouble there.

*Chang:* Wait till I tell you! One day fifty casks of sesame oil and fifty casks of tung oil came in.

*Li:* You mean sesame oil for making cakes and tung oil for varnishing furniture?

*Chang:* Exactly. And because the casks looked very much alike the storekeeper told Muddlehead to write "Tung Oil" on fifty

red labels and "Sesame Oil" on fifty blue labels and stick them on the different casks.

*Li:* That should have kept him straight.

*Chang:* It should have. But just as he got all the labels ready to stick on, the telephone rang.

*Li:* His sweetheart again!

*Chang:* Yes. She wanted him to take her to the opera to see "The Love of Tu Shih-niang". At first Muddlehead tried to explain that he had a job to finish. But she wouldn't listen. She said she'd be waiting for him at a restaurant at six o'clock, and hung up. It was already twenty to six.

*Li:* Didn't have much time, did he?

*Chang:* You don't know Muddlehead. He threw on his overcoat, rushed out and jumped on a tram. Then he suddenly turned round and got off again.

*Li:* Why?

*Chang:* He remembered the labels and rushed back to slap them on the casks. He was humming an opera tune while he did it.

*Li:* Did that make him late?

*Chang:* No, he finished in a jiffy, then tore out and got on another tram. It was a quarter to six.

*Li:* A speed record!

*Chang:* It certainly was. After the casks were delivered to the customers, eight big cakes were sent to the store by the bakery co-op. They were tung-oil cakes!

*Li:* Makes me sick to think of it.

*Chang:* Then the cook from the university arrived with tung-oil meat dumplings, tung-oil fried chicken, tung-oil fish and all kinds of tung-oil delicacies. They were getting ready for a banquet and he'd got all these things ready before he realized the mistake.

*Li:* Muddlehead should have been made to eat them!

*Chang:* After that a furniture company sent us two chairs and a table smelling of sesame oil.

*Li:* What a mess that must have been.

*Chang:* It was only settled after our manager had apologized and promised to pay for everything spoiled.

*Li:* What happened to Muddlehead?

*Chang:* He was asked to write a self-criticism and then demoted to errand boy.

*Li:* By the way, who replaced him in the Buying Department?

*Chang:* Chap named Wang. He's capable and diligent but he often gets stomach-aches, real ones.

*Li:* How about the monkeys?

*Chang:* I'm getting to them. I thought since Wang had written the rush order for monkeys, it must be all right, so I took the night express for Shenyang. The Trade and Commerce Bureau there was surprised, but helpful. They suggested I go to a village at the foot of the Changpaishan Mountains. When I arrived I went to the village head and explained what I wanted. He made a face.

*Li:* Some trouble?

*Chang:* He said "It's true there are monkeys in the mountains but no one hunts them because there's no market." I told him this was a piece of urgent public business. "If you must have them," he said, "I can give you two that I have at home. But they are pretty old." I was delighted that the business was beginning to move. Who cared how old they were, as long as they were monkeys. Then I asked the price. "It's all right," he said. "I'll contribute them to the state."

*Li:* That was generous!

*Chang:* Well, they were an awful pair of old crocks—toothless, hairless, and I doubt if they could walk far without crutches.

*Li:* So you didn't take them.

*Chang:* I didn't refuse, but the village head saw they didn't satisfy me. "Let's think of some other way," he said. "We'll call a hunters' meeting tonight." About 500 people came.

*Li:* Good piece of organization!

*Chang:* The village head introduced me and said I'd make the mobilization speech. Everybody clapped. I found myself standing there in front of them.

*Li:* Let's hear that speech you made.

*Chang:* "Folks . . ."

*Li:* (Claps his hands loudly.)

*Chang:* "Comrades!... (coughs)... I, hm... (coughs)... I (coughs) . . ." What shall I say to you?

*Li:* You tell me. How do I know what you said to them?

*Chang:* "Comrades, I've been sent here to buy monkeys. Now I'm going to tell you what monkeys can do for the country. Monkeys . . . (coughs) . . . Monkeys too can contribute to the construction of our country. They can . . . they can . . ."

*Li:* Come on, get on with it.

**Chang:** "Well, comrades, first they can keep watch . . . secondly they can . . . they can act . . . thirdly their hair can be spun into yarn. Well . . . those aren't all their uses, of course . . . (*pauses*). And besides . . . all of us have been living better since the land reform. Who can't afford to keep a monkey nowadays!"

**Li:** I've never heard of anyone doing it.

**Chang:** Those peasants thought my mobilization speech was—

**Li:** (*breaking in*)—reasonable?

**Chang:** No, not quite. They thanked me for the inspiring talk and said they had better hurry to—

**Li:** (*breaking in again*)—catch the monkeys?

**Chang:** No, go home to bed.

**Li:** So what did you do then?

**Chang:** I decided to go to South China—to Kwangtung!

**Li:** That's right. There are plenty in Kwangtung.

**Chang:** I stopped off at Tientsin on my way and left the two old monkeys given to me by the village head with my wife, told her to look after them carefully, then went south.

**Li:** Did you find many there?

**Chang:** No. It took me two weeks to buy twenty.

**Li:** You still had to find 28 more to carry out your task.

**Chang:** That's right. I sent my Kwangtung monkeys to my wife too, and then travelled west to Szechuan province.

**Li:** Are there any there?

**Chang:** Of course. Don't you remember the ancient Tang dynasty poem: "Amid the cries of the monkeys, the boat sailed past ten thousand mountains"? I went by ship up the Yangtze and then by train from Chungking to Chengtu. It took me a long time, but I got the 28 monkeys in the end.

**Li:** Congratulations! So your monkey business was a success.

**Chang:** I put them in a cage and set off for home. When I arrived, my wife burst into tears. "No news from you for months on end," she said. "I thought you'd died of a monkey bite!" Well, I looked at the monkeys and saw they were healthy and fat. It made me very happy and I thanked my wife for the good care she had taken of them. "You wretch," she said. "You only think of the monkeys. Why don't you look at me!"

**Li:** Had she grown fat too?

**Chang:** No, she was thin—as a monkey! Anyway, I consoled her and rang up the department store to send over a lorry.

**Li:** What for?

*Chang:* For the monkeys. Then I went to see the Chief Buyer. "Where have you been?" he asked. "To Szechuan," I replied, proud of having done a good job. "Whatever for?" He seemed puzzled. "Why, buying monkeys," I said. "Who told you to buy monkeys?" he yelled. "You did!" I answered, getting heated too. I handed him the rush order with his seal on it. He turned white as a sheet and sent for Secretary Wang. "Did you write this?" he barked when Wang arrived. Wang looked at the order, stamped his foot and cried: "Oh Muddlehead, Muddlehead, see what you've done!"

*Li:* I'm all mixed up.

*Chang:* Never mind, I'll explain. The day the rush order was issued, the Chief had to go out to a meeting so he put his seal on the paper before it was written out. Just before closing time Secretary Wang sat down to prepare it, but he got one of his stomach attacks. At that moment Muddlehead came into the room. Seeing Wang in such pain, he told him to go home, saying he would complete the order. Wang dictated: "Buy fifty boxes Monkey Brand soap from the northeast district immediately." Muddlehead dipped his pen to write, but the telephone rang. He left a few words out of the order. That's why it read: "Buy fifty monkeys from the northeast immediately."

*Li:* And that sent you running all over the country. What did you do with all those monkeys?

*Chang:* Nobody wanted to buy them so we gave them to the Tushan Park Zoo.

*Li:* Oh, I've seen them there. What about Muddlehead?

*Chang:* He's now their keeper. I saw him at it one day.

*Li:* What was he doing?

*Chang:* Answering the phone. He was too ashamed to greet me. But I went up to him and clasped his hand warmly. "Muddlehead," I said, "I really owe you something."

*Li:* Why did you say that?

*Chang:* "Well," I said, "It's lucky you didn't write 'polar bears' instead of 'monkeys', otherwise I would have gone to the North Pole!"

*Li:* I don't think you were so lucky. Just think, you might have had a round-the-world tour!

*(Chang and Li bow out)*





Eva Hsiao

Satisfied contemplation — candied apples.

## THE ENJOYMENT OF LIVING

CHINESE PEOPLE know how to work hard, but they also know how to relax and enjoy themselves. In this rapidly-modernizing country the whole range of leisure facilities is expanding. New theatres and cinemas, parks and gardens, clubs and libraries provide recreation for every member of the family. Sports stadiums, playing fields, swimming pools and places for dancing challenge the skill of the young and active. Children have special playgrounds, their own theatres, a real miniature train to ride on, and a model hydro-electric station to teach them about the harnessing of nature. If you live in Peking, it's worth while taking the family to the Zoo every month or so, for there is always something new and exciting—a giraffe, a new elephant from India, a rhinoceros from Nepal, a new-born baby tiger, or China's own rare pandas from Szechuan province.

Then there are the more traditional pleasures, such as dining out. Each part of the country has its culinary specialities: crisp brown Peking duck, roasted to a turn; Canton's delectable breakfast dumplings stuffed with shrimps, meat and mushrooms; Szechuan's spicy-hot dishes; the fresh-water fish and tender bamboo shoots of the provinces south of the Yangtze River.

Stay-at-homes enjoy cultivating flowers, keeping all kinds of goldfish in huge porcelain bowls, or taking a stroll with their pet birds, so tame that they will not fly away. Famous artists and craftsmen are finding ways to apply traditional design to things of everyday household use so that all may enjoy—at prices they can afford—the richly-varied beauty of Chinese handicraft design in their own homes.

## Breeding Decorative Goldfish

by CHEN CHUNG-HSIEN

GOLDFISH originated in our country and the Chinese people had kept them for hundreds of years before they were brought to Japan and England in the sixteenth and seventeenth centuries and disseminated to other parts of the world. Today too, in China's public parks and gardens, and in innumerable homes, these fascinating creatures can be seen swimming leisurely round in ponds, tubs or glass bowls. Their bewildering variety of colour, fantastic shapes and slow, graceful movements, are a never-ending delight to the eye.

Chinese poets have written about goldfish, and numerous ancient books refer to their breeding and care. These have helped present-day scientists learn how the fish were originally domesticated, and how the different varieties were created. Professor Chen Cheng, (Shisan C. Chen), one of China's leading zoologists, has made a special study of this subject and it is from his works that we take the information below.

All domesticated goldfish in the world have the same ancestor—the *chi yu* (*carassius auratus*)—a carp-like fish found and eaten everywhere in China. In its natural state the *chi yu* is grey in colour, but an orange-coloured one very occasionally appears.

Between A.D. 968 and 975, in the period of the Sung dynasty, a local official in Chekiang province had a pool for keeping aquatic creatures, which he called the "Pond of Animal Emancipation". Among them were some golden or orange-coloured *chi yu*. A work of A.D. 1000 mentions that similar fish were kept in a semi-domesticated state behind the Liuho Pagoda at Hangchow in the same province.

No new varieties originated until the twelfth century A.D. Then the emperor, Chao Kou, began to breed goldfish in artificial ponds in the garden of his palace at Hangchow, which had become the Sung dynasty's capital. Members of the leisured ruling class followed the fashion set by the emperor and built ponds of their own in which goldfish were kept and fed on water-fleas.

Variations of colour began to appear and two new types—white and spotted—came into existence. The story is told that an official of the Sung court, sent from Hangchow to take up a new post in distant Szechuan, carried his goldfish with him in three huge vessels filled with the water in which they had been reared.

By the sixteenth century the keeping of ornamental fish in ponds, which hitherto could be afforded only by the rich, had begun to be succeeded by the practice of rearing them in large earthenware tubs. Common folk then took it up, and it spread from Hangchow all over China, remaining a popular hobby to this day.

The transition from ponds to tubs also affected the physical development of the goldfish. Till then their shape had remained much like that of the carp, with a small head, long, lean sides and short, powerful fins. In the new environment, through what scientists call the law of adaptation, their sides gradually became shorter and rounder and the fins longer and more supple. These characteristics were better suited to swimming slowly in the confined space of round vessels.

Able to observe their charges more closely than when they had been kept in ponds, goldfish-fanciers were able to develop fresh types by saving, from a great number of young in each generation, only those which had strange, beautiful, or otherwise desirable characteristics. This process is called successive elimination. Between 1547 and 1643, it produced six new hereditary variations: mottling, double tail-fins, bialal fins, long fins, protruding (telescopic) eyes and short bodies.

The change from semi-domestication in natural ponds to full domestication in artificial ones, Dr. Chen Cheng sums up, brought progress from no artificial selection to unconscious artificial selection—giving rise to two new varieties. In the next transition, from pond-culture to rearing in earthenware or other vessels, unconscious selection under unfavourable circumstances was succeeded by unconscious selection under favourable circumstances. This led to the origination of six further varieties.

Now came the biggest change of all. Beginning with the year 1848, conscious planned selection was introduced, and up to 1925, it produced ten new variations: black telescopic, blue, brown, lion-head, goose-head, skyward eye, bubble-eye, narial (nostril) bouquet, outfolded operculum (gill-cover) and pearl-scale.

Today, with new research, it is well understood that to create new varieties the fish must be made to live under conditions most favourable to the development of the desired characteristics and that selection too must be carefully planned. This has already had its fruits. Chungshan (Sun Yat-sen) Park in Peking has a "goldfish corner" where no less than twenty-seven varieties are on view.

On a fine warm day literally thousands of people crowd around the hundred or more shallow wooden and earthenware tubs which hold these fish, to stare enchanted at their luxuriant, lazy movements, fabulous forms and rainbow hues. The chief keeper, Hsu Kuo-ching, never tires of answering the innumerable questions asked him, or of discussing finer points of breeding with the many goldfish-fanciers who come to seek his advice. His family, goldfish breeders for five generations, used to stock the fish ponds of the imperial palace. When he himself came to work in the park 35 years ago, it had only 100 goldfish, but now it has over seven thousand. Hsu Kuo-ching has several assistants, one of whom is his son. They are kept busy, because the fish, which can live for twenty years if they are constantly tended, are easily killed by careless treatment or neglect.

The writer of the article had a talk with the veteran breeder and learned many interesting things from him. Goldfish hibernate in the winter, when they do not need to be fed, and in Peking they are put indoors from the middle of November until the second week of March. When spring comes, they breed, and the thousands of tiny fry which emerge from the eggs are fed on water-fleas or hard-boiled egg yolks. Hsu Kuo-ching, who says water-fleas are best of all, confesses to some difficulty as a result of the spectacular improvement in sanitation in recent years. As open drains disappeared in Peking, it became impossible to find the goldfish their favourite food. The local authorities asked that experiments be made with other foods—minced sheep's liver or dried beef.—but this was not successful. Now Chungshan Park has its own glassed-in pond of stagnant water where water-fleas are bred specially.

The fish themselves are kept in well-water; chlorinated piped water is bad for them. When summer comes, the water must be freshened several times a day to keep it from getting too warm. Only half can be changed at a time, since the fish cannot stand sudden cold or heat.

As for aquaria, Hsu Kuo-ching considers the traditional earthen or wooden tubs much better than glass for maintaining an even

temperature, as they do not conduct heat easily. The mossy weed which grows around their sides not only absorbs carbon dioxide and gives forth oxygen but also protects the fish from injuring themselves. The fish known as "bubble-eyes", for instance, has two transparent fluid-filled "bubbles" at each side of its head—which could easily be injured if knocked against the hard side of a glass aquarium.

In the autumn, the fish eat voraciously, though they are still fed only once a day. Diet has to be watched carefully because their digestive system is very delicate, and their appetite is affected by changes of weather. A fish with its digestion upset stays at the bottom of the tub for long periods—the remedy is to cut off its food for a while. A fish that twists and wriggles close to the surface is being annoyed by parasites that grow on its skin. These can be got rid of by adding 2 per cent salt solution to the water.

Chungshan Park bred most of the goldfish, belonging to 20 rare varieties, sent to the children of India as a gift from Premier Chou En-lai on the 65th birthday of India's Prime Minister Jawaharlal Nehru in November 1954. Hsu Kuo-ching's son took charge of them on their journey to Delhi, where they were put on public view in the gardens of the presidential residence. Their Chinese keeper stayed for several weeks to supervise the acclimatization of the fish to their new surroundings, and to advise the Indian keepers who will look after them.

JUNE 1955

## A Peking Duck Dinner

by CHU CHI-PING

**I**N the western suburbs of Peking, beyond the famous Summer Palace, stands "Jade Spring Hill". It is so called because at its foot is a spring as pure and precious as jade—or so said the ancients. This spring is one of the chief sources of drinking water for the

people of Peking. From it, streams flow out among the fields. Not too cold in winter and not too hot in summer, this is the home of that world-famous delicacy, Peking duck, which has been reared here for over 200 years.

The Peking duck, so appetizing at the table, is also a handsome creature in life. Its body is snow-white, and its bill and feet are orange-red. It grows fast, is very hardy, and can adapt itself to widely differing surroundings. It belongs to the species *Anas Platyrhynchos domestica*, and was exported from China to the United States in 1874—to become “Long Island Duck”—and later introduced to England and other countries.

The duck-breeders near Jade Spring Hill have succeeded in more than producing a succulent bird for roasting. They have overcome the rhythm of nature to suit the needs of man. The big demand for these fat ducks, which are best eaten when three months old, is in the cold season,—they would be too heavy fare for the summer. Yet in its original habits the duck moults in the autumn, and begins to lay after its feathers have grown again. Now they are conditioned to moult in summer, laying eggs in autumn and winter, when ducks are in the greatest demand.

To persuade the bird to reverse its normal habits, the farmers put them in an enclosure from which they cannot get out and go swimming. For three days, they are given only drinking water and a small quantity of rice husks. When so treated, regardless of the season, they begin to shed their soft feathers. Then the farmers pluck the wing-feathers, a few at a time. A few days later their nutrition is increased and then, when the new feathers have all grown, they are allowed to swim again. Twenty days afterwards, the ducks begin to lay.

On an average a Peking duck lays 120 to 180 eggs a year. When the duckling is hatched, it weighs about two ounces. After 60 days of careful feeding, it grows to more than 35 times its original weight. During the third month of its life it is put on a special diet consisting mainly of flour and sorghum. This adds almost three pounds to its weight. Now the duck goes to market.

When Peking ducks go to the market, most of them finish up in restaurants, where they are roasted. Peking roast duck has for many years been one of the renowned dishes of China's capital—the praises of which are sung both by residents and visitors throughout the world. So fine is this dish that when a temporary Peking duck restaurant, with Peking cooks, was set up in connection with

the Chinese exhibition in Moscow in 1953, popular acclaim there led to some of the cooks' staying. One can order this course today in the Peking Restaurant in Moscow. It was also introduced at the Leipzig International Exhibition in 1954.

Not long ago, I invited four friends who came from far away to eat with me in one of the oldest and best-known duck restaurants of the capital. It is now joint state-and-privately owned, but otherwise the only change that has taken place in the last few years is the customers. Before liberation, it was the haunt of wealthy people; today an ordinary worker or a student can, if he likes, afford to go there for an occasional meal. The price of a meal is perhaps half a day's wages for a moderately-skilled worker.

We booked a special table in advance, because this place is always crowded. As we entered, we saw rows of freshly-killed, fat white birds hanging on steel hooks to the right of the door. To the left was a huge oven. Peeping inside, we could see nine or ten ducks hanging from hooks in the open oven. They were already beginning to turn from white to yellow, from yellow to golden brown. Only wood is burned in the oven—and it is always either pear-wood or wood from the date tree, each of which emits its own special scent that blends with the flavour of the roasting bird.

We were asked to select our duck, and picked an extra large one, weighing five pounds. While we waited for it to cook—which took about 40 minutes—we drank tea and chatted about various things. Presently the waiter set the table, first with plates, spoons, chopsticks; then with dishes of thick, sweet-sharp sauce made from soya beans, and two plates of raw leeks chopped into pieces about an inch long. Lastly, he brought a pile of freshly-cooked, paper-thin, unleavened pancakes.

Then began the carving ceremony. Two white-clad waiters appeared in the doorway looking rather like surgeons prepared to operate. The first held aside the door-curtain while the other proffered to our view a large dish on which lay a sizzling, shining duck, straight from the oven. The first waiter announced in majestic tones, as is the invariable form:

“Your duck is ready. May we serve you?”

They set the duck on a small side table, and the carver took a sharp, broad-bladed knife and began to slice it with a swift and expert flourish. First he cut slices of skin—crisp and deep burnt-gold in colour. The skin, which is coated with molasses before



being put to roast, is considered the finest part of the Peking duck, It must be eaten piping hot.

As soon as the first sliced morsels were brought over, we diners each spread a pancake on our plates. Then with our chopsticks we laid on it two pieces of duck-skin and one of chopped leek, first dipping the latter into the brown sauce. Then we rolled the whole into a little tube and ate it.

I asked my friends how they liked it. No one said a word. Their faces were covered with smiles, and their mouths were full.

With dazzling speed the carver passed to the table plate after plate of sliced duck, first the skin and then the flesh. This was another treat. During roasting, the carcass of the bird is filled with water, and the tenderness that results from the combination of steam inside and dry heat outside makes it melt in the mouth. One of my friends made the remark that the meat was even better than the skin, but the rest of us were silent as before—for the same reason.

Finally, the carver's assistant announced: "The meat is all cut. May we make you a soup from the bones?"

This too is part of the ritual. We gave our consent, and to complete the ceremony ordered a steamed, savoury custard, which is always served at the end of this meal.

The soup was a light, perfect combination of duck bones and Chinese cabbage. Then followed the custard—slightly salted—made simply from beaten egg mixed with a few drops of duck-oil and steamed.

That was the end of the meal. As we ate languid spoonfuls of the creamy egg, we had only one sorrow—that the limits of the human frame are so regrettably inelastic.

## Three Popular Pandas

by CHEN CHIAO-JUNG

**I**T WAS March of this year, and the mountains in eastern Sikang\* were still covered with snow. We were stepping cautiously along a trail when suddenly the man in front stopped dead. There before us, emerging from a bamboo grove, was a lumbering, furry creature, black and white. Beside it was a smaller one, looking scarcely larger than a toy bear. A Giant Panda with its cub! Quick as a flash we loosed the dogs and gave chase. The mother streaked back into the bamboo grove and was lost to sight. The baby, scared and bewildered by the barking of the dogs, climbed into a tree and clung there. The dogs leaped frantically around as one of our number climbed after it. "Be careful! Hold it by the scruff of its neck!" we shouted from below. But the baby Panda suffered itself to be carried down to the ground without any resistance. We wrapped it in a blanket, laid it in a light bamboo cage, and carried it to a peasant hut in the valley, our temporary headquarters.

Our team, consisting of four men and myself, had come from Peking to Pohsing county, in eastern Sikang, some weeks before. One of the many animal-collecting teams sent out by the authorities of the Peking Zoological Gardens, we had already captured a number of valuable animals in this part of Sikang province, including some Lesser Pandas, leopards and deer. But our main assignment was to capture a Giant Panda, and now we had found one.

None of us had seen a Giant Panda before. We were enraptured with the lovely little creature. It was a female, weighed about 20 pounds, and was under a year old. Its fat, clumsy body was covered with creamy-white fur, but its shoulders and stumpy legs were black. The small black ears and the two oval black patches around its eyes gave the broad, white face a comical expression. We named it Ping Ping—a pet-name sometimes used for babies.

\* In July 1955, the province of Sikang was incorporated into Szechuan province and Tibet.

For the first three days after her capture, Ping Ping fretted. She lay with her head in her front paws and refused to eat. We placed all the most delicious dainties we could find in front of her—tender bamboo leaves, rice congee mixed with eggs and sugar, and so on. But she would not touch them. Then, fearing that she was going to pine to death, we began to offer her milk on the end of a stick. She put out her tongue and licked it. We tried again, and then gradually drew the stick towards the bowl. She followed it with her nose, then dipped her face into the bowl and drank up the milk to the last drop. We realized that she had not been weaned. From then on, she took nourishment regularly, began to walk about the hut exploring her surroundings, and became quite friendly.

By the end of May we had caught two more Giant Panda cubs, also females. Chi Chi and Hsing Hsing were even younger than Ping Ping, and each weighed less than twenty pounds when captured. We made ready to take our three charges back to Peking, greatly elated at having succeeded in our task.

We could not have achieved it, of course, without the help of the local people. None of us had first-hand knowledge of the territory or of the habits and haunts of the animal. The local government gave us a great deal of preliminary help, introducing us to the peasants and hunters and assisting us to identify with them the twenty or so wild animals to be found in the region. We found this confusing at first because the Sikang people have their own colloquial names for them; for example, they call the Giant Panda "the white bear".

The work of the local hunters was invaluable. We lived with them for weeks, staying in their homes, camping out in the mountains, sleeping round camp fires, following precipitous paths and wading waist deep through snow. On the lower slopes they helped us to track deer. Where there was thick undergrowth they said we should look for leopards. But to find the Giant Panda they led us high up the mountains, between 6,000 and 10,000 feet above sea-level, where there are groves of "wheat bamboo"—so called because its leaves resemble growing wheat. This is the Panda's favourite food, and it eats both the leaves and the shoots.

The journey back to Peking had to be undertaken with the greatest care. Four members of the team accompanied the three Giant Pandas to the capital. They are extremely delicate animals, difficult to rear in captivity. In the last twenty years only four-

teen of them are known to have been captured, and most of these died before reaching their destination—in each case some foreign country. They are found only in eastern Sikang and the western part of Szechuan province and are so rare that they were valued before World War II at about 15,000 U.S. dollars each—approximately equal to the price of thirty lions. All those successfully taken to the United States and Britain died subsequently, and there is now no foreign zoo which contains one anywhere in the world. The Chinese People's Government has made it an offence to kill or capture a Giant Panda without authorization. In 1953, one was captured in Szechuan province and kept for the first time in China. It was taken to the zoological gardens in Chengtu, but only lived for three weeks.

We travelled first on foot by mountain path, then by truck, later by train and finally by air, a total of five days' journeying with three days' rest in between. All the traffic authorities gave us priority so that we could take the cubs to Peking as quickly and easily as possible. The cage in which we carried our honourable guests was kept curtained so that they should not be annoyed by curious sightseers. We took turns watching over them day and night. All three reached Peking in good health.

On arrival at the Zoo, the Pandas were placed in one month's quarantine in the reception centre to which all animals are sent before being shown to the public. After this, they were moved to their new home in the gardens, and began to receive visitors.

The Giant Panda House consists of two glass-fronted rooms and a garden. The garden is planted with shrubs and has a hill of rock, a small pool and two swings. During the summer the Pandas seldom go into their garden except in the early morning. They are accustomed to cool weather and the heat makes them gasp for breath. The temperature inside their rooms is kept between 21 and 23 degrees Centigrade, and in the very hot weather blocks of ice are kept there for added coolness.

They are fed three times a day. Besides their favourite "wheat bamboo", a special grove of which has been planted in the gardens with shoots flown from Sikang province, they are given milk, sweetened rice congee, eggs and biscuits. All three have gained weight steadily. By August, Ping Ping weighed 60 lb. and Chi Chi and Hsing Hsing around 40 lb. each. In two years' time they will be fully grown, and it is expected they will reach about 200 lb.

NOVEMBER 1955

Attendance at the Zoo went up sharply as soon as the Pandas were put on show. Large crowds came to visit them every day, even during the hot weather when they could only be seen through the glass walls of their house. They soon became accustomed to the crowds, and Ping Ping, the largest cub, seems to like showing off, for she has been known to rouse the other two from sleep to roll around and turn somersaults for the amusement of the children.

Their antics are very amusing. It is charming to see them sitting on their fat hindquarters, holding some plaything between their woolly front paws, for all the world like a baby with a toy. They sleep like children too, lying on one side with a paw over their eyes, or sprawled out on their backs with their fat little stomachs heaving as they breathe. They have large, healthy appetites, and hold the dishes in which their food is served with their front paws until they have licked them absolutely clean. During meal times they are very good-tempered and tractable; at other times they are generally playful, but in a capricious mood they may try to bite, or hug their keeper's leg in a painful grip.

Besides providing interest and amusement to visitors, our three Giant Pandas are, of course, a valuable source of study and research for our veterinarians, biologists and zoologists. Provided their health and growth are maintained, we shall undoubtedly enrich the existing scientific knowledge of this rare and lovable animal.

MAY 1956

## Bamboo Makes Everything

by KENG PO-CHIEH

**T**O THE Chinese people, especially those living in the south, bamboo is an old and faithful friend. The South China villager builds the framework of his house from bamboo. Thin strips

of it make blinds to shade his doors and windows from the hot sun. Bamboo water-pipes irrigate his land. Carrying fertilizer to the fields, or crops to the storehouse, he uses a springy 5-foot-long bamboo shoulder-pole with woven bamboo baskets hung at each end. Thick shiny bamboo leaves make the hat which keeps the sun from his head. His shoe-soles may be made of the plant's fibrous sheath. When it rains, he opens up his bamboo-framed oil-paper umbrella.

Inside the home, the mat on which he sleeps, his tables and chairs and many of his cooking and eating utensils are also made of bamboo. With bamboo chopsticks he eats—as a special delicacy—the tender, crisp, thinly-sliced bamboo shoots, the baby sprout of the plant, cut when it is six inches above the ground.

Bamboo is so intimately related to Chinese life that the symbol denoting it forms part of more than 270 characters (including those for brush, chopsticks, flute, arrow, notepaper, broom, trunk, basket, eave, pole, sail, awning, screen and fence). In fact every part of this erect, woody, evergreen grass, which varies in height from 1 to 60 feet, can be put to some use. Bamboo fibre is elastic and pliable. Its readily-polished surface does not easily deteriorate when wet. The light, hollow stem can withstand great pressure, yet is easily splintered vertically into strips so fine that they can be woven into cool fabrics, flexible as cloth.

Bamboo has had an important place in Chinese history, technology, literature and art. It was one of the earliest materials our people used for their written records. As far back as 2,500 years ago, documents were written on flat slips of bamboo, strung together like books, replacing the tortoise-shell and animal bones on which the oldest writing appears. When the emperor Chin Shih-huang (246-210 B.C.) ordered the old classical books to be burned in an attempt to stabilize his rule, scholars secretly buried the bamboo "volumes". Dug up scores of years later, the records were found to be well preserved.

The world's earliest technical work on bamboo, written by Tai Kai-chih in the fifth century A.D., described 40 species. The later *Detailed Manual of the Bamboo*, by Li Yen (1245-1320), is a seven-volume work with fine illustrations, recording over 200 varieties.

Paper made from bamboo pulp was invented in China in the third century. Today bamboo continues to be the raw material

for about half of all paper made in China, including high-quality stationery.

Bamboo was used in works of large-scale economic importance. The still-functioning 2,000-year-old irrigation system near Chengtu, in Szechuan province, depends on it. The dyke that holds back part of the Min River is made of giant sausage-shaped bamboo baskets filled with stones, which are also used to block or open various diversion channels. A frequent sight over all the Chinese countryside is the tall bamboo structure of an irrigation pump, its power supplied by a donkey which circles the well, or the huge bamboo water-wheel, run by the power of the stream, lifting water up into the fields.

In the Tzeliuching saltfields, also in Szechuan, bamboo drill-shafts are used to bore hundreds of feet below the ground, bringing up brine and natural gas. This is the world's earliest example of deep boring. It dates back to the first century or even earlier. Such technique was not used in other parts of the world until more than a thousand years later.

Suspension bridges across the turbulent rivers of West China are slung on bamboo cables. In Chinese river and coastal navigation, both masts and sails have long been made of bamboo, while bamboo poles help to propel boats through rapids and shallows. Marco Polo, in the thirteenth century, wrote of the bamboo ropes used to haul boats along the lower Yangtze (and still so employed today). He described them as being made of "canes of the length of fifteen paces . . . split in their whole length into very thin pieces, and these, by twisting them together, they form into ropes three hundred paces long. So skilfully are they manufactured, that they are equal in strength to a rope made of hemp."\*

Bamboo has been used for palaces as well as farmhouses. Here, again in Marco Polo's words, is a description of the summer-house of Kublai Khan at Dolonor, Inner Mongolia.

The roof, like the rest, is of bamboo cane, and so well varnished that no wet can injure it. The bamboos used for this purpose are three palms in circumference and ten fathoms (60 feet) in length, and being cut at the joints, are split into two equal parts, so as to form gutters, and with these, laid concave and convex, the pavilion is covered.

Bamboo has always held an aesthetic significance for the Chinese people. It was associated with closeness to nature, with

\* *The Travels of Marco Polo*, revised from Marsden's translation and edited with an introduction by Manual Komnoff. Boni & Liveright, New York, 1926.

painting and calligraphy (done with bamboo-stemmed brushes), and with music — as the material of many instruments.

A row of tall bamboo in the east, some chrysanthemums by the fence in the west, says one writer, will add beauty to the simplest garden. Bamboo, the pine and the plum blossom are grouped together as the "three friends of the cold season".

Wang Yu-cheng, a minor official of the Sung dynasty (A.D. 960-1279), wrote poetically of the house he built for himself:

The summer shower sounds like the rushing cataract; the thick snow of winter sounds like the falling of broken jade . . . it is nice to play chess here, for the movement of the pieces makes a tinkling sound; it is pleasant to throw darts here, for the darts against the wine pot make a metallic note. All this is so because the building is of bamboo.

What makes bamboo so suitable for musical instruments, both wind and string, is its bell-like resonance. The hollow tubes are used for making the flute and the *sheng*, a many-reeded instrument something like the pan-pipes. A bamboo sound-box with silk strings makes the two and three-stringed "Chinese violin" and the mandolin-like *pipa*. The characters for "silk" and "bamboo", used together, mean "music".

Chinese bamboo carvers rank with ivory carvers as fine craftsmen. Larger stalks are split and carved with verses, to be hung on the wall for pleasant contemplation. Medium-sized stalks, used in the round, are carved with landscapes, flowers or birds for use as pots to hold brushes and pens. Thin bamboo splinters are woven into plain and lacquered baskets, bird cages, vases and dishes. The inner, honey-coloured wall of the stem, obtained by cutting away the green outer layer, can be flattened into firm, thin boards after being soaked in hot water. These make dainty little boxes for cigarettes, sweetmeats or tea, or can be split finely enough to make a fine-toothed comb. Bamboo ply, thin as blotting paper, is used by shopkeepers to wrap moist or oily food for their customers to carry away.

Modern science has added to the variety of things made from bamboo. The culm is used for slide rules and gramophone needles. Ply-bamboo makes aeroplane-wing ribs. Research in bamboo growing, and in new products, is being carried on in several Chinese universities and scientific institutes. One of the most interesting new uses of bamboo, now being studied, is as a substitute for iron ribs in reinforced concrete.



## Preserving the Handicrafts

by CHENG YEH-FU

**I**NDUSTRIALIZATION means that many things previously made by hand can be turned out on machines. This is part of mankind's progress, but in many countries it has meant the dying out of popular arts and handicrafts, with great loss to the culture of the peoples concerned.

China enters her machine age with a fine living tradition of handicraft skills and arts. She is determined to preserve them as part of the "colour" of her national life. They originated among the people and some of them have come down from times older than history.

The earliest designs and patterns, simple and vigorous, were mainly applied to things used every day by ordinary people. In the 2,500 years of feudal rule, purely decorative objects became more common and, especially toward the end of this period, designs became more and more elaborate and even at times vulgar. But artistry and skill continued high, and as wider contact was made with other countries, gained ever-wider admiration abroad. This had its reverse side. The foreign merchants who came to buy up handicraft products—like the Chinese merchants who acted as the middlemen—thought only of profit. This contributed to the artistic degeneration. The artisans who made the beautiful carvings and embroideries, the lacquerware, lace-work, porcelains and carpets, could no longer follow their free fancy. They had to use their skill in turning out "standard" objects adapted to the commercial taste, always repeating the same patterns and designs. For their work they received sweatshop wages. The famous jade-carver Liu Teh-ying, today an honoured craftsman and a member of the Peking Municipal Consultative Conference, once spent months making an intricate six-inch-high coral vase for a dealer who paid him ¥130 for his labour and the material, and then sold the vase for ¥88,500.

Handicraft output and export went down during the Sino-Japanese War and the War of Liberation that followed. In the

first few years after the Chinese people won their freedom, production and trade revived and such exports became a significant part of foreign commerce, helping to provide the capital needed for our industrialization. Moreover, there was a new market inside China, growing as the material life of the ordinary people improved, and the artisans were much better paid.

But the artistic stagnation was not immediately overcome. Those concerned in the trade, whether private dealers or the export corporations set up by the government, did not give much thought to the creation of new designs, though some effort was made by artists in a few fields such as designs for cloisonné. People became dissatisfied with the lack of variety, and there was some justified criticism from abroad that China's handicrafts were falling below traditional standards.

This problem was tackled from two sides—economic and aesthetic. With regard to the first, craftsmen were helped and encouraged to form cooperatives and establish more direct links with the socialist economy so that they need not worry over the supply of raw materials and the marketing of their products. The second task was to free the creative power of the handicraftsmen from commercialism.

Early in 1952 the Ministry of Culture sent scores of artists and art-students to look into the handicrafts of 28 provinces. They selected and brought back 3,000 different representative items for the First National Exhibition of Art Handicrafts, which was held in Peking in December 1953. Afterwards, research institutes and experimental workshops were set up for some of the major handicrafts—such as pottery, porcelain and lacquer—and “model cooperatives” were formed. In these, artists and technologists study and work with the master-craftsmen, giving advice on improving quality and technique. For processes which do not demand individual skill, labour-saving machinery has been introduced.

Especially in the handicrafts of high artistic merit like porcelain, ivory and jade sculpture, the stress is on quality rather than quantity. The aim is a high one—to equal and eventually surpass the best traditional standards of the glorious past. For things used in everyday life—porcelain tableware, lampstands, household linen and so on, every effort is made to ensure beauty as well as practicality, quality and low cost.

Most craftsmen now work in cooperatives, except for those who find it more convenient to work at home, like the peasant

women who do embroidery and lace-making in their spare time. Cooperative work has put many of the trades on a completely new footing. Not only do the craftsmen get more for their work; their skill is no longer restricted. Ivory and jade-carving, for instance, has suffered for a century because the cost of materials was so high, and the pay so small, that few craftsmen could afford to make any but the smallest objects. Now, with capital provided by the Federation of Handicraft Cooperatives, they can exercise their art on lavishly beautiful pieces for display in museums or exhibitions.

Jade-carvers now work on high-quality jade supplied by new state-owned quarries in Kansu and Chinghai provinces in North-west China.

Seven members of the Peking Ivory-Carving Cooperative recently completed a piece carved from a single tusk seven feet long and weighing almost 140 lb. It is a full view of Peking's famous Peihai Park, with 1,298 tiny people among its tree-clad walks and slopes. The carvers were able to spend fifteen months perfecting this work, which has now been sent abroad for exhibition.

Hand-weavers of the rich and colourful Chinese brocades are getting help from artists, museums and research workers. From Nanking, where the famous "Yun Chin" or cloud brocade is made, the Municipal Cultural Bureau has sent artists to copy ancient designs from pieces preserved in the Palace Museum in Peking, many dating back to the Ming dynasty (1368-1644). So called because its patterns and colours have the richness of clouds at sunset, this brocade owes its lavishness and fine workmanship to the fact that it was long produced under imperial patronage. For this and other brocades made in Hangchow, Soochow and Chengtu, new patterns are being created by artists and designers.

Most Chinese potters still throw their wares by hand and fire them in antiquated kilns unchanged for hundreds of years. Even in Chingtehchen, China's most famous porcelain centre, there are no electric gauges in the ovens and temperatures are controlled by watching the colour of the flame. One phase of the present effort in this field is to modernize the industry for mass production, with special care for good design and pattern in everyday wares. On the art side, some of the rare ancient glazes formerly produced only in imperial kilns are being experimentally reproduced by ceramics experts, working with the old master-craftsmen who know their formulas. Handed down for generations and jealously

guarded, their secrets are now being scientifically analyzed and studied at the Ceramics Research Institute in Chingtehchen which, together with the Central Academy of Fine Arts in Peking, is experimenting with over 60 new glazes. For painted ware, the best of the old designs are being cherished, and good new designs and decorative patterns are being studied for application on a mass basis. More than 300 new designs have been created at Chingtehchen alone.

Embroidery cooperatives too get help from artists and designers. They are reviving forgotten designs and inventing fresh ones. Hunan embroidery, under pressure from the export trade for scores of years, had lost its original variety and become very stilted—with endless dragons and phoenixes, or conventional floral and landscape patterns. Now it has regained some of its folk character. Soochow embroidery, most famed of China's needlework arts, is acquiring new designs and forms with the help of nationally-famous painters and designers.

The batik work and cross-stitch of the Miao people in Southwest China was formerly made solely for bridal and festival attire or dowries. Now this too is cooperatively organized and sent out for sale to other parts of China, to the great delight of women all over the country.

A very pleasing peasant handicraft is the blue and white hand-printed cotton, made in nearly all provinces of China. The cloth, handwoven on cottage looms, is stencilled with lime and then dyed with indigo planted by the peasants themselves. The parts which have been limed remain white, and the rest becomes a rich dark blue. The bold, cheerful patterns are most attractive. Foreign women visitors often buy the cloth, rough homespun though it be, to make evening gowns. This peasant art had almost died out seven years ago because of the dumping of cheap cotton prints in the countryside. Now the newly-organized cooperatives which produce it can hardly fulfil their orders.

All these handicraft products and many more are given trial sales at a big special shop jointly managed by the Artists Union and the Federation of Handicraft Cooperatives in Peking. Here one can see—and purchase—a tremendous range of delightful things, from peasant scissor-cuts, bold or delicate, to folk toys and filigree; from tiny clay figures to elaborately painted porcelain vases. Also to be bought are decorative screens carved in wood or lacquer or inlaid in mother-of-pearl; sandalwood fans, hand-

wrought jewelry, ingenious traditional toys, and a thousand other objects of delight and beauty. Similar shops are to be opened in several other cities this year—among them Dairen, Shanghai, Tientsin, Nanking, Canton and Chungking.

In every branch of handicraft work, young people are being trained to carry on the traditional skills. Some of them go direct from school as apprentices into the cooperatives for ivory-carving, cloisonné work, lacquerware or jade. The master-craftsmen are their teachers, but no longer their "masters" as in the old days when apprentices were virtually unpaid and harshly treated, and training was often deliberately slowed. Other students are entering China's first College of Industrial and Applied Art, or the secondary trade schools set up in different regions, both of which also admit cooperative members who want to improve their skill. The old craftsmen themselves no longer fear for the future. About thirty of the most skilled in Peking receive salaries equivalent to those of university professors. And they are treated with great respect, as artists making a big contribution to the nation.

A research institute for industrial and applied arts was recently opened in Peking. Its eleven departments include ceramics, lacquer, embroidery, metal-work, dyeing, clothing and furniture design, and each department has its own experimental workshop. Selected members from cooperatives all over the country come to the institute to take courses in their own particular craft. Leading craftsmen work with artists and technologists in research. The Palace Museum is setting up a reference centre for art handicrafts where art books, traditional designs and actual examples of the best work are to be available for study.

The second national handicraft exhibition will be held soon. It will be a visual summary of all that has been done since 1953, when the first one was held, to revive and improve China's incomparable handicrafts.

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