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Korean Economy

Canadian Doctor on Medicine in China





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COVER PICTURE

A girl in Chiyuan, Honan.

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EASTERN DIARY

An Agence France Presse report last November from Peking seems to have stirred up quite some interest in the outside world. It was based on an article written by the educational revolution team of the Teachers' University of Shanghai and published in the People's Daily of Peking. The article, mainly on library administration, begins with a request from a department of the university for European and American novels of the 18th and 19th centuries which started the library workers thinking and arguing. What follows is an account of what they did, how students reacted to their decision and how the library has been dealing with this and similar questions.

The AFP report, however, was rather sketchy, and being a news report it probably could not have been otherwise. But I am sure many would like to know more. So here let me give a fuller account of the article.

The above-mentioned request came from the Chinese Department of the University in the summer of 1970. This touched off an argument in the library. Some proposed that the request should be complied with, but others raised vehement opposition. For the latter, to buy these books would be 'a signal for the restoration of the old regime'. They failed to come to any conclusion.

But at the same time, there were in the library large quantities of books of a similar nature. Should the students be allowed to borrow these books? Opinions again differed.

As the revolution in education continued in depth and the university enrolled new students, more of them came to borrow books and more requests for new books came to the library. But when students asked for problematic books, some of the library workers became alarmed. They even tried to withhold these books.

This was severely criticised by the students. It was pointed out that the library should positively serve the proletarian revolution in education. To withhold books, to shun contradictions, is like refusing to eat for fear of choking. This criticism finally went home. After studying and discussing the matter, the library workers came to a new understanding. To supply books to the students in a positive way, they now concluded, is to help train proletarian fighters. Readers would of course come into contact with wrong ideas and 'poisonous weeds'. But just as Chairman Mao has pointed out: 'Fighting against wrong ideas is like being vaccinated—a man develops greater immunity from disease as a result of vaccination. Plants raised in hot-houses are unlikely to be sturdy.' If the students were not allowed to come into contact with problematic books, it was asked, how were they to develop their judgement and their faculty of telling the wrong from the right?

But the library workers also realised that to merely adopt an open-door policy was not enough. Though they should have confidence in the judgement of the vast majority of the students, they had also to face the fact that, being young, some of the students could be corrupted by some of the books they read. The library workers thus began to take an interest in the books the students were reading and how they were reading them. To help the students develop their faculty ot criticism and judgement, the library workers not only wrote book critiques, but also encouraged students to do the same. Such critiques, ranging from a few hundred to several thousand words, were posted on the wall-boards in the library or compiled in book form. When differences of opinion arose, library workers would take these to the students for further discussion, or refer them to the students in the class of literary criticism.

The library also sponsored extra-mural reading clubs and recommended good books for after-class reading.

Dr Wang Hao, Professor of Symbolic Logic, left China in 1946 for the United States, where he settled down and was naturalised. Last June, after 26 years' absence, he came back to China on a fourweek tour, during which he visited, among other places, a village in Shantung, where his father and his elder brothers were born.

On his return to the United States he talked to Chinese residents there about his visit. The lecture was in Chinese and a transcript was recently reproduced in the *New Evening Post*, a Chinese language newspaper in Hongkong.

In his lecture Professor Wang first listed what he called the 'basic progress' made in China since Liberation. Most of the measures carried out in China, he said, were taken with a long term view to achieve what is fundamental and necessary for the great majority of the people, and he listed the following achievements:

-People have enough to wear and eat, and one no longer sees people in tatters, whether in the cities or in the countryside.

-Closely related to the problem of food and clothes is drought and flood prevention. Here the amount of work done and the achievements attained are unprecedented.

--Soldiers, poor and abhorred not very long ago, are now respected and put in leading positions in production and education.

-The country is now a closely knit unit and no longer the 'sheet of sand' which it used to be. Some may feel that there is too much organisation, but others are of the opinion that some excess is necessary in order to set things right.

—A number of infectious diseases have been wiped out, and health has improved among the general public.

----Equality between the sexes has attained a high degree.

—Illiteracy has almost become a thing of the past.

—In industrialisation and mechanisation, China is still very backward by comparison with advanced countries and a great deal has yet to be done. But also in this respect she has gone a long way. Relying: on herself, China has overcome the first and most difficult task of producing things which had never before been produced in the country.

Professor Wang was especially impressed with the big strides made in China in medicine and health. Comparing China with the United States, he said:

Undoubtedly China is very much behind the United States in automobiles, aeroplanes, washing machines, television, kitchen appliances, plumbing, the mechanisation of agriculture, automation and comfort in living. But on the other hand China is superior to the United States in the problems relating to the position of women, national minorities, social order and the ideology and education of the people. What is most surprising is that, in the field of medicine and health, China is not only comparatively more advanced than the United States but her medical service is also more fairly and equally distributed among the people. Let me name a few concrete examples. China has completely eradicated venereal diseases. Doctors are more evenly distributed in the country. Working women enjoy a 56-day leave for childbirth. The barefoot doctors are a glaring contrast with the monopoly of medicine by professional organisations in the United States.

It should be interesting to hear Professor Wang, who would be classified as an 'advanced intellectual' or a 'big intellectual' in China, talk about his counterparts in China. So here I translate at length: In China recently I met many of my former teachers and schoolmates. My two general impressions about them are: First, concerning ways to advance knowledge and educational reform, all are open-minded. They are still actively discussing and searching for fundamental ways and tactics and there is no arbitrariness. Second, individuals differ a great deal in their degrees of enthusiasm, but they all accept as reasonable the notion of substituting public interest for private interest.

Are all intellectuals in China happy? I find it very difficult to give a definite answer to this question. . . In fact the question should probably not have been put in such a way at all. For it has always been true that intellectuals have their anxieties in whatever society they may be. In a new society old anxieties have disappeared, but new ones might emerge in their place. Furthermore it is not easy to discard self interest. Rationally one might have accepted the principle of serving the people, but that does not necessarily mean that emotionally one has also accepted the consequences of putting such a principle into practice.

My feeling is that, especially for those in advanced research, there is less freedom than in the West in choosing one's subject according to one's interest. I have seen married couples work at two far apart places, and this seems to be more common than in the West. I have also seen some intellectuals having difficulties getting their children, academically qualified, into universities, though today there are still proportionally more children of the intellectuals in university than those of the workers and peasants.

I had ample opportunities to meet and talk in private with friends, relatives and my erstwhile teachers. . . My impression is that they are all very enthusiastic about their work. The one I admire the most is a physicist, with whom I was in college together. While in the United States, he used to spend a great deal of time on classical music and Western literature. Now he is so devoted to his work in applied physics and political studies that he has no time for either music or literature.

But a friend who likes to play the violin not only still keeps his hobby but has also picked up piano playing. He is a very accomplished scientist, sincere and modest. According to him, he has not taken an active part in politics since he returned from abroad and he is not a communist. But he easily shares the feeling common to most of the intellectuals now in China. They are all patriots and they admire the Chinese Communist Party for the achievements it has made in national construction. I could see that he was respected, well treated and in high spirits.

I also met a former teacher of mine who used to read a great deal. It seemed that this old habit of his had not changed at all. He still gives free rein to his interest, reading different sorts of books and studying different sorts of purely theoretical questions on very special subjects. I felt as if I were still back in Kunming where I was his student. Working in a research institute, he has of course more freedom. But those teaching in universities have much less time at their disposal. Some told me that, devoting all their time to teaching, they had few opportunities to work on questions not directly related to the subjects they were teaching. Some have begun to find that this is not quite right and discussions are now under way to find ways to correct this situation.

I went also to see Professor Feng Yu-lan, the well-known philosopher, and his wife in their home. For their ages they looked surprisingly fit, both physically and mentally. Professor Feng is revising his well-known work, A History of Chinese Philosophy. His devotion to work should put us of the younger generation to shame. I told him about my dissatisfaction with the current trends in philosophy in Britain and the United States and the difficulties I had encountered in studying Marxist philosophical thinking. It was comparatively easy to comprehend the notion that knowledge is a reflection of the physical world, but hard to be initiated into dialecticism. In reply, he stressed the importance of taking change as the fundamental phenomenon of the world. Non-change, according to him, is but an abstract and special form of change. He wrote a poem and presented it to me. It reminds me how China has changed from a weak nation to a strong one during the 26 years I was away and urges me to focus my attention on changes wrought in history in order to have a good understanding of change in philosophical terms.

On the important question of integrating theory with practice, I was given some unexpected information. Quite a few people told me while I was in China that it had recently been realised that practice had been over-emphasised in neglect of work on certain basic theoretical aspects. Here one sensed the urgency felt by the academic world in the all-round development of scientific research. I was told by a friend that the latest line was that, while for special colleges the stress was still on close coordination with production, universities of a general nature should redirect their attention to theory.

The development of science is of course closely related to education, especially the question of how to interest the young generation in science and thus bring up young scientists. The measures taken in the United States and the Soviet Union, though effective to a certain degree, are not acceptable to the Chinese. So what to do in this respect is still under incessant study in the academic world of China. Related to this, the questions of university enrolment and productive labour in universities are all under study and discussion.

The excavation of the Han tomb (2,100 years old) at Mahuangtui, Hunan, formed the subject of a recent seminar sponsored by the Chinese archaeological journal *Kaoku*.

Comparing the discovery with the earlier looting of the tombs in the same area around Changsha by foreign imperialists and their Chinese collaborators, some of those participating in the seminar pointed out that the latter had not only caused the removal of historical relics from China, but also destroyed their full value as historical data with their desultory diggings and taking and preserving only what they considered valuable. The present excavation was far from fortuitous. In fact as early as 1952 the Archaeological Institute team at Changsha, having come to the conclusion that a group of tombs at Mahuangtui were of the Han period, had realised their historical importance.

But considering the working conditions and the level of archaeological techniques then obtaining, the institute decided to keep the tombs intact until a later date when it would be possible to make more systematic and careful scientific studies. And that day had come, less than 20 years after.

A great deal of interest has been focussed on the cause of the high degree of preservation of the contents of the tomb, including the body of the woman buried inside. Those taking part in the seminar seemed to have been agreed that the white clay in which the set of six coffins was encased had played an important part in preserving the body. In the course of excavation, when the layer of white clay was punctured, a gas was emitted. Like marsh gas, it burst into flame on coming into contact with fire. But this may be only one of the contributing causes, even if the most important one. It was believed that the compact earthwork surrounding the layer of clay and the layer of charcoal underneath it were all partly responsible. The layer of clay, besides keeping out moisture and suppressing the breeding of bacteria, might also have helped to keep the temperature inside at a constant level.

The seminar also brought out the importance of the 312 bamboo slips used to record the burial articles in the tomb. This was the first time that such slips were found in such large quantities. With a total of over 2,000 characters on them, the slips provide an ideal opportunity to study the transition of the Chinese script then taking place, namely from *chuan* to li_* .

Earlier, legends had it that the group of tombs at Mahuangtui were those of the Prince of Chu and his family members of the Five Dynasties period, thus putting them in the tenth century. Others believed that the two most prominent tombs in the group were where Liu Fa, the Prince of Changsha of the Han Dynasty, buried his two concubines. Now both have been proved wrong. 6

The inscriptions on the lacquer ware and the clay seals on bamboo cases and a pottery container all indicate that the woman buried in the tomb was a Marchioness of Tai, most likely the first one. The only question which baffles the archaeologists is how the Marquis of Tai, living off a fief of only 700 households, could have afforded to bury his wife in such a lavish manner as the finds in the tomb have borne out. But it was argued at the seminar that the first Marquis of Tai, who served also as the Chief Minister to the Prince of Changsha, a member of the Han royal family, must have wielded a great deal of power and amassed wealth far beyond his own meagre fief.

Lee Tsung-ying



A Journey to Chiyuan

Rewi Alley

We went by train to Hsinhsiang from Chengchow, and rested a while before crossing the 140-kilometre plain to the county of Chiyuan. It was one of the very hot early days of summer. There had been little rain in the prefecture since last autumn, but due to ample irrigation, the crops were even better than those of last year. There are around six million people in the fourteen counties of the prefecture farming 533,000 hectares of land, 33,000 hectares of which is irrigated. Most of it is flat, much once alkaline. Now with the water in the water table near the topsoil being pumped out, the salts no longer rise to the surface. Then with all the improvements of the new day, plus its determination and spirit, much has changed, and heavy crops are now the regular thing.

There are two city municipalities in the prefecture, both industrialised— Hsinhsiang and Chiaotso. Foreign monopoly once exploited the Chiaotso coal, but now the place has greatly enlarged with many new factories to become one of the many rising industrial towns of China's hinterland.

Chiyuan County

On our journey to Chiyuan over the good tar-sealed highway, we passed through several counties, Huochia, Hsiuwu, Poai and Chinyang, as well as Chiao-

tso, and towards evening came into the Chiyuan County centre, set amongst many trees in a basin under the escarpment of the southern edge of Taihang Shan. It is a county of 440,000 people, 81,000 households. Back in the bad years of drought and Japanese domination in 1942-3, 100,000 people died of starvation, and many more went off as refugees. The rivers that came down through mountain ravines from Shansi merely flooded and eroded the lands below, sweeping more silt from the farmlands into the Yellow River that forms the southern boundary of the county. Eighty-one per cent is mountainous or else rolling country, the highest mountain peak being that on Wangwu Shan, which is 1,800 metres above sea level. At the county centre the height is 183 metres. The main rivers other than the Yellow River are the Chi Shui, the Mang Ho, and the Chin Ho, the last two coming down through passes in the Taihang mountains from Shansi Province. In the bad old days, agriculture here was especially backward. There was no industry to speak of, the average yield of farmland was pitifully low, and hills were eroded and quite unproductive, long having been denuded of forest. Much of the Chiyuan basin was marsh. The people of today's Chiyuan have sought to remedy all of this at the grassroots. They have gone into the back hills and reforested 60,000 hectares. When the trees are big enough, they will let the sheep and goats at present on 22,000 hectares of pasture graze in the forested hills, and turn to replanting the total hill area. Many horse chestnuts are planted, their nuts being good for making into pig fodder. There are also oak, ash, as well as walnuts, persimmons, apple and pear trees, and many apricots, peaches, etc. Quick growing timbers from these forests and those like poplars from villages have already supplied the county with all its building timbers so far necessary.

The county has 46,600 hectares of arable land. There are only about 2,000 more hectares that can be reclaimed through terracing. 21,300 hectares has been irrigated, there being water enough for 33,000 hectares when all laterals for distribution now being built are completed. In the old landlord days, there was but 4,000 hectares irrigated and that by wells.

Taming Rivers

After Liberation, the people took a good hard look at their legacy, and in consequence first turned to the Mang Ho River, to bring it under control. They planned a canal from the upper reaches of the two rivers Chin Ho and the Mang Ho, bringing their waters together and running them around precipitous cliffs, in the way the Red Flag Canal, popularised now in Linhsien in the north-west of the province, in these last years has done. Here, however, some of the work carried through was even more difficult, the lads had to hang down from the tops of the cliffs by ropes. Controlling the Mang River was started in 1953 as the first stage. Then taking the Chin Ho over to the Mang was started in 1965, the work being completed in August 1968. The whole main canal, running over the many aqueducts and through tunnels, or around steep cliffs, is 120 kilometres long. Some of the water is taken into small reservoirs,

some runs away into laterals and then over the countryside, or in branch canals along ridges of rolling country, when it gradually descends to the newly terraced fields below. With the rivers controlled, and the back hills forested, summer floods have lost their terror for the lowlands. One in 1948 swept all before it, villages and fields. Bigger rains since have done no damage.

In 1949 the county averaged around 900 kilo. of grain and 187.5 kilo. of cotton per hectare. In 1971 the average was 3.1 tons for grain and 247.5 kilo. for cotton, irrigated and dry land taken together. But often in times of drought or flood in the old times, very little indeed would be harvested, and the people died. The only industry in those days was a small coal pit, and some blacksmiths who achieved fame by producing a plow share that turned the sod very well, much better than in other counties. Actually, it was the 2,000-year-old Han Dynasty type, which had survived here, along with the way of making it.

County Factories

In the county today, there are over 30 county factories, 26 more run by communes, and 570 little ones operated by the commune brigades. The county factories are modern ones, well placed with all the facilities. They have production valued at over 45 million yuan a year. Running on the principle of using local materials where possible to fulfil local needs, the first one visited takes lead ore from the local county mine, refines it, and then makes plates for the miner's storage battery which operates his lamp. The factory turns out 180,000 such lamps a year, made in this plant, both for local and also for coal mines in other parts of Honan. The lead ore also contains gold, silver, zinc and mercuric oxide, all of which are extracted and refined during the process.

Here the factory buildings are well

spaced in an especially large compound, there being an awareness of the hazards of lead dust to workers' health. As a side line and to meet local demand, rubber tyres are made for the rubber-tyred handcarts so very common in all Honan rural areas. The workers had just finished building a large block of flats, in modern style, for living quarters. The plant employs 460 workers in all. It has a good machine shop, now busy constructing machinery and equipment for the various other factory shops. The struggle is for more mechanisation all along the line. The plant was set up in a very small way in 1957, but removed to its present location and greatly expanded in the 1958 Leap Forward year. When it started, only 70 tons of ore were treated a year. Now 390,000 tons are.

The county machine shops were busy when we arrived to see them making lathes and other machine tools for communes and commune brigades. It is amazing how many machine tools begin now to infiltrate into the countryside, making one wonder what the people of tomorrow will produce with the mechanisation that now so irresistibly comes to their aid in the struggle for better livelihood. The Chiyuan machine shops have 250 workers. At the time of visit 60 of them were out in the countryside helping with rural mechanisation in the summer harvest rush. Some twenty lads and lasses from commune brigades were in the shops as learners. The plant has 102 modern machine tools, overhead cranes, and a very well-set-out foundry and smelter. Workers have made many creative innovations, and the concrete floors of some of the workrooms, where groups have met and had technical discussion, were seen to be covered with sketches and calculations chalked on them during the process. A total of 4,900 pumps for mechanisation were made last year, and 700 threshing machines for commune brigades. Some of the work is in repair of rural machinery brought in, but now more and more the commune machine shops are taking care

commune machine shops are taking care of this. The county also operates a Kangta-type school for middle school graduates and commune folk which has six classes, two of which concern themselves with the upkeep and construction of agricultural machinery, thus assisting commune mechanisation quite a bit.

Education

Education has taken a prominent place in the life of the people in Chiyuan. There are 17 upper middle schools, and 805 lower middle and primary ones, with a total of 100,000 students in all, and having 4,300 teachers. There has been a good deal done to wipe out illiteracy amongst the older folk. Stress is laid on health education, the work centring around the county hospital which has 210 beds, and on down through commune hospitals, brigade clinics. There is a public health station in the county centre which deals with preventive measures, vaccinations, injections, etc. The mountains have produced over 100 kinds of herbal medicines which are collected by communes and sold. In birth control, average births per year are 1.5 per cent around the county centre, with an overall average of 2.1 per cent for the whole county. Before the movement for planned families came along, the figure was 2.5 per cent. All aids for birth control are distributed free, right down to the smallest production teams.

Iron and Steel Plant

While in Chiyuan, we made a rather more complete survey of local industry than has been possible in quicker visits to other places. So we spent a whole morning at the local iron and steel plant, situated some way from the city, and using a lateral come down from the Mang-Chin Canal for its water supply. Actually, iron has been smelted in the mountain valleys

of Chiyuan for five hundred years, but it was only with the surge of the Leap Forward in 1958 that the first two modern furnaces were set up amongst grain fields outside Chiyuan city. Then came the Liu Shao-chi period in 1960-61, when he ordered all iron and steel works that did not show an immediate profit be closed down. So it was not until 1968 that the present plant began to take shape, a hundred-cubic-metre furnace installed, along with a battery of smaller sizes, including the two old original ones. In 1969 five thousand tons of iron and 99 of steel were turned out. In 1970, 10,200 tons of iron and 2,000 of steel. The present inhibiting factor to more rapid increase , is that there is no rail connection between the iron mines in the mountains and the smelters, and road transport of the ore is too slow. There is a light railway connecting with the local coal mines, however, and there is plenty of limestone available around. There are 2,456 workers in the plant, more than the number needed for present production if there was more mechanisation. Four hundred are women. Yet it is always good to train for much bigger plants. Costs now come down rapidly each year, and the ability to expand becomes greater all the time. All workers live on the plant site, and were busy building a big new block of housing at the time of our visit. There are around 100 cadres in the administration, the leading ones being mainly middle-aged who have come up the hard way through actual practice. The plant has its own machine shops, and maintains a geological survey team in the mountains all the time, surveying and mapping new deposits of ore as they find such. Finds have been rich, good enough for long-term major development.

Light railways are now quite a feature of many Honan counties. In Chiyuan the people have built one that connects with two counties without coal, so that they are kept supplied with fuel, and the coal mines with business. The first lines

the people built of white native iron founded in Chiyuan, turning to steel later. Two trains run daily from Chiyuan to these counties, and passengers are carried. Speed is around 30 kilometres an hour. The county maintains quite a large repair works for the locomotives and rolling stock. A familiar sound in Chiyuan town is the shrill whistle of the little locomotives as they go along with their work. To have plenty of good, cheap iron available for immediate use means a great deal to the whole process of mechanisation in Chiyuan and the counties around. But steel producting, as with electricity, must go up if industry is to maintain its present momentum here and all over Honan.

Plastics Factory

The weather decided to change the day we went to the Chiyuan Sohua Plastics Factory. The wheat harvesting had begun, but the first steady rain for months here soon changed country roads to mud. The folk at the plastics factory had rubber shoes prepared for us, so we went over their quite large compound with reasonable ease. We were met by a sturdy middleaged woman, who has been the leading cadre in the factory ever since it was started in the Leap Forward of 1958, then with no equipment but one donkey, the 17 workers working by hand. By 1966 however they were turning out 10,000 pairs of plastic soles for shoes, as well as plastic pipes for local use. In that year work started to extend in earnest, more workers were taken in, and more mechanisation applied, which gradually built up production until now six million yuan a year worth of products are made. The main one now is the polyviny chloride that goes out into industry for making plastics. Other lines are chemicals such as caustic soda, hydrochloric acid, bleaching powder, and so on. Some 700,000 pairs of plastic soles were turned out last year, 100 tons of plastic sheeting, as well as the plastic

pipes of various sizes so popular in the hilly countryside when a farmer wants to bring down water from a spring to his home, or put in some small irrigation work that needs such. I wondered how the pipes were joined, and it was quickly demonstrated that by softening both ends to be connected with a blow torch, and fitting a joining length of smaller pipe between them, the join becomes completely tight on cooling. Workers here are practically all middle-school graduates, and take a deep interest in all technical processes, coming together for technical discussion in 'Chuko Liang meetings', named after Chuko Liang, a noted creative mind of ancient times, famous in the 'Three Kingdoms' novel.

In wages, workers get around 40 yuan a month, and have living quarters on the plant. Those who are married usually have their families in the old county city, not so far away, across the fields. There is a problem with the waste water, which is understood, and is being met. At present waste water cannot go into the canal irrigation system of the communes around. Raw materials except the salt come from the county which is not far away. The provision of a good serviceable shoe sole lifts a considerable burden from women's lives, for in the past they have always been making cloth soles, which would wear out speedily. With plastic, two pairs a year is sufficient. The cost is low enough for all to meet. To find so sophisticated a plant with all its overhead pipes of various colours, its complicated equipment so well set out, in a rural county town in the Taihang Mountain area is certainly a sign of the times, and too of the way new Chinese industry is being spread all over the land, based firmly on the people. The country girl at a control desk sitting amongst meters, gauges and what not is a changed country lass all right. She is no longer married off at fifteen or sixteen to become the slave of a demanding motherin-law. She has become a creative person, in her own right, not getting married

until she is 25, and then to someone she knows quite well, and likes.

Coal Miners Then and Now

We went out to the foot of the mountains, across downs rich in golden standing wheat, and looked at two of the coal pits being operated by the county. There were the same terrible stories of coal miners' treatment in the old days when some landlords operated one of the pits. Long hours and poor food, a management which would simply seal off a tunnel when it flooded and let miners become entombed. There was low production, and poor equipment. Now the whole place gives a relaxed impression. Coal either comes up shafts on trolleys or up an inclined slope that runs down to where coal faces are.

There are 2,030 workers, and the mine runs for three shifts a day. By 1957, it was gaining 130,000 tons of coal a year, in 1966 230,000 tons, which has now risen to 438,000 tons. By the end of this year, a new pit now having been dug and equipped will be bringing in another 450,000 tons a year, which will make the total amount gained near a million tons. Which is not so bad for a county project, apart from the national, state or provincial mines. The additional coal will be welcome, for now county factories begin to make more demands than the old production could meet, and all industry must move forward together. Miners' wages average 60 yuan a month, old ones getting around 90, and lads fresh from the schools, who work above ground in machine shops, etc. 30 yuan to start with. There is a miners' hospital with 72 beds. Amongst miners who have grown up and worked under old conditions, there has been some silicosis, and all found have been retired on full pay. The disease has not been discovered amongst workers who have come in after Liberation. The field extends over a 14-kilometre-long area, there being several coal-bearing strata, the

thickest being well over two metres thick. Galleries are lined with stone or concrete so as to make working easier, timbers being reserved for new workings near the actual coal extracting areas. More mechanisation is being worked out wherever possible, everything having to be done on the self-sufficiency basis as is the case with all other county and commune industry.

Workers have a big hall, where cinema shows and entertainments are held. There is a school for their children.

A Park of a Factory

Not far from the county coal mines, still around 8 kilometres from the county seat, is the county machine building factory. Here a good many of the machines the coal mine needs are made, as well as machines for the communes. They have a specialty here, the manufacture of shapers for county or commune machine shops, and in the past two years have turned out 665 of them. One of the more common farm tools produced is the straw crusher and chaff cutter, 8,000 of which have been made to date. Of the 300 other machine tools workers have made for themselves and other county factories are planers and grinders of excellent up-todate types. In 1971 the value of production was 2,400,000 yuan. It is expected that this will rise to be over four million yuan in this 1972.

Set on a very large area of land, the compound is more like a park than a factory at first glance. Some of the biggest shops stand out boldly against a background of the Taihang Mountains, but most are well separated, and in between trees. Living quarters are spacious for the 475 workers, all of whom have their homes in the communes around. Starting as an iron-working factory in 1958 in the Great Leap Forward, it gathered together many blacksmiths, and turned out simple agricultural tools. Then with setting up of the communes, it helped to equip such with their first machines. The change to a machine-building plant came in 1964, when the biggest of the shops were erected. Most of the old workers have stayed on learning to handle new machines, having now been joined by many youngsters who have had middleschool education, both lads and lasses.

Born of Struggle

From this factory we went to the county fertiliser plant set up in the past two years, and now turning out 3,000 tons of ammonia base material a year. In ancient times, some monks came to this spot and built a temple by a spring that gives the county its name. A spring that throws up a considerable volume of water. In Sung times and perhaps earlier they built a pagoda there which still stands, though the temples have now become farm houses.

Work was started on setting up the fertiliser factory here in July 1970. Though the main equipment was provided by the province, yet all the installation and making of parts had to be done by the workers of Chiyuan. All local machine shops helped well, however, and sent in skilled technicians to assist. Local people and cadres also came in to help with building operations. Even though buildings had not yet been completed, production started in February 1972, at the rate of 45 tons a day of ammonia bicarbonate, which now runs to 12,000 tons a year. Of the 280 workers, 58 are women. Most are middle-school graduates. The technician is a local man who was sent out to work in similar plants and get enough experience to be able to help here. All are learning how to make fertiliser, by making fertiliser. Water pumped up from the springs gives the plant a good water supply, and the waste water goes off into the canal system, bringing only good to the land.

Some idea of the early stages this plant went through, we saw near by where a phosphate fertiliser plant was being erected, and work was under way during the process. Workers temporarily lived with the commune farmers around, and production was going full steam ahead while buildings were being erected around the plant equipment. Workers looked very happy with the struggle of it all, for here they had been given a challenge and had met it triumphantly.

Old Pagoda and Modern Opera

We went over to the old pagoda to have a look at its construction standing so sturdily after a thousand years. Both outside and all inside faces in each story are covered with small Buddhas, most in a good state of preservation. Standing in the domed room at the base, and looking up through the round aperture in the top of the dome, one could see Buddhas right to the top of the structure lit by the rays of setting sun striking through the light inlets all the way up. The old men who designed it must have been quite considerable artists in their way.

We attended a performance given by the local opera group one evening. There were two selections. One on education, on a struggle between two grandmothers over the way the granddaughter should be taught, and the other a Resistance War drama of 8th Route Army men and Japanese invaders, a thesis still very much alive in these regions, where the struggle went on between the people and aggression for so many bitter years. The acting and singing were both excellent.

One morning we set out to look at some of the brigades of the Chengkwan Commune, finally getting to one whose village bordered the mountain slope, called Peitsun. There was the faint smell of ripening wheat and harvest in the air, coupled with the freshness that came after a day's rain. The brigade had 640 families in it, 3,160 people in all, farming 373 hectares of land, 133 hectares of which was hill slope. There are 22 production teams, 20 working on agriculture, one on

forestry, and one on industry. In the bad old days, this was a noted poor place. A good portion of the land was marsh, called by the people 'Frog Swamp'. All of the good land was owned by five rich peasants. Poor peasants left their families to grow a little corn where they could, while they themselves went off through the mountains to Yangcheng in Shansi to do hauling and carrying work there. The carrying pole then was their real staff of life. In the famine of the early forties, 370 families went away to Shansi as refugees, while 540 of those who stayed at home died of starvation. After the big change came, the land was divided properly, and the big swamp drained, a 30-kilometre-long water course being made to carry off the water. Not 750 kilo a hectare could be averaged over wheat areas cultivated in 1949. By 1966, the area had extended, with the total of over 1,500 kilo a hectare. Then came six years of concentrated work helped by more advanced political understanding, so that the 1971 grain total was 5 tons a hectare for grain and 840 kilo of cotton. This period also saw a great increase in tree planting. Some 30,000 date trees were grafted on to the hill briar, that makes such a good stock for them. Also 20,000 walnut trees were planted, 9,000 persimmons, 3,000 apple, as well as some 80,000 timber trees. Planting trees on a rocky mountain slope is not so easy, as a hole has to be hewed out of the rock, and good earth brought in to give the tree a proper start.

We visited the two food-processing plants, one of them a flour mill, both operated by the swift waters of the branch canal that ran down from the main one up on the mountain slope.

School and Birth Control

We called at the local seven-year school. It was the last day of classes before the wheat harvest holiday. Country schools in this part of China have three

holiday periods a year, those at wheat harvest, autumn harvest, and then for general festivities at spring Festival, the old Lunar New Year. With 24 teachers and 780 pupils it gives a seven-year course, five in primary and two in lower middle school. Besides the usual school subjects, politics and agricultural general knowledge are taught. All being related to practice. In politics, the meaning of Tachai, what working class internationalism connotates, and how Dr Bethune's work illustrated it. The lesson in determination shown in the essay on the foolish old man at Wangwu Shan, and what it takes to really serve the people, and the words and music of the Internationale and their meaning for ordinary people. After we heard about the school, the children put on a fine entertainment of dance and song for us.

With brigade leaders, we talked for a while on the way livelihood was bettering all the time, how a 250-kilo allowance of grain a head is now possible, how there were now 163 sewing machines, 85 bicycles, and 320 rubber tyred carts amongst the people with each of the 22 work teams having a horse cart, and the brigade now owning two new tractors, a four furrow plow and a new style disc cultivator. How for some years after Liberation, around 100 tons of grain a year had to be bought in to relieve the shortage, but how now there is a surplus, and all production teams have their grain reserves. We talked a while on how well the brigade clinic operates, and how well birth control ideas have spread. In 1965, there were over 80 births. In 1971, only 47, while nine old folk died in that year. So the present increase is relatively small indeed. All necessary contraceptives are provided free.

It was a pleasure to see canal laterals sparkling down the sides of streets here, and to look at the many trees that have been planted in village compounds and beside the commune roads. All of this, together with the new timber planted in the mountain areas, will ensure that better and brighter homes will be possible to build in the future. What was the use of growing timber in the old days, when Kuomintang soldiers would come, commandeer carts and cut down everything to cart off to the city and sell or use as firewood for themselves?

We went out into the country to see the main trunk canal, the Tsengkan Chu, of the Chi Shui River project. Halting by the Hungwei aqueduct that carried a branch lateral over 840 metres of a river bed, with its high stone arches built by 12 commune brigades in 5 months, we went up into the hills and climbed up a steep slope to the main stream with its waters surging around the hillside in a stone-lined canal. To cut off a loop, and to give a more direct flow, a 200-metre tunnel is being made under the mountain, at the time of visit over half having been done. We stopped at a few of the villages and met some of the folk who had done all this work. Able, friendly people they were, youngsters so light on their feet, so lithe, yet who have helped to do all this almost incredible amount of stone work, succeeding in taking the rivers out of their valleys and making them run in new channels high up on the hillsides serving the once parched and barren lands below.

On the way home in the evening, we passed two small coal mines, sheaves busily turning over their pit heads, mines which were operated by different communes for their own fuel and industry.

The Old Foolish Man's Mountain

One hot morning we set out to go to Wangwu Shan, the mountain of Chairman Mao's essay on 'The Old Man Who Removed the Mountains', and part of the old liberated areas where the Eighth Route Army fought the Japanese. Passing over ranges and through forested valleys, we got to the headquarters of the Hsinyukung (New Old Foolish Men) Brigade of the Wangwu Commune. This commune, because its villages are far apart on hillsides, has 42 brigades for its 21,000 people. They have 3,733 hectares of tillable land. For irrigation they have to use reservoirs, and at the time of our visit twelve brigades were working on a fairly big new one called 'Yushan' that will hold back 11,000,000 cubic metres of water. A thousand-metre tunnel will bring some of its water to the Hsinyukung Brigade.

Brigade headquarters here are set in a wonderfully scenic spot. Under the peak of Wangwu Shan, there is an old temple called Yangtai Kung of the Kaiyuan period of Tang, which was around the middle of the 8th century. As stone tablets say, it was repaired at the beginning of Yuan and again in the Wanli period of Ming. Its main hall has three stories. Its pillars are of stone, with fine engravings on them, most dragons and phoenixes, children and lotus flowers, but many with every day life scenes, like the pilgrim tying his horse up under a tree, and so on. In the compound are some ancient cypresses, and a Soleh tree, one of the three ancient ones still existing in the county. It still carried a good deal of its blossom. I wrote these lines on the place:

Once pilgrims climbed painfully up the steep North Peak of Wangwu Shan, to seek the favour of heaven in their distress; now they combine to build a reservoir, cut a thousand-metre-long tunnel through the mountain base to bring glittering water to Yushan fields.

For Wangwu Shan in Chiyuan is the Yushan of the fabled 'Old Man Who Removed the Mountains' a folk tale so deftly told in all its connotation, that it has entered the hearts and minds of the multi-millions, is read in school primers, memorised, recited, sung all over the land, raising determination to do, despite each and every difficulty.

And today, I looked from the top balcony of an ancient tower near by built in Tang, and still with much of its glory of coloured glaze tile, seeing through cypresses over a great spread of rolling country in harvest colours, while down in the courtyard below there came bursting in a whole school of hill children so lithe, so alive; and I knowing that in tune with these and all the new understanding they now gain, so will man's horizon widen, mists clear and all surge forward again.

The Yushan Brigade is one of 223 families, 1,056 people in all. It farms 116 hectares of hilltop or hillside land, irrigated so far by three pond reservoirs it has built to store rain water. One of these leaked, so was being given a coat of concrete over its whole floor space. At the time of our visit, lads and lasses of a production team were working hard at it. In addition to its two crops, one of wheat and the other of millet, there is an increasing harvest of persimmons, walnuts, dates and small fruit. The school of children who came to welcome us was a warm. and lively bunch, as well fed and agile as hill children always are these days. The grain allowance per head is 228.5 kilo a year. They have 11 mules and horses, 166 cattle, and 900 sheep and goats, one big tractor and two small ones. Everyone takes part in tree planting at the proper seasons each year, and we went along one hill ridge which had persimmon, apricot, oak and date trees all growing well after the last spring planting. Across the valley below and coming out of the hillside was the exit of the water-carrying tunnel of the new reservoir, and the sound of explosions there showed that work was going ahead fast. On our way back over the 50 kilometres to the county seat, we passed through the village of a forestry brigade, where the foresters had started at home first, their family compounds being full of tall trees. The covering of the hills with green trees makes a wonderful difference to the countryside. Mostly planted between 1955 and 1958, the 2,000 hectares is a real picture today.

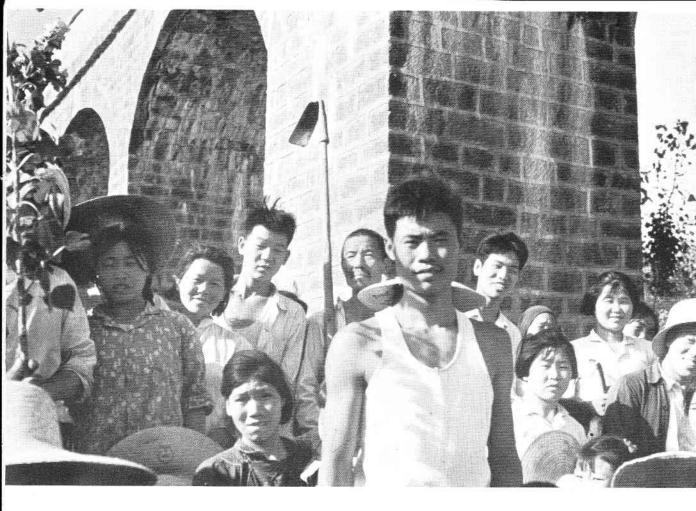
Coming out of this forested region, we stopped for a while to see the 648-metrelong New Yukung aqueduct that is 18 metres high over the lowest part of the river bed it crosses. The course over the aqueduct is 5 metres wide, widening to 6.5 metres as it emerges into the stone-The same water from the lined canal. Chi Shui River project we have seen already, 50 kilometres away from here, but by now with addition of the waters from the Mang River, down from Yangcheng in Shansi. The main canal itself is 120 kilometres long, laterals going on from it down to Menghsien County to the south.

Sewing Machines and Bicycles

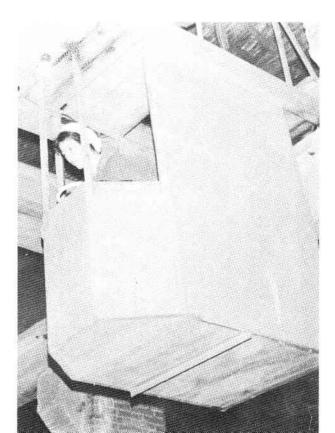
The Kangtou Brigade is a cheerful place out on the flat land to the east of Chiyuan town. A total of 1,780 people here farm 185 hectares of ground. Once, before the bad early forties, there were more folk here than now-1,900 in all. In one year, 1942, 900 were killed or died of starvation. A hundred and two families were wiped out. Many took to the roads as refugees. Some came back again; many never did. Three landlords owned 55 per cent of the good land, but on an overall average, never more than 1.5 tons a hectare of grain was gained, even in the best years. In 1971, the average was 6.3 tons of grain and 825 kilo of cotton. A feature of this brigade is the many new homes being built. In people's homes are 170 sewing machines and 180 bicycles, and 600 pigs are in the excellently kept brigade piggery. The seven-year school

has 430 children in it, with 13 teachers. The newly mechanised flour mill grinds 15 tons of flour a day. Good experimental work is being done on wheat seed, adapting the Hsinhsiang No I type to local conditions. There is a grain allowance per person of 240 kilo a year. People here are pleased with their clinic. The three brigade members who look after it first had a two-year course in the county Public Health school. Now since they have been in the clinic they go out in rotation to various training classes either in the county or else in the prefecture at Hsinhsiang. I asked about births last year. They said, less than forty, during which time there were four deaths. Births in 1965 were well over eighty. But the brigade leader had forgotten the actual figure for that stage. So we got back on to the subject of fertiliser. Forty-five cubic metres of compost is put out per hectare, along with 600 kilo of chemical fertiliser, and 300 kilo of cotton seed cake taken from the cotton-seed oil press after the oil has been extracted. The 67 hectares of cotton, of course, needs more fertiliser than the grain does. Stamped earth of old houses makes very good material for compost heaps so there is every encouragement given to members to build themselves new ones.

Listening to the folk talking here and looking at them as they came around to look at me, the first foreign visitor for a very long time, I could not but think back over the saga of the revolution, and what terrific struggles had gone into it especially here in Chiyuan. Liberated in 1945 from the Japanese rule and the old order, then suffering a come back by the Kuomintang for two years until 1947, then on to the early struggles to get mutual aid teams working, the lower, and then the higher forms of cooperative, and all that meant in fighting the class struggle, and to change old ideas of property and individualism. The fight to get hills forested, the coal mines working, wells sunk. The Great Leap Forward, and the coming



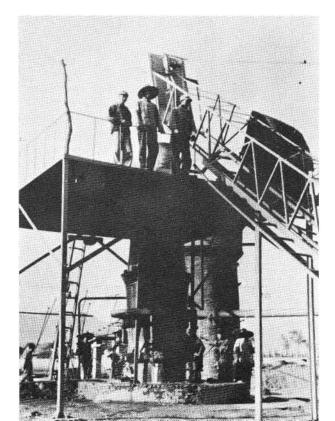
Some of the people who built the aqueduct behind them.

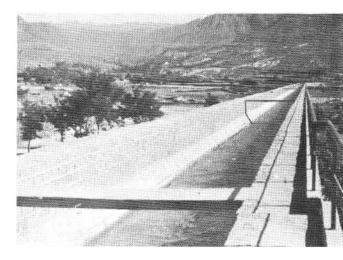


An overhead crane operator in the county machine shop of Chiyuan.



A young canal builder.



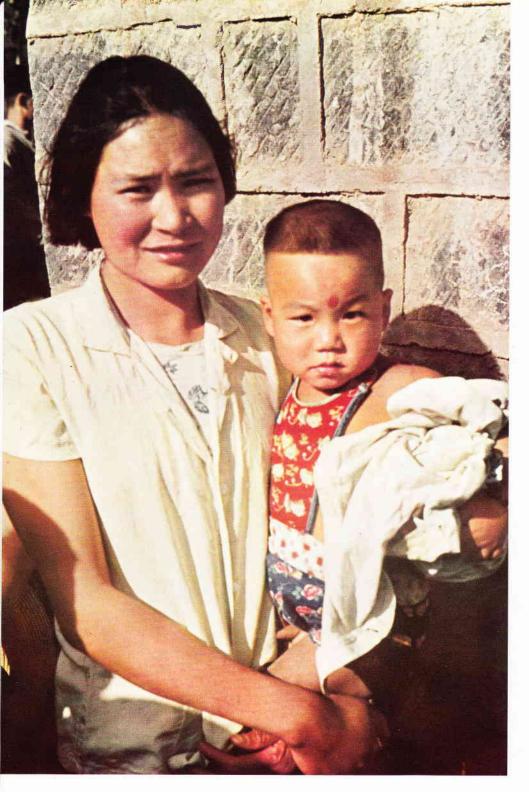


The New Old Foolish Man aqueduct.

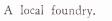
Production of phosphate fertiliser has started before the factory building overhead is built.



Laterals are taken across a valley on an aqueduct like what we see in the picture.

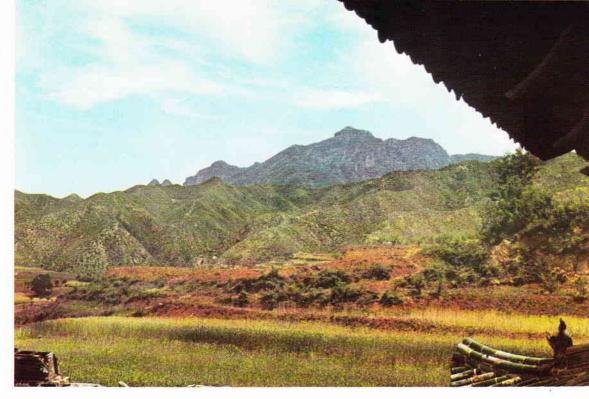


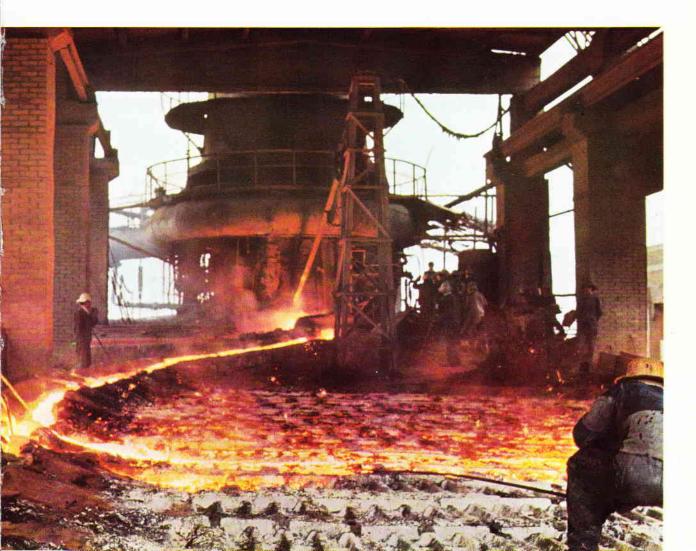
Mother and child in a commune.





Wangwu Mountain, where the legendary Old Foolish Man is said to have lived.

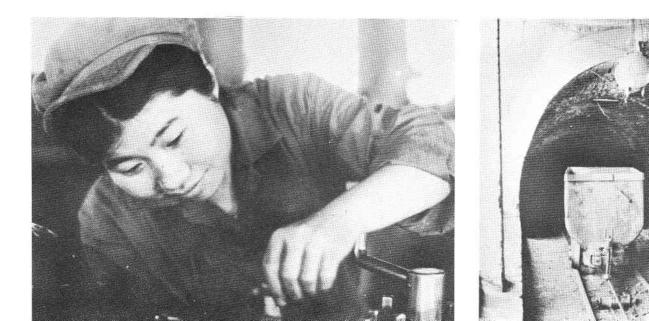






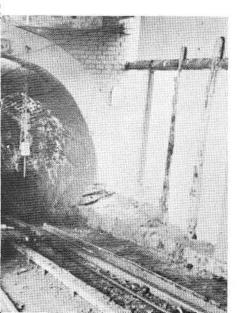
Chou and Han relics unearthed at Chiyuan in store.

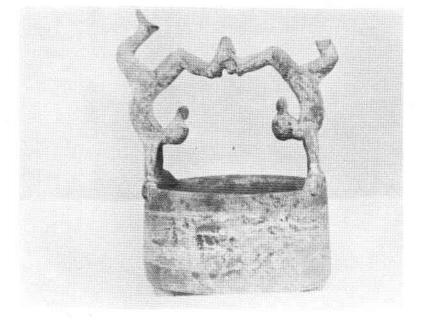
A Chiyuan girl working in a local machine shop.





A county coal mine.



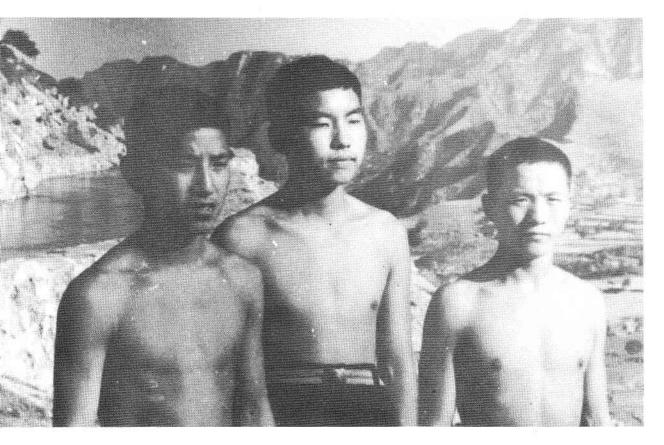


A Han bronze unearthed at Chiyuan.



The Ching River is made to flow uphill into the main irrigation canal.





Lads who helped to build the canal.

in of the people's commune, all of which entailed such long, patient work by the cadres who sought to change ideas, the foundations for county industry being battled for. Then two years of drought which brought home the fact that much more water must be sought for. The work that already had been completed at Linhsien further north around the escarpment of Taihangshan provided a wonderful example of what could be done in this. The movement for socialist education in the countryside, which first began to bring the ideas of Chairman Mao closer down to the people, followed by the storm of the Cultural Revolution, out of which came clarity on the two lines and the determination to solve in the spirit of the Old Man and the Mountains, some of the major contradictions that stood in the way of the people's struggle for more ample livelihood.

So were the people seized wth the high adventure of taking hold of rivers and making them run where needed. The challenge came to folk already steeled in much struggle, and by now having the tools to better fight it with being available, the most important being the spirit engendered by an application of correct political theory which so swiftly changed into the material things necessary. One victory has led to a new one, one struggle to the other, like a river in high water bursting through one obstacle and throwing its increased weight against the next. One needs to have some background of the old, some understanding what people have done, in order to fully appreciate the present, in this rapidly changing Chinese countryside, and to have some idea of what the future can bring. One too must remember that all of this struggle has been done at a time when imperialism attacked in Korea, up from India, out from the occupied province of Taiwan, along the rivers of northern frontiers, and then for long years against the three countries of neighbouring Indochina. Ever too has it been important for villages to send out

some of their strength to build national projects such as highways, railways, major engineering schemes, to man the People's Liberation Army, and the new large scale industry. So one looks into the face of the youngsters who stop school to go out and help with the harvest, the older ones reaping, and the younger ones gleaning, with the realisation that here one is looking at the people who will build so much of the future.

For a pleasant interlude in the county centre, we paid a visit to the store where ancient artitacts are kept, after being sent in to the county by people digging them up during irrigation or recasting the land work. Most were funerary pots, the majority from Han times. Outstanding pieces have been sent to provincial or national collections, but there is still plenty to fascinate anyone interested in the fruit of man's hands over the centuries. The circus man with a performing cow. Acrobats poised in mid air, dancers and what you would. There was quite a wealth of stone-age artifacts, both in pottery and tools. The pre-historic period must have indeed been a long one, its legacy being so rich. There are some models of men working bellows for the smelting of metals that came from Han. Then, too, many of the iron weapons of that period. 'Some day when we have time, we will display them properly for the people to come and see. We are still too busy with basic things now to do more than keep them all safely,' cadres said.

Real Heroes

And there are so many other things that do take up all the energies people possess. Three men and three women came in to talk with me, riding in by bicycle on a very hot day from various district hilly regions, the oldest all the way from the Yushan reservoir project which he was leading.

The assistant county Party secretary gave us first a complete run down on work in the county on irrigation over the years. In 1953 after land reform had been carried through, a survey of all water resources was carried out, and many wells sunk, land levelled and much reclaimed on the plains. The next stage went on to 1958, during which time, work was started on Mang Ho conservancy, there being perpetual menace from that river as it meandered its way over the plains. Reservoirs were dug, and the river tapped for a first irrigation scheme.

In the third stage, that of 1959-64, the ideas of Liu Shao-chi had to be contended with. He said that too much irrigation had been done and work on it should be curtailed. A new survey of Chiyuan showed that there had not been too much, but much too little. Work on getting all the flat land irrigated was carried on with. But all done was of use only if there were good summer rains. In a big drought, if wells dried up, and reservoirs also, there would still be disaster. So from 1964 on to 1972, efforts were made to take the waters that flowed through Thaihang Shan, and with the resources of the county, put them to use in a total irrigation scheme. Considering the nature of the mountainous area to be tackled, it was an ambitious project. The county and communes put out their financial and technical strength, the brigades and work teams did the actual work. Some of the real heroes that came up from their ranks now sat talking in simple terms about the things they had done.

Tall and quiet, Chao Ching-jong is 42 years old. In 1954 he joined the North China geological survey team as a worker, learning much from the geologists with the team until he suffered an accident which injured his leg, and came home to recuperate. In 1965 he was fit enough to get around mountains again, and led workers finding the right stone for aqueduct building and canal lining. He later led in constructing one of the Mang Ho aqueducts, and is now the local peasant expert on the strength of rocks and stones, much in demand for consultation at all work sites.

Then there is Kuo Tsui, who was a poor peasant living in the marsh lands of the I ungmatou Brigade. Returning from Shansi atter 1945, having gone there as a refugee, he got his first chance to work on irrigation after the second liberation of the county in 1947. One irrigation job led to the other, he playing a more and more important role, as the whole strength of the people was brought into play to complete the big Mang-Ching scheme. Since 1970 he has been leading the work on the Yushan reservoir.

It was hard to get the men to say much. It was just that there was a job, and we helped with it, all said in the most casual matter-of-fact way. Sung Yu-wei, a 33-year-old man, is proud of his little home and his two children, but his tace, scarred by a blast, shows that he has been in at least one tight corner. Known throughout the whole construction job as a worker hero always in the vanguard, hacking at cliff faces while suspended by a rope, using the 'five feet' of the worker doing precarious jobs in early cliff face work, hands, feet and bottom holding on to the little space blasted out, he has the same look as the old soldier who has been through many battles.

And Women Heroes

Then there were the women. Wei Yujong is a girl with considerable presence. Born amongst the hills, she knew from her earliest times what it meant to not have enough water around, so was glad to get the chance to serve the people to bring in more. But when she got to the worksite, she found that only the men were doing the heroic jobs, and all the women were expected to do was to carry away the rock. When the men were resting one midday break, she and three girls went to a tunnel and worked so well at the face that even the men said it was good. Encouraged by this, the women asked to be given a tunnel of their own to work at.

So they successfully did one 320 metres long. After that, they were well established as tunnel workers and Wei Yu-jong as their leader.

Hua Lien-fang the 'cement girl' started working on a cement kiln in 1966. Today, the county has a modern horizontal rotary kiln. Then, the old-type vertical ones had to be used. She changed the type that had been in use but did not always give the best results to one shaped like an inverted trumpet, wide at the top. It was entirely successful, producing better cement for some of the longest aqueducts, as well as for the millions of squares of cement board with which the laterals of the Chiyuan irrigation network are lined. Before irrigation work started in the county, local people did not even know how to cut stone.

They learnt to do so by cutting it, and building aqueducts. But over in the rolling country on the south of the central plain, there is no suitable stone, so that there the long branch aqueducts are made of the reinforced concrete made from the cement Hua Lien-fang's cement works has produced.

The gelignite girl is Niu Su-ching, who started making explosives in 1966. No longer the old gunpowder, explosives now turned out are much more highly sophisticated than they were. No, in the years when she and her group have been at work, there has not been any accident, and there has never been a shortage of explosives due to her group not keeping up with manufacture. At the beginning of the cliff side work, some explosive was sent up in bulk, but the paper for wrapping up the plugs got left down below. The men on the job tore up their clothing to make the covering necessary. There would not be that trouble now, she said. Charges are packed in nylon bags of the right sizes. It was interesting to hear the three women talking together in a matterof-fact way in terms and on things that were so short a time ago right out of the

peasant women's ken. They had become the new professionals.

We went out to see the aqueduct of the 12th Branch Canal in the Chihchung Commune in the rolling country south of the central. It takes water at one cubic metre a second over a reinforced concrete aqueduct 1,150 metres long, with 104 slender pillars 20 metres high in the middle portion. The concrete was poured on the site, taking 308 tons of cement, 52 tons of steel, and 1,600 cubic metres of sand and gravel.

It will be some years yet before the work on the whole scheme is finished. It is the final stages that will need a lot of work, especially in the rolling country. Much recasting of the land needs to be done, levelling, and so on. Then all the thousands of small laterals put in especially over rolling country. The next two winters, however, should see the back broken on this task, with the whole system fully in running order by 1975.

Factory through Many Troubles

We went out to the Szeli Commune, 10 kilometres from the town, to visit the commune machine-repair shop there. Set up in 1954 it has come through many troubles, at first making but small farm 'Twenty-four bachelors, one hamtools. mer and one anvil,' some laughed at them. Their material then was scrap iron collected; but with workers helping each other and the local people helping them all, they managed. In the Liu Shao-chi period of 1960-3 especially, it was ordered that commune factories should be either cut out or else reduced in numbers. This one was to have its by then 147 workers cut by two thirds. It however managed to register as a handicraft cooperative, and thus was able to keep going, though still doing what it did before, providing horse carts, hand carts, pumps, and all the time repairing the simple machinery that had gone out to the brigades and work teams. Recently it has built a new shop, and will soon move all of its 19 machine tools inside. Shaper, drill and the lathes were made in Chiyuan. Work in the wood shop is mechanised, with circular, band and buzz saws. I liked the big roomy compound. Workers can be busy at the smelter, then have a spell sitting under the shade of a persimmon tree beside, where a thermos bottle of hot water, a tea pot and cups set out on a table looked inviting.

Such commune factories are a start in the progressive mechanisation of the land, and in making a first bridge between agriculture and industry. Workers are very much at home in their own village, and the older ones can eat in the factory or at home near by as they wish.

The drastic reduction in the birth rate that is going on will make mechanisation more and more essential in the decades to come when there will not be many hands around. But anyway, mechanisation is well on the way.

This became more evident when we went out to see the machine shop of another commune. It was called 'Ke Ching', meaning 'take in wells', the present character for 'Ke' replacing one that meant to 'bow down to' as if in worship. A commune that runs for 25 li along the Taihang Shan foothills, mostly dry and stony, its 30,000 people divided into 41 brigades, farming the 4,000 hectares of land that they have seized back from the stony waste. There used to be many trees on this stretch, but they were all felled for the Japanese armies of occupation during the War of Resistance. Last year 200,000 more were planted, and now every brigade and work team has its tree nursery.

The commune is an unusual one in that it depends on the waste products of bigger industry, the turnings, filling, grindings, and scrap from county industry, for its raw material. It has put in an iron smelter and is producing at the rate of around 800 tons a year, so that it is able to supply other brigades with some pig iron as well as supply itself with enough for the agricultural machinery it makes, and the various kinds of pots and pans commune folk use. There is no overlapping in Chiyuan. Each commune machine shop is allocated certain work to do in line with the general necessity. The Ke Ching Commune operates a small coal mine and a number of other small industrial efforts, though its main preoccupation is with the land and in finding ways and means to make poor land produce more. Getting stone removed and carrying in good earth is like a battle. Each *mou* saved a victory. Now that irrigation is no longer a problem progress in future will be swifter.

It was good to have spent a week amongst the communes, irrigation projects and factories of an old county, now become a new one. It is becoming something more than a rural county, for its struggles have marked it as a place to which people not only in China but also abroad will look to and gain inspiration from its down-to-earth, revolutionary struggles.

Pottery Kilns of Old

We spent a very pleasant last evening with our hosts and their children, the old ones playing with the young ones, and the local star with the friend who had come with me from Peking. There was a lot of good spirit, fun and good technique too. Then the next morning after early breakfast, we were off again, going through industrial Chiaotso this time, on our way for a stop at the Tangyangyu Village of the Hsicheng Commune of Hsiuwu County. A picturesque place with its houses all the way up a ravine in the loess-covered hills. In the brigade office, we saw many specimens of the shards and pieces from the Sung Dynasty kiln site we had come to see. There was also a rubbing from a local stone tablet of Sung times with some of the history of the place. There are references to happenings in AD 1101 and 1104, but it seems that the heyday of the place was in or around the AD 1068-77 period. There were 300 of the 1,000 local families engaged on

making the pottery then. The main kiln has not been found yet, though there is a reference on a tablet to it. We saw several places where there had been kilns against the loess batter of hills, which had caved in. Sung shards were everywhere around. Then we came to two fairly perfect specimens high up against the batter of one loess cliff. Heat had changed the inside of the kilns to black glass. They were bottle-shaped, one 2.2 and the other 2.5 metres across the base, both 1.8 metres at the neck. Both were around 2.2 metres high, and both had around one metre of loess over their top.

It seemed that these kilns set out to make any style of pottery or indeed porcelain then in demand. We saw one cup of fine white material in the brigade office, which looked like eggshell porcelain, but had gone a little out of shape during firing. There was also Ting-type pottery, painted Tzechow types, 'Chao Tsai', a kind of stone or wood grain impression given by mixing black or brown colours with white, blacks and browns, and then even a shard of brilliant Chun of the Sung period. Most had been fired in ordinary saggars. Some in ring saggars of the Ting type. There were many wine cups, wine pots, small figures, and even a salt or condiment shaker. The local people are proud of the remains and they are well preserved. Modern kilns further down the valley towards Chiaotso still have construction not so very different from the ones seen at Tangyangyu.

It is wonderful how many old crafts can be found when they are looked for in the countryside. In Chiyuan, for instance, there was that of making inkstones from a certain strata of rock in the Taihang Mountains. We saw one with an engraving of the Panku Temple in the Taihang part of Chiyuan. The temple associated with the first of the Tangs, Li Yuan, who was a native of the locality just north of it.

There was not so much time in Hsinhsiang, after coming on a very hot summer's day from Chiyuan, seeing the kilns at Hsinwu, and before going on to Chengchow the same evening. But yet we did get time to go through three of the now over three hundred factories of the municipality, and catch up a little of what is happening in industry in what was once a purely rural centre. The first plant seen was one that makes towels for export from the cotton yarn produced in the cotton mills here from local cotton. It has 1,435 workers, 80 per cent of them women. The plant was once in Shanghai, but was moved here in 1957, and since then has added to its plant and rationalised its production a great deal.

Where Brocades Are Made

We next visited a silk-weaving factory where brocades for quilt covers are made. Started in the Leap Forward period of 1958, its 306 workers took another step forward in 1966, and greatly raised production. There were no well-trained technicians to depend on, so experienced and young workers put out their best, and made the adaptions needed. In both of these two textile factories visited, everything was spick and span, workers in white caps and aprons, air-cooling operating. Factory management in the third factory seen was also excellent. It made pump assemblies for rural communes and state farms, factories, etc. in the province. The shops were more than big, they were huge, so that the 588 workers had plenty of light and no crowding. Both pumps and motors are made, from small sizes up to big. More construction is going ahead to house a production line of even bigger types. The economy expands and industry has to meet the challenge.

We drove through to Chengchow after supper, in the late evening. Blue tubes of light carrying on their anti-insect pest work shone as they were fixed to telephone or power transmission line poles over the countryside, giving a festive effect. Finally, we crossed the four-kilometre-long Yellow River bridge, and were soon back in the well-lit streets of modern Chengebow; our Honan tour ended. I went over what I had written about Chiyuan and add these lines:

Tumbled cliffs of Taihang Shan, ever rose in haughty ramparts, seemingly against the advance of man; rock spattered ravines spewed flash floods each rainy season ripping over lowland farm and village, destroying crops, taking lives; but at last the people rebelled, then out of their own great strength, now released dragged rivers bodily from their courses emptying them into canals village heroes had hewn out of precipices, then with strong hands tearing stone from the mountains, building massive aqueducts that carried waters from one ridge to another, waters now placidly listening to the command of man as to where they should flow and how, and it was as if some gigantic fist had suddenly given the whole fabric of man and his environment

a twist that brought it back to constructive sanity, put it securely on the road to life, so that life changed and all over the land golden harvests stood proudly filling the air with fragrance, and the people once denied everything except the right to live pitiful, bitter lives with starvation and cold ever biting like mad wolves, now with a whole world of new freedoms giving meaning to their days; today farm folk mine coal, smelt iron, make steel, build one machine after the other rocks are ground to make cement farm girls turn out modern explosives, use them to drive tunnels through mountains. There was an old order doomed to die; then there was the revolution that buried it: now children of the revolution look into a future analyse and create ever better able to decide, as two roads open in front of them which one to take.



Medicine in China Today

Stuart Maddin, MD

Two months ago I was invited to visit the People's Republic of China, as an official guest of the Chinese Medical Association. In this short report I shall attempt to record some impressions of this fascinating journey, during which I was privileged to observe medical facilities at Canton, Peking, Tientsin, Nanking, Hangchow, Shanghai, Sian and Wuhan, as well as in the rural areas. I found the experience most stimulating and interesting.

No attempt to assess the current position of medical development in this teeming land can be made without reference to politics, and especially to the Cultural Revolution, which commenced in 1966, and the major shifts in policy which occurred in the following years.

Its effects are far-reaching and are still being felt at all levels. Initially, confusion and uncertainty virtually halted progress on many fronts. Medical schools closed and only now are beginning to reopen. The *Chinese Medical Association Journal* (the official voice of Chinese Medicine), ceased publication in 1968, although it is expected that circulation will be resumed in the near future. Physicians, fearful of criticism and wary of offering opinions of any kind, ceased to meet in groups or associations. The single authored medical text-books were replaced by group authorship for the same reason.

On the positive side, however, many decisions were made which radically altered existing patterns of medical training and practice.

I intend to discuss these developments in more detail, but first it must be emphasised that, in China, policies concerning medical services are not necessarily made by those trained in medicine. From the lowliest commune to the most important teaching hospital, these decisions are initiated by revolutionary committees representing a cross-section of workers in the particular hospital or institution. The committee will consist of both party and non-party members, physicians, both those with Western and traditional training, a cook or kitchen janitor, and most important, cadres, who are professional administrators (something like our civil servants), who interpret the party line, and are aware how to translate it into action. Generally, the cadres are in touch with higher authorities, and are usually spokesmen for the revolutionary committees.

The concept of medical policy decisions being made by lay people may seem strange to us in the West, but doctors' opinions are sought before final decisions are made. In any event, as we in the West know only too well, there is no guarantee of success, even when decisions are made exclusively by the medical profession.

Doctor Stuart Maddin is Consultant Dermatologist at Vancouver General Hospital, Vancouver, Canada. He was in China with his wife and son last summer on his second visit, but first since the Cultural Revolution, there,

Let us now have a closer look at what happened to medical developments during the Cultural Revolution, beginning with the more positive aspects. I was advised that the reduction in medical school training from six to three years, which began in 1969, was inspired by the severe shortage of doctors; it was made possible by the marked decrease or complete eradication of some diseases such as syphilis, gonorrhea and scabies, etc., which has rendered obsolete the further need for the inclusion of these diseases in the medical curriculum; certain other subjects such as psychiatry and forensic medicine were not emphasised. The Chinese, to quote their own words, have 'trimmed the fat' from the medical school curriculum and generally stream-lined teaching methods to meet the urgent requirements of such a vast population. For example, the shortened training period only includes electrocardiology in the physiology course, which is an early feature of the programme; the subject is not studied further at a later stage of intellectual development, as is the custom in Western medical schools.

Psychiatry as a specialty is not stressed in China, officially because the nations' life-style is not conducive to the various psychosomatic and neurotic complaints which seem to bedevil so many people in the West. Theoretically, psychiatry does exist within the bounds of neurology. Similarly, medical students are not now taught forensic medicine, because the Chinese contend that their political philosophy has abolished, or at least drastically reduced, the criminal element in society.

Mass immunisation programmes have reduced effectively many highly infectious diseases, such as diphtheria, scarlet fever and whooping cough, to the point where it is not considered necessary for medical students to study them. This is a further example of how the medical teaching programme has been curtailed.

The major negative aspect was the cessation of medical training when the

medical schools closed during the Cultural Revolution. It can be estimated however roughly, that at least 40,000 students did not graduate. That was a huge loss to a country already handicapped by severe shortage of qualified medical personnel.

It should also be pointed out that the criteria for receiving medical school training has changed. Prior to the Cultural Revolution, high school students who wished to become doctors applied to attend medical school and were accepted on the usual basis of academic excellence, aptitude, interest and other pertinent characteristics.

Today no-one is permitted to attend medical school without first working for several years on a commune, in a factory, or as a soldier in the People's Liberation Army.

If a young person demonstrates the appropriate initiative and desire to become a doctor (maybe after first working as a 'barefoot physician' which I shall discuss in more detail later), that individual will get the backing of the revolutionary committee where he or she works, and will be later interviewed by a medical school screening committee. There may be a gap of up to five years between the time of high school graduation and acceptance at medical school; during that time the students will almost certainly have forgotten at least part of their basic biological sciences. They will have to go through a crash refresher course to bring them back up to standard before embarking on their formal medical training. This may seem a little clumsy and tend to disrupt the hitherto orderly flow of students into medical schools, but it is done with a definite purpose; the Chinese are wary of creating a class of academic mandarins or callous medical professionals, who would know nothing, and possibly could not care less, of the everyday problems faced by ordinary people in tarms and factories throughout the nation.

Medical students are not required to

take examinations. At the end of their training period, extended from eight months to ten months of each year, they are considered qualified after three years. The Chinse medical educators say there is no 'drop-out' rate.

Another important result of the Cultural Revolution is the dramatic improvement of medical services in the country areas. From those in the smallest hospital to those in the biggest and most important, approximately 80 per cent of all Chinese physicians have spent some time in the rural areas. About 15—20 per cent of all hospital professional medical staff are working away from their base hospital at any one time. This is done voluntarily, and on a rotation basis.

Say, for example, Dr A is a surgeon at Shanghai's famous No. 6 Hospital. He will go for 8-10 months to a people's commune outside the city. There he will carry out surgical procedures at the rate of two a day, and will teach his special surgical skills to the local commune doctors. In turn, he will learn from them their simplified procedures, and the ways they have learned to adapt to unsophisticated equipment and surroundings.

When Dr A's time is up, Dr B (perhaps an orthopedic surgeon or a gynaecologist), will be called upon to replace him. This system reminds the physicians that they are there to serve the masses, and the people are proud and grateful that specialists from the urban medical centres look after them and their families.

Many teaching hospitals will adopt a commune, or part of a district, as an area of special interest. There is an area in West China, for example, where there is a predominance of cancer of the esophagus. It is a poor area, where the people eat a lot of a particular kind of rough cereal; it is thought that this causes the cancer. The area is of special concern and interest to the Peking Tumor Hospital. These kinds of tie-in are in operation all over China.

It was stressed repeatedly during the

Cultural Revolution that every effort should be made to combine traditional Chinese medicine with modern Western techniques. The swing back to traditional medicine is reflected in the new format of training in medical schools. In the previous six-year medical training programme, only ninety hours of traditional medical didactic training was given during the whole of that time. The 1972 three-year training course provides for a 60-40 split between Western and traditional medicine.

'Chinese medicine and pharmacology are a great treasure house,' said Chairman Mao Tsetung. 'Efforts should be made to raise them to a higher level.' Two areas where the most effort is being made concern the ancient traditions of herbal medicine and acupuncture.

Let us look first at acupuncture. The practice of inserting needles into predetermined points of the body to alleviate a wide variety of ills had its origins in China at least 3,000 years ago. It is estimated that there are one million acupuncturists in China today. But acupuncture as a surgical anaesthetic (and incidentally as a pain killer for complaints such as arthritis) is a comparatively recent innovation. The first operation in which it was used (a tonsillectomy) was performed in Shanghai in 1958, and it was not until ten years later during the Cultural Revolution that it began to grow rapidly in popularity.

Authorities in Peking informed me that, by April this year, more than 400,000 operations had been performed in China under acupuncture anaesthesia, and it is now used in between 60 - 70 per cent of all operative procedures.

At least one Western physician has described acupuncture anaesthesia as a 'revolution in anaesthesiology' and there is no doubt it has attracted enormous interest throughout the Western world. Certainly, it has a number of practical advantages. In the case of minor operations, the patient walks in and walks out, so quick is his recovery. There is no postoperative nausea, as there usually is in the case of drug-induced anaesthesia. It is cheaper and in some instances safer, because there are no inherent operative risks.

Let me explain. When, for example, a Western surgeon performs a thyroidectomy (to remove part of the thyroid gland in the neck), there is some danger that, in doing so, he may injure what is called the recurrent laryngeal nerve, which controls the voice box. If that happens, the patient may suffer partial or complete loss of voice for months, or sometimes permanently. However, if the patient is awake, as he will be under acupuncture anaesthesia and talking to the anaesthetist throughout the operation, there is much less chance of that happening.

I was fortunate enough to witness open heart surgery performed in Wuhan, at No. 2 Hospital, attached to Wuhan Medical School. The patient, herself a physician, was suffering from mitral stenosis, that is narrowing of a heart valve. She was anaesthetised solely by acupuncture. A single stainless-steel needle was stuck into her forearm, just below the elbow. The needle was attached to an electrode, which stimulated the needle electrically, turning it constantly. Thirty minutes later, the operation began. I was so close I could look into the patient's eyes, and even from behind glass I could hear the 'snap' as her ribs were cut away to expose her heart. Yet she was totally relaxed and talked to the anaesthetist throughout the operation. It was truly a remarkable demonstration.

An amazing thing about acupuncture anaesthesia is that nobody is quite sure how it works. The most objective physiological explanation was given to me by Dr Chang Hsian-tung, Director of Acupuncture Research at Shanghai's Physiological Institute.

At the risk of over-simplification, this is what he told me; 'The effect of acupuncture anaesthesia is conducted through the peripheral nerves into the central nervous system. Impulses from the point of needling, and impulses from the point of pain are conducted into the central nervous system by different neurological pathways. When the two sets of impulses meet in the central nervous system, those from the point of acupuncture may inhibit the impulses from the site of the pain, thus effectively blocking them. This is known as the "Gate Theory"."

It is this writer's opinion that high priority should be given to determine the physiological mechanism of acupuncture anaesthesia. Lack of understanding would not necessarily preclude it from being used in the West, but there can be little doubt that knowing how it works would greatly accelerate its acceptability. It would be a tremendous contribution to world medical knowledge.

Much the same sort of mystery surrounds herbal medicine, which pre-dates even acupuncture in China by some 3,000 years. Herbal medicine, as I have already mentioned, was officially discouraged prior to 1949. But after Liberation, Chairman Mao let it be known that herbal medicine should once again play an important part in the welfare of the Chinese people. Today there are about fifty research establishments in China conducting research into traditional drugs, and looking for new and better remedies.

Although some specific answers are being sought to explain the curative properties of certain plant substances, most of those which have survived the test of centuries are not under active investigation.

'With the present state of our knowledge, herbs are used on an empirical basis, with no attempt to explain their specific actions within the body in terms referable to Western medicine,' I was told repeatedly by traditional physicians.

Once again, I believe there should be a determined effort to isolate the active ingredients of specific herbs. The Chinese could be sitting on a wealth of information of inestimable therapeutic value.

At the open heart operation I watched in Wuhan, surgeons were using sponges soaked in a special combination of herbal extracts—instead of clamps to control bleeding. Afterwards I did my best to find out the actual herbal factor responsible for this dramatic control of hemorrhage. Nobody could tell me.

At the Institute for Research in Traditional Drugs in Tientsin, employing 173 people, more than a hundred different drugs are being assayed currently to determine any possible anti-cancer effect. Although I did not detect any great optimism among researchers that I spoke to on this subject, it should not be construed that the Chinese are chasing rainbows in this field. A herb grown on the outskirts of Peking, for example, is reputed to be highly effective in the treatment of liver damage as a result of hepatitis. In the southern province of Kwangtung, another herb has been reported effective in the treatment of hypertension.

In hospitals throughout the country, traditional herbal medicine is combined with Western style treatment, and doctors I spoke to insisted that this combination is far superior to using Western treatment alone.

Every district health centre, every hospital, every commune, has its own herbal garden. This ensures a constant supply of herbs for medication, serves as a demonstration area for students and city dwellers, and provides a source of seeds, which workers who live on the communes can sow in their personal garden plots.

Let us look at life on a commune, particularly in regard to public health, in a little more detail. We have already seen how physicians from hospitals all over China are now spending part of each year in the countryside as part of Chairman Mao's call to shift the emphasis on medical services from the cities to rural areas. Consider the work of that small army of dedicated people who are working in the front line of China's continuing struggle to improve health and hygiene for the masses. I refer, of course, to the 'barefoot physicians'.

Barefoot physicians according to the official Chinese definition are 'Peasants trained to give medical treatment locally, without leaving their farm work.' They first made an appearance in rice-growing Eastern China and were little more than enthusiastic amateurs, who used to go barefoot to care for patients in the fields. During the Cultural Revolution, barefoot physicians received official recognition, and programmes were initiated to give them a degree of formal medical training. Nobody can even estimate how many of them are currently at work throughout the country, but I was advised on several occasions that the ideal barefoot physician to patient ratio would be 1 to 750 or 1,000 people. There is no doubt in my mind that they are doing an extremely valuable job in a country whose population exceeds 700 million.

As well as treating minor complaints from coughs and colds to paddy field dermatitis (caused during rice planting by a parasite in the water) and doing physical check-ups on children, barefoot physicians are responsible for a wide variety of preventative health and community hygiene programmes. These can range from giving dietary advice to mothers; to anti-mosquito and anti-fly campaigns; to environmental sanitation problems; dissemination of birth control devices and tablets, and assisting in the anti-leprosy measures.

Nobody, least of all the Chinese, is suggesting that the barefooted physicians can even approach the standard of learning and expertise acquired by fully trained Chinese physicians, but, for millions of people particularly in remote areas, they provide what may be the only medical service available, and there is no doubt that they take a considerable load off the shoulders of the nation's fully qualified doctors. All the barefoot physicians I spoke to agreed that only 10-15 per cent of their patients had to be referred to the commune hospital. All the rest they were capable of treating.

Each worker in a commune pays about 14 cents (US) each month to belong to a cooperative medical association, organised within each production brigade. Each brigade has its own health station and pharmacy, which is stocked with Western style and traditional drugs, paid for by the medical cooperative. The cooperative also equips its barefoot physicians with a doctor's bag which contains essential but unsophisticated equipment such as a thermometer, syringes and so on, plus as many as forty different kinds of drugs, both Western style and traditional.

Salary for medical personnel prior to the Cultural Revolution ranged from US\$25 per month for newly graduated physicians to approximately \$200 per month for experienced doctors; these scales have remained unchanged.

Doctors in China are expected to play an active role in helping to protect the environment. For example, they persuade patients not to pollute streams and rivers by explaining the resulting health hazards to them and their families. Great improvements have taken place in regard to the maintenance of good health, the prevention of illness and the eradication of disease in China during the past few years. I travelled extensively throughout the country in 1965, and the changes which I witnessed on this occasion were most impressive. Further communication between the medical profession in the West and their Chinese colleagues must be encouraged; increasing dialogue between such different but complementary cultures will reap a harvest of great understanding. All Mankind will be the beneficiary



Home-coming After 9 Years in China

Visiting the United States after 9 years does not make for an instant expert. After a total of almost 15 years in China since 1949, however, I find myself equipped with a pair of glasses few Americans can wear.

From the east coast I left New York and leisurely crossed the country, stopping in the midwest and south-west before arriving in California on the eve of the presidential election. Virtually the same size, both the United States and China have similar climate zones and vast expanses of territory (despite popular conceptions of China as a land where every inch teems with people, one can travel there across sparsely populated plains and over mountainous areas).

Observations and conversations with people where I have been and while travelling by plane and bus point to a widescale apathy to public affairs. People are quick to point out the lack of American-style elections in China though few are aware that China down through the centuries never experienced the 'democratic process'. All this notwithstanding, there is a big contrast between the disenchantment with politics in America today and how the public in China considers itself now involved in politics.

The way so many Americans spend their time and energy on personal matters is a far cry from China. The Chinese have no 5-day week or long weekends but they feel that their time and energy are being devoted to building a new country and society. In general and among the youth especially people believe the important thing is not personal advancement but rather fitting into society as a useful and productive person.

The Kennedy-Nixon election, the last I witnessed, was close. Like campaigns I had known before it was visibly on the public mind. The 1972 election is notable for a lacklusterness approaching disinterest. It is taken as certain that Nixon will be re-elected, and already political pundits are talking about Agnew vs. Edward Kennedy in 1976.

George McGovern has his devotees and while the liberals talk about how their man's defeat will bring on four years of more whittling away at civil liberties and heightened repression, one is hard put to find real signs of a fired up electorate. There is a noticeable lack of the fierce partisanship that I had once known every four years. There is even a dearth of window posters and auto bumper stickers for either candidate.

Among those I've encountered on my journey across America are any number who supported Johnson and are now supporting McGovern. There is a tendency to accuse Peking of favouring Nixon and helping him by inviting him to China earlier this year. Some wonder why the Chinese could not wait until after the election for a presidential invitation.

That China's leaders may not be especially concerned about who is the US president does not seem to occur to those who had scarcely heard of McGovern when ping pong broke out in 1971.

Peking has long been on record for negotiating with the United States. Four months before the People's Republic was set up in October 1949, Mao Tsetung said: 'We are willing to discuss with any foreign government the establishment of diplomatic relations on the basis of the principles of equality, mutual benefit and mutual respect for territorial integrity and sovereignty... The Chinese people wish to have friendly co-operation with the people of all countries and to resume and expand international trade in order to develop production and promote economic prosperity.'

This stand was reiterated over the years. In 1960 Chou En-lai repeated it in an interview with the late Edgar Snow in Peking. It would seem that when the time came for Washington to change its outdated more than 20-year policy of burying its head in the sand the Chinese, steadfast in the belief that the chief executive of a capitalist country represents the interests of the class in power, were not going to quibble over who was living in the White House when it came to holding negotiations.

Whatever the effects of the Nixon China trip, it is highly doubtful it will mean the difference between electing Nixon or his rival. Defeat for an incumbent has seldom happened in this country. Added to this in 1972 is the general mood that there really isn't much to get excited about in choosing between the two.

Perhaps the single thing that strikes me here after many years in China is the general complacency when corruption in high places is exposed. Twenty years ago the gift of a \$500 deep-freeze or a vicuna coat involving the White House was enough to bring on a major scandal. Now the public is numbed by the passing out of millions in campaign gifts for favoured government treatment to the tune of hundreds of millions of dollars.

The Democrats have hammered away at the administration's misdeeds, pointing to the International Telephone & Telegraph Corp. offer to contribute \$400,000 toward the cost of holding the Republican Party's convention in San Diego. It falls on deaf ears as do the revelations of the bugging of the Democratic Party's national campaign headquarters, the grain dealers who made a killing out of advance knowledge the Soviet Union was going to buy 400 million bushels of American wheat at \$1.65 a bushel and went out and bought up wheat at just over \$1.32 a bushel, and the catering to big corporations and special interests in Washington.

Many Americans, of course, are concerned by all this. In general, however, the corruption issue has been lost in a quagmire of frustration and cynicism. Coming from China where varied forms of big and small corruption were an intrinsic part of a system handed down from antiquity and which are now regarded as buried in the past, I find it difficult to understand the awesome indifference to the subject in this country much as I may be aware of the old American belief: 'Well, that's politics!'

There is obviously more to the US scene even from the limited vantage point of two months' wandering across this vast nation than the subdued 1972 election and the shrugging aside of the administration's helping hand to big business and vice versa. The physical changes in the cities, the tall modern skyscrapers that have gone up in New York and in quakeprone San Francisco and in cities like Kansas City and Albuqurque, cannot fail to impress. The tremendous industrial and agricultural production spilling out over the country, the wealth created by the millions who work in it, is to be found everywhere.

While apathy and frustration in politics stand out, there are various channels for those not so affected—local issues in the coming elections, community work and projects, ecology, better health care for tens of millions sorely in need of it. Sports definitely attract more interest than the election, but Henry Kissinger's recent peregrinations and the fact that the war in Vietnam is coming to an end has put Vietnam back before the public which wants an end to this disatrous phase in US history.

Trying to typify the mood and outlook of America one must take into account the heavy indifference to what does not personally affect people. While millions cannot be classified in this way, the average citizen is, to put it in one of the phrases I've become acquainted with, tuned out and turned off to what does not apply to his or her own immediate life.

My short visit leaves me with this not so unheard of belief. Speaking about his congregation, a minister in a town about 30 miles from San Francisco says: 'The war, poverty, the despised, they mean nothing to them unless they touch them personally. Their attitude is, if it's going to affect me, then I'm terribly concerned about it. Otherwise, I'll stay in my shell.' A young activist at Columbia University in New York said in September: 'The campuses are quiet. How many times can you let out your rage and see nothing really change!'

An important part of China's often misinterpreted Cultural Revolution was expressed in the dictum 'fight self,' not putting personal interests above public. Warm and spontaneous as Americans are in casual meetings with strangers, there is a basic selfishness running through society. People are consumed by the need to do one's own thing, including among those who have turned their backs on the establishment. Acquisitiveness is to be found everywhere (there are far more things to possess than when I last was in the country), the youth are alienated and despite an observable increase in kinds of jobs open to blacks the majority have given up on the system.

People I meet and those I talk to in passing are friendly. Many are amazed and interested to hear I've been in China for a number of years, a big change from less than two years ago when the China image presented to the public was far different. Americans accuse the Chinese of switching public opinion overnight, yet they fail to see how much and how quickly it has been reversed here.

At my first stop in the country, at New York's Kennedy airport, a customs inspector noted that I had come from Peking. When I told her how long I had been there, the response was: 'Isn't that nice!'

Nations and peoples have their various patterns. The Chinese have long had a great love for nature—sky, water, flowers, birds, fish, horses. Dogs have never been particular favourites and the fact that they are not to be found in the cities often is astonishing to some visitors from abroad.

The increase in America's canine population is bewildering. In cities two or three can be seen fouling the streets as their masters take them out for their airing. Ostensibly a protection against housebreakers and muggers, one beast, one would think, is sufficient.

I have been told that dogs in some cases, particularly among younger adults who are

disenchanted with society, are a substitute for children. At least to me, the TV advertisements by competing brands of canned dog food (one brand boasts that its all beef concoction has no cereal) in a country where millions live below the poverty level are incredible. Like drugs, dog food (cats have their own brands of fish and liver in cans) is a big business. It almost seems that as human relationships become downgraded more people are seeking loyalty and companionship from the animal world.

Much of what I've observed has been commented on by others. Having lived in China for some time it is natural to look upon some of what I see in America in terms of where I have just come from. Material things, people's mobility, comforts, the easy life are some of what is far easier to come by in America than in China. For the Chinese, hard work is considered a virtue, a necessity in building for the future, and their society as a whole has a cohesion that is in sharp contrast with the fragmentation taking place in the United States.

Both countries have their strong and weak points as well as a tremendous difference in how their people look at themselves and the world. An eye to the future and a purposefulness fills the atmosphere in China which is advancing out of the economic backwardness of the past. Rich as America is, there is a general aimlessness and alienation of people that makes up the prevailing picture of this affluent nation.

Julian Schuman



The DPR of Korea Today

W. Rosenberg

Introduction

I recently had the good fortune of being able to study the economy of the northern part of Korea—the Democratic People's Republic of Korea, during a visit.

The impression which such a visit makes on you is that of an overwhelming economic success. The city of Pyongyang has risen from the ashes, into which American air raids had changed it, into one of the most beautiful cities of the world. I would like to compare it to Canberra in Australia with its imposing public buildings, its beautiful rows and rows of apartment houses, its wide, treeshaded boulevards, its magnificent parks and river embankments. One has to be told that only 18 years ago this city was a heap of charred rubble as a result of the American strategy of war against civilians. And what applies to Pyongyang applies to most of the other cities of northern Korea of which I have seen only one, Hamhung. The villages too are largely reconstructed and modern houses have been erected instead of the old strawthatched shacks in which Korean peasants lived.

The people in the streets are without exception well dressed and look fit and healthy, food is plentiful and education is an industry which will have produced one million experts and specialists by

1976 in a working population of perhaps little more than 5 million people in 1972. At present something like a quarter of the 14 million people in the DPR of Korea go to school or University and other tertiary institutions. Korea, a country which only the day before yesterday was a Japanese colony, under-developed with as low a standard of living as any beggar nation in the world, which only yesterday was a heap of rubble consciously planned by American air strategy, today is a country where motor traffic has all but entirely displaced animal-drawn traffic, where modern living conditions have displaced the ages old customary way of life of a starving peasantry, where literacy of a high order has replaced ignorance, superstition, technological backwardness and illiteracy.

All this has been achieved without incurring foreign debt, without 'foreign investment', without the country losing its independence to older industrial nations. All the consequences of industrialisation, huge slums surrounding the glittering interior of ever-growing capital cities, the racketeering, prostitution and luxury of the profit-makers in the cities, the inflation which undermines the livelihood of workers and fixed income recipients alike, the sporadic and growing unemployment largely the result of the bankruptcy of the peasantry who are driven into town, the indebtedness of peasants and townsfolk alike-all these consequences have been avoided.

W. Rosenberg, Reader in Economics at University of Canterbury, Christchurch, New Zealand, visited North Korea last summer.

With a steady increase in industrial production of 12.8 per cent for the last 10 years the DPR of Korea has the right to be called the world's No. 1 economic miracle.

The Growth of the Northern Korean Economy

Here are a few figures to illustrate the prodigious progress which has been made in that small country today of only about 14 million inhabitants.

The first table shows the rapid industrialisation of the country:

Table 1

	Value of Industrial	and Agricultural
	Production in the	DPR of Korea
	% of Natio	nal Income
	Agriculture	Industry
1956	75	23
1969	35	65

This complete reversal of the position of agriculture and industry in 14 short years (the years 1953 to 1956 were years of post-war reconstruction) was not brought about by neglect of agriculture as can be seen from Table 2:

Table 2

Development of Agricu	ilture i	п	the
DPR of Kor	ea		

roduc-	Index of
Grains	Agricultural
n tons	Output
2.6	100
3.8	140
5.0	196*
7-7.5	
	3.8

Thus, in a period during which the population of Korea increased by only about 40 per cent, grain output alone increased by 96 per cent. Compared to 1946, agricultural production increased by 213 per cent—whereas population increased by probably less than 50 per cent. So much for the prophets of doom who think that population must always outstrip the increase in the means of subsistence.

The basis of the tremendous agricultural development in the DPR of Korea was, of course, first and foremost the change in the social system—from private dispersed agricultural plots, landlordism and debt slavery to co-operation by peasants for their own advancement.

Here the destruction brought about by the policy of war against the civilian population on the part of the Americans in the Korean war turned into a benefit. Table 3 below shows how collective farming accelerated after 1953. It must be remembered that land reform was carried out very thoroughly in the DPR of Korea from 1946 onwards, giving propertyless peasants their own land. Such a policy of giving peasants the land of their former oppressors, landlords and colonial property owners, carries the risk with it of creating an individualistic peasantry which, as it grows better to do, tends to hold back the development of socialism. Thus co-operation prior to the three years of American total war against cities and agriculture in the north of Korea proceded very slowly. The total destruction of farm houses, implements, irrigation works and so on wrought by the American airforce, however, forced peasants to co-operate when the Americans finally had been stopped by 1953. Table 3 describes this development:

Table 3

Growth of Collective Farming in the DPR of Korea 1954 to 1958

%	of farms in co-ops	Scale of co-ops expressed in average number of houscholds
		per co-op
1954	31.8	33
1956	50.0	55
1957	80.0	63
1958	100.0	273

¹ 1970 figure is author's estimate based on the increase of grain production only—it is probably an under-estimate since side-line production has increased enormously. It can be seen that by 1958 the entire peasant population had voluntarily joined co-operative farms. The size of these farms (with about 5 persons per household) grew. By now there are many coops with 600 households and the average size has correspondingly risen.

The policy of agricultural development which could be carried out once all peasants had joined co-operatives was based on the policy of the Premier and leader of the DPR of Korea, Kim Il Sung, defined in 'Theses on the Rural Question in Our Country'.¹ Progress, according to this policy, depends on five 'revolutions': the technical, cultural, ideological, managerial and ownership revolutions.

The technical revolution is based on irrigation, mechanisation, electrification and chemicalisation.

Irrigation was completed by 1970. By 1969, 1,234 reservoirs had been built, 11,200 pumping stations both pumped water up from rivers onto high-level land and drained the land after irrigation and 39,700 kilometres of irrigation channels had been built. It is on this basis that high and rising yields of rice are now ensured irrespective of the variations of weather.

Mechanisation is still far from complete. But substantial progress is being made. The number of tractors per 100 hectares has been raised from 0.14 in 1958 to 1.46 in 1969. The plan for 6.9 tractors per 100 hectares in 1976 appears somewhat ambitious, but miracles are the order of the day in the DPR of Korea so one should not under-estimate the possibility of the target being reached. But even a figure of 3-4 tractors per 100 hectares of the 1,800,000 hectares of cultivable land in the DPR of Korea would be a most creditable achievement. Smaller agricultural implements are being produced in farm factories, and the machine tool and implement industry of the country is making giant strides, to provide the countryside with implements other than tractors.

Electrification has reached a very high level. By 1972 all rural houses in the DPR had electric light and a number of agricultural processes such as threshing were performed by electricity in many cases.

Chemicalisation includes the production of chemical fertilisers. Table 4 shows the growth of this important industry:

Table 4		
Growth of Chemical Fertiliser		
Production in DPR of Korea		
million tons		

1960		0.7	
1970		1.5	
1976	(plan)	2.8	

It is very likely that the plan will, if anything, be exceeded. I visited a chemical fertiliser factory in Hamhung, one of most modern equipment and substantial size, and was informed that this plant alone was already producing at the rate of 1.5 million tons per year.

The chemical industry of the DPR of Korea also produces insecticides and weedicides in growing quantities to support the programme of chemicalisation.

Similar to China, Kim Il Sung insists that no increase in output is possible without 'politics in command'. Thus cooperatives, like all other organisations in the DPR, are led by committees of the Korean Workers' Party, although managed by directors who are more or less in sole command. The Party sees to it that ideological education is always to the fore and that plans, as they are passed down by higher authority, are fulfilled and overfulfilled.*

Agricultural planning is done by the

¹ The Selected Works of Kim II Sung have been published in Pyongyang in 4 volumes and contain all of the important programmatic and theoretical statements of the Korean leader.

^{*} Korean Workers' Party with its over 1.6 million members, or more than 1/4 of the working population, is the blood stream which is pumped by the heart of the DPR, which at the present time is its Prime Minister Kim Il Sung.

centre after consultation with 'County Committees for Agricultural Management' who have experts in close touch with co-op farms in their counties to elaborate plans.

The cultural revolution in the countryside is closely connected with the technical revolution. There is now universal education right throughout the republic and the means of mechanisation of agriculture, larger machines and tractors and capital works, like irrigation, require more and more technicians. These technicians are part of the state apparatus rather than of the co-ops themselves, but they are largely recruited from young members of co-operatives. Thus young engineers, agronomists, technicians are becoming ever more numerous and farming accordingly is becoming more and more scientific. One has to be careful, however, not to confuse the Korean term 'cultural revolution' with the Chinese Cultural Revolution. What Kim Il Sung means by cultural revolution is the training of educated people in large numbers and the liquidation of the former ignorance of the typical peasants. He is convinced that no technical revolution is possible without this type of cultural revolution.

The managerial revolution is closely connected with the ownership revolution planned for the development of agriculture. Farm management which in the past was a matter of age-old tradition and more or less a hit-and-miss affair, is to be assimilated to industrial management. Close planning and optimisation policies are to be introduced. Managerial courses at universities and special institutions are outstandingly good, always combining theory with practice.

At a very important high school for managing personnel I was given an example of the way how this training is carried out. The question was: How to deal with the removal of standing water in a district. The student, using an electric switchboard with about 100 or more answers had to project the right approach on a black-board. Points of procedure may, for instance, be: Study conditions, prepare political arousal of masses, discuss techniques to be used by the masses, work out a detailed plan, get statistical data and enumerate which are required etc.

The enumeration of all these steps is undertaken in constant discussion with the class and goes down to very fine detail. Finally a chart is prepared, containing perhaps a hundred steps. The teacher then summarises the work done by students. The next thing is that students are sent to co-op farms to study real cases and to see how their theory and practice accord. After that there is another summary of experience and adjustment of theoretical schema.

But more important even than the training now given to managers is the setting up of a scheme of management which makes available, through county committees of agricultural management, management, technical and other consultants to every co-op farm. Together with the growing importance of government-owned machine and tractor stations and of government run irrigation and other capital construction projects (including state housing for farmers), the State is taking an ever growing role in the management of farms. The objective is to change in the end co-op ownership and management of farms into state ownership and management. Thus does Kim Il Sung hope to avoid the sliding back of the rural economy into some kind of antagonistic privately oriented-even if still collectively owned-sphere of the economy.

From the above it is clear that the basis of agricultural development, after the ownership revolution had been completed in 1958, was industrialisation of the country so as to provide agriculture with the implements for mechanisation, ban the spectre of food shortages for ever and create a reliable basis in the country for the growth of light industries.

The pace of industrialisation has been astounding:

Table 5

	Growth of Output of Industry in DPR of Korea	
	1946 = 100	1956 = 100
1946	100	
1949	337	
1953	216	
1956	615	100
1960	2,140	34 ⁸
1971	7,062	1,148

While this growth appears almost unbelievable, absolute figures which have been published for 1969 and plans for 1976 bear out the fact that the DPR of Korea has achieved in the short span of 15 years the standing of an advanced industrial nation:

Table 6

Some Indicators of DPR of Korea Industrial Development 1970 1976 (planned)

2.2	3.8-4.0
) 4.0	7.5—8.0
27.5	50
16,000 m kwh	28-30,000 m kwh
30,000	
n.a.	21,000
) 4.0 27.5 16,000 m kwh 30,000

The above are only some indicators of technical development; it would be tedious to extend the list. But from inspection as well as from the figures it is clear that Korea, in the field of heavy industry, has achieved a position of great strength.

The growing wealth of the country, expressed in its more secure food basis and its rapidly rising output, is returned to the people in four ways:

(1) The peasantry has been relieved of all taxes, and it is receiving heavily subsidised prices for rice and other grain, they also receive free housing and other capital development. (2) The town population has been housed, fed and dressed. The house-building programme for the current 6-year plan provides for over 150,000 new dwelling units a year, a truly enormous effort in a population of 14 million, even if that population rises every year by over 3 per cent.² Food in the shape of rice is heavily subsidised. (3) An ever expanding education and health service is given free to the entire population. (4) An effort is being made to increase the output of light consumer goods with special reference to lightening the burden of women's work in the home.

While industrialisation was first largely financed by agricultural taxes, the State has been able, as agricultural output sold to the State increased, to reduce this tax until finally it was wiped out altogether.

Table 7

Agricultural Taxation in the DPR of Korea % of crop harvested

	/0	0.	an of	
1946/195	3			25
1953				20.1
1959				8.4
1966				abolished

Peasants are being paid 0.60 won per kg of rice, but the retail price is only 0.08 won per kg of rice. In other words the price of rice for the townsman is almost nothing (average town wage about 80 won with variation up to 250 won per month).

In 1964 still 40 per cent of rural capital projects were financed by the coops themselves. From 1965 onwards the State undertook 100 per cent of the finance.

In the field of education, compulsory primary education was introduced in 1956, compulsory secondary education

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² Because of the great war losses which first had to be made up there is as yet no birth control propaganda in Korea, although—to save women for the labour force—marriage before 25 years of age is being discouraged.

—leading to a 7-year universal schooling —was introduced in 1958. Universal 9year general and technical education was completed in 1970. By 1976 universal 10-year education is planned. If it is borne in mind that all working mothers can send their children free of charge to crèches and kindergartens and that in these kindergartens children are taught to read and write so that they start at school with most of this basic knowledge already present, it can be seen that the DPR of Korea provides its people with the equivalent of a universal 11-year and soon 12-year education.

On top of this very high level of school education is a system of tertiary institutions which numbers more than 130 universities and other higher schools of learning. There are over 200,000 students at these institutions. Every fourth Korean attends an educational institution. When one wanders through the streets of Pyongyang one is much aware of this education tidal wave. For a quarter of the population seems to be walking through the streets a book open before them and studying while walking while another quarter seems to sit in parks and on embankments studying. The Kim Il Sung University in Pyongyang has to be seen to be believed. At present it accommodates about 10,000 internal students and teaches about 5,000 external ones. By 1976 it is expected to serve 17,000 internal students. The floor area by that time will have doubled to 300,000 cubic metres.

All this education is free and even textbooks and the ubiquitous school uniform are either free or heavily subsidised.

The health system is also free and universal.

There are about 11 hospitals beds per 1,000 population in Pyongyang city. There are 11 medical schools in the country turning out doctors, about 60 per cent of whom are women. Section doctors are provided for the population on the basis of 1 for 700 persons, that is about 120 households. The section doctor is supposed to visit every household at least once every ten days. In the Pyongyang South Province with a population of about 2.3 million, there are 5,000 doctors of whom about 3,500 are section doctors.

Hospital and specialist services are of a high standard and prescriptions are free.

Until now the provision of general consumer goods for both country and town has been somewhat poor, both in quantity and in quality. Some headway is to be made in this field during the six-year plan which is to be completed by 1976. By that time 127,000 rerigerators, 110,000 washing machines and 100,000 TV sets are to be produced every year. This programme coincides with the objective of the six-year plan to lighten the burden of women. There is also to be a substantial increase in the output of shoes and materials. The total quantity of fabrics to be produced will increase from the 400 million metres of 1970 to 500-600 million metres and it is planned to produce million pairs of shoes for the population of perhaps 16 million by then. Of these shoes about 10 million pairs will be leather shoes.

Living Standards

I now come to the tricky question of 'living standards'. We really can say very little about the satisfaction people get out of life by referring to their earnings and spending only. Particularly in socialist societies where people live largely lives filled with moral and social ambitions, and where their working hours are perhaps more part of their satisfactions than even their leisure hours, an appraisal of living standards based on incomes and prices gives a very, very partial picture only. For what this is worth, here are a few figures.

I have not been able to obtain a figure for 'national income' in absolute amounts. An informant told me that in 1969 or thereabouts the income was 8,000 million won—which is at official exchange rates about \$U\$3,200 million or about \$235 per head. Seeing the total state revenue was 6,300 million won in 1971, the figure of 8,000 million may not be completely invented. However, one has to bear in mind that socialist accounting does ignore services of army and education, health and other such tertiary occupations which are an important ingredient of the Korean economy. On the other hand, the exchange rate of 1 won=0.40 US cents is also very unrealistic, so that one should not make much of this figure at all.

There are index figures for the growth of national income published as follows:

Table 8

Index Figures for National Income DPR of Korea

National Income Productivity per head

1946	100	100
1949	209	252
1953	145	197
1956	319	386
1960	683	539
1971	1,845	1,185

The 18 fold increase of national income since 1946 and the 5.67 fold increase since 1956 give a measure of the growth of the Korean economy.

It also shows the damage of war in 1953. One may add that the threat from the South in the shape of the American occupation throws further heavy burdens on the DPR of Korea. In 1971 31 per cent of the 6,300 million *won* state budget was devoted to defence. However in 1972 this percentage was reduced to 17 per cent of a budget increased to 7,370 million won.

The following figures for average real income (expressed in index figures) exist for workers and peasants respectively:

	Table 9	
	Real Incom	
	in the DPR Workers	or Korea Peasants
1960	100	100
1969	170	200

These figures take into account both money income and income in kind in the form of social benefits.

The productivity figures in Table 8 reflect the growth of the labour force based on an increasing proportion of women working and also the absolute growth which now starts to take in the rapidly growing young population. The increase in the labour force must have been of the proportions of about 4 per cent per annum for some time, although this may now slow down since already 2 million women are in the work force.

The fact that practically all married women work, means, of course, that family income has risen much faster than individual incomes. The plan states that the average wage of 70 won a month in 1969 should be raised to 90 won in 1976. An attempt will be made to bring peasant incomes closer to town incomes by 1976 than they are at the present time.

In making inquiries at various work places in town and country I found that nurses, kindergarten teachers and younger members of the work force might earn 80 won a month, and that factory workers might earn 100 to 150 won. But their incomes are frequently increased by piece work and other bonuses. At the University I found that incomes varied between 90 and 250 won per month and those of doctors varied between 80 and 200 won per month.

Whenever one asked the question of

earnings there was emphasis on the meaninglessness of that question. Housing is between 2 and 3 per cent of income; education and health are free. Office workers and so on get one winter suit every three years and a summer suit every two years. Rice is practically free at 0.08 cents a kg., and there are many other items which enter into the standard of living of the worker which are not expressed in earnings.

However, if one asks what the money Koreans earn can buy, here is a table of prices.

Because of certain comments I wish to make later on I am comparing these prices with prices which I have noted in China:

Table 10

Prices of some retail goods in the DPR of Korea and in China. Korea (won) China (yuan)

	()	())
$\frac{1}{2}$ kg of rice	0.04	0.16 to 0.22
flour	0.035	0.19
biscuits	0.90	0.37
pork	1.50-1.75	0.80-1.00
beef	1.50	0.80
10 eggs	1.70	0.84
apples (accordin	g	
to season)	0.25-0.75	0.15-9.45
r tin of fruit	1.25	1.12
leather shoes	16.50	16.90
canvas shoes	3.40	3.39
children's socks	2.00	0.70
woollen cardigat	n 33.00	17.66
a pair of trouser	TS	,
as worn	24.00	6.20
cotton padded	·	
coat	25.00	11.31
coloured shirt	9.00	4.06
white shirt (full		
short sleeve	13.00	
I meter cotton	0	
material	2.10	1.26
1 man's wooller	1	
suit	100-120	

In China the average income is more like 60 yuan per head, that is perhaps as much as 25 per cent lower than that of the average Korean factory worker. On the other hand the official exchange rates of the *won* and the *yuan* are very close to each other.

What table 10 brings out is the fact that rice is subsidised in Korea at the cost of higher meat and food prices and that the price of many other light industry goods is higher than in China. This applies in particular to textiles.

Not only are these light industry goods more expensive in Korea than would correspond to the higher money earnings of the Korean worker, but they are also of less good quality and less ample in supply. To compare a Chinese department store with its plethora of cheap and beautiful goods with a Korean department store with its narrow range of goods is looking at two worlds. Korea has emphasised the development of heavy industry, of education and of cheap rice; China has made agriculture the basis, light industry the second priority required to give incentives to peasants to earn more and to finance light industry, with heavy industry following.

The consumer comes third after heavy industry and the country's children in Korea; in China, if he is not king, he is the first among equals.

Appraisal

Some of the strengths and some of the shortcomings of the Korean economy can be explained in terms of the Korean system of planning. This is a most detailed system in which every item produced must be included in the plan. Like everywhere else in the Korean scheme this centralisation is not divorced from the mechanism of constant consultation. Attached to each organisation is a planning body which consists of members of the organisation itself (perhaps six persons in a large plant) and an equal number of State-paid planning officers. The plant or county personnel will work out a plan handed to them by the state officers, criticise it and amend it. The state personnel

will discuss these comments on the spot, amalgamate them with comments made by other plants or organisations in the same industry and hand the amended plan figures back to the higher levels and the centre.³

While this system of direct unified planning has led to great successes in the production of standardised goods — without too much bureaucacy slipping in, it relies on central design offices for new products. This means delay and slowness in introducing new products and designs and is probably one of the reasons why there is the shortage of a large and rich assortment of goods in the shops, in spite of the tremendous productive capacity of the DPR's industries.

At the same time it must not be forgotten that the DPR of Korea is carrying a tremendous defence burden which must absorb a good deal of its increased productive capacity although the call is for the development of the civilian and defence economies side by side.

The basic ideology of the Korean economy is what its leader, Premier Kim Il Sung, has called *juche*. *Juche* means self-reliance economically, politically and militarily. Kim Il Sung who in many ways resembles General de Gaulle in his standing and independence has recognised that his country cannot exist if it imitates foreign regimes.

Thus the economy of northern Korea must fulfill two objectives: it must be self reliant militarily, so as not to come under pressure when pursuing singlemindedly its goal of unification of the divided country and it must show to the people of South Korea that Koreans can succeed without foreign aid. And indeed the tremendous achievements of the DPR of Korea have been made by an economy which is almost entirely based on Korean raw materials, industry and expertise.

One must always never forget that Korea is somewhat of a siege economy always poised against another war threatening from the south. Seeing the Vietnamese example how the United States deal with countries which they have divided when the countries themselves want to re-unite, the feeling of tension which is in the air in the DPR of Korea is understandable.

Whatever one wishes to say, however, the Democratic People's Republic of Korea has proved to the world and to economists in particular, that a country which wishes to develop can do so without sacrificing its economy to foreign capital. No doubt, economists and others in the developed countries will continue to ignore the lesson from the DPR of Korea — but they will ignore one of the most potent sources of optimism for the possibility of a world free from hunger.

Source

Apart from the Selected Works of Kim Il Sung, most of the figures given were noted by the author when visiting various institutions, exhibitions, etc., which are always full of statistical tables and graphs. The latest publication containing the most up-to-date figures and available in English is Kim Il Sung's Report to the 5th Party Congress, published in Pyongyang, 1971.

³ See Kim Il Sung, Selected Works, 'Unified and Detailed Planning', vol. IV, pp. 261 ff.

Chinese Factories Are Exciting Places!

Janet Goldwasser and Stuart Dowty

(Continued from last issue)

Holding Up Half the Sky

We were discussing conditions in the United States with a group of workers and cadres at the Tientsin No. I Machinery Factory. Tsai Tsao-huai, a middleaged man on the revolutionary committee, suddenly looked up, obviously startled at what we had just said. 'What? You mean a woman in the US might lose her job if she leaves to have a baby? But that's ridiculous!'

He then proudly reviewed the provisions for women in Chinese factories. Women in other factories had also described these for us. We learned that women get 56 days maternity leave, with pay.' 'And,' they often added with chuckles, '70 days for twins!' Mothers have two periods (usually 40 minutes each) during the day to nurse infants. Factories have low-cost child-care facilities, nurseries, kindergartens and 'feeding rooms'. When a woman reaches the sixth or seventh month of pregnancy, she is given work that is 'suitable to her condition'. This usually meant lighter work and, if necessary, shorter hours.

These provisions are not regarded as a kind of special privilege given to women. They do not come from a masculine 'gallantry' which graciously bends the principle of equality between men and women. Rather, they are viewed as simple, sensible steps necessary to achieve equality. They are considered necessary for women to take their full place in society, insuring good health, safe conditions and equal participation.

Woman's Work Is Never Done

Before Liberation, a woman's place in China was summed up in the old saying: 'A woman works on three terraces: the k'ang (bed), the kitchen stove, and the millstone.' Tied to the home by oppressive feudal and family customs, there was no place for her in the work force.

The Chinese Communist Party has from its beginning urged women to participate in society. In 1955 Chairman Mao issued the call: 'Enable every woman who can work to take her place on the labour front, under the principle of equal pay for equal work'. What has happened in the past seventeen years? How well are women integrated into the work force? What is the attitude toward women working? What direction are things going?

Women entered the industrial work force in China through two gates. First, they joined the new expanding work force as factories were constructed and industry developed. Second, women organised their own neighbourhood factories, relying on their own efforts. We visited two such factories, one in Peking and one in Tientsin. Both factories were built by groups of housewives. They received no capital investment from the State, but they did have help and encouragement from the All-China Women's Federation and from the Chinese Communist Party. This involved both ideological support and concrete aid in the form of nurseries and day-care centres for their children.

The Peking factory we visited is run by a street committee-the basic unit of local government in the city-and is owned collectively by the workers. Eighty per cent of the 362 workers are women, and half of the workers are ex-housewives who had never worked outside the home before Liberation. During the Great Leap Forward in 1958 many women wanted to promote production and help build socialism in their country. At first, twentytwo women in this District formed a production group. Their strength was their spirit of self-reliance. Their first obstacle was that they had no place to work. They built their factory literally from the ground up, using waste materials. They collected bricks and other materials left from construction of a large stadium in their district; they went to the old city wall and carried back old bricks; they took bamboo stalks, covered them with mud, and used these for walls. Many of these original buildings are still in use, standing as an example of their self-reliance and hard struggle.

Since 1958 they have progressed 'step by step.' At first their production was very simple: pokers for the fire, small parts for stoves and metal buckets. They went to state factories and salvage yards to buy equipment. Some machines were purchased 'by the pound' as scrap metal; they repaired them and put them into service in their factory. In 1964 they began production of metal chairs and stands for X-ray machines and charcoalheated sterilisers for medical instruments. Now they produce, among other things, an electrically controlled high precision lathe. The Red Flag Embroidery Factory in Tientsin is now housed in an old building near the centre of the city. The factory was established in 1953 by a small group of women who did the embroidery work at home while also continuing their regular housework. After a few years they were able to come together and set up central production. The leading body in their city district gave them their first 'factory': one room in the district offices.

The women brought their own equipment from home: foot-pedal sewing machines, scissors, needles and thread. They now have 240 workers with electric sewing machines, many electric embroidery machines for fancy work, motor-powered scissors, and their operations fill four floors of their building.

One of the women workers at this factory described her struggle to join in production:

'There was a struggle when I went out into society. The All-China Women's Federation in the district where I lived mobilised us; they said times were different and we should go out and work. We went to meetings of the federation, but when we came home our husbands would not agree to let us work. They said if we went to work, then who would look after them, who would care for our parents-in-law? But we persisted and argued with them. We said, "If we work, we'll earn money, and that will help our family." At the beginning, we got materials and did the work in our homes and also tended to our families. After a while our parents-in-law, who had feudal ideas, came to like the idea that we were working. They were convinced when they saw the money that we earned. But in my family we still had struggles. We fought ideologically and I held to my position. At one point, we were on the verge of getting a divorce.

'My husband did change his attitude, but only after struggle. At first he tried to stop me from working. But the leaders where he worked did educa-

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tion with him, to teach him he was wrong to try to stop me. His attitude began to change then. But I still had problems; how was I to work and still care for my children? I decided to take the children from the house to a nursery run by the neighbourhood committee. I would take the children there in the morning and then go and work. In the evening I would bring the children home and then do the cooking and all the other work in the house. My husband was finally moved by my actions and he started to help with work in the house. Now things are much easier.'

The struggle for women to 'take their place on the labour front' meant a struggle on three fronts: ideology, practical problems, and leadership.

The first front was ideological. Old ideas about women had to be changed. Men's attitudes of superiority had to be challenged and women's views of themselves had to be changed. For example, women are guaranteed equality in work and pay by law, but that became a reality only when women demanded their rights and defied old ideas and customs. In some places the struggle to implement equal pay for equal work still continues.

Before Liberation, women were virtually slaves in the family. As one older woman said, 'If my husband said that something was one, I never dared to say it was two.' There were taboos and superstitions about women's work. If a woman came by when a well was dug, it would never have water; if a woman plowed the land, no crops would grow. These old prejudices were carried over into the cities and new ones emerged as developed. industry The All-China Women's Federation played an important role in mobilising women to fight against these old ideas; the Communist Party helped with education among both men and women. As Chairman Mao said, 'Times have changed, and today men and women are equal. Whatever men comrades can accomplish, women comrades can too.' This is a long battle and is by no means finished; it continues today and will be fought again tomorrow.

The second front was that practical problems had to be solved. Steps had to be taken to make sure that productive work outside the home did not become a 'second job' for a woman. Nurseries and kindergartens were set up to help with child care; older people in the neighbourhoods were organised to start 'service centres' where mending, sewing and other kinds of housework could be done. Struggles went on within the family to get the husband to share in household tasks.

The third front was that women had to be involved in leadership. Usually this has been done by making sure that every leading body has at least one 'representative of women.' In many places there was also a conscious effort to involve women in leadership at every level in the factory. Also there was usually a leading woman cadre in charge of women's work in the factory. It is important that women participate in leadership, we were told, because only in this way would women be truly respected. 'Also, women know the physical conditions of women workers better than the men do,' a man on the revolutionary committee of a commune told us.

Today women in China are engaged in industry in all areas; every factory we visited had women workers, though the percentage varied. In most factories there seemed to be no division of jobs on sex lines. Men and women were often working in the same workshop; sometimes where a machine required several people for operation, the group would include both men and women. We saw women working in skilled or semi-skilled jobs-ones that in the United States are reserved for white men: welding, running lathes, operating cranes, driving fork-lift trucks. However, in two places we visited heavy jobs were done only by men: working underground in the Kairan Coal Mine and loading crews on the Hsinkang docks near Tientsin. Also, some very light jobs, like pasting on labels, were done mainly by women. Work with young children in kindergartens and nurseries was done by women. But women have broken many old taboos and do engage in some heavy work. In Canton we visited a commune which was digging a tunnel through a mountain for a water conservancy project. Eight teams had volunteered for this work; two were teams of women. The work was hard, tedious hand labour using sledge hammers, chisels and hand carts.

The principle of equal pay for equal work was generally followed in the factories we visited. Since seniority at work and political consciousness are important factors, we saw cases where someone doing heavy work was paid less than a person doing light work. There was also a clear understanding that each person's job was 'part of the revolution;' a woman pasting on labels had equal footing with a man pouring out molten iron.

Clearly the direction of change is toward greater integration of women into the work force. At many factories they said the number of women workers had increased since the Cultural Revolution. These new women workers are working alongside men in all kinds of jobs.

The historic role of the All-China Women's Federation has been to encourage and mobilise women to join in work outside the home. Today most women are working and the task is no longer the struggle to join in labour, but to guarantee equality through continued struggle on the three fronts mentioned above. When we asked about the All-China Women's Federation's present status we were told it is in the process of 'struggle-criticism-transformation.' That is, the future and direction of the Women's Federation are presently being discussed deeply and this is undoubtedly related to the politics of the 'struggle between the two lines.'

Young and Old at Work

Education has been expanded, especially since the Cultural Revolution. Another new force is appearing among workers in Chinese factories: the 'educated youths.' In the past those who went through middle school usually went straight on to higher education or other technical work. Now increasing numbers of middle school graduates are taking part in productive work in the factories.

The educated youths have, as the Chinese say, 'strong points and weak points.' Their strong points include their literacy, technical skills, and a high spirit. Their weak points include an undue pride in their education, inflated egos, a corresponding disdain for repetitious or simple manual work, and tendencies toward spontaneity and impatience in political To draw on the strengths of struggle. each, old and young are often combined in one study group. The educated youths have the advantage of literacy; often they take the lead in studying articles and reading them aloud. Veteran workers have had great experience in both class struggle and the struggle for production; their own lives provide many examples of the theoretical points in the materials they study. The general trend seems to be to learn from the experience of the veterans and learn from the spirit of the young.

There is a great deal of respect for 'veteran workers.' This is quite different from the blind obedience to elders which was part of the old Confucian tradition. Veteran workers are respected because they have had long experience in class struggle, because they have had a proletarian life, and because they contribute greatly by way of their experience.

Old workers, even retired workers, are very much involved in the life of the factories. Since so much activity revolves around the workplace, some people do not retire when they reach retirement

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age—60 for men, 55 for women. Health is often a more important factor than age in determining retirement. Poor health may necessitate earlier retirement while good health may mean workers choose to remain at their jobs. Workers at the Kairan Coal Mine described one veteran worker who reached retirement age and preferred to continue work. He said, 'I still want to do something for socialism." He just wasn't ready to sit back and watch others work! He had heart trouble and couldn't do heavy work; he began cleaning up the grounds around the buildings and workshops, and mobilised other older workers to do the same thing.

Veteran workers are not kept around as 'museum pieces' or as 'quaint' reminders of how life used to be. They have an important role to play in the life of the factory; they help both with ideological education and with technical advice. Often, they take the lead in developing new methods of work and technical innovations. Everyone is encouraged to learn from their experience and from their perspective. They are respected as comrades, not 'venerated' as elders.

Town and Country

Efforts are being made to break down the old division between agricultural and industrial workers. One method is the development of small-scale industry in the countryside. The goal is for communes to become as self-sufficient as possible, so most industry in the countryside is geared to making products for rural areas. Many communes produce plows and other implements to pull behind tractors, electric milling machines to husk and grind grain, small 'hand tractors,' as well as smaller hand tools. Most communes we visited have small foundries and workshops to make farm tools. Other 'rural industry' we saw included fertiliser factories and food processing plants.

New industry is often built away from the major cities. New factories are built in suburbs, away from the crowded centre of town. Some workers are from a peasant background; they continue to live in the countryside while they work in a factory in a near-by city. Usually other members of their households will be commune members working in agriculture. Thus, many factories include workers with a foot in each camp; they have direct experience with both agricultural and industrial work.

Many factories also engage in agricultural production. Some own farms where cadres and workers spend occasional periods in agricultural labour. Some factories also grow fruits and vegetables on land surrounding their building. Pigs are a common adjunct to dining halls, performing multi-purpose roles of garbage disposal, providing fertilisers, and then being 're-cycled' themselves on to the dining table!

Transforming a Spiritual Force Into a Material Force

Study is an important part of life in Chinese factories. Shop groups or work units in every factory we visited had set aside specific times each week for study. One factory had three evening periods a week of 1.5 hours each; another had two hours of study once a week; a third had one hour after work each day.

Study involves both political and technical subjects. Work groups discuss and solve their day-to-day problems. Workers told us they were reading Marxist-Leninist theoretical works, newspapers and magazines. The most common materials used were articles by Chairman Mao, especially the 'three Constantly Read Articles' (Serve the People, In Memory of Norman Bethune, and The Foolish Old Man Who Removed the Mountains) and the Five Philosophical Articles (On Practice, On Contradiction, On the Correct Handling of Contradictions Among the People, Where Do Correct Ideas Come From, and Speech at the Chinese Communist Party's National Conference on Propaganda Work). The Communist Manifesto was also frequently mentioned.

A work group will usually study together; this helps tie study to practice. There is also a good deal of self-study in spare time. Workers we met gave many examples of their study and how it helped their work. Study is used in four general ways: to help workers understand their role in society; to combat selfishness and individualism; to promote technical innovations; and to solve contradictions among the workers. Work group study also promotes a unity which affects all aspects of life.

Tao Su-lun works as a cook in the dining hall of the East Is Red Auto Factory in Peking. 'I graduated from middle school in 1966 and came to work here in February 1968. When I went to work in the kitchen, I wasn't very happy. After all, I had studied for ten years; that work seemed too simple, too plain. I didn't like my job; I kept hoping that I would get to change it, to something with a more brilliant future. I wanted to work in the factory itself. The older cooks in the kitchen knew something was bothering me, and they asked me what was wrong. When I explained, they talked to me about their sufferings in the old They led me in studying the society. 'three Constantly Read Articles,' especially Serve the People. I was deeply moved by Serve the People, especially by Chang Szu-teh's boundless loyalty to the people. I compared my thinking with Chang Szuteh's. I looked down on my job; he did This showed that I didn't really not. mean to serve the people whole-heartedly. So I took Chang Szu-teh as a model. I accepted the job assigned to me and I learned to love my work. Now I think that a job as a cook is a common job, but it is also a job that is part of the revolution. In my job I can give good food to the workers in the shop; they can then produce more and so we can all serve

the revolution in China and the revolution in the whole world.'

The problem that Tao Su-lun faced is common in capitalist countries; the very nature of the capitalist system produces and maintains alienation. There, most workers harbour a hope to some day get a job that has prestige, honour, high pay, or some other special reward. The crucial difference in China is that although Tao looked down on her work, no one else did. The problem was not the job; it was her attitude toward it. From the way she described her feelings, it was clear she had romanticised what it would be like to work in production in the factory. It she had simply changed her job without changing her attitude, she would probably still have been bored and dissatis-This is exactly what happened to fied. another young woman of the same age at the Shenyang Transformer Factory:

'I first came to this factory in 1969, after graduating from midde school. At that time, my only thought was to get re-education from the older workers. Like the other new workers, I was in high spirits and I wanted to produce as much as possible. I started work doing grinding and at first I was happy with my job. But after a while, doing the same grinding every hour every day, I started to think that this work was too ordinary. I studied Serve the People and Chang Szu-teh was an example for me. He considered his job as part of the revolution. Then I read In Memory of Norman Bethune. There, Chairman Mao says that each person's capacity may be high or low but everyone is capable of having Comrade Bethune's spirit. I tried to learn from the spirit of Chang Szu-teh and Norman Bethune. I learned that every unit I make is a part of a transformer and these transformers are sent all over China and the rest of the world, too. I make my contribution by making my small pieces. Now I understand what I am working for, and I'm satisfied with my work.'

In the old society people who laboured for a living were looked down upon; manual work was despised. Work with the hands was considered lower than work with the head. In the new socialist society, workers are respected. It seems simple and obvious that in a workers' society, in socialism, work should be respected. But old ideas—as the above examples show—die hard; the Chinese understand that this is one way 'the class struggle continues.' And political study with work groups is one way they fight the struggle.

Also the nature of repetitive or boring work is transformed by the environment of a socialist system. People do not work merely for a pay cheque; they are working for something they believe in. Factories are not merely places where you endure work; they are centres for: production, politics, education, recreation, culture, and health and living facilities.

Hao Ching-chai is the chairman of the revolutionary committee at the Pottery Research Institute in Tangshan. He said that the study of Mao's works has helped their committee function better. 'In the past, we sometimes had problems. When a question came up, different people would have different opinions, but we didn't know how to handle our differences. We had lots of arguments; we never could reach unity. So we studied On Contradiction and we came to see that it is natural to have differences of opinion. That's normal; in fact, it's a good thing and we shouldn't be afraid of it. After we studied On Contradiction, we changed our approach. Now whenever an important question comes up, we call a mass meeting. We try to involve as many people as possible in the discussion. Everyone talks and there are always lots of different opinions and lots of disagreements. But we understand that we can learn from each other. We work out our differences through discussion and we now can get unity on the questions we face.'

Theoretical work is often applied in quite creative ways. A woman worker at a district-run factory in Peking gave us one example. When the factory decided to begin making electronic lathes, she was put in charge of the section that was to do electric wiring. 'But I had very little schooling; very few of us had much education at all. I was no technician; I couldn't even read blueprints. I just couldn't see where to start in learning to do wiring. I went to the Party branch in our factory and they encouraged me. They suggested that I study Chairman Mao's article On Practice. When I read it, I learned that skills do not come by nature. Every skill is learned through practice, no one is born a technician. My They comrades encouraged me, too. said: "Remember, illiterate workers have built high buildings in Peking!" I got a little more confidence and tried to do the work. It was hard for me to copy the blueprints; some of the workers in my section were middle school graduates. They used a compass to make circles, but I had never even seen such a thing before. I watched what they did and figured out my own methods. I got a round box and used that to draw circles. These workers encouraged me; they said my circles looked even better than theirs. But they used symbols on the blueprints that I didn't know-like "A", "B", "C". So I made symbols of my own; 'A' was like a ladder with something on it; 'B' was like a '3' with a line next to it; 'C' was half a pancake. I made my own copy of the blueprint; no one else could read my blueprints but they worked for me.

'But I also had problems. One man in our group had been to school and was an electrical worker. At first he looked down on me; he said the wiring could only be done by a trained electrician. He told me I should study the blueprint more and I shouldn't try doing any wiring. He said I would only make mistakes. But the more I studied the blueprint, the more confused I got. I thought of what I had read in On Practice. If I started to do the wiring, I thought I could learn as I worked. I went to the Party branch and They suptold them what I thought. ported me; they encouraged me to go ahead and they told the electrical worker he shouldn't make fun of me. Then I tried to wire up my first panel. When I got it done, everything was right except for one small wire. So I took it to the electrical worker and asked him to show me what was missing. He learned then not to make fun of me; he began to respect my spirit. Now I can do all the wiring on the panels. There are many other veteran workers like me who have never been to school. We sometimes find it difficult to learn new techniques. But we give priority to practice and we learn from each other.'

Study has other effects, too. Relations among workers were close and friendly. Work, recreation, education and cultural activities are drawn together through joint study. Workers help each other solve both personal and group problems. They are comrades, not competitors. Their spirit of cooperation is promoted both by common study and by the nature of the socialist system itself.

Study is closely tied to practice, applied in a creative and productive way. It is a living process that changes as the needs of production and society change.

The Creativity of the Masses

The Cultural Revolution drove home the truth of the statement made by Chairman Mao back in 1955: 'The masses have boundless creative power . . . they can concentrate on production in breadth and depth and create more and more undertakings for their own well-being.' At almost every factory we visited, we saw technical innovations developed during and since the Cultural Revolution. Production has increased greatly. Workers at the Wuhan Sewing Machine Factory said: 'The Cultural Revolution is a great revolution ideologically and economically; as our consciousness increased, our production increased.'

Some technical innovations were relatively simple: at the sewing machine factory they showed us a multiple-head drilling machine which drills many holes at once instead of one at a time. On another machine one person is now needed instead of the former seventeen. Most innovations were developed by a 'three-inone combination' of workers, cadres, and technicians. Sometimes these innovations changed the whole output of a factory. At the Shenyang Transformer Factory they said that 'in the Cultural Revolution, we criticised the Liu Shao-chi line of "run the factory by experts." We have built new transformers using a three-in-one combination and this new equipment is better than the old design: it is lighter in weight, it takes only half as long to make, and it costs 30 per cent less."

Technical innovations have helped some factories become self-sufficient. Workers at the Tangshan Pottery Research Institute told us that in the past they imported all the colours for glazes on the pottery. During the Cultural Revolution many people joined the struggle for scientific experiment and now they produce twenty varieties of colours themselves. A woman engineer discovered a way to produce gold colouring from local materials; now they glaze to the whole province of Hopei.

At the East Is Red Auto Factory in Peking we saw an innovation which illustrated the fundamental difference between work in socialist China and work in a 'free enterprises' system. In Detroit, the automobile factory where Stu worked installed an automatic spotwelder about a year ago. Workers in that factory hated the machine, and with good reason. It sped up the line; they had to work harder to keep up. They also knew that it took away people's jobs and meant more unemployment, which is very high in the autoindustry to begin with. The new machine

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was the enemy of the workers; they cheered when it broke down and sometimes they even 'helped' it break down. In Peking, at the East Is Red Auto Factory we saw a similar new automatic spotwelder. But the Peking spotwelder was built by workers themselves, together with technicians and cadres. Many had even stayed overtime to help build it. They regarded it with great pride and they knew it was to their benefit to make such innovations. Automation meant improved production but since workers were in control, it did not mean speed-up. It didn't throw anyone out of work because improved production in the socialist system meant rational planning and adjustments, not loss of jobs and dislocation. The machines in Detroit and Peking were similar; but in one setting it was the workers' enemy while in the other it was the workers' friend. In one system technical advancement meant unemployment lines for workers; in the other it was part of a rationally planned economy that benefited everyone.

Workers' Life

'Pay close attention to the well-being of the masses, from the problems of land and labour to those of fuel, rice, cooking oil and salt.' Chairman Mao issued this call in 1934; it has been used as a guideline ever since.

For example, the Wuhan Iron and Steel Works has an extensive system of workers' 'welfare.' 'This factory, in addition to iron and steel production, organises and supports: a college for workers and their families, housing and apartments, four middle schools, ten primary schools, nurseries, three theatres, a library, a cultural performance 'propaganda team,' a hospital with four hundred beds, several clinics, a rest sanitorium, medical teams, a farm, a militia group, sports and recreation facilities and also provides cheap transportation by bus from the city to the factory.

Workers and cadres at the Foreign Languages Printing House in Peking outlined the 'workers' welfare' activities which their plant supports: free medical care with half-cost for family members; kindergartens and nurseries; haircuts and a bath house; a retirement system; books and a library; sports and recreation facilities; cultural performances; films; a factory-subsidised cafeteria; and, they said, we have low rents, no taxes, no unemployment or lay-offs, and if someone has health needs for special food they can get extra money to cover the cost. They also grow apples, rice and grapes on factory farms and on the grounds around their buildings, and some of these products go directly to workers while some are sold to the State.

'Before Liberation, I had never even seen a hospital run by a factory. Now we have our own hospital and the doctors and nurses come to the workshops to see the condition of the workers and to give us treatment.' This is what a Chengchow factory worker told us. His factory looked after workers' health through a three level system of medical care: 'barefoot doctors' in each shop; clinics in each section; a hospital for the factory as a whole. As mentioned earlier, medical care is provided free to workers and at half-cost for their families. But this rule is flexible; the individual's situation is considered. Workers at the Wuhan Printing and Dyeing Factory gave us one example of this flexibility. A few years back, the wife of one of their workers became very ill. She was hospitalised for two years and the cost of her medical care was nine thousand yuan. Half-rate for families cut that down to 'only' four thousand five hundred yuan. The man who worked earned between sixty and seventy yuan a month—obviously there was no way they could pay the bill. The leaders of the hospital and the factory discussed the situation; the circumstances were investigated and they simply dropped payment. The woman received all

the medical care she needed, though she couldn't pay for it. They also told us that in other cases the State has picked up the bill.

Sick leave with pay is standard policy in the factories we visited. The Tung Feng Watch Factory has a policy of six months sick leave with full pay and after that 60 per cent of pay. Workers at the Chengchow Textile Equipment Manufacturing Factory described a woman who had become seriously ill with heart disease and was absent from work for four years. All her treatment was covered, including being sent to Shanghai for special care. She received 70 per cent of her wages plus the regular increases given during her illness. She had commented to her fellow workers that 'before Liberation, I would have died with such an illness.'

Most factories have built low-rent housing for workers. We visited several families in such factory-built apartments. Rents for two rooms plus kitchen and bath usually ran between four and six *yuan* a month. Sometimes utilities were extra. Some factories in the north provided a wage supplement in the winter months to pay for fuel. Factories also have dormitories for single workers; rents in these are very low. In some places it was 50 cents a month; in others, new workers paid nothing for dormitory rooms.

Workers choose where they want to live; the percentage of workers who live in factory owned housing differs from place to place. Many families live in State owned apartments or houses and some people own the homes they live in. In cases where two members of a family work at different factories they can choose between housing provided by either one.

Some very small factories, such as the district-run factory we visited in Peking, do not provide housing. Most workers were women who lived in the neighbourhood and many lived in housing owned by the factory where their husband worked.

There is variety in the type of housing that factories provide. The newest housing is often four- or five-storey buildings; in some places they have built smaller one-storey houses that are similar to the style of peasant homes. Details change with the times. The Kairan Coal Mine in Tangshan began to build housing for their workers in the mid-1950's and the workers bought their houses from the mine in instalments without interest. We visited one neighbourhood there where every family owned their own home. Housing built in more recent years is rented from the mines. Thirty-five per cent of the workers in these mines live in housing provided by the mine. The percentage varied in other factories.

Factories provide feeding rooms for mothers to nurse infants; they also run nurseries and kindergartens. Parents decide whether their children attend a nursery. Often children remain at home and grandparents or great-grandparents look after them. Nurseries do much more than 'baby-sit.' They are bright and lively places with lots of activities for the children. Even the smallest ones go on outings; they learn to sing and dance. We visited several nurseries where the children were eager to perform samples of Peking opera for us. In Shenyang we saw a group of five-year-olds learning to write characters.

Nurseries provide for child-care during the working day; some also care for children all week long. Parents drop their children off at the start of their work week and pick them up on the sixth day, so the family spends its holiday together. Both day care and week-long care are voluntary. Charges for nursery or kindergarten care are low, with nursery costs subsidised by the factory. One kindergarten in Chengchow charged six yuan a month for all-week care and 1.5 yuan a month for day care; this did not include the cost of food. The nursery run by the East Is Red Auto Factory in Peking charges eleven and a half yuan a month for day care, but this includes three hot meals and two snacks a day for all children. The State also helps subsidise nurseries and kindergartens since the actual operation costs are higher than the total fees that parents pay.

Children begin primary school at age seven (age six using Western style of determining age). School is free. Many factories have their own primary and middle schools. Elsewhere children go to schools run by their city district or street committee.

'Rice, cooking oil, and salt' are also attended to by the factories. Every factory we visited, large and small, had dining halls for their workers. Small ones had a kitchen which could turn out hot meals or heat up food that workers brought from home. The larger dining halls provided a very wide variety of appetising dishes and at nominal cost. In Wuhan, workers said, 'we have told our cooks to provide a choice of "three hots" for every meal: hot soup, hot rice, hot main dish.' The cost ranged from a low of 4 cents to a high of 15 cents for a meal, depending on choice. In Chengchow we visited a dining hall equipped to serve two thousand workers on each shift. The Kairan Coal Mine in Tangshan has a dining hall for above-ground workers and hot food is taken to underground workers during lunch break.

Cultural and recreational activities help make Chinese factories lively and exciting places. Emphasis is on participation, not just observing, and workers typically jump into these spare-time pursuits with great zest.

Almost every factory has a spare-time 'propaganda team' which performs Chinese songs and dances and scenes from the new revolutionary Peking operas. Part of their purpose is 'to make life more lively,' and the ones we saw certainly did a good job of it! They provide both entertainment and education, using songs and dances of China's national minorities, selections from Peking opera, and scenes from the life of their own factory. Sometimes the propaganda team will give performances to praise the merits or good behavior of individual people or work groups in their factory. The artistic level of these troupes is quite high; their enthusiasm infects all who come into contact with them. The timeliness and relevancy of their material make them very popular. They are voluntary, spare-time groups. Factories often provide funds for elaborate costumes, instruments, music and other equipment.

Sports are popular. Basketball courts, ping-pong tables and volleyball courts were common throughout all the factories we visited. Some had soccer fields, sports grounds and even swimming pools or small stadiums. Track meets, tug-of-wars and other games are often organised. Teams are organised in different sections of the factory but there is also considerable informal activity and 'pickup' games. Both men and women are active in sports.

Factories also provide reading rooms, libraries, TV rooms and game rooms. Many cities have a 'workers' cultural centre' where workers' groups from different factories can put on performances or hold sports events. We visited a 'cultural park' which serves the whole city of Canton. The activities there were numerous: two outdoor theatres; two stages with cultural performances going on; six exhibition halls; a library and reading room; amusements and rides for small children; and sports facilities where we watched a basketball game between teams from a sugar mill and another factory and a ping-pong match between a shipyard worker and a machinist.

Red is the colour of happiness in China; the factories are 'doubly red,' politically and culturally!

One Divides Into Two

The Chinese are the first to admit they have shortcomings. They are generally

quite frank in discussing them: 'Our leadership sometimes can't cope with production problems and sometimes we get confused,' said some Peking workers. 'Our assembly is not always done in a practical way for such a large factory; this is a reflection of our practice when we were small,' said a cadre in Tientsin. The most common shortcomings mentioned to us were that too much work is done by hand, and problems in administrative work. But they are trying to solve these problems. A movement for technical innovation is encouraged to reduce the amount of hand labour needed. They say administrative problems will be solved over time as workers gain experience in running factories. 'After all,' people in Wuhan said, 'we know how to smash the old system, but we are still learning how to build up the new.'

We have already mentioned two areas where we felt improvement is necessary: workers concern for their own safety (protective glasses, etc.) and maintaining close relations between workers and cadres. The Chinese maintain that the class struggle continues under socialism, and thus shortcomings are bound to appear. The proper attitude, they assert, is to be vigilant and determined in continuing to struggle against these weaknesses or wrong ideas. Their appearance does not reflect inherent flaws of socialism as a system. Rather, socialism allows and encourages masses of workers to struggle and actually solve such problems.

'The socialist countries are states of an entirely new type in which the exploiting classes have been overthrown and the working people are in power.' Chairman Mao said this in 1957. The 'New China' illustrates just how different this 'new socialist country' can be from the old capitalist society. The interests of the whole people come first; decisions are based on people's needs, not on profits.

Socialism is based upon people—working people. In China human needs come first. State policies are a means to that end; written policies are applied with a flexibility impossible in a profit system. Factories are only part of Chinese society, but they are a key to the future. Moreover, they are now the people's factories and that is what makes them *really* exciting.



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A Milestone of Contemporary History

The Taiping Rebellion and the Western Powers: A Comprehensive Survey.

By S. Y. Teng.

(Oxford University Press, London, 1971.)

The Chinese revolution which avalanched after the First World War had its beginning in the nineteenth century. The eruption of the first Chinese republic in 1911 and the Boxer rebellion at the end of the 19th century was preceded by what was erroneously called the Taiping Rebellion, a word inappropriate to describe the revolutionary movement that almost crippled the Manchu dynasty.

Unfortunately, one cannot cut the historical continuum as arbitrarily as Professor Teng attempts to do in alluding to 'communist' and 'non-communist' writers. What bourgeois scholarship has always done is to celebrate the cult of objectivity acted out by a coterie of mandarins divorced from the historical struggles of our time.

Professor Teng has marshalled an enormous amount of facts from the archives in Taiwan and other capitalist countries, but he has ignored, or is ignorant of, the vast amounts of primary source materials that have been worked upon since Liberation within China itself. This rediscovered material combined with the new scholarship brings out the popular dynamics of the mass upsurge of the 1850s and 1860s.

Such probing in depth is now all the more necessary since the newer generations in China and elsewhere require to know that the revolutionary traditions of China, in all its plethoric richness, was not the product of a passive history-less people, but of a people transmogrified into the masters of history. And here the significance of the Taipings acquires a new dimension. The interrelationship of the various facets of the Taiping revolution and the earlier Opium War, 1839-42 (launched by an emergent British capitalism) exposed the bankruptcy of the ruling Manchu caste and ushered in the era of unequal treaties. Well could it be said that the aggression, triggered in November 1839 and ended in August 1842 with the treaty of Nanking, marked the beginning of the nation's century of exploitation, submission and humiliation which, by its very essence, was to generate its opposites: revolt, rebellion and ultimately revolution.

But more than the loss of sovereignty, the Opium War delineated the putrefaction of the Manchu state with its staid Confucian rhetoric, its irreversible class contradictions, of which the most paramount was its ferocity towards the Chinese masses and its obsequiousness to its white slave-master.

Enfeebled and endowed with a ruling caste whose sole preoccupation was survival, the exactions demanded by China's predators (to pay for the unwanted opium that was now being shovelled into China) had to be paid for, above all, by the Chinese peasantry in gold and silver dollars. Nor was it surprising that the Taiping rebels first arose in precisely those areas which had tasted the whip of the extortionate tax official.

The Manchu ruling class had run into an historical impasse which could only be tackled by the wholesale replacement of the system; and it was here that foreign predators became in the initial stages the catalysts of such changes, dragging in their baggage the sub-caste of compradors and the multiplicity of parasites that percolated capitalist relations into the confines of the remotest of Chinese villages. The imperial caste could rarely initiate new policy measures since its administration was little more than a clearing house of memorials and exhortations; and the nation's financial policies a series of rapacious *ad hoc* measures designed to grab unsystematically the actual economic surplus of the peasantry, thus placing a brake on the process of capital accumulation.

The internal demands of the Manchu dynasty were matched by the policies of their new masters: the foreign capitalists whose economic occupation of China meant that the Manchu caste had to pay indemnities spiralling 21 million dollars, which after 1845, generated a large budgetary deficit and sustained inflation.

The circle of corruption widened in very much the same way as imperialist relations shroud the ruling oligarchies in several 'independent' neo-colonies of the Third World. In words of contemporary resonance Teng writes:

The sale of official ranks was a source of extra income. The banks in Peking financed the purchase of rank but charged a very high rate of interest on loans. But all officials were underpaid. A governor-general received a small annual emolument legally, while lower officials were forced into extortion to meet the regular exactions of higher mandarins. The latter devoured not only the salaries of their lower subordinates but also received from them large presents to secure the tenure of their posts. The average illegal extra income of an official amounted to about four times his regular salary. According to one contemporary observer, however, the extra money 'totalled about nineteen times as much as the regular income'.

Political corruption, skullduggery, kickbacks and shakedowns, grotesque and staggering as they were, were only a small part of the endemic crisis that now assaulted the Manchu dynasty. Foreign predators realised that the existence of a loyal 'native' caste (as in most independent neo-colonies today) was vital for the perpetuation of their own existence. In short, the capital accumulation sucked from a disembowelled China was used to finance growth and development in precisely those capitalist countries then embarking on their industrial revolution. The exactions of the alien masters combined with the domestic exploitation of the comprador class were the ideal formula for national impoverishment. Land pressures and land taxes were the 'normal' run of China's development which did not escape such a shrewd observer as Thomas Wade who, in the 1860s, referred to 'a dense population pressing upon the means of subsistence so closely that a partial failure of crops, or a change in the course of trade reduced masses of population to a state of starvation and drives them to support life by pillage.'

But population and population pressure could not suffice to explain starvation; behind these lurked the spectre of exploitation that ravaged China at every turn of the screw. As in any class formation the large landowners became the richer in the process and on the eve of the Taiping Rebellion the centre had now been focused on the land problem and the need for agrarian reform.

But 'reforms' even of the most innocuous vintage were inconceivable to the Manchu bureaucrat. By the mid-fifties more than twenty million Chinese had become opium addicts; and with drug addiction went the astronomic expenditure of foreign exchange earnings for the purchase of opium. Such, in brief, was the background against which Kwangsi Province became the cradle of the Taiping revolution on the 4th November 1850, when the peasantry resorted to arms against the Manchu dynasty.

Since the end of the Opium War revolutionary violence was not the retort to the persistent counter-revolutionary violence of the Manchus; under the leadership of Hung Hsiu-ch'uan and Feng Yun-shan a revolutionary movement had gathered under the ideological umbrella of various brands of Christianity. This was understandable enough, notwithstanding the realisation among several of the Taiping leaders, much later, that Christianity represented not merely a white man's religion, but more precisely, it was the religion of a slave master. This was a fundamental contradiction which some of the early Taiping revolutionary theorists could not grasp.

It was resorted to, in opposition to the Confucian and Taoist mythologies, because the latter had been linked too closely with the vision and ideology of official power. It was only much later that a revolutionary movement was to develop and embrace the materialist revolutionary ideology that was necessary to shunt the

A MILESTONE OF CONTEMPORARY HISTORY

movement onto scientific lines; but such an ideology presupposed a revolutionary political party.

It is comic to see the crushing irony of Taiping 'Christianity' whose sheer subtlety was beyond the wit of the colonial missionaries. In his disquisition on the nature of god the 'Eastern King' enquired of the colonial missionaries:

Your nations having worshipped God for so long a time, does any one among you know: 1. How tall God is, or how broad? 2. What his appearance or complexion is? 3. How large his abdomen is? 4. What kind of beard he grows? 5. Of what colour his beard is? 6. How long his beard is? 7. What kind of clothes he wears? . . . 12. Whether he is able to compose verse? 13. How rapidly can he compose verse? 14. How fierce his disposition is? . . .

The reason for this piece of comicality came precisely at a moment when the Taipings wanted to drive a wedge between the American and British commercial interests. But there was another vision to the Taipings that had no comic face, but one which under-scored the nature of the class struggle in which the belly of God was irrelevant.

In this stirring manifesto which has nothing 'bombastic' in it, despite Teng's contention to the contrary, we have a clear analysis of the social conflict.

Many people displaced by floods and drought are starving to death and their bones are piled in heaps; the Manchus pay no attention to them and let them die in order to keep the Chinese population small. Furthermore, the Manchus let avaricious and corrupt officials spread all over the empire to squeeze and impoverish the people. Government posts can be obtained by bribery, punishment can be rescinded by money, and hence the rich people are very powerful; whereas poor men of great abilities have no hope for employment or promotion; they can only die of melancholy. Those who pursue a righteous path to restore China to the Chinese will be severely punished, as well as their families to the ninth generation, so that not even a brave man ever dares to contemplate a rebellion.

Indicting the subservience of the intellectuals to the prevailing power structure, the manifesto continued in its virulent reproach to the mandarin-scholar immersed in esoteric meditation at the expense of working people. You gentlemen read books and understand history, but you have no sense of shame. In the past, Wen T'ien-hsiang (1236-1282) and Hsieh Fang-te (1226-1289) preferred death to service under the Yuan dynasty; Shih Kofa and Ch'u Shih-ssu (1590-1651) also preferred to die rather than work for the Ch'ing. These events are undoubtedly familiar to you gentlemen. We are never in doubt that the population of the Manchu is no more than a few hundred to a thousand, while that of the Chinese is no less than 50,000,000 (sic) ... What a disgrace.

The religious ethic was compulsively a part of the ideology of the Taipings, but what was more important was that as the movement spread and the institutional forces of the revolution began to take root the fear of the colonial white missionaries became clearer, since at first the Taipings were regarded as counterweights to Manchu power.

The early benign tolerance of the Taipings ultimately gave way to one of open hostility when missionary power saw that the course of revolution would be to end alien interference in China's affairs. Such ideological shifts were to be expected since Christianity in China was the most rapacious expression of expatriate interests.

Despite the utopian elements in Taiping thought, with its reference to the 'sacred sources of God' and other mumbo jumbo, the national struggle and the class struggle were pushed to the fore with the Manchu leadership stigmatised as an anti-national force. In the course of the struggle increasingly the driving force within the Taipings and their most militant elements acquired an unsystematised materialist world view which Teng does not examine. Not only did this materialist outlook assail opium smoking, gambling, prostitution, theft and other such acts, but its attacks were centred on the class forces responsible for such human degradation. Thus the gropings towards a materialist philosophy was laid during the Taiping Rebellion. From a weird concoction of religious ballyhoo a social movement was to evolve later along new philosophical lines. The detonator that was then missing was an authentic revolutionary party wedded to a materialist world outlook that is the science of dialectics.

The shift from a neutral pose to one of open interventionism was relatively easy for the missionaries. Their class profile became clearer as the decade of the fifties wore on. The earlier euphoria of the leader of the London Missionary Society in 1853 was not untypical of the reaction towards the Taipings: 'What a moral revolution. To induce 100,000 Chinamen (sic), for months and years together . . . to live without dollars, and all share and share alike . . . it is the wonder of the age.' But such cant could not conceal the missionaries as being the ideologists of commercial interests. The Taipings were exploited and adulated by the alien capitalist predators and their missionary troubadours as long as it was in their interests to do so.

After extorting their privileges from the Manchus—by the Treaties of Tientsin and Peking in 1858 and 1860, the United Kingdom and its fellow exploiters departed from the neutral pose. Full-throatedly the missionaries now joined the chorus of the counter-revolution and it required few refurbished rationalisations to effectuate such a shift.

As long as the Taiping revolution clung to the southern provinces of Kwangsi and Kwangtung, encroachments on foreign trade were peripheral; but when the rebels moved to occupy Shanghai—the bastion of compradors and white man's capitalism—the Taipings were branded as criminals, bandits, rapists who bandied their species of Christianity as a propellant to power, since, in the opinion of their clerical class enemies, they had become 'iconoclastic warriors, adopting some of the externals of Christianity and inscribing on their blood-stained banners the emblems of a religion of mercy and peace.'

As foreign intervention against the Taipings mounted in intensity the voice of god-power and that of gun-power became identical. In 1862, a leading British missionary noted that 'it would be for the interest of commerce and the gospel to break the Taiping power upon the sea coast and the Yangtze River and never allow them to hold any place within the gunshot of navigable stream . . . ' Such a view was not incompatible with white man's Christianity since Sir John Bowring, himself one of the top China hands in Nanking, a leading free trader and a missionary, had declared in the 1840s: 'Jesus Christ is free trade; free trade is Jesus Christ.' The circle had been squared. It was not the first time that foreign interventionism would use religion to shore up its interest against a revolutionary force (even if that revolutionary force had initially embraced the same ideology); and it would not be the last.

The obscenities of missionary ideology were forcibly different between the British and American and French and German. The Japanese war criminal, Tojo, was to summarise the situation succinctly several decades later in the 1930s: 'We have conquered China and we intend to maintain that conquest in order to widen the market for Japanese goods. We do not require missionaries as others do to assist us in the job. We need bayonets. And on bayonets we count.' The doctrinal leitmotifs running through all the Christian missions in China was identical, namely the disparagement of China's traditions and a racialist contempt for the Chinese people.

Divergences there were of a scriptural nature, but they were at one with their Governments for pushing the effete Manchu dynasty to major treaty revisions. All missionary ideologists recognised themselves as having an existence organically related to the occupying forces within China. After the counter-revolutionary violence had been consumated in the sixties a French Jesuit declared: 'Better a thousand Manchus than a single red Taiping', a masterly comment on both the nature of the struggle and the identification of the forces at play.

France, the United Kingdom and the US acted jointly to compel China to a treaty revision. 'The three powers looked forward,' writes Teng, 'to obtain a good many privileges which included access to the entire interior of the Chinese empire, permission to use the Yangtze River for steam navigation, the opening of Nanking and Chinkiang as treaty ports, the legalisation of the opium trade, the abolition of inland transit dues . . .' But this was merely the opening of the wedge. With swift reptilian rapacity the dismemberment of China moved apace, including Tzarist aggrandisements which, up to the present, have not yet been repudiated by the Tzar's successors.

Foreign interventionism was unified in all its stratagems of pitting the Manchus against the Taipings and maximising their gains in the civil war; but ineluctably were led to savage each other in the process. The British military accused the French of looting and pillaging art objects from the Summer Palace in Peking, which the French dutifully acknowledged to be true but countercharged that the British had done the same thing. The leader of the British terrorists was Lord Elgin, precisely the same Elgin who had earlier removed thousands of pieces of statuary from Greece to Britain, most of which he was to sell on the London market, then offering a few choice pieces to the British museum as proof of his philanthropy.

Baron Gros had charged that Lord Elgin had ordered the burning of the Summer Palace on October 18, 1860. 'To Elgin this decision was a means of striking a blow at "the pride" of the emperor.' Elgin, Gros said, 'followed "torch in hand, a path along which I neither want nor can accompany him" and wondered whether Elgin's objectives were to provoke the fall of the Manchu dynasty to the profit of the Taipings?' It was a fatuous question since the British like the French and the Americans and the Russians used a panoply of different stratagems in their rape of China.

Nowhere were diplomatic ruse, chicanery and veiled threats used more potently than by Tzarist Russia. Huge tracts of China fell into the Russian grab bag by the treaty of November 14, 1860, which gave Tzarism the Maritime territory: an area of 72,877 square miles, a chunk of territory as large as Korea (including the port of Vladivostok). To this annexation was superimposed the extra-territorial privileges in Mongolia and Sinkiang and duty-free trade at the Russo-Chinese frontier.

The extermination of tens of thousands of Taipings and innocent men, women and children joined to an institutional racism was now openly proclaimed. Increasingly, the Chinese were now referred to as 'an inferior race of malleable orientals', to use the debased coinage of The Economist in the 1860s. In his Shanghai diary of 1853 the Russian novelist Goncharov sadly relates the following incident: 'We strolled along the street and ahead of us there was a Chinese who didn't notice us and who failed to move to the side of the road. Stokes (an English official) without ceremony grabbed him by the hair and threw him to the side of the road.' Extermination and racial humiliation of the 'yellow niggers', to use the picturesque turn of phrase of a British viceroy in India, were different faces of the same coin.

As early as 1854, Sir John Bowring described the Taiping revolution 'as a disorganising and destroying influence which is everywhere undermining authority, but which seems to furnish few materials for the establishment of order and good government.' When interventionism became the unveiled juggernaut, the British, the French and the American and Manchu collaborators 'wiped out', according to British parliamentary papers of 1857, 'more than one million innocent lives in Kwangtung' and 'saved' Canton.

The militarist puppet governor Yeh Mingch'en noted that 'the numbers executed by his order were over 100,000.' Yeh could never have organised this massive genocidal act without the underpinning of the Franco-British interventionists. Such acts moved hand in hand with the sharpened internal economic colonisation of China through such agencies as the Chinese Maritime Customs Service, which conferred on the alien absolutists the rights to appropriate and 'administer' customs duties.

For such colonisation to be effective internal collaborators that were the stock in trade of colonial power relations were imperative. And the Manchus filled that job. On March 22, 1862, the North China Herald, the spokesman of white man's capitalism and the missionary ideologists, jubilantly proclaimed:

While the representatives of Great Britain and France, and the naval and military commanders of these Treaty Powers in China, have not only withdrawn their sympathy from the Taipings, but actively cooperated with the imperialists (i.e. the Manchus) in trying to crush the rebellion, it is satisfactory to learn that the foreign relations of the Government are daily becoming more friendly and sincere. . . . As Prince Kung, who is favourable to foreign interests, has been restored to power, we have every reason to believe that at no period in the history of this empire ... has the representative of foreign nations possessed greater influence at the Court of Peking than the British and French ministers do at the present time.

But this was a Victorian pipe-dream for there could be no 'harmony' under such forms of exploitation. Although several decades were to pass (and which witnessed the pyramiding of a new consciousness) before the resurrection of the New China orbited a new epoch in human history, the antagonisms between the predator powers continued within China, as well as rising in crescendo from the eighties onwards. The crushing of the Taiping revolution did not stop these antagonisms; they exacerbated them and ended China's isolation and in the process smashed the vestiges of its mediaevalism.

The major interventionist jackals: the UK, USA, France and Tzarist Russia (later to be

joined by Germany and Japan) continued to tear into the vitals of each other. Such was the profile of modern China.

The first Chinese republic, born in 1911 (inspired by the Boxer upsurge at the end of the century and the abortive Taiping revolution) was separated from the imperialist holocaust of 1914-1918 by a mere three years. It was precisely the bloodbath of those four years that was to sow the further seeds of the liberation movement that followed 1918. No where was the drama of the unfolding of this event more vividly described than by William Burghardt du Bois—the great American negro scholar—in 1919;

The world war was primarily the jealous and avaricious struggle for the largest share in exploiting darker races. As such it is and must be but the prelude to the armed and indignant protests of these despised and raped peoples . . China is raising her half manacled hands, India is writhing for freedom, Egypt is sullently juttering, the negroes of South and West Africa, of the West Indies and of the United States are just awakening to their shameful slavery. Is then this war the end of wars? Can it be the end, so long as sits enthroned, even in the souls of those who cry peace, the despising and robbing of darker peoples? If Europe hugs this delusion, then this is not the end of world warit is but the beginning.

The Taiping Rebellion contributed to the disintegration of white man's capitalism, much the same as in our time the revolution in Indochina has contributed to bleed American fascism. In this historic context the Taiping revolution becomes one of the milestones of contemporary history—preceding the Paris Commune by a narrow stretch of years.

Teng's volume contains serious flaws based on his eclectic approach to historical change, as when he makes occasional references to the 'generosity' of the Western predators and the 'totalitarian' social engineering of the Taipings. Yet, despite these very serious shortfalls, the book constitutes an important source of documentation, which is coherently stitched together. It deserves a large readership.

Christopher Collingwood



ON MANY HORIZONS

Acupuncture Used on Animals

The Peking Municipal Veterinary Hospital and the army horse disease prevention and treatment centre of the Peking units of the Chinese People's Liberation Army have used acupuncture anaesthesia over the past two years for operations on the chest, neck, limbs and other parts of the body of 360 horses, mules, donkeys, cattle and pigs, and achieved a 95 per cent success rate.

Acupuncture anaesthesia induces analgesis and to a certain extent, readjusts the functioning of the organs of the ailing animals. Therefore it can deal with the acute pain and physiological disorder acompanying surgery and ensure a smooth operation.

This method is particularly effective for seriously ill animals with irregular heart beat that cannot be anaesthetised. Such operations have none of the side effects caused by anaesthetics and usually require only simple electric anaesthetic apparatus which is easy to handle.

The success of acupuncture anaesthesia to animals is also of important theoretical significance. Some people assert that it is man's consciousness that operates in the effectiveness of acupuncture anaesthesia. But animals can give the veterinarian no conscious cooperation.

Hsinhua, Peking, 11 October

Paradise for Going High

The Defence Department reported yesterday a five-fold increase in the use of heroin and other hard drugs among the 45,000 US servicemen in Thailand.

Dr Richard S. Wilbur, the department's chief medical officer, attributed the higher rate to the larger troop population, better techniques for detecting heroin use and the availability of drugs in Thailand where he said they are easier to obtain than in Vietnam.

AP, Washington, 13 October

Right Foot Grafted on Left Leg

A young peasant woman (29-year-old Tsui Wen-chih) who lost both feet in an accident can now walk with one transplanted foot of her own plus an artificial leg, thanks to a successful operation by surgeons of two Peking hospitals. Her right foot, severed from her smashed right lower leg, was transplanted to her left leg below the ankle. After nine months of treatment, the patient can now walk up and down the stairs and stroll in the park.

A recent examination shows that the transplanted foot has normal blood circulation and the rejoined bones, tendons and nerves are growing well. The foot shows fairly good recovery of function and the sole can sense elevation, cold and warmth and the consistence of objects it touches.

Hsinhua, Peking, 18 October

New Styptic

A new-type medicine to stop bleeding was recently made by an army hospital in East China. The styptic which can also alleviate pain and combat infection has been popularised in other hospitals of the country. It has been 97 per cent effective in 1,703 cases.

This styptic is suitable for injuries of tissues and internal organs resulting from operations. It is especially effective in checking bleeding that cannot be managed by electric cautery, suturing and ligating as well as in checking extensive oozing of blood. Persistent nose bleeds and other severe cases have been cured. When a styptic plug was applied, a patient whose foot had been pierced through by a bamboo spike stopped bleeding at once. When a patient's liver ruptured, bleeding was arrested three minutes after styptic powder was applied to the wound. The styptic is convenient to carry, store and use.

Hsinhua, Nanking, 27 October

Asian Population in 2000

Despite intensive family planning measures, Asia's population in the year 2000 will be 3,778 million. This is more than the total world population today, which is in the region of 3,635.2 million.

The grim forecast comes from the Economic

Commission for Asia and the Far East (Ecafe) which undertook a study of emerging population patterns for the Ecafe region, stretching from Iran to Japan.

The Asian, Hongkong, 29 October

Life in Smith's Jails

Political prisoners of the illegal Smith regime in Rhodesia are being held in close confinement and without proper food, clothes and bedding, according to a letter smuggled out of a Salisbury jail.

The letter, signed by 34 detainees, mostly members of the banned African National Party Zanu, reveals that the men are kept on 'Scale 3' of the Rhodesian penal code—the lowest scale.

This means they are not allowed spoons, towels, pillows, boots, toothbushes and toothpaste. They must wear shorts all the year round, despite the cold winter, and their mail is heavily censored. Their food, says the letter, is 'exceedingly poor, always deliberately badly cooked and consequently unfit for human consumption.'

> The Asian, Hongkong, 5 November

The Mood in Taiwan

Several days of conversations with Chinese Nationalist officials and foreign diplomats here produced predictions for the future that ranged from forced optimism to open, if privately expressed, pessimism. Bacause the issue is so sensitive politically, all of them asked not to be identified.

The word that fell most often from everyone's lips was 'survival.' The mood, in general, was a mixture of fatalism, stubborn resistance to the realities of international politics, fear of political unrest on the island, bravado and genuine determination to plug ahead.

> New York Times Service, Taipei, Taiwan, 6 November

Skull 2,500,000 Years Old

(A human skull was excavated at Lake Rudolph, north Kenya, late September this year by a young English anthropologist named Richard Leakey, according to reports in British newspapers.—Ed.)

So far, the newly discovered man has no

name, only a number—'1470 Man.' The number is a catalogue reference of the Kenya National Museums, of which Richard is the director.

1470 Man is remarkable not only for being the earliest hominid fossil yet discovered—more than 2,500,000 years old. It also involves revision of existing theories of man's early development.

> Sunday Times, London, 12 November

They Live in Dignity

The question a traveller back from Peking is asked most frequently is 'What do you really think of China?'

You sense an odd hope that your reply will be belittling.

In my (William Hill's) case, I'll never belittle. One-fourth of the world's population lives in the People's Republic of China, a country not much larger than the United States.

So far as a Westerner can discern in 23 days of observation, they live—amid poor economic circumstances—with dignity, integrity and as much happiness as you see in America.

As one of the editors in our party remarked, 'The Chinese, having little, appear to have everything.'

'But weren't you shown only the good side of Chinese life?' someone asks. 'Wasn't everything tailored to give you a favourable impression?'

Of course they showed us the good things, but we saw shabby things too, and we always had more freedom of choice than I had anticipated.

Perhaps the greatest thing about today's Chinese is their basic goodness, showing itself in kindness, unfailing courtesy, and dependability in big and little things.

New York Times Service, Washington, 12 November

Mice Race Down Under

Australians, they say, will gamble on anything, and to prove it a local yacht club is to stage a race meeting—with mice.

Judges, stewards and a commentator have been appointed and a six-foot long ten-lane track has been built for the 'Sun City Stakes' to be held on Saturday. The runners will not be your ordinary, common or garden mice, but thoroughbreds.

Reuter, Perth, 16 November

Hair Tragedy

Koh Tze Jin, 19, a worker in the government-owned Sembawang shipyard, was suspended for a day for having long hair. That evening he shaved himself bald.

On his return to work on Tuesday he was suspended for a week without pay. 'My baldness was interpreted as a form of protest,' he told newsmen.

Koh denied he had shaved his head as a form of protest. 'I chose to shave my head as it is cheaper than frequent trimmings and cooler,' he said.

Two hundred colleagues of Koh thought the management action was unjustified and held a lunch hour sit-in yesterday in protest.

A company spokesman said: 'It is not nice for a young man to go around bald, and invite stares and jokes that would distract other shipyard workers.'

AP, Singapore, 16 November

The Popular Couple

Tokyo's Ueno Zoo today installed special telephones to handle a flood of public inquiries about a pair of giant pandas presented to Japan by China earlier this month.

A spokesman said the zoo was receiving about 700 calls a day about the young male and female, Lanlan and Kangkang.

Reuter, Tokyo, 17 November

Poverty Abolished for the 56th Time

Indian Prime Minister Indira Gandhi enters her 56th year with her country facing a serious economic crisis which it is feared can only deepen in the months to come.

Her birthday was declared 'Garibi Hatao' or 'abolish poverty' day.

But heavy food losses caused by floods in some areas and drought in others have sent prices soaring. And industrialists, complaining of the lack of a clearcut government policy on the role of private industry, have held back on investment. So production has stagnated, causing unemployment and shortfalls in exports.

Reuter, New Delhi, 19 November

LSD in Russia

Soviet police have uncovered a group of scientists who were manufacturing narcotics, reportedly LSD, reliable sources here report.

The scientists, all working in an institute under the powerful Soviet Academy of Science, may have been discovered when an unhappy user of their product reported them to authorities, the sources said.

An investigation is still under way. Already, one man has been arrested and 2.2 pounds of narcotics has been seized at the Institute of Natural Compounds (INC) in Moscow.

> Hongkong Standard, Hongkong, 20 November

Israel Comes First

Israel spent more money per citizen on 'defence' than any other country in the world— US\$477 for every man, woman and child in Israel in 1970.

The United States was second, spending US\$379 per person in 1970, the Soviet Union third at US\$270 and Sweden fourth at US\$139.

These statistics were contained in a document called World Military Expenditures, in which the US Arms Control and Disarmament Agency compiled figures on military spending round the world.

UPI, Washington, 27 November

Majority's Wish

The overwhelming majority of Tokyo residents oppose the continued presence of US military bases in the area, the Tokyo Metropolitan Government reported today.

The government said a random survey of 1,450 residents showed 83 per cent wanted the bases removed and only 3.5 per cent thought they should remain.

Reuter, Tokyo, 27 November

Starry-Eyed Unwanted

Tourists be warned: Singapore immigration officials will not only be looking for unkempt long hair soon but also for those with a glazed look in their eyes.

Newly proposed laws being introduced in Parliament will enable officials to insist that foreigners arriving by land, sea or air undergo a urine test if they are suspected of taking drugs.

Stiffer regulations are being imposed to ensure that Singapore's society, which is also rapidly becoming comparatively affluent, will not adopt Western permissiveness.

AP, Singapore, 29 November

A Chat between Khrushchov and Malinovsky

(At a banquet in Vlora to celebrate the 60th anniversary of the independence of Albania and the 28th anniversary of her liberation), Enver Hoxha said, 'This heroic Vlora saw Khrushchov too. When this renegade to Marxism-Leninism was found before the magnificent Vlora Bay, he was amazed and in an instant I heard his collaborator Malinovsky whispering to him: "You understand Nikita Sergeevich, with the missiles from Berlin and East Germany, we can now hit Gibraltar, while from Vlora Bay we have in the palm of our hand all the Mediterranean". They had in the palm of their hands the wind, because our Party and Government destroyed their plans. Never will Vlora be in the hands of the foreigners. The same Malinovsky said again to Khrushchov in Butrint: "This is a beautiful lake. If the coast of the sea is breached through here, near-by a magnificent submarine base could be built and then Greece, too, would be ours." I got shivers and I remembered that dark night in Tirana, when together with Vasil Shanto, we plastered the posters "Down with Italian fascism. Long live the fraternal Greek people fighting for freedom . . . " No, our Party and Government would never allow that from the country of olives the fraternal Greek people receive the evil!'

Hsinhua, Tirana, 29 November

Anti-pollution in Tokyo

A Japanese veterinarian is making his own contribution to reduce air pollution in Tokyo. He is riding around on a donkey instead of his car.

Beside, Dr Teruo Iwamoto, 43, explains: 'In

heavy traffic, it is faster to get around on a donkey than a car.'

Dr Iwamoto says there is one disadvantage: Donkey feed is more expensive than petrol. He still has his car and is undecided what to do with it.

UPI, Tokyo, 4 December

No 'Wogs'

The Acting Prime Minister, Dr Goh Keng Swee, warned of the danger of Singapore becoming a nation of 'Western Oriental gentlemen' or 'Wogs' for short.

Speaking at a dinner party at a People's Theatre fund-raising campaign, Dr Goh said, 'When the British governed India, the British civil servants were contemptuous of Englisheducated Indians who disowned their Indian identity and values.

They called them 'Western Oriential gentlemen' or 'Wogs.'

Somt time ago, he said, the Prime Minister warned Singaporeans against the danger of an education exclusively in the English language. The end product is often a Caribbean-type of person with no roots in the past.

UPI, Singapore, 11 December

Concerning Drugs

China wants to help eradicate Hongkong's massive drug dilemma.

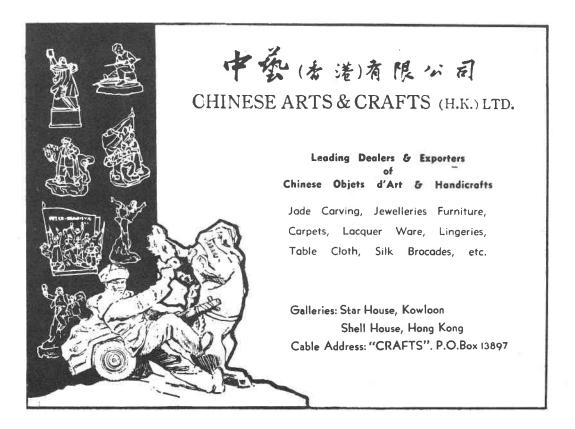
This was disclosed yesterday by Hongkong's first Commissioner of Narcotics, Mr Norman Rolph.

'There are indications that China is interested in aiding the community,' he said in an exclusive interview, 'and she will probably play an active part in eradicating the drug traffic.'

Concerning allegations that China is pumping opium and heroin into Hongkong, the Commissioner said: 'All evidence is to the contrary,' adding that 'such things are probably said by people of an opposite political background who do it as a sort of smear.'

> Hongkong Standard, Hongkong, 13 December





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