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A NEW CHINA IN THE MAKING

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The University of Nanking, Nanking, China

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A NEW CHINA IN THE MAKING

C. W. Chang

China is both old and young. She is old because she has several thousand years of history behind her. She is young because she, as a republic, has a history of only 35 years. Without a knowledge of such distinction, one cannot fully understand her.

During her past several thousand years of history, she has developed a high civilization, much higher than her neighboring nations. When Marco Polo made the report on his trip to China, the people in Europe could not believe him. Although at different times China was ruled by invaders of different races, each time the conquerers were finally conquered by the high civilization of the Chinese as they were gradually assimilated by the Chinese to the extent that they lost their entire identity. Take Manchurians for an illustration. They were the ruling race in the last Dynasty. Where are they now? During the last three centuries they were entirely assimilated by the Chinese. Today you cannot find a genuine Manchurian. They all speak the same language. They all read Confucius' books. They all have the same customs. They intermarry with the Chinese people. It is the high civilization of the Chinese that has assimilated all the invaders who have ever conquered and occupied China.

Then what is the Chinese civilization? Of course it is difficult to describe it in a few words. In general the Chinese civilization condemns war-like activities and upholds virtues of life. All the teachings of Confucius may be summarized in two words -- "loyalty" and "forgiveness". That is, one should be loyal to his own country and he should forgive his fellow men for trespasses against him. Mencius said that to make people to follow you by force is bound to fail. But when people once have faith in you, they will follow you wholeheartedly just as water flows from a higher level to a lower one. For the past two thousand years, we, the Chinese people, have been very much influenced by the teachings of these two great scholars and the selection of people for the government service was based on their understanding and elaboration of these teachings.

But in the early part of the nineteenth century, when her door was forced open to the western world, China found herself facing a totally different situation. It was in 1842 that China was defeated for the first time by a western power - Great Britain, as a result of the Opium War. This was followed by a number of other setbacks. All these led to the awakening of the people, which was instrumental in the introduction of reforms of various kinds in the latter part of the last Dynasty, and finally resulted in the overthrow of the Dynasty and the establishment of the Republic in 1911.

This is the 35th year of the Republic. Her short history has been full of troubles and difficulties. During the first part of her history there were constant civil wars, one after the other, draining heavily on the wealth of the nation and interfering with any program of reconstruction. Then in 1931, as a result of Japan's occupation of Manchuria, China found herself at war with her powerful neighbor, and, being unprepared, lost, for the time being, four of her provinces in the North East. In 1937 the war flared up again, ravaging the whole country for a period of eight years, much longer than in any other nation in World War II, and causing tremendous destruction of life and property. So one can readily see that in the early years, the Republic was much absorbed in the matter of internal adjustment, in changing from one form of government to another, and that in the latter part of her history, she was much engaged in a war against invasion. Consequently there has not been time for the government to undertake any substantial work of reconstruction.

The long history of China is both a matter of pride and of handicap. To do anything new, she had to break up her long-established and deep rooted customs and traditions. Furthermore, the population is huge and mostly illiterate. In addition, transportation is difficult. In a sense, the young Republic is just like a man climbing up a steep slope with a big load on his back. And oftentimes this man has encountered thunderstorms, making the path up the slope more difficult. I think people can still remember that the last Emperor of the last Dynasty took his shelter in the Japanese settlement in Tientsin, North China, after he was dethroned in 1911, and twenty-one years later the Japanese made him a figurehead again in Manchuria. Japan did not want China to become strong and so constantly tried to keep China from being united, by encouraging civil wars. This is the general picture of the life that the young Republic has been living all these years since its establishment. We hope China will have a free hand to develop her own destiny in the future, and will not be interfered with by any other nation with the desire for domination and exploitation.

It is most fortunate that in spite of disturbed conditions education in China has been allowed to develop and has not been very much affected by disturbed conditions. As a matter of fact, there have been a number of educational reforms introduced from time to time to make education more popular and more practical. The spoken language is now widely in use in place of literary language so as to make it understandable and accessible to the common people. Mandarin is generally used in all schools in all parts of China, including schools in foreign countries that are run by the overseas Chinese, so that in due time all Chinese people can talk to each other with the same dialect - that is Mandarin. During the war it was the policy of the government to move all schools out of the occupied area and to help students to go to Free China for their education. As a result of such encouragement, the enrollment of students in both training institutions of higher learning and secondary schools have been doubled during the war. It is also interesting to note that more students are now preferring applied courses, such as engineering, agriculture, and economics to the courses in the liberal arts, just reversing the picture in the prewar days. In other words, they are more practical minded than they were before.

Educational development in China owes a great deal to our missionary schools. They pioneered and set the pattern for the education that followed. Before the war the total enrollment of students in our missionary schools of higher learning constituted about one fourth of the total number of students of college grade in the whole country. At present the ratio is about one to ten. In many respects the missionary schools still take the lead in our educational work. The College of Agriculture and Forestry of the University of Nanking, the College of Medicine of Cheoloo University and the School of Law of Soochow University are among the leading training institutions in China. They are private institutions, free from government red tape, and they are missionary schools, armed with spirit for service and sacrifice. Many of our leaders in government service industries, medicine, and agriculture came from these institutions. Without any doubt, this is one of the major factors that accounts for the good understanding and cordial friendship between China and the western world.

Long before the end of the war, China had set to work on plans for postwar reconstruction. According to Generalissimo Chiang Kai-shek, the ultimate aim of our postwar endeavor is not in any way for world domination but is rather directed for the betterment of the life of the people and for the realization of a real democracy. At present there are several hundred projects fully blueprinted and ready to be developed. Let me cite the Yangtze Gorge Project for an illustration. This was devised, a few years ago, by Dr. J. L. Savage, an American hydraulic engineer with a world reputation for making dams. According to his plan, the Yangtze Gorge Project, which is to put up a dam in the Upper Yangtze River, somewhere between Chungking and

I-chang, will generate 10,560,000 kilowatts of electricity, will provide water for irrigation for 10,000,000 acres of land, will control floods and will make the upper part of the river navigable the year round. If once installed, it will electrify a big portion of rural China, giving birth to many industries and improving the rural life. It is a paying proposition. We hope it will soon be put into operation.

There are many other projects that are planned for the purpose of raising the standard of living of the rural people, who constitute about 85% of our total population. The rural people are industrious and self reliant. It is on them that the future of China depends. But their farms are small and they cannot make a decent living on their present incomes. To improve the situation we must promote cooperation among the farmers for increased agricultural production, for processing of agricultural products and for marketing them. By applying all these related efforts, the economic life of the people will be greatly improved. The College of Agriculture and Forestry of the University of Nanking has a two year course, known as the Rural Leaders Training school, that trains students to become leaders of the rural people in all these activities. In the past twenty-four years it has graduated about 750 students. In prewar days about 95% of them were placed in the work for which they were trained. Their work has been remarkably successful. Now there is a plan under way to strengthen the school in order to train more students to meet the demand.

As a preparation for the undertaking of our post war reconstruction program, China during the past two years has sent 4,000 students of proved ability to the United States and 400 more to Great Britain for advanced training in various fields of learning. This summer there is a plan to send over 2,000 more. This simply shows our determination to reconstruct ourselves as rapidly as we can. From 1932 to 1937, China made record progress in her reconstruction. Many schools were established, many highways were constructed. A new life was introduced. Many government reforms were adopted. About 300 rural reconstruction centers were at work in different parts of the country. By 1937 cotton production in China was increased by 75% over 1933. People everywhere in the country began to enjoy a prosperous life. Unfortunately the war broke out in 1937 and the reconstruction work was stopped. If given the opportunity, China is able to make progress by leaps and bounds.

While the government is attempting to undertake reconstruction work, there are strong social forces already in China that we should not overlook. They are churches and their organization, 13 Christian Colleges and Universities, 250 Christian Middle Schools and 100 mission hospitals, located in all parts of China. Together these represent the largest single social force one can think of. They have done a wonderful work in the past, and they will do a great deal more in the shaping of a new China. Their motive is simple and pure. We all like them and want them. May we now work out a thoroughgoing postwar program of work for all churches in China so that they can keep pace with the needs. If every church and every Christian school can become a center of reconstruction for its own community, then at once we will have hundreds of reconstruction centers throughout the country to work hand in hand with the government for the improvement of the life of the people. This will not only speed up the work of reconstruction in China but will eventually make the church a part of the life of the people. This is a big challenge to all of us. There is no reason why we cannot accept it.

Rev. O. J. Goulter of our church had already taken the lead in pioneering in this new field of service in Hefei, Anhwei Province, Central China, in prewar days. His work was so successful that he was invited several times by the authorities of the provincial government to visit government schools and to see if they could do something for the improvement of the life of the people in their communities. The West China Executive Committee of our church has urged that this work

should be extended to all other churches in China when they drafted the post war plan for our churches a year ago. I hope the plan will be acceptable to you.

The Chinese are a peace loving people. They have never fought a war of aggression. They always want to live at peace with their neighbors. If they did not want to be bothered by any other people, they either retreated or put up a wall on their boundry to keep them away, as the "Great Wall" was so built in the Chin Dynasty, about two thousand years ago. When they are overseas, they just mind their own business and do not want to be involved in politics. They consider themselves as doing business on someone else's territory and do not want to become master of it. But if and when their own territory is invaded, they just cannot tolerate it and will fight it out. When the war with Japan was on a nation-wide scale in 1937, no one could ever believe that China could fight the war more than a year. However, China fought single-handed the first four and a half years. After the Burma Road was closed, China was cut off from all the rest of the world. Then inflation set in, making living very difficult. To China it was a most desperate situation. But the people continued their confidence in their national leader, Generalissimo Chiang Kai-shek, and hung on in spite of all difficulties until the final victory. This is the spiritual strength of the people which has been fostered for centuries by her own civilization.

Now the war is over and China faces the gigantic task of rehabilitation and reconstruction. Few realize how deeply the roots of Chinese civilization have been disturbed and how intensive and extensive has been the destruction of war. It is most unfortunate that there still exists an internal strife, which has caused the situation to go from bad to worse. It seems to me that the key to a permanent solution of our internal difficulties lies in the rapidity with which we carry on our reconstruction work wherever it is possible. As the reconstruction work makes progress, the life of the people will be improved and hence the cause of the present strife will be removed. It is misery and poverty on which social and political discontent thrives. It will be a fatal mistake to assume that reconstruction should be deferred until internal strife is settled. But rather it should be speeded up. We earnestly urge that our Allies, especially the United States of America who has done so much for the liberation of China from our common enemy, will continue to help us without any hesitation and with increasing force in our endeavor to achieve national unity, economic stability and a high standard of social welfare and to share fully in world affairs.

Mr. Chairman, Ladies and Gentlemen: I am now through with my reading of the little paper on "A New China in the Making".. Before I take my seat, may I as a member of our church and as a citizen of China, take this opportunity to appeal to you for help to China. As you know, I am the Dean of the College of Agriculture and Forestry of the University of Nanking, which our church is supporting. I came out not as a government representative, but as a private individual on his sabbatical leave. I first went to Great Britain at the invitation of the British Council. Now I am travelling under the auspices of the Rockefeller Foundation. This is the tenth country I have visited. In my letter to friends in Nanking, I said this, "Our American friends are enjoying their life as if they were in heaven; people in Europe are on the earth; we, Chinese, are in hell." Dr. R. M. Hopkins wrote on his trip to Europe, "The bread set before us in England was always unpalatable." However, they do have enough to eat. But in China it is not a matter of palatability, but a problem of hand to mouth, life and death.

China has just fought a successful war against aggression with the help of the Allies. While her Allies are on the road to recovery, China is being held

down again by her internal strife. This internal strife is different from all previous civil wars. It is a strife between governments with two armies and with two different principles. China cannot allow her house to be divided into two.

I can assure you that my government as well as my people is working for a democratic form of government. It is a slow process. It takes time. We want our friends to be patient. You cannot measure China with your yard stick.

May I now lay two requests before you. First, we request you, our church, to give as much help to China as you can in the way of sending more missionaries to China and more facilities for them to work with. Second, we request you to write your government to continue to give support to our national government. This is a critical movement for China. We need your help. I am sure you can and will give us this help.

THE RURAL RECONSTRUCTION MOVEMENT IN CHINA *

The Rural Reconstruction Movement is one of several movements of great importance that have taken place in China during the last two or three decades for the uplift of the country. It differs from all other movements, however, in at least three respects.

The movement is not something remote from the masses of the people, but very closely related to their livelihood which it tries to raise to and above a minimum standard. The work usually begins with a survey to find out the real needs of the community. Then, based on these needs, a plan of improvement work is drafted, which in general includes agricultural improvement, public health, rural industry, education and citizenship training.

The movement not only does its work with the people and for the people, but it is so planned that the people of the community will take it over and run it themselves in due course. In any community, before the work is actually started, a committee of local leaders is organized, either to sponsor the movement or to serve in an advisory capacity to it. It enlists the help of the local people as much as possible and encourages them to take an active part in it; thus making them feel that this work is their own so that they will give it their full support. By this participation, they are not only trained, but they also learn how to work together, and in this manner the work gradually takes root and grows.

The movement works from the bottom up instead of working from the top down as many other movements do. Unless it is intimately related to the life of the people, no movement can ever succeed because it works without a foundation.

Before the war with Japan in 1937, the movement had already become nationwide. Three national conferences on Rural Reconstruction were held, first in Tsouping, Shantung, in 1932, second in Tingsien, Hopei, in 1933, and the third in Wusih, Kiangsu, in 1935. They were all well attended. More than 400 people attended the last conference, representing some 250 organizations that were directly concerned with the movement. The proceedings of each Conference were published in book form by the Chung Hwa Book Company. Such organizations as the Mass Education Movement at Tingsien, Hopei; the Rural Reconstruction Research Institute of

* This is an address delivered at a meeting held in London under the auspices of the Universities' China Committee on February 20th, 1946.

Tsouping, Shantung; the National Association of Vocational Education at Shanghai; the International Famine Relief Committee; the Provincial College of Education at Kiangsu and the College of Agriculture and Forestry of the University of Nanking, are among the pioneers that have pushed the movement forward.

Let me cite the case of Chengping Hsien, a county in Honan, as an illustration of the work of the movement. Mr. Pang Yu-ting, a native of the district, returned home in 1929, after a period of service with the Northwestern Army. At that time Chengping was not safe to live in because of bandit trouble which followed the civil wars. Nevertheless, Mr. Pang decided to stay at home. With the help of the local people, he soon succeeded in wiping out the bandit trouble, and then started the so-called self-government work in the whole district. The work included such items as taking a census of the population, land registration and measurement, social welfare work, public health, education, customs reformation, road making, telephone service, agricultural improvement and country policing. He had all the money that he needed for his work of reconstruction and it was raised entirely from local sources, and in a few years it had accomplished marvels.

This experiment enjoyed a nation-wide reputation. Every year many people from all over the country went to visit Chengping to study Mr. Pang's methods. Unfortunately, however, he was shot in the spring of 1933 by the reactionaries. But the work he began had taken root and grown, because the people had been well organized and trained, and they continued and strengthened it. During the war they successfully repulsed the invasion of the Japanese army, each time inflicting heavy casualties on the enemy. Towards the end of the war Chengping was selected by the Government as a centre of operation for the promotion of rural industrial cooperatives and relief work, with the local people in charge.

I will not stop to enumerate all the centres of rural reconstruction that have come into existence in different parts of the country in the last twenty to thirty years. There were several hundreds of them before the war. Some were small, often limited to a school community, some were large, covering one-third or one-fourth of a hsien. Some were started by a group of individuals, some were started by training institutions. Among the latter, the most notable is the National Council for Rural Reconstruction which was organized in 1925 by the Mass Education Movement, Tsinghua, Yenching, and Nankai Universities, the Peking Union Medical College, and the College of Agriculture and Forestry of the University of Nanking, with the financial help of the Rockefeller Foundation.

The Council had a very good field centre for training and research in Tsining, Shantung, and worked in full cooperation with the provincial government. It nominated one professor from the participating institutions to the government for appointment as a magistrate of the district (county). Then the magistrate appointed his staff for the different offices of the government on the recommendation of the various participating institutions. As a general principle each of the participating institutions contributed what it was best fitted to offer. For instance, the Mass Education Movement promoted adult education; Tsinghua University, engineering; Yenching University, rural sociology; Nankai University, economics; the Peking Union Medical College, public health; and the College of Agriculture and Forestry of the University of Nanking, agricultural improvement. The Council provided dormitories, a library, discussion rooms and laboratories in the offices of the County Government, and teachers and students from the participating institutions went there for research and training. Certainly it was a wonderful set-up. It was originally intended to develop the so-called 'University Community Concept Idea'. That is, to select a place typical of the country for the rural reconstruction work as the Council's field centre. There the participating institutions could make their distinctive contributions and work together through one set of government machinery in a controlled environment. This was a splendid idea for a co-ordinated

effort. Unfortunately war broke out, making the full realization of this idea impossible.

The effect of the Rural Reconstruction Movement on the Government as well as on the public, has been very great. In the second National Conference on Civil Affairs held in Nanking in 1932, a resolution was passed to the effect that a few hsien be made models for reconstruction on a hsien-wide basis. Very soon afterwards, five model hsien came into being in four provinces. The result of this experiment has been very encouraging. Probably it was the first time in the history of China that the hsien government has actually done something for the welfare of the people at large.

In the spring of 1940, the National Government decided to inaugurate the new hsien government system in all the hsien of the country. According to the new system, each hsien is to be divided into a number of hsiang (villages) and chen (market towns), each hsiang or chen into a number of pao (boroughs). Each pao consists of ten chia (wards) and each chia of six to sixteen households; the idea being that there should be a people's foundation school in every pao, and a community centre school in every hsiang or chen; the latter giving supervision to the former. The principal of the school may concurrently act as the head of the community for civil and military affairs. The major function of the system is to organize the training of the people and achieve increased production.

At present all hsien in the country are supposed to operate on the new system. The Provincial Government of Szechwan has designated four hsien as model hsien on the new system, two near Chengtu and two near Chungking. The Provincial Government has organized a supervision committee of which I am a member, to assist the Government to give supervision to all hsien that are operated on the new system.

So far as I am aware, the most difficult thing that the Government is facing in the operation of the new system is not lack of funds but shortage of personnel trained in and devoted to the task. Take Penghsien, one of the two model hsien near Chengtu, as an illustration. By efficient management of the public land and taxes, there are sufficient funds available for operation. But where to look for the personnel? It is not enough to have one good magistrate - he must have a team of workers to work with him, otherwise the new system cannot be effectively operated. It is the function, therefore, of all training institutions to provide men to fill this urgent need.

The new system is a Government attempt to undertake reconstruction work on a nation-wide scale. It functions from the bottom up, paving the way for a real democracy. During the war everything went to win the war and so other work could not be pushed very far. But now the war is over, the Government will push rural reconstruction forward with all its force in order to achieve success.

WUKIANG RURAL RECONSTRUCTION CENTER *

Under the auspices of the College of Agriculture and Forestry
The University of Nanking, Nanking, China.
June 10, 1946.

Wukiang Rural Reconstruction Center is one organized on the principle of

* This is a statement prepared for the Agricultural Missions Inc., 156 Fifth Avenue, New York City 10, N.Y.

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helping the people to help themselves and merits a word of explanation.

Wukiang is the name of a market town, 30 miles west of Nanking, located on the north bank of the Yangtze River, in the Province of Anhwei. Long before the war it was a well known agricultural extension centre for the extensiveness of its program for rural Reconstruction and the ability to maintain itself, in due time, from local support under the supervision of the University of Nanking. Every year about 300 students from the University, Ginling Women's College, Nanking Theological Seminary, and other schools, went there for practice and many government officials and rural workers paid their visits. There are many articles written about it.

The center began first with the distribution of improved cotton seed in the spring of 1922. Then it gradually took on other activities such as education, cooperatives, and public health to meet pressing needs of the community. In 1930 the National Agricultural Extension Committee of the National Government began to help to finance the work, with a view to making the center a place for demonstration for rural reconstruction.

The center was equipped with a seed farm of 20 acres, a cotton gin house, a clinic service, a library, an elementary school, and a headquarters with 50 rooms for offices, dormitories, conferences, and seed storage. There were a total of nine people on the staff, including five agricultural extension workers, two school teachers, and a nurse, and twenty apprentices selected from the community for training. In Winter seasons many short term training courses ranging from four to six weeks were conducted for farmers and their wives. Toward the end of their training, they were often taken to Nanking to visit the University and Government offices. Up to 1937, the college had organized four district Nung Hwei (farmers' associations) with a total of 2,000 members and these four Nung Hwei were united to form a Federation for the entire community an area with a radius of eight miles.) It is to this Federation that the College has gradually shifted the management of the center. Under the Federation, there were organized two credit cooperatives with 500 members, 3 fish raising cooperatives with 50 members, 2 water buffalo insurance cooperatives with 100 members, 2 cooperative tea houses with 1,000 members, and one cotton marketing cooperative with 500 members. All these members were taught how to elect their officers, to conduct their meetings and to keep records. The total running budget of \$7,000 national currency for the center for 1937 was met locally from sales of the farm, service charges of the cotton gin house, cooperative enterprises, and membership fees. The people in the community considered the center as an organization of their own and looked to it for help and advice.

During the war, much of the property of the center was destroyed and the work stopped. Now there is a plan under way to rehabilitate it.

IMPRESSIONS OF BRITISH AGRICULTURE *

Great Britain is predominantly a livestock country, in sharp contrast to China which is pre-eminently an agricultural country. In 1939 there were in Great Britain nineteen million acres of permanent grass against thirteen million acres under cultivation. Before the war, about half the home wheat production was used for feeding to livestock on the farm. Wherever cattle cannot be raised profitably,

* Broadcast over BBC Station in London, 11th May, 1946.

sheep farming is the rule. Most of the world's best breeds are produced here. On February 12th, 1946, a world record price, £14,800, was paid for a bull which was sold in an annual fair in Perth, Scotland. Before the war Great Britain used to import a major portion of her food supply and feeding-stuffs from other countries where they could be bought more cheaply than if they were home grown. But during the war, due to the limited amount of shipping space available, she had to increase on her own soil not only a major portion of her food supply for direct human consumption, but also feeding-stuffs for livestock that were allowed to be kept largely for milk production. In this she has been exceedingly successful.

With the encouragement of the Government, much new and grass land has been brought under cultivation. By 1944 the arable land had reached over nineteen million acres and permanent grass had dropped to under twelve million, just reversing the pre-war figures.

It is to be noted that during the war much agricultural land was lost to aerodromes, defense works and military requirements of all kinds. Up to date, over 150,000 farm drainage schemes have been approved, affecting over three and three quarter million acres and costing six and a half million pounds. In addition, over five and a quarter million pounds worth of schemes on minor watercourses and four and a half million pounds worth of main river schemes were approved for execution during the war. Over one million pounds were spent on drainage machinery. These are permanent improvements on some water-logged lands, rendering them capable of full production. Moreover, the farm has been extensively mechanized during the war. There are now 150,000 tractors in the country compared with 55,000 before the war. Likewise, other farm implements have increased very considerably, thus making the cultivation of increased acreage possible in face of labour shortage.

British agriculture is equally efficient. The average farms are between 50 to 150 acres and their cultivation is intensive and is often limited to good land. It is often quoted that the average yield of wheat in Great Britain is two and a half times the yield in the U.S.A. and Canada. The average yield of barley in Great Britain is seven cwt. per acre more than in the U.S.A. and Canada. The British oats yield is about twice the yield in the U.S.A. and Canada. The annual net output per agricultural worker in Great Britain is £205; as compared with £185 in the U.S.A.; £135 in Canada; £70 in Germany. In Great Britain one man engaged in agriculture feeds seventeen people, in the U.S.A. thirteen, in Canada twelve, in Germany seven. If the livestock were further reduced in order to release more grass land for tillage, the country could easily be made self-sufficient in its food supply. But it seems that the policy of the country is to produce a sufficient amount of fresh milk for home consumption, so as to maintain their high standard of living and nutrition, and then to grow as much food crops as the situation warrants.

Now the war is over, the Government has been busily engaged in working out a long-term agricultural policy for the country as a whole, in the light of her own needs as well as the needs of the world, recognizing that agriculture is an important basic industry. Such steps as the reorganization of the Ministry of Agriculture, the establishment of the National Agricultural Advisory Service, and the improvement of the training institutions have already been taken. The Government has proclaimed that it is the function of the Government to see that the land is properly farmed, properly managed and properly equipped, and the people on the land are getting a reasonable remuneration and making a decent living. In other words, agriculture shall receive the same attention from the Government that other industries have long been receiving, and the rural people shall have decent housing, decent wages and the amenities of the towns. In short, they are aiming at healthy

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and efficient agriculture. This is as enlightened an agricultural policy as any Government can possibly have.

In the limited space of the succeeding paragraphs, I am trying to stress a few points of my observation here for the consideration of my own Government in shaping her own policy for postwar Agricultural development.

First. It is interesting to see that practically all research stations were started as private enterprises and they all are receiving considerable amounts of subsidies from the Government. Take Rothamsted as an illustration. It was started by John Bennett Lawes in 1843 with a humble beginning. Now it is the oldest and one of the largest of its kind in the world. Its contributions to agricultural science are just tremendous. At present ninety per cent of its annual expenditure comes from the government subsidies. However, it still retains its freedom of research as in the past. Another interesting point is that most research stations are either located in some universities as an integral part of them or in close cooperation with them. This sort of cooperation has many advantages and is worth considering.

Second. Regarding university schools of agriculture in this country, the trend of movement is to require a better foundation in pure science and less agricultural specialization in the under-graduate course. It is only with a good foundation in pure science that one can possibly hope to be a real agricultural scientist. So here in this country provision is often made for those who have had degrees in pure science to obtain training in agriculture. It has also proved that the school of agriculture is an integral part of a university and cannot very well be separated from it as otherwise the school will suffer from the effects of isolation.

Third. The success of war-time agricultural policy in this country owes much to the War Agricultural Executive Committee that has come into existence in each county during the war. I have seen one in Cambridgeshire. There are over one hundred people on the staff including technical officers and clerical assistants. They have done a remarkable job in bringing about improvements on the farms with the help and advice of various committees composed of some progressive farmers from the locality. Now the Government has taken steps to organize the National Agricultural Advisory Service which will come into being, October 1st, 1946. According to the new scheme, the Service will be organized on a county and "provincial" basis. The county advisory staff will provide the general advice for farmers. Counties will be divided into districts of about one thousand farms each and each district responsible for specialist advice. For England and Wales there will be eight provinces. In addition to the existing research institutes, there is a plan to establish sixteen agricultural experimental farms to be distributed throughout the country according to agricultural regions. This is a big step forward toward the provision of a systematic advisory service on a nation-wide scale. The advisory officers of all levels are to be appointed and paid by the Ministry of Agriculture. This permits the promotion of the staff from one level to another and equalizes the chance for a good advisory service in all counties in the country.

Fourth. The Land Settlement Association Limited is one of interest; it controls twenty-two Estates in the country. I have seen one in Fendrayton, Cambridgeshire. This Estate was started in 1935. It has 301 acres. At present there are 46 settlers, each occupying 3 to 5 acres of land with residence and farm buildings provided by the Estate, for which they each pay one pound a week as rent. The Estate runs a central farm and all the heavy farm work such as ploughing and

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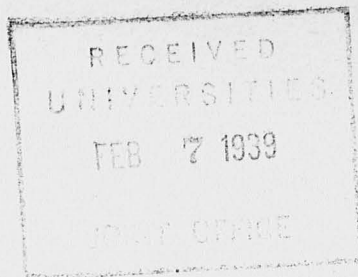
harrowing is provided by the Estate and the settlers just pay for it, so the individual settlers do not have to keep their own work animals and ploughs and harrows. The Estate also provides technical advice for the settlers. About 70 per cent of them were ex-service men in the first world war and most of them did not have any experience in farming before. One of the settlers whom I have met lost one of his legs in the war. He has three acres of land and a glass house. He has 50 chickens and 5 pigs. In the glass house he grows lottuces and radishes and later he will grow tomatoes. Last year he made a gross income of £1,380. His wife helps him on the farm and his boy is in school. He is quite happy. The Estate has a packing centre where the produce of the settlers is received and graded and marketed collectively. The charge to the settlers for such service was less than 5 per cent last year. The Estate also operates a supply house where the settlers can buy what they need for their farms. After all these services have been rendered, this Estate has made a net income of over £5,000 this last year. The 46 settlers each made an average net income of £500 for the past year. This is the kind of management that should be introduced into China on a large scale to help the small farm-holders.

Fifth. There are many similarities between British and Chinese Agriculture. There is not anything in this country on a too elaborate scale such that China cannot duplicate it. Often-times I was struck by the simplicity of some of their research laboratories. But there one will find that some of the wonderful discoveries in scientific agriculture have been made under these conditions. Of course it would be nice to have elaborate equipment to work with but it is not altogether essential. The most important thing is to get the right man for the job and to provide him with sufficient funds and adequate facilities so that he can stay on the job and do his best. Continuity and stability are always the two factors that account for the success of any substantial improvement. Here I have seen people spending their life-time in the field of their interest and their efforts are never in vain.

In closing I want to thank the British Council for bringing me over for a three months' visit, the Ministry of Agriculture and the Department of Agriculture for Scotland for the arrangement of my itinerary, and the various organizations for receiving and showing me their work when I visited them.

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CROP INVESTIGATION IN THE AREA AND SUNDRY ECONOMIC DATA

A REPORT OF INQUIRIES

Conducted by

Dr. M. S. Bates

{Professor of History, University of Nanking}

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On Behalf of

THE
NANKING INTERNATIONAL RELIEF COMMITTEE
COMPLETED OCTOBER, 1938

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Foreword

IN view of its experience during the past eleven months, and of its apparent responsibilities for relief persisting at least until the spring of 1939, the Nanking International Relief Committee has felt the need of continuing inquiries into the changing economic conditions of the people in and near Nanking. The Committee has asked Dr. M. S. Bates of the University of Nanking to supervise such specific inquiries as seemed most useful, and in particular sought for information about the basic problems of food, fuel, and clothing, as affecting the nature and extent of its winter program. At Dr. Bates' request, no extra staff was provided, except for the crop investigation; and the inquiries have been conducted for immediately practical ends, within close restrictions of time and expenditure. Nevertheless, the Committee feels that the information secured, limited as it may be, is highly enlightening as to the real problems of the people of this region; and that it should be made available to the many persons actively interested in measures of relief.

W. P. MILLS
Chairman.

INTRODUCTORY NOTE

The reports that follow were prepared one by one for the members of the International Relief Committee in the ordinary course of their work, and are neither an enterprise in social science nor pleadings for any cause. Publication is a secondary consideration, and is undertaken as simply as possible, with little change from the casual form originally employed.

Errors in judgment and in form of statement must be charged to the compiler, though he has tried to guard against them by continual checking and consultation. Inadequacy and fault in the scope and quality of the original data are due in part to the obvious material limitations of the enterprise, and in part to the mental shortcomings of farmer and investigator and supervisor, several of which are painfully clear to the last-named. We do not believe that there has been conscious misrepresentation at any point.

The materials exhibit their own nature. The crop investigation, initiated by Dr. Lewis S. C. Smythe, and begun in late July, is the only one on a considerable scale. The report proper is slightly enlarged by the inclusion of tables giving needed facts about the farm area covered, and recording the prices of rice and wheat through several months; also by the addition of a few items bringing the picture up to date. The simple inquiries on fuel and textiles were made in October. These later reports follow often the method of sampling dealers, and then turning their answers into estimates of city-wide sales and stocks by striking an average from the data secured and multiplying the average per dealer by the total number of dealers.

Western readers may wish to be reminded that the local *mow* of land as reported by farmers varies considerably. In Kiangning Hsien it is 0.06067 hectares. The new standard *shih mow* is 0.06667 hectares or one-sixth of an acre. The *shih tan* used in the crop reports is calculated by weight, 50 kilograms; while the *tan* employed in price reports is the *shih tan* by measure, 100 liters, or 2.838 American bushels, or 2.751 imperial bushels (the *shih tan* by measure is on the average 155 *shih chin*, 77.5 kilograms, or 170.9 pounds of rice; 144 *shih chin*, 72 kilograms, or 158.7 pounds of wheat—for Chinese wheat runs only about 56 pounds to the American bushel). After a long period in which the Chinese dollar was steady at about \$3.40 per U. S. dollar or \$17.00 to the British pound, it fell rapidly from April onwards, and in October, 1938, exchanged for about \$6.20 to the U. S. dollar or \$30.00 to the British pound.

M. S. BATES

I. CROP INVESTIGATION IN THE NANKING AREA

PURPOSE. GENERAL CONDITIONS

In order to discover (1) the acreage of all summer crops in the region of Nanking, (2) the probable yield of rice and other crops, (3) general conditions in the farm villages, with especial attention to flood; the Nanking International Relief Committee on July 18 sent out six investigators, expecting to make a brief survey by sampling in each of the six hsien of the Ningshu Area. Notwithstanding the favorable experience and local reputation of the Committee and the preparations made by its staff, the investigators met with serious difficulties: one investigator, whose way went through an area suddenly involved in warfare, cannot be traced at all, despite repeated efforts still continuing. A second was forcibly detained for a considerable period, and was prevented from doing even one day's work in his territory. A third was seized, tortured, and held under sentence of death till he was dismissed after vigorous efforts on his behalf. Two others were arrested in a dangerous manner, one of them after being fired upon in a small boat. Even the sixth, who fared best, was prevented from completing his work. All the investigators were at times required to show especial tact and persistence if they were to overcome the developed fears of the trampled farmers, and to pass through the suspicious hands of multiple local chieftains in the armed chaos of this region. Public order and condition of travel in certain areas have greatly deteriorated since our survey in March last. Under these circumstances the investigation was seriously prolonged in time and curtailed in results. (Data of the original investigation were all recorded in the field by August 1). Nevertheless, we find the reports to be of considerable value to us, and we communicate them to interested friends at this late date (early October) with the addition of some recent evidence of rural conditions.

GROUND COVERED

The practical outcome of the investigators' efforts was as follows: (1) The large and populous Kiangning Hsien, in which Nanking is located, and which contains 45 per cent of the cultivated area and normally 49 per cent of the rural population in the four hsien reported, was fairly well sampled in the central and western portions; not at all in the south or in the northeast. (2) In Lishui (south of Kiangning), the middle areas of the northern half were covered. Across the Yangtze River, (3) Kiangpu was touched in a path starting from the southwest corner but blocked before reaching Kiangpu City; and (4) Luho was usefully sampled through the southwest quarter and then eastward clear across the central portions. Investigators were able fairly well to follow their instruction to zigzag, reaching secondary routes as well as highways. For Kiangning the results are clearly significant; for Luho fairly so; for Lishui slightly; for

Kiangpu only suggestive. As to Kuyung and Kaoshun Hsiens, the investigation can make no report whatever.

QUESTIONS ASKED

Each investigator attempted to visit every third farm-village on his route. He carried a village schedule, on which he recorded the composite estimate of several leaders as to the present number of families in the village, the number not yet returned, and the number who returned but did not plant (with indication of the reasons for failure to plant); a similar composite estimate of the crop-yield in the percentage of "normal"* (the estimate is slightly ambiguous, because it was not specifically limited to the dominant crop, rice, though the investigators say that the answers were based upon rice rather than upon all summer crops); an estimate of the percentage of planted land then flooded. Further the investigator secured from individual farm families, taken by random sample in the villages (on the average, 6.2 families per village), their report for their own farms of total area last year and this year, of total planted area and area planted to each of the six leading summer crops (plus "others" and "not planted", to provide check against totals) last year and this year, and of planted area presently flooded.

FARMERS' REMARKABLE ACHIEVEMENT

Our report is most cheerful as to the admirable achievement of the farmers in planting under the unfavorable conditions of the spring and early summer almost as large an area as usual. Although many of them were hampered by extraordinary interference from armed men of all sorts, and many more had to farm after losing part or all of their buildings, tools, and animals, even working members of their families*, the farmers who were on the job got 99 per cent of their arable land into summer crops.** The story of that success includes phenomenal industry and hardship; much inter-borrowing of tools, animals, and seed: all the traditional tenacity of the Chinese peasant.

Here we pause to mention the report on war damage which we have just cited. In many ways the present investigation and report may be considered brief supplements to that basic and more extended study. It contains a map, list of weights and measures, and fuller general information about the area studied; in addition to the major data upon all types of losses and upon winter crops. The farm data were gathered in March, 1938.

*"Normal" is fairly well understood to mean a bumper year, one in which all conditions are favorable.

*See Smythe *War Damage in the Nanking Area*, pp. 17-18; 22-23.

**Note that 4.5 per cent (over 7,000) of the original number of farm families are reported as absent (3.6 per cent), or not planting (0.7 per cent). The reasons given for not planting (78 families) were, in order of frequency: late return from war dislocation, 33; lack of capital, 30; of equipment, 10; of buildings, 3; of labor, 2.

CHANGES IN CROPS

There were minor changes in the distribution of planted area among the various summer crops, as compared with last year. Rice declined from 77 to 75 per cent of the total; soybeans went up from 13 to 14 per cent; corn dropped slightly, remaining around 7 per cent in both years; cotton declined from 0.8 per cent to 0.7 per cent; green beans increased from 0.5 to 0.6 per cent; sesame was almost unchanged at 0.5 per cent. Thus there was a slight shift from rice to beans and lesser food crops, perhaps due to the especial losses in buffaloes and in irrigation apparatus, and to the fact that greater labor is required for rice. Though the cotton acreage of these hsien is always small, the decline may have significance for this locality, since the yield is reported poor and transport from a distance is practically prohibited by military control or irregular interference and manipulation.

DISAPPOINTED YIELD. CAUSES.

Unfortunately the excellent record of planting is subject to considerable discount for poor cultivation. Farmers have frankly testified, and expert observers have reported, that many fields were sparse or weedy as compared with the usual standard. Lack of animals, of equipment, and of security did tell, in spite of the strained achievement in planting area. An even more obvious damage was from the excessive rains of June, followed by dark, wet, unseasonably cool weather during most of the summer. Actual flooding of farm land was extensive, as shown below, depriving the farmer of a fraction of his rice crop and occasionally of the whole. Moreover, rice on land free from flood was unable to head properly without bright, hot weather. One scientific observer has reported in September an apparent yield of 60 per cent from fields that were rated much higher in July, and were not significantly affected by flood.

ESTIMATES OF YIELD. EXTENT OF FLOOD.

For Kiangning Hsien our investigators reported an expected yield of 41 per cent of normal; for the four hsien investigated, 45 per cent.* These discouraging estimates should be associated with the reports of flood. The village estimates indicate that 53 per cent of the planted land in Kiangning Hsien was flooded; 48 per cent in the four hsien.** A report and a calculation presumably more accurate is that based upon the statements of individual farmers (1031) about their own land, made to investigators on the spot. They said that in Kiangning 68 per cent of their total planted area was flooded; in the four hsien, 55 per cent. If the number of flooded mow is taken as a percentage of the number of mow planted to rice, the result in Kiangning is 88; for the four hsien,

*These figures are based upon the individual farm reports (1031) weighted according to the number of mow planted to rice on each farm. This we believe to be the most accurate representation of the original data. The simple average is 49 per cent, alike for Kiangning and for the four hsien.

**Also weighted according to the number of mow planted to rice.

73. Rice fields are usually lower than any of the dry fields; hence the flood occurred very largely in them, and very little in the fields used for other crops. It must be remembered that the term "flooded", particularly as applied to rice fields, is not accurately defined, nor easily capable of definition; and that a flooded rice field is not usually a total loss. Reaping rice that is completely submerged, using the sickle from tubs and other surface craft, the toilsome effort to save some of the drowned grain by sunning bundles upon scrubby trees and over frames strung along dikes: all are pathetically familiar sights.

SIGNIFICANCE OF ESTIMATED YIELD

It should be noted that "normal" is almost equivalent to a maximum crop, in practice if not in theory. It is commonly said that 50 per cent of normal, or 50 to 60 per cent, is full average crop for this region. Hence the estimate of 45 per cent is not so gloomy as it seems, though it is poor enough. Now statistics of yield are available in terms of most frequent yield per mow. Dr. Buck's investigations have found that for the Yangtze Rice-wheat Area, "normal" is 128.6 per cent of "most frequent yield", when the latter is defined as the yield secured most frequently over a period of ten years. On that basis, this year's estimate is 58 per cent (.45 x 128.6) of the most frequent yield. We calculate that the four hsien investigated have produced sufficient rice to supply the minimum cereal needs of the entire farm and city population for about one year (10 months if we use Buck's figure of most frequent yield for the Yangtze Rice-wheat Area; 15 months if we use Ts'ui's more liberal figure for Kiangning Hsien). It should be remembered that in this locality rice accounts for $\frac{3}{4}$ to $\frac{7}{8}$ of the annual production of all cereals.*

NOTES FROM INVESTIGATOR'S DIARIES

"People have not returned, for the cottages were burned." "Farmers lost their oxen and farm implements in the war, so most of the fields are uncultivated." "I could not walk on the dyke because it was covered by deep and broad water. I rented a boat for the trip. The village chief said the condition was like that of the Great Flood of 1931." At several points, investigators could not even see the locations of fields, for all was under deep water. Even on two main roads, it was necessary to cross some flooded portions by the use of wooden tubs as ferries.

"Oxen are urgently needed. There is shortage of seed for cotton and for wheat." "The farmers were afraid to give their true names. They feared that their young men would be conscripted." There were many reports of the current burning of villages, sometimes of daily trouble from the cruelty, robbery, and arbitrary requirements of soldiers.

*Compare Buck's figures for planted area and yield in *Land Utilization in China*, pp. 221, 225; also *Statistics*, p. 209. For winter cereals 1937-38, see *War Damage in the Nanking Area*, p. 20 and Table 21.

SELECTIONS FROM RELIABLE LOCAL REPORTS IN LATE SEPTEMBER

Detailed reports from excellent and experienced men in five widely varying localities support closely the crop prediction of the Investigation in July. They seem to indicate a slightly better yield of rice than the July anticipation, and a lower yield of dry-field crops. Soldiers are still taking animals and poultry.

In many places taxes are collected by several different authorities, a complete list of which might prove embarrassing in various quarters. Rice from a distance of 20-25 miles is paying as many as three sets of transport levies alone (amounting to more than one dollar per *tan*). Local products brought 25 miles by water regularly pay eight or more assessments. On cotton, for example, ordinary farmers or dealers without official favor have been paying \$6.55 per *tan*. Such a revival of *likin*, to use the term loosely, represents all too plainly the reversion to primitive conditions of transport and trade.

Farmers will exert themselves less during the coming seasons, for they received so little as the result of their stupendous labor in this year. Crude rice has sold at less than \$1.50 in certain parts of the Nanking area, because no real transport is possible. Moreover, the farmer cannot get any sort of credit to enable to hold his crop; and he can buy little of other necessities than food. Various communities report serious scarcity of cloth and clothing, cotton wadding or yarn, kerosene, matches, soap, medicines.

GRAIN SUPPLY IN RELATION TO RELIEF NEEDS AND RELIEF POLICY

There is sufficient food within the Nanking area to supply the present civilian population. From the point of view of the consumer or of those concerned chiefly with city relief, the unfavorable factors affecting supply and price are as follows: (1) irregular and unpredictable military requirements of certain foodstuffs; (2) the attraction of the very high prices in the Shanghai market, which are tempting official quarters to exercise their special connections to work inside the military monopoly of shipping, transporting to Shanghai more agricultural products than are able to reach Nanking in replacement; (3) uncertainty of incoming transport, even from points within a few miles, which is seriously limited by insecurity of road and river with violent fluctuations; (4) the worsening tax situation, as every sort of armed authority in all degrees of dignity, scrambles for income; (5) the small stocks carried in Nanking, where certain foodstuffs have leaped in price during recent closings of the gates. Most of these factors are wholly or mainly political, and cannot be influenced by relief interests. A relief program must, however, take into account the uncertainties of delivery to a large city; first as affecting the living of the poorer classes, and second as regards its own supplies.

But the major concern of the International Committee may pass by the problem of food stocks in order to attend to the more difficult and critical question of the ability of the people to buy food. In so doing, the farmers' struggle is not to be forgotten. As a group of old villagers said to an investigator: "Innocent people have suffered too much. Flood after war! When will the end be?"

TABLE 1
GENERAL DATA: POPULATION AND AREA

	Normal number of farm families (thousands)	Estimated rural population (thousands)	Average size of farm (mow)		Cultivated area (thousand mow)		
			Survey***	Invest.†	Survey	Invest.	Buck††
Kiangning	81.6*	489.6**	16.7	26.3	1,336.0	2,146.1	1,431.0
Kiangpu	15.8	94.8	39.4	37.6	623.1	594.4	302.8
Lishui	27.8	166.8	20.8	33.2	577.4	922.7	525.8
Luho	42.4	254.4	21.8	21.2	927.4	893.3	928.0
Total	167.6	1,005.6	20.7	26.3	3,463.9	4,407.2	3,187.6

*Buck, *Land Utilization in China, Statistics*, p.417.

**The figure of 6.0 persons is considered a satisfactory median among various reports as to the size of the farm family (household) in this region. For fuller information, see *War Damage*, Table 17 and Note 2.

***In the farms actually visited in March, reported in *War Damage*, Table 17.

†The present investigation, which seems faulty in sampling, must have struck belts of relatively large farms in Kiangning and Lishui. The minute check provided by Table 3 seems to leave no other likely cause of discrepancy. Cf. Buck's figure for average size of farm in Kiangning, 1.50 hectares (equal to 24.72 Kiangning mow). For the Yangtze Rice-wheat Area, his figure is 1.56 hectares. *Statistics*, p. 291. This result from Buck's surveys, subject to 1.4 per cent discount for uncultivated farm land in Kiangning and 9.1 per cent in the Area, is seriously at variance with the 17.5 mow indicated for Kiangning by the government general figures cited from Buck above, in the columns for farm families and cultivated area. We cannot attempt to solve this problem.

††*Land Utilization in China, Statistics*, p. 24.

TABLE 2
INVESTIGATION DATA: RETURN TO CULTIVATION

	Villages visited	Farm Families in Villages Visited				Farms studied	Average farm area (mow)		Average planted area (mow)	
		Original	Present	Not returned	Present not planting		1937	1938	1937	1938
Kiangning	90	9,017	8,616	401	76	744	26.30	25.94	26.30	25.94
Kiangpu	8	130	130	0	0	13	37.62	37.62	37.62	37.62
Lishui	15	1,173	1,156	17	0	106	33.33	33.12	33.33	33.12
Luho	52	1,870	1,847	23	2	168	21.20	20.96	21.20	20.96
Total	165	12,190	11,749	441	78	1,031	26.33	26.01	26.33	26.01

TABLE 3

PLANTINGS OF MAIN SUMMER CROPS 1937 AND 1938

BY NUMBER OF MOW PER FARM; THEN SHOWN IN PERCENTAGE OF TOTAL PLANTED AREA

	Rice		Soybeans		Corn		Cotton		Greenbeans		Sesame		Others		Not plant- ed 1938
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	
Kiangning	20.20	20.01	3.14	3.05	2.50	2.49	.05	.02	.08	.03	.07	.08	.28	.26	.36
Kiangpu	27.08	27.08	.08	.08	.08	.08	9.69	9.69	.39	.39	.15	.15	.15	.15	0
Lishui	12.70	9.59	7.21	9.38	.32	.24	.08	.14	.43	.69	.25	.24	.21	.68	.06
Luhoh	32.15	32.02	.07	.15	.17	.20	.32	.27	.06	.10	.39	.32	.17	.06	.07
Average	20.29	19.64	3.45	3.74	1.87	1.85	.21	.19	.13	.15	.13	.13	.25	.31	.27
Kiangning	76.70	76.21	11.94	11.62	9.49	9.47	.20	.08	.23	.12	.27	.30	1.07	.99	1.35
Kiangpu	71.98	71.98	.20	.20	.20	.20	25.77	25.77	1.03	1.03	.41	.41	.41	.41	0
Lishui	59.93	45.68	34.02	44.56	1.50	1.16	.39	.66	2.02	3.30	1.17	1.13	.97	3.24	.27
Luhoh	96.66	96.55	.20	.46	.41	.60	.96	.62	.20	.31	1.16	1.02	.42	.21	.23
Average	76.98	74.71	13.09	14.25	7.19	7.06	.78	.72	.48	.58	.51	.49	.97	1.15	1.04

TABLE 4

ESTIMATES OF RICE CROP IN TERMS OF CONSUMPTION

	A	B
Average number of mow planted per farm	15.5*	15.5*
Total number of mow planted	2,597,800	2,597,800
Per cent of most frequent yield expected	57.7	57.7
Most frequent yield in <i>shih tan</i> per mow	3,8547	5,7960
Total crop expected, in <i>shih tan</i>	5,781,975	8,687,802
<i>Shih tan</i> per farm family	34.5	51.8
<i>Shih tan</i> per rural family (towns included)	26.1**	39.3**
<i>Shih tan</i> per family (Nanking included)	18.9***	28.4***
Months' supply for farm families	15.0†	22.5†
Months' supply for rural families	12.6††	18.9††
Months' supply for all families	10.0	15.0

A. Uses Buck's figure for most frequent yield in the Yangtze Rice-wheat Area. *Land Utilization in China, Statistics*, p. 208.

B. Uses R. T. Ts'ui's figure for most frequent yield in Kiangning Hsien, weighted according to numbers of farms in his Land Classes IV and V. *Land Classification of Kiangning Hsien*, in "Economic Facts" 1938 (University of Nanking, Department of Agricultural Economics).

*Since our own acreage figures are obviously too high, we bring them into line with Dr. Buck's government statistics and those of the more representative March Survey, through multiplying them by .787, the ratio which the average size of farm reported in March bears to ours. Cf. Table 1.

***Land Utilization in China, Statistics*, p. 417. Town families 53,700.

***Estimating present Nanking population at 400,000 and number of persons per family at 4.7, Nanking families 85,100. Cf. *War Damage*, Table 1.

†We follow an earlier estimate of 2.3 *shih tan* monthly per farm family. *War Damage*, p. 21, utilizing consumption data from South Kiangsu in Buck, *Statistics*, pp. 105, 107.

††These and the figures next below, include town and city families at the rate of 1.39 *shih tan* per month. See the cereal consumption of lower median groups of city families, as recorded in Gamble, *How Chinese Families Live in Peiping*, p. 326.

TABLE 5
NANKING PRICES FOR RICE AND WHEAT

	Farmers' market outside Chunghwamen		Retail markets inside the wall	
	Yellow Rice	Wheat	Rice	Wheat
March	—	—	\$8.40	—
April	—	—	\$7.16	—
May	\$6.50	3.20	6.97	4.00
June	\$7.70	2.60	8.10	—
July	\$6.20	2.60	6.85	—
August	\$6.00	3.00	6.83	3.20
September	\$6.20	4.60	6.50	4.50
October	\$6.60	5.90	7.10	6.00

Notes: (1) Quotations are for the last week in each month, employing the *shih tan* by measure as the unit.
(2) The recent sharp rise in wheat prices reflects the serious shortage in the June harvest. Cf. *War Damage*, pp. 20-21 and Table 32. It is very unusual to have wheat selling at near the price of rice.

II. DATA ON FUEL—NANKING

INTRODUCTION:

1. Purpose of Investigation.

To discover sources of supply, quantities sold, conditions of transport, changes of price, stocks on hand, probable supplies on hand.

2. Method.

Careful inquiry among: (a) peddlers; (b) merchants; (c) storage centers; (d) laborers concerned; (e) persons well acquainted with the business.

3. Scope.

The Walled City, with nearby points concerned in the trade and supply of fuel.

4. Date.

October 1-7 for the investigation of facts.

A. FIREWOOD

1. General Conditions.

The earlier loot from buildings has now become scarce, and is largely replaced by wood from nearby hills.

2. Sources of Supply.

Wood from a distance was formerly landed near Shuihsimen or Chunghwamen. Local wood came in through Taipingmen and Hopingmen, secondarily through Chunghwamen. That produced within the city was hardly 10-20 per cent of the total. After a period of plentiful supply from buildings within the ruined city, wood newly cut from the hills has gradually risen to two-thirds of present supply. Of the latter, 33 per cent comes through Chunghwamen; 22 from inside the city; 20 each through Taipingmen and Hopingmen.

3. Trade Centers.

Wood arriving at Chunghwamen is handled near that gate, both outside and inside (15%). Through Taipingmen and Hopingmen, at Lienhwachiao (40%), Sanpailou (10%), Kulou (10%). From Tungchimen, at Ta Chung Chiao (15%), but the irregular opening of Tungchimen draws some supplies to this market from Chunghwamen. At Shuihsimen, both outside and inside; but recently no arrivals, hence a small market. Remaining 10% scattered.

4. Conditions of Transport.

Formerly carriers, donkeys, wheelbarrows, and especially boats. Now boats have practically been eliminated, and there is no transport from a distance. Wheelbarrows and animals were largely lost, and now few are seen. Carriers bring most of the wood, but their numbers are kept down by continuing robbery

on the part of soldiers. Carriers are said to number 20-30 per cent of those in the past.

5. Daily Sales.

Each farmer brings on the average 120 *chin* (range of 80-250 *chin*). Daily at Lienhwachiao there are 50 men; at Ta Chung Chiao, 16-17; Chung-hwamen, 20; Sanpailou, 12-13; Kulou, 12-13; at other places, 14-15. Total 114-115 carriers, bringing about 140 *tan*.

6. Supplies Available.

Farmers who bring in wood are from within 20 li, about $\frac{1}{4}$ of the area of Kiangning Hsien. In this area, only $\frac{1}{4}$ of the farmers have wood. This means $\frac{1}{16}$ of the 81,600 families in the hsien, or 5,100. Inquiry shows that each farmer has on the average 22 *tan* available (range 4 to 40 *tan*). Total estimated supplies, 112,200 *tan*.

7. Price.

No stocks are carried in the city, and indeed there is no store or merchant for firewood. Hence a little interference with communications, or rainy weather, as at the time of the investigation, sends up the price rapidly. Earlier prices are given from the University of Nanking market lists (Department of Agricultural Economics).

Apr.	May	June	July	Aug.	Sept.	Invest.	Oct. 30	(per <i>tan</i>)
\$.70	.76	.83	.80	.67	.88	1.20		Maximum
.65	.57	.63	.67	.60	.67	.80		Minimum
.69	.66	.73	.74	.65	.76	.97	1.00	Average

Notes:

(a) Military requisitions outside the gates are very heavy, and greatly reduce the supplies carried into the city for sale. (b) A place in Kao Chia Chiu Kwan collects 40-50 *tan* per day for sale to the military at \$1.33. A large stock of wood has been gathered by the military near Sanpailou, on the east of Chung Shan Road. There is also at least one purchasing point in Hsiakwan. (c) On October 1, some carriers were arrested by military police, and were threatened with imprisonment if they should thereafter infringe the sale monopoly of the Tupan's Government. (d) Under military orders all trees have been cut near barracks and other military points, also along the railway. The reported distance varies from 300 yards to 2 or 3 li.

B. REEDS

1. General Conditions.

Formerly the center of trade was outside Hanhsimen and Shuihsimen, on both banks of the canal, where 4,000 families made their living from the reeds. Now there are only 300 families, mostly near Shuihsimen.

2. Sources of Supply

Chiefly Kianghsinchou and other islands in the river. This year the crop is said to be excellent, but less than 1% has been cut, because of the high water.

3. Centers of Trade.

See No. 1 above. Formerly the two west gates handled 60% of the trade, Chunghwamen 15% and Hsiakwan (Hwei Min Chiao) 25%.

4. Conditions of Transport.

From the reed islands, boats carry loads of 300 bundles to Nanking. Each bundle weighs 300-400 *chin* (range from over 200 to over 500 *chin*). Distribution to within the city is by wheelbarrow at some 300 *chin* per load. Recently boats can come freely. But old stocks were burned. And often 8 taxes are collected, amounting to 40-50 cts. per *tan*, which entirely choke the trade.

5. Daily Sales.

Formerly about 600-700 barrows, and even after the war began, 500. Now Hanhsimen is closed, and there is none from Chunghwamen. From Shuihsimen about 20 barrows enter the city, averaging 280 *chin* (range 230-350 *chin*). This makes 50-60 *tan* per day.

6. Stocks.

Only a tenth of the 300 families in the business have supplies on hand. They average 22 *tan* (range 10-30 *tan*). Thus we estimate 660 *tan* outside Shuihsimen.

7. Price

In former times the highest price was \$0.83 per *tan*. In Sept.-Oct., 1937, it was \$0.63. This year:

May	June	July	Investigation	Oct. 30	
\$.87	1.00	.93	1.11		Maximum
.80	1.00	.93	1.00		Minimum
.83	1.00	.93	1.07	1.00	Average

Note: 7,000 *tan* of reeds were burned here before the taking of the city.

G. GRASS.

1. Formerly a little came from up-river, but most from this vicinity.

Local trade slowly came to life beginning with June and July. Farmers complain much about inspection and inoculations. No grass comes from a distance.

2. Sources of Supply.

Though Chunghwamen, 40%; Hopingmen and Taipingmen, each 25%; Chungshanmen, 5%. Tsing Liang Shan, 5%.

3. Centers of Trade.

Near Chunghwamen, 35%; and from Chunghwamen, at Ta Chung Chiao, 5%. From Hopingmen and Taipingmen, Sanpailou 5%, Kulou 10%, Lienhwachiao 30%. From Chungshanmen, at Hsihwamen and Ta Hsing Kung, 4%. From Tsing Liang Shan, Shuihsimen 1%, and small quantities at Hanhsimen, Lienhwachiao and Kulou. Other 10% scattered.

4. Conditions of Transport.

Formerly boats, donkeys, carriers, of which only the last-named survive.

5. Daily Sales.

Each carrier brings 119 *chin* (range 80-180 *chin*). For a total of 800-900 men, that means 1,000 *tan*.

6. Stocks

Arrivals are all from the 20,400 families living within 20 *li* of Nanking. Each family has available on the average 26 *tan* (range 5 to 60 *tan*). Total potential supply 530,400 *tan*.

7. Price.

June	July	August	September	Investigation	Oct. 30	
\$.86	.73	.53	.73	1.07		Maximum
.47	.57	.47	.50	.83		Minimum
.73	.66	.48	.64	.89	.85	Average

- Notes: (a) Soldiers compel cutting of all grass within 1 *li* of railways.
(b) Farmers returning through Taipingmen often lose their money to sentries.
(c) Shuihsimen people formerly used grass, but have shifted to reeds since grass does not arrive from up-river.

D. COAL.

1. General.

Although coal is not the main reliance of ordinary people in Nanking, it is of some importance for cooking and heating; and the lack of it increases somewhat the demand for wood or other fuels. Moreover, teahouses and the sellers of hot water are dependent upon coal.

2. Official Control.

Now the entire coal problem has taken on a political color, and the city is at the mercy of army, navy, and official interests. No consumer or merchant has access to any supply or transport unless all official interests are satisfied, financially and otherwise. The Tupan's Government has a Coal Control Office, which has taken over the coal docks and yards at Hsiakwan, and has been exercising through personal connections with military guards an irregular control over the sequestered stocks at Sanchiaho belonging originally to the associated Nanking coal merchants. However, it is reported that the Ministry of the Interior in the Reformed Government has obtained Japanese consent to its management of coal supplies and distribution, and there are military interests also to be considered. For the future, a monopoly by the Japanese official Chung Hsing Company is considered probable.

3. Supplies.

It is commonly said that when the Chinese Government left Nanking there were 150,000 tons of coal at Pukow, which stock was taken over by the Japanese Navy. In any case, it is certain that very large stocks were brought to Nanking last summer and autumn by the Chinese Ministry of Communications, most of which were on hand to be confiscated in December. Of those

stocks nothing remains within the city. It is reported that 20,000 tons are at Hsiakwan and Pukow. 16,000 tons belonging to the merchants are in custody at Sanchiaho. It is said that part of an original 40,000 tons is still at Tsaishihchi. At Laohokou there were 7,000 tons, of which part has been taken by guerillas. There is constant leakage from the yards on both sides of the river, some to poor foragers and some through corrupt deals. So far as is known, there have been no important arrivals for a full year.

4. Sales and Prices.

Within the city there is a coal Dealers' Guild with which the Tupan's officials have toyed inconsequentially. There are more than 80 dealers, whose average monthly sales are 33.4 tons per shop (range 4 to 210 tons), say 2800 altogether. Stocks average 21.4 tons (range 1-100 tons), amounting to a scant 20 days' sales. There is no real hard coal, and no first-grade soft coal. The supplies are almost entirely dust of the Hung Ch'i type. Prices are ranging from \$60 per ton in the thin and uncommercial market.

5. Consumption by Teahouses and Hot Water Shops.

Teahouses formerly numbered 400-500. Now there are 150-160. They use on the average 300 *chin* of coal per day (range 140-600), making 46,500 *chin* or nearly 28 tons. This calls for over 800 tons per month. Hot water shops are now nearly 300, relatively high in recovery against the nearly 400 former shops, but at present mostly very small in turnover of business. They use on the average 200 *chin* of coal daily (from under 100 to about 250 *chin*) making 60,000 *chin* or nearly 36 T all told. This would be almost 1100 T per month. They get their coal from the Coal Control Office or from scattered dealers. Thus teahouses and hot water shops alone take a large part of present sales, and if restaurants were added they would cover all sales. Hot water sells at 2 *chin* per copper, double the old price.

E. FUEL AND THE CONSUMER.

Leaving out of consideration the peculiar and uneconomic problem of coal, the 85,000 families of Nanking need fully 4,000 *tan* of domestic fuel per day (counting a family's requirements at the moderate figure of one and one-half *tan* per month). Present arrivals of wood, reeds, and grass provide only 1,200 *tan* daily. Presumably the remainder is made up from branches and scrap wood, charcoal, and small quantities of coal preserved in hiding or irregularly secured; likewise the stocks easily accessible at this season.

The fuel situation as a whole is characterized by obvious lack of buying power among the mass of the people. Although stocks on hand are ridiculously small, there is not sufficient demand to push them up or to raise prices seriously. It is hoped that the seasonal supplies of "wild" fuel may be replaced in time by greater supplies of reeds and some of grass. Nature and peasant effort have done their part to make possible the cooking of food, if only soldiers and tax-plunderers can be restrained. Heat is a luxury to be expected by few civilians in Nanking under present conditions.

III. DATA ON COTTON, CLOTHING AND BEDDING- NANKING

At the outset it should be recalled that the losses of clothing and bedding in Nanking during the past winter were heavy, amounting to \$11,353,000 according to the "Survey of War Damage in the Nanking Area", or \$115 per family of those remaining in Nanking during the critical period. Losses in the surrounding rural areas were also heavy, through plundering and also through the burning of 40 per cent of all farm buildings. Plundering of clothing and bedding in the country is still continuing, and soldiers are bringing some articles into the city to be sold for a few dimes each, while bandits under various titles take their toll.

A. COTTON

1. General.

In the past there were over 300 shops, all of which were destroyed or out of business for several months. From March and April there was a tiny revival, but even now there are only 40 shops, doing less than one-tenth of the former business.

2. Sources of Supply.

There have been two classes of shops: the Nanking shops, buying from Wukiang and Chiaolin; the Yangchow shops, usually underselling them with inferior grades from Nantung and Taitsang, plus some sorted out from purchases by Shanghai mills. In the past, 60 per cent came from Wukiang and Chiaolin, 30 per cent from Nantung and Taitsang, 10 per cent from Shanghai. Now there is none from the lower river. Wukiang and Chiaolin are under orders not to "export" from their locality, but some is brought to Nanking with difficulty.

3. Conditions of Transport.

Cotton arriving from Wukiang must be handled in very small lots, for large consignments reaching here are confiscated by the military, unless they are under official favor. Eight irregular taxes are paid on the way from Wukiang, amounting to well over \$6.00 per *tan* recently, about 20 per cent of the crude price.

4. Daily Sales.

Shops average 23 *chin* (range 10 to 50) or 1035 *chin* collectively (10 *tan* per day).

5. Prices.

Wukiang cotton has gone up from \$32 to \$42 per *tan* in the last four weeks. (Inquiries are dated Oct. 8-18). Retail sales are at an average of \$0.35 per *chin* (\$0.52-0.56).

6. Stocks.

Owing to difficulties of purchase and the small capital available, shops average 8.8 *tan* (5-15 *tan*), or nearly 400 *tan* collectively. This equals more than a month's sales in the warm weather of early autumn.

Note: (a) Cotton from upriver is mostly last year's holdover, for which no previous transport has been possible. This year's crop is poor, about 20 per cent of normal in the Wukiang area. (b) An official of the Tupan's Government has said that he profitably sold \$60,000 worth of cotton to Japanese interests in Shanghai. (c) One dealer from Taitsang is reported to sell over 10 *tan* per day to the Japanese. Thus the amounts going out from Nanking seem much greater than local sales under present conditions. (d) In the four *hsien* surrounding Nanking, cotton occupies 0.7 of one per cent of the area planted to summer crops.

B. CLOTHING

1. General.

Less than one per cent of stocks were preserved through the acute period. The established dealers were mostly Tanyang and Chinkiang men. Formerly there were more than 20 shops with a capital of around \$50,000 each and employing 30-40 men, while smaller shops had several thousand dollars' capital and hired some 10 men each. Now the trade is centered in the Shengchow Road Region, where there are 30 shops including sidewalk dealers. The largest have a capital of \$300 or \$500 with 3-5 assistants, all family members or close personal friends.

2. Sources of Supply.

Formerly the old clothes trade of the lower Yangtze was centered in Tanyang, drawing largely from pawn shops. Tanyang dealers then distributed to their agents at many points, sending about 30 per cent to Shanghai and 20 per cent to Nanking. A few old clothes also came to Nanking from Shanghai. New clothes were made by proprietors of the Nanking shops, using Changchow assistants and gathering materials from a wide range. Now dealers in old clothes buy some direct from local poor, and some from the Black Market (largely for the sale of stolen goods, including those secured from soldiers); also from general junk dealers. Other clothes, particularly new ones, come from Shanghai by Japanese boats.

3. Daily Sales.

Nine out of sixty shops in the whole city report average sales of \$36.67 (\$20-60), which would total about \$2200. Most of the sales are of very cheap garments, averaging \$0.70-80 per garment. That would mean nearly 3000 garments per day. They go largely to country people, especially to those from

north of the river. Very few are bought by city residents; some shops say they sell only three or four per day to Nanking people.

4. Stocks.

Average per shop is 677 garments (400-1,500) or some 40,000 without reckoning on the country. Stocks would cover only two weeks' sales. Dealers are obviously operating on very small margins, and they complain of the three weeks' time required to get goods from Shanghai by Japanese steamer, with no insurance or guarantee, and many losses in transit.

CLOTH AND BEDDING.

1. Cotton Cloth.

This item is of course related to clothing as well as to bedding. Material is coming from Shanghai by Japanese boat, with similar difficulties. 85 shops are selling at an average of \$30 per day (\$10-80). This means \$2250 collectively, or enough for about 600 garments. Dealers complain that few have money to buy their material.

2. Local Weaving.

By late September some 20 family establishments with some 50 looms had resumed weaving. In October the resumption has been brought to a total of some 40 establishments with about 200 looms. This gain is most welcome, though it is only a faint gleam of what is now regarded as past glory. The chief concentration of weavers is near Mo Ts'ou Road. Other scattered persons are using looms within their own families, but usually not on a commercial basis or with full production. All weavers are using number 20 yarn, supplied from Shanghai by local Japanese dealers at \$8.50 per bundle of some 200 ounces. The looms are producing on the average one 75-foot piece per day, which sells at five to eleven dollars. Sales are contracted for in advance, 80 per cent of them to buyers from the country in all directions, even from 40 to 50 miles' distance. This daily weaving would make nearly 1400 outfits of clothing. Winders receive piece-work wages which commonly are figured at \$0.24 per day, while weavers get \$0.40 to \$0.50.

3. Bedding.

Heavy quilts are available secondhand at \$4-6 on Mo Ts'ou and Shengchow Roads, apparently in plenty. Much cotton is being reworked from old garments and fragments of bedding, some of which is military in origin. Sales seem small.

4. Prices.

City markets have fluctuated greatly but irregularly in the past six months, because of the uncertainty of transportation and supplies. Many types are more than double the price common before the war. But there is no great tendency to rise further and indeed recent Japanese arrivals have brought a recession in some prices. Average prices per foot are given below:

	May	June	July	Aug.	Sept.	Oct. 16
Coarse cotton	\$0.12	.14	.14	.14	.14	.14
Fine cotton	\$0.19	.18	.19	.20	.20	.18
Shirting (print)	\$0.16	.20	.17	.23	.22	.22
Black Jesus	\$0.26	.27	.28	.29	.30	.27
Coarse dyed	\$0.16	.14	.14	.16	.16	.15
Drill	\$0.27	.27	.29	.29	.32	.27
Sateen	\$0.37	.33	—	—	—	—
(Farmers' market, outside Chunghwamen)						
Coarse cotton	\$0.15	.13	.13	.14	.15	.12
Fine cotton	\$0.19	.18	.16	.20	.21	.16
Black Jesus	\$0.27	.27	.28	.29	.29	.24

Note on the clothing and cloth market in general. There is the frequent report of the lack of buying power among local people. They are short of clothing and of bedding, particularly the kinds needed for winter, and this is the normal, season for stocking up. It is a common observation that many persons do not have enough even for the present warm weather. Yet buying is slight. Dealers in second-hand clothing, despite their small capital, complain that their stocks are big in proportion to their turnover; some are considering leaving Nanking, unless they can soon do better. Amateurs on the sidewalks are often selling their own stuff, with that of friends or relatives, or articles bought with a desperate use of last resources and borrowings. They frequently sell something at the end of the day below its cost price or its market value, because they have no other way to feed their families for the next day. Such competition is of course deadly to other dealers of all types, and the only thing to be said for it is that probably the buyer is also needy.

IV. GENERALIZED DATA ON PRODUCTIVE INDUSTRIES, STATE OF BUSINESS, SOURCES OF INCOME, DEGREE OF DESTITUTION—NANKING

(Results of a Questionnaire Answered by Thirty Mission Workers)

Here are reported the questions and the summarized answers to an inquiry addressed to missionaries, pastors, and Christian teachers in various parts of the city of Nanking. They are in daily touch with people of all classes, and their views are a useful extension of the experience and observation of the International Committee and its staff. Perhaps these views reflect some special concern for those in want, mingled with the outlook of their own middle class group. Certain of the answers represented thorough consultation or additional private inquiry. It is of course not assumed that the summary has statistical validity, though it is most easily presented in figures. The summary has simply the worth of the composite observation and acquaintance which it represents.

A. *What kinds of production are found in your part of the city? Numbered in order of importance? (For example, Weaving of Silk or of Cotton; Knitting, as of Stockings; Work in Wood or Bamboo; Work in Metal; Building; Others _____)*

The building group was mentioned by 17 persons, with an average rank of 2.1. Then metal work, also by 17, with an average rank of 2.9. Then wood-bamboo, mentioned by 20, with a rank of 3.6. Next, knitting, by 13, ranking 3.3. Last of the five suggested, weaving, by 13, with rank of 3.4. Shuttle-winding (often loosely confused with spinning) was added by 6 persons, which suggests that it might have been higher still if presented on the same basis with the preceding five; rank 3.5. Photography, by 2, rank 4. Candlemaking 1, 2. Candy 1, 3. Leather 1, 3. Dry cleaning 1, 3. Rope-making 1, 4. Shoes 1, 5. Clock repair 1, 6. Soap-making 1, 9.

Thus the textile group (weaving, knitting, and winding) is easily first in the reports of productive work, followed by the building trades, metal, and wood-bamboo. Market gardening and the processing of food seem to have been passed by.

B. *In your part of the city, what kinds of business seem to be most flourishing?*

Food was mentioned by 12; rice 5; restaurant 2; oil (vegetable) 1. Peddling and small trade 10; general store 1; secondhand 4; curios 1. Tobacco 4; supplying wants of soldiers 1; barbers 1; clock repair 3; dental 3; wine 1; prostitutes 1; waitresses 1; photography 1; fountain pen 1. Old clothes 1; tailors 1. Carpenters 1; masons 1; bamboo 1; iron 1.

Answers were decidedly weak, averaging a scant two per person. Food,

petty trade, and a miscellaneous group more or less dependent on military trade, are the only lines of business to flourish.

C. *What kinds are greatly reduced from normal?*

Cloth 5; clothes 3; tailors 1; shoes 3; weaving 2; dyeing 2; cotton 1; silk 2. General stores 6; all large businesses 1; daily necessities 2. Miscellaneous food 3; bakeries 1; sugar 1; teahouses 1; confectionery 1. Hardware 3; metals 1; galvanized iron 1; silver 1; glass 1. Books 3; stationery 1; printing 2; paper 1. Coal and charcoal 3; firewood 1. Pawnshops, incense, temple candles, candle-making, wicker, leather shoes, western medicines, curios, schools: each mentioned once.

Among the "greatly reduced" businesses, textiles are again most prominent, suggested their importance in the Nanking of former days. General stores, specialized foods, metals, books and printing, fuels, are also to be noted.

D. *What kinds that formerly flourished are now lacking?*

Fruit 6; food 3; rice 1; restaurants 1; sugar 1. Cloth 5; woolens 2; yarn 2; clothes 1; men's clothes 1; western clothes 1; satin 1; silk 1. Hardware 4; iron 1; electric 1; silver 2; enamel 1; motors 1. Pawnshops 2; exchange 3; banks 3. Books 3; stationery 2; newspapers 1; paper 1. Coal 3; lumber 1. General stores 2; hotels 1; tobacco 1; barber 1; clerks 1; small officials 1; middle schools 1.

Answers to this question should of course be examined in juxtaposition with those to No. C. Fruit is the most prominent single item, though again the textile group is highest, followed by metals, the financial group, books and stationery, coal.

E. *Among the people with whom you have familiar contact, what are the chief sources of support? (The figures given below represent the actual checks or other indications written upon the form used).*

	Many	Some	Few	Comment
Food Shops	9	—	8	
Other Shops & Trade	4	4	10	
Peddling	14	2	8	
Small Manufacture	2	1	14	
Manual Labor (general)	11	4	6	
Institutional Pay	7	6	9	

Remittances from outside -	1	15	
Rent or Savings	1	1	15
Relief	11	5	4
Others	3	3	2 (farmers, 1; thieves, 1)

If we consider in declining order those which seemingly supported the most people, we list the sources as follows: (a) Peddling; (b) Relief; (c) Manual Labor; (d) Institutional Pay; (e) Food Shops; (f) Other Shops and Trade; (g) Small Manufacture; (h) Rent or Savings; (i) Remittances from Outside (practically nil).

If we check this process by reversing it to name those sources which were mentioned most times as supporting few people, we reach closely similar results: (a) Remittances from Outside; (b) Rent or Savings; (c) Small Manufacture; (d) Other Shops and Trade; (e) Institutional Pay; (f) Food Shops; (g) Peddling; (h) Manual Labor; (i) Relief.

This list probably does not give representative weight to the importance of manual labor in the city as a whole, whether as coolies for the military or as commercial carriers. It rightly indicates the low state of production (again allowing for the omission of market gardening), and that the population has very little to live upon except what it secures by daily effort. The "relief" listing seems high, though the International Committee's own small distributions of grain went to nearly 20% of the city's families during the summer; and probably the report reflects the small relief grants made by and through mission organizations, naturally to their own constituency.

F. Does the condition of your acquaintances seem better or worse than about three months ago? In what ways?

Answers are thus classified: worse, 11; a little worse, 3; a little better, 12; better, 3; balanced, 1. This somewhat inconsistent result should probably be interpreted as reflecting the fact that some groups are gaining ground while others are losing. Though the answers are split almost equally on the mid-point, the 11 "worse" weigh somewhat more heavily than the 12 "a little better".

Explanations on the worse side: savings exhausted, 12; business poor, 4; excessive competition, 2; no production, 1; unemployment, 1; no supplies for business, 1; prices up, 1; effects of looting or robbery; 2; disorder, 1; families lost men because of soldiers' acts, 1; bad condition of those newly returned from the country, 1; no rent, 1. Explanations on the better side: business improved, 9; employment improved, 4; institutional jobs available, 3; remittances from outside, 1; order improved, 1; relief aid, 1. Note that about 10 scattered items point to poor business and unemployment, contrasting with the 13 that point directly to economic improvement. The emphasis on exhaustion of savings suggests a middle class bias, as perhaps also that on institutional pay. Others cannot have had savings as late as this summer, though the report is undoubtedly correct in showing the fact that some groups have only now reached the bottom of their resources.

G. What per cent seem now to be destitute?

44.29 per cent is the average of widely varying replies.

H. What per cent are successfully maintaining themselves on any level?
37.70 per cent.

I. What per cent do you think will be unable to get along during the winter unless they receive relief?

43.66 per cent. Although the individual estimate often varied considerably from those given by the same source to No. VII, the average answer was almost identical with that to VII.

J. What needs do you especially feel, and what suggestions do you have as to relief program and methods?

Reports of needs and suggestions were often undifferentiated in the answers, but are arbitrarily separated here for the sake of presentation. Frequently an answer seems to assume that an item such as "work" does not require to be mentioned as a need if it is proposed as part of a relief program. Perhaps some persons deemed food so obvious as a need and so certain as a method of relief that mention of it was unnecessary.

Needs:

Clothes 6, bedding 3, wadded garments 2, shoes 2, stockings 1, hats 1.

Food 6, children's food 1.

Work 4, handicraft equipment 1.

Housing 1, medicine 1, loans 1, spiritual aid 1.

Suggestions:

Work 7, factory or work-room 12, jobs for scholar group 3, work relief 2, industrial school 1, loans and other aid to handicrafts and to weavers.

Loans 10.

Food 4, kitchens 4. Aid dependent women with food and cash, 2. Cash 1.

Clothes 4, bedding 1.

Cooperative societies, 2. Free schools 2. Spiritual aid 2. Free clinics

1. Medicines 1. Seeds 1. Conduct large store 1. Collections and entertainments to secure funds 1.

V. SUMMARY AND CONCLUSION

Although the investigations here reported are piecemeal, and do not pretend to cover the economic field as a whole, it may be useful to outline the combined picture that they present:

1. This year's crops suffered considerably from war and flood, and are estimated seriously below average. The area planted was practically normal. Grain produced in the four hsien near Nanking is sufficient for the population of this area, but shipments out are causing alarm among dealers and consumers.
2. Transportation is neither free nor secure.
3. There is manipulation of supplies and markets for military or official advantage, not for the benefit of producers or consumers in this area.
4. There are complex and irregular levies upon farmers and upon goods in transit, particularly as they approach or enter Nanking.
5. There are no banking or credit facilities for general use.
6. Reserves and stocks of any sort, public or private, are practically non-existent. Two days of difficulty at the city gates send up the prices of food and fuel, even of a staple like rice which is commonly accumulated in large quantities at this time of year.
7. The entire cotton industry and trade, from raw materials through all stages to finished clothing and bedding, is scant and unhealthy, despite great need of its products.
8. Through all commercial reports runs the theme, "the people have no means to buy."
9. Whole blocks of income-producing employment have disappeared from Nanking, and other major lines are sadly reduced.
10. There is little recovery from the complete cessation of the productive light industries formerly important in Nanking.
11. There is widespread evidence of destitution, reported as the condition of 44 per cent of the people of Nanking.
12. Needless to say, employment and trade related to culture or to luxuries is hardly to be found.
13. The special trades of catering to the needs and desires of soldiers enjoy a prosperity not always satisfactory to general economic and social interests, but maintaining a considerable number of persons.

During the past year this region has been rather thoroughly plundered, with not a little of outright destruction; and the process is still continuing, with variety of agents, form, and speed. Yet, despite all difficulties, farmers and workers and merchants have put up an excellent struggle for livelihood. A large percentage of the people will get along somehow, if military and political interests do not injure and burden them too heavily. Meanwhile, privation is common, and the life of the community is precariously maintained on a distressingly low level.

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4

THE NANKING POPULATION:
EMPLOYMENT, EARNINGS AND EXPENDITURES

A SURVEY

Conducted by

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On Behalf of

THE
NANKING INTERNATIONAL RELIEF COMMITTEE
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To The Reader

THE Nanking International Relief Committee is a private relief organization disbursing funds contributed for humanitarian work. During the past winter and spring the Committee has been engaged chiefly in the most economical form of direct relief, the allotting of grain and beans to needy families; with supplementary enterprises such as the making of clothing and bedding for poor relief, and the granting of small loans to aid productive effort.

The Committee has endeavored to maintain high standards of investigation into the circumstances of every applicant for aid. As the present survey and its predecessors show, the Committee has also tried from time to time to discover in an objective manner the general economic conditions of the mass of the population, as they have varied since the capture of Nanking in December, 1937. The current inquiry is part of an effort to know whether continuing private relief is urgently required; and if so, of what type. It is published for the information of supporting organizations and other interested friends.

Contributions in any currency may be sent by registered mail to the Treasurer, Dr. A. N. Steward, at the office of the Nanking International Relief Committee, 4 Tientsin Road, Nanking, China; or to the general committees for China relief established in other countries. The Nanking Committee does not wish to make a competitive appeal, but merely to let the local situation be known as part of the whole grim story of wartime suffering. Brief reports of relief work in this area will shortly be available upon application to the Committee or to suitable agencies abroad. Correspondence may be addressed to M. S. Bates, Chairman.

Nanking, May 20, 1939.

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INTRODUCTION

A. Procedure

Inquiry was made among all Chinese families residing at each fiftieth street number, using a detailed map to cover all parts of the city within the wall. Undoubtedly there were some omissions or errors in counting within small alleys, though great care was taken. Certain slightly inhabited areas closely used by the military were not investigated; and it is probable that a small number of persons in military or government employ were missed. With these minor exceptions (and it may be noted that our estimate of population is higher than the Municipality's reports of house-to-house counts), the inquiry was about as thorough as it could be made in a reasonable length of time. The actual dates for field work were November 28-December 10; January 10-24. The collection of data was interrupted during the semi-voluntary suspension of the International Relief Committee's work following the detention of six members of its staff from December 7, 1938. From the last-named date till April 15, checkings, listings and computations were made with deliberate pains. The use of district units facilitated counter-checking. Economy in the use of staff and the pressure of other duties have prolonged the study of the data till May; but there has been some gain in limiting all parts of study to experienced men, and in allowing time for gradual consideration of problems.

B. Definitions.

A "family" is a group of persons living with a single economic budget; it is thus practically identical with "household", though it is almost always based on relationship by blood or by marriage. Occasionally a solitary person may constitute a "family".

A *shih tan* is calculated by measure, 100 liters or 2.838 American bushels or 2.751 Imperial bushels (of rice, on the average 155 *shih chin* or 77.5 kilograms or 170.9 pounds).

A "dollar" is the Chinese currency unit, with an exchange value stabilized at some \$6.20 to the U.S. dollar or \$29.00 to the British pound. Locally it exchanges at something like \$1.05 to the Japanese yen, which is present mainly in the form of military notes. The purchasing power of the dollar is suggested by the average price of medium-grade rice in mid-winter, \$8.00 per *shih tan*. This is not far from a "normal" price. Certain other commodities were well above usual prices. During the spring, rice and many foodstuffs have risen sharply to 25-35 percent above winter levels, bringing increased distress. Since the major cause of the jump is the cutting off of the surrounding countryside, no improvement is in sight.

For convenience of analysis, the districts employed in listing, and in reporting when such detail seems to be of value, follow those used in the International Relief Committee's survey, published as *War Damage in the Nanking*

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Area (data of March-June, 1938). They are as follows: The former Safety Zone area (which naturally ceased to have any administrative meaning after the Japanese occupation was accomplished, but has remained a more convenient division than the large and heterogeneous Municipal District which includes it) is thus bounded—Hanchung, North Chungshan, Shansi, Sikang Roads to the Hanchung Gate. Cheng Hsi—Shengchow, Chunghwa-Fuhsing (former Chung-cheng), Hanchung Roads, and the wall from the Hanchung to the Shuihsi Gate. Cheng Pei—west of the Safety Zone area to the wall, north of the same Zone and Kuleo-Pao T'ai Chieh to the wall; thus including all the northern parts of the city except the Zone and the district now to be mentioned. Cheng Pei: Tung—East Chungshan Road, the wall around to Peichiko, Pao T'ai Chieh, North Chungshan Road from Kuleo to Hsin Chieh K'ou. Cheng Tung—Paihsia Road from Fuhsing Road to Tungchi Gate, the wall around to Chungshan Gate, East Chungshan Road, Fuhsing Road. Men Hsi—the southwest corner of the city as enclosed by Chunghwa and Shengchow Roads and the wall. Men Tung—the southeast corner of the city as enclosed by Chunghwa and Paihsia Roads to Tungchi Gate.

C. Notes on Other Data Used in Comparisons.

1. *War Damage in the Nanking Area* (Smythe), often cited as 1938. A complete survey, of which a large part dealt with the city. Data mostly collected in March, three months after the capture of the city. A plain report of destruction and injuries so great that early recovery is impossible.

2. *Crop Investigation in the Nanking Area, and Sundry Economic Data* (Bates). July-October, 1938. Includes detailed information on major crops, fuel, textiles; summary data on changes in production, trade, standard of living, evidence of destitution.

3. "The Composition of the Chinese Family" (Smythe in *Nanking Journal*, University of Nanking, November 1935, v. 5 No. 2, pp. 371-393). Often cited as 1932, the year of the original data. This study is particularly valuable for comparison with "normal" conditions, since it sampled portions of the city in which many of the present population then lived and now live.

4. City census figures of various years, 1930, 1933, 1936, 1937, 1939, as reported in gazettes and newspapers. Variations in area and in method preclude close comparisons. Items are here introduced for a specific purpose, usually with comment. In the past such figures have usually been suspect for incompleteness due to general carelessness and to habitual concealment from official inquiry. Also for under-reporting of young children, particularly girls; though this fault seems to have been reduced in the years just before the war. Current statistics may slightly over-report males because they have been less timid than females, and more eager to register themselves with the authorities for certificates that facilitate movement. Also, some men living outside the city have registered inside in order to be able to enter freely for trade or transport; and again, transients, who are largely male, may affect reports. Current government figures may also reflect to a slight degree the reporting of a large family as two or three small ones, in order to lessen its risks under the five-family collective guarantee system, and perhaps occasionally in order to reduce the fear that "extra" men may be conscripted for labor or military service.

5. *How Chinese Families Live in Peiping* (Gamble, 1933). Very thorough studies of the detailed budget records of 289 families, kept under supervision in the year 1927. The families included a disproportionate number from the middle class, but all types are carefully grouped for separate analyses. The book is also a compendium of valuable comparative data from other parts of China and abroad.

D. Significance of the Data.

The present report gives a picture much less catastrophic than that of the *War Damage Survey*, which was primarily concerned with the critical destruction and injury at the time of assault and in the early weeks of occupation, secondarily with the economic and social conditions of three months thereafter (March, 1938). Now one can get a steadier view of a society that has not changed acutely since the summer of 1938, and which shows no internal indications of important changes in the near future. According to our understanding of the lower Yangtze basin, the economic conditions of Nanking are not far from the present average of city life in this part of China.

It must be repeated that the present study is limited to the Chinese population now residing within the walled city of Nanking. This statement includes the following implications: (1) The city has lost fully half its former residents, including most of those directly or indirectly related to the public organs and educational institutions formerly so important for its economic life, and also most of the former financial and commercial institutions and leadership. (2) The present population includes some tens of thousands of fugitives from nearby localities where these persons have found less security or less hope of survival than in Nanking. (3) This study does not give a complete representation of the economic life of the city, since it naturally does not deal with the varying but considerable military personnel and their enterprises, nor with the three to four thousand Japanese civilians who conduct several hundred undertakings of direct or indirect economic bearing. To an irregular degree, these Japanese elements are a replacement or displacement of important economic factors mentioned in (1) above. However, the method of gathering data comprised, with minor exceptions, Chinese employment and income from whatever source, including Japanese establishments. (4) No crude comparisons with earlier statistics are possible, even with such few as are available, primarily because of variations in the area and population covered. The municipal boundary has commonly made a big arc outside the wall and even across the Yangtze, comprehending some communities specializing in trade and transportation, and others completely rural.

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I. THE NANKING POPULATION

1. GENERAL DATA

The number of families studied is 1,706, containing 7,161 members. When multiplied by 50, the families number 85,300 and the individuals 358,050. The District Offices of the Nanking Municipality reported for February, 1939, a population within the wall of 83,611 families, containing 342,664 members. The Police Census of the same month reported for the same area 78,618 families, with 315,478 individuals. Detailed problems of these official reports are confusing; they are mentioned here only for general comparison. Our 1938 *Survey* showed a population inside the wall of 45,300 families and 212,600 members, figures which were probably incomplete by 15 to 20 percent. But an increase of about 100,000 persons in 10 months is apparent, and the municipal reports indicate a current gain of several thousand per month.

Almost 60 per cent of the present population lives south of Hsin Chieh K'ou ("The Circle") and the East Chungshan Road. Cheng Hsi contains almost one-fourth of all persons within the wall, and is by far the highest in absolute density of population. Cheng Pei-tung and the former Safety Zone are populous but have more space. Men Hsi is second in density and third in numbers. As compared with 1938, the Safety Zone naturally shows a decline, but its decrease is moderate and stands alone. Cheng Pei gained more than seven-fold, Cheng Hsi threefold, Men Hsi and Men Tung nearly twofold.

2. SIZE OF FAMILY

The present report shows the average size of family to be 4.2 persons (1939 District report, 4.1; Police Census, 4.0), as compared with 4.3 in 1932, the best check with normal times (contrast 4.9 for city districts in February, 1937), and 4.7 in the 1938 *Survey*. Since 1937 there has been a great exodus of the larger and more prosperous families; since 1938 there has been a natural separation of families or part-families combined during the time of crisis and of concentration in one section of the city, also some separation for reasons of convenience and safety in the five-household mutual guarantee system now enforced by the city authorities, finally a rush of marriages to be explained in due course.

The 85,300 families are distributed as follows according to the number of persons in each family: (1 person) 5,800; (2) 13,050; (3) 15,800; (4) 17,650; (5) 12,700; (6) 9,500; (7) 5,600; (8) 2,800; (9) 850; scattering, 1,550, of which 1,050 had 10 or 11 persons. Thus 80 percent of all families consist of 2 to 6 persons; fewer than 13 per cent have more than 6 persons; and only 6 per cent, 5200 families, more than 7.

3. GROUPINGS BY AGE AND SEX

Analysis of the population according to age reveals a serious shortage in vigorous mature people, with a corresponding excess of children and aged. 47 per cent of the present residents are 15 to 49 years of age, as compared with 54 per cent in 1932; 35 per cent are under 15 years, as against 31 per cent in 1932; 18 per cent are 50 years and over, as against 15 per cent in 1932. For the productive ages this is a relative decrease of 13 in the hundred, with a corresponding increase for the non-productive ages. Present reports follow fairly closely the 1938 Survey percentages.

Analysis of the population according to sex indicates a significant decline in the ratio of males to females, most acute in the productive ages. The general sex ratios (males to 100 females) are 93 in 1939,¹ 103 in 1938, and 115 in 1932. When the ratios are split according to the three main age-groups, it is plain that the decline occurs largely in the period of vigorous maturity. 15 to 49 years, 91 (1939), 111 (1938), 124 (1932); under 15 years, 102, 105, 109; 50 years and over, 79, 85, 94.

Thus we find a drop of nineteen in the hundred for the general sex ratio since 1932, and of twenty-five in the hundred for ages 15 to 49. The fall is most acute for ages 20-29, where now the ratio is only 65 as against 126 in 1932, and 103 in 1938. Violent death, compulsion, and the avoidance or fear of compulsion (the factors are still at work), have removed from the present population a large part of the young men, with desperate economic and social consequences. We wish to be more than cautious and therefore point out that the smaller the age-group the greater the possibility of distortion by faulty sampling; also that some able-bodied men working for the military are probably not recorded in this report. Yet we believe that the essential picture is correct.

Our report shows that in any given number of families one would now find only half as many men 20 to 29 years of age as in 1932. At present the number of men 15 to 49 years is 80,300, or 22 per cent of the total population; in 1932 they were 30 per cent of the population surveyed. Now there are 94 men of vigorous age to each 100 families; then there were 130. Contrasts would be still more gloomy if we took Gamble's 1.5 wage-earners for each family of 4.6 persons in his survey.² Or if we put the present sex ratio of 93 against that for the whole Nanking population in the Police Census of 1930, 163; the Municipal Census of 1933, 158; the Municipal Census of 1936, 143; or the Municipal Census of 1937, 146 or 148 according to the area included.³ (One should note that the former national capital contained many thousands of male officials, workers, students, whose families did not reside here.)

4. FAMILY COMPOSITION

Investigation of family composition shows an encouraging return toward usual circumstances in that the percentage of "normal" families (husband, wife,

¹Three different sets of Municipality figures for late 1938 and early 1939, with strange internal variations, show general sex ratios of 114 to 118. This is the most acute difference from our figures in all our comparisons. See INTRODUCTION, Notes on Other Data Used in Comparisons.

²How Chinese Families Live in Peiping, p. 29.

³See INTRODUCTION, Notes on Other Data Used in Comparisons.

with or without children and relatives) has risen from the 1938 low of 63 to the present 69, as against 72 in 1932. Moreover, the percentage of families with children is practically as of old at 72; and likewise with households of the non-family type (man without wife, or woman without husband, whether or not accompanied by relatives), at 14 per cent of all families.

The percentage of broken families (husband or wife missing) still shows a sharp increase over 1932, 17 per cent as against 13 per cent of all families, though there is real improvement from the 21 per cent in 1938. Families without men or without a male head¹ are relatively twice as numerous as in 1932, 16 per cent as against 8 per cent of all families. Here there has been practically no improvement since 1938. The number of families without male heads is now 14,100, a dismal figure.

The improvements in family composition which have occurred since the catastrophe of 1937-38, are due mainly to two factors: to the reuniting of families, usually by the entry of one or more members to join others of the same family who were here in early 1938, or by a departure to effect reunion elsewhere; and to many recent marriages whether following naturally upon deferments during the crisis, or because of the wish of the parents to increase the physical and economic security of their daughters (sometimes offering considerable inducements in order to get the girls off their hands), or because of the feeling of young men and their parents that marriage may lessen the risks of labor conscription or of the rumored and much-feared military conscription, also risks from political distrust of young and unattached males.

The data on Population are given in Tables 1, 2, and 3.

¹This category includes a few families in which an older woman is head, but has with her a grown son or son-in-law; so far as earning power is concerned, such families are offset by others in which an old or invalid man is head without another adult male.

II. EMPLOYMENT

1. PRESENT AND FORMER, BY OCCUPATIONS

Of the 99,000 persons now gaining income, 33,000 are in trade, 21,000 in general labor, 18,000 in manufacture and mechanical employments, 9,000 in transportation, 7,000 in domestic and personal service, 3,000 in combined shops (both making and selling), 3,000 in agriculture, 3,000 in the professions, 2,000 in public service not otherwise classified, and 400 in clerical occupations. Percentages of 99,000 are obvious.

The same population reports that before the war 87,000 gained income: 23,000 (26 per cent) in trade; 22,000 (26) in manufacture and mechanical employments; 11,000 (12) in transportation; 6,000 (7) in combined shops; 6,000 (7) in general labor; 5,000 (6) in agriculture; 5,000 (6) in domestic and personal service; 4,000 (5) in public service; 4,000 (4) in professions; over 1,000 (2) as clerks.

It must be recalled that these figures apply only to the present remnant population, and do not consider the great exodus of the more prosperous and the more highly skilled. These reports reveal the increase in amateur petty traders with their uneconomic competition; the large number of persons recently driven into the ranks of common labor; the significant declines in combined shops, in manufacture and mechanical lines, and in transportation; slighter shrinkages of opportunity in agriculture, public service, the professions, clerical work. Thus the shift is from definitely productive enterprises and from middle-class functions, to the despairing struggle of peddlers and to the overflowing reservoir of unskilled labor. The inability to use former skills and experience, the entry into unfamiliar work, are secondary indicators of social and individual loss. Chinese economic life in Nanking is sick indeed.

2. PRESENT AND FORMER, BY SERVICE

Another classification of employment, familiar in China, is by service, based less upon the type of work performed than upon the place in which the work is done, and the type of economic organization or interest for which it is done. For example, an unskilled laborer is classified under public service if he works regularly for the military or in cleaning the streets. On this basis, of 99,000 persons gaining income, 34,000 are in trade, 14,000 in manufacture and mechanical employments, 12,000 in public service, 11,000 in domestic and personal service, 9,000 in communications, 7,000 in combined shops, 6,000 in rough labor, 3,000 in the professions, 3,000 in agriculture. The sharpest differences from the occupational listings of the same persons are in the manufacturing and mechanical lines, in public service, in domestic and personal service, and in rough labor.

When present employment by service is compared with former figures the percentages for each category in the respective total of employment change as follows: Increases in trade, 29 to 34; family service, 2 to nearly 12; public service, 6 to 12; rough labor, 1 to 6. Decreases in agriculture, 6 to 3; manufacture and mechanical, 25 to 14; communications, 13 to 9; professional, 5 to 3; combined shops, 15 to 7. In actual numbers, the increases were: trade 11,000, family service 9,000, public service 6,000, rough labor 5,000. Decreases: agriculture 2,000, manufacture and mechanical 7,000, combined shops 6,000, communication 2,000, professional 1,000. The individual transfers were probably more numerous, of course, than these collective figures.

3. GENERAL RATE COMPARISONS

The percentage of the total population gainfully employed is 27 (of those 10 years and over, 35; 15 years and over, 41). The present population reports its own employment before the war as 24, 32, and 37 per cent, to be compared with the preceding. The reality is less encouraging than these figures. Other data and observations show that important income-producing elements have left Nanking in undue proportions; that many women who did not previously work for money are now driven to do so; and that abnormally large numbers of those reported in "trade" are old men or young boys engaged in trivial peddling. Nevertheless, the improvement from the paralysis of March, 1938, is marked by a 300 per cent increase in percentage of employment, if that comparison is any comfort.

A check with employment of the total population resident in pre-war days is difficult, because the only recent statistics from that other era were gathered on the basis of social groupings by service rather than on the basis of actual employment for income. The 1936 Municipal Census showed 66 per cent of the total population as employed. The total figure for employed persons was over 95 per cent of the figure for total population 16 years and above. Of the employed, 63 per cent were males, 37 per cent females. Nearly 200,000 women, almost nine-tenths of all the "employed" females in the city and 92 per cent of all resident women 16 to 50 years of age, were reported in personal and domestic service; obviously they were mostly doing housework in their own families. That census reported 6 per cent of all employed persons as in agriculture, 9 in manufacture and mechanical lines, 26 in trade, 5 in transportation, 13 in public service, 3 in the professions, 33 in personal and domestic service. If the swollen "domestics" and a figure for "unknown" were allowed for, the other percentages would be increased by about one-half, to read somewhat as follows: agriculture 9, manufacture 14, trade 39, transportation 7, public service 19, professions 5, personal and domestic 7.

Reporting for a Police Department Census of 1930 is supposed to have been for a smaller area, and perhaps less accurate in distinguishing types of service, also it probably included a moderate number of persons belonging to families engaged in trade or manufacture or other service groups, but not themselves gaining income at the time of the census. Groupings were as follows: agriculture 3 per cent, manufacture and mechanical 25, trade 28, transportation and communications 9, public service 15, professional 4, family service 16.

The 1930 census had the advantage of including only a reasonable number of females under domestic service (fewer than the number of males in the same category). It showed the percentage of employment in the total population as 47, almost identical with the 1936 report if the latter is corrected for house-workers and for "unknowns". Gainful occupation in the United States according to the 1930 census was practically 40 per cent. By any reasonable comparison with ordinary situations, there is no doubt of critical underemployment in Nanking today, when the percentage of employment is 27. It should be at least one-half greater.

III. EARNINGS

1. PRESENT AND FORMER, CLASSIFIED

The average daily earnings of persons employed are \$0.49, which is equivalent to \$0.13 per capita of the total population and to \$0.55 per family. The same population reports former earnings of persons formerly employed to have averaged \$1.22 per day. The *War Damage Survey* of 1938 showed current earnings of persons then employed as \$0.32 per day, and former earnings as \$1.01 per day.

Analysis by occupations shows that the large number engaged in trade are making just the average income, as might be expected when shopkeepers of some success are balanced by the excessive number of peddlers and household stalls engaged in cutthroat competition. Manufacture and mechanical occupations average \$0.47; domestic and personal service report \$0.36 and probably should be rated higher because of other economic benefits received; general laborers get \$0.26 a day. On the upper side of the average, the most numerous groups are those engaged in transportation, with \$0.67; and in combined shops, with \$1.13. The professional class receives \$0.72, hardly a bourgeois income, while those in public service report \$1.06. All such figures for daily earning of course represent some persons with relatively good incomes, necessarily to be balanced by others with wretched ones.

By comparison with pre-war earnings, present income is most significantly smaller in the trade group, \$0.49 against \$1.54. Manufacture and mechanical, domestic and personal, professional, and combined shops, indicate present incomes roughly half the former ones; in general labor there has been a drop of less than 20 per cent. When 1939 earnings are compared with those of 1938, the averages of \$0.49 and \$0.32 are fair guides to the changes for all groups. The only big relative gains were made by combined shops and by agriculture, both of which had little more than a nominal existence as selling industries in 1938. General labor is practically unchanged, and tends to remind one of the iron law of wages.

When service classifications are substituted for occupational groups, changes in wage-reporting are important only in the lower figures for family service (\$0.18 as against \$0.36 for domestic and personal service) and for public service \$0.50 as against \$1.06 in the occupational grouping). In both cases the change indicates the redistribution of common labor according to place of work.

2. EMPLOYMENT AND EARNINGS OF WOMEN

At present 20,000 women are gainfully employed, full 20 per cent of all persons employed and 23 per cent of all women 15 to 50 years of age. The 1930 census showed women as 11 per cent of all persons employed. The present

population reports that before the war 1,800 of its women were gainfully employed. Thus there is a striking movement of women driven into the struggle to make a living for themselves and their dependents. Almost all of the present women workers are new recruits, presumably inefficient and certainly unable to bargain for wages.

Of the 20,000 women in all occupations, 6,000 are engaged in manufacture and mechanical employment at an average wage of \$0.17 per day, 6,000 in general labor at \$0.14, 6,000 in domestic and personal service at \$0.23, 2,000 in trade at an income of \$0.20. The average daily earnings for all employed women are \$0.18. This figure may be compared with the average for employed men, \$0.56. In no employment do women's wages equal half the men's, and only in general labor do they approach that ratio (\$0.14 as against \$0.31). The disparity is most significant in the manufacture and mechanical group (\$0.17 as against \$0.63), a fact which shows what poor return women receive for labor in the subsidiary processes of textile industries. It is noteworthy that women are one-fourth of all general laborers, and four-fifths of all in domestic and personal service; in no other occupations are they a significant factor. If employed women are classified according to service rather than by occupation, the wages reported are not much different, but numbers vary a good deal. 11,000 are reported in family service, including some engaged in unskilled assistance to home industries, 4,000 do rough labor, 2,000 each are in trade and in manufacturing, and a scant 1,000 are in public service.

3. GROUPINGS OF FAMILIES AND OF EMPLOYED PERSON BY EARNINGS

One-sixth of all families report no current earnings. (It is to be pointed out that one-seventh of all families report that their present members had no earnings before the war; most of them presumably were supported by persons now dead or removed from Nanking, or at present physically or economically unable to support them). 24 per cent of all families earn something, but less than \$10 a month; added to the 16-17 per cent with no earnings, this means that full 40 per cent of all families are unable to earn \$10 monthly. Nearly 36 per cent of all families earn between \$10 and \$20; 14 per cent, \$20 to \$30; 7 per cent, \$30 to \$60; 2 per cent, above \$60; 1 per cent uncertain.

This same population reports that before the war 7 per cent earned something, but less than \$10 per month; added to the 14-15 per cent with no earnings, this makes 22 per cent of all families failing to earn \$10 monthly. 26 per cent earned \$10 to \$20; 25 per cent, \$20 to \$30; 15 per cent, \$30 to \$60; 8 per cent, above \$60; 4 per cent uncertain. These percentages should be compared one by one with those just above, which group families according to present earnings. They reveal the terrible drop into and toward destitution, all along the line.

Almost half (47,500 in 97,100, or 49 per cent) of all employed persons whose current earnings are definitely known, make less than \$10 per month; whereas just one-eighth (10,100 in 81,100) were formerly in that group. 37 per cent now make \$10 to \$20, very slightly under the pre-war percentage. 10 per cent get \$20 to \$30, as against 30 per cent of old. 3 per cent make

\$30 to \$60, where formerly there were 12 per cent. 1 per cent (1400 persons), earn more than \$60; formerly, 8 per cent. Thus the fall from the middle and higher groups even of this remnant and refugee population, containing relatively few who were ever prosperous, has been catastrophic. Even in the group of \$20-\$30 earnings, only one-third as many as formerly can find a place; while the pitiful half who earn under \$10 a month are multiplied by four. The present percentage of employed persons who earn less than \$10 monthly is practically equal to that of persons formerly earning up to \$20 monthly. There is now a larger percentage (86) of persons making under \$20 than that (80) which formerly made up to \$30. At present, less than 5 per cent (4,550 persons) earn more than \$30, as against the former 20 per cent.

4. RELATION BETWEEN INCOME AND SIZE OF FAMILY

Among the income groups containing the greater number of families, the relation between earnings and size of family is clearly revealed, and more sharply so under present pressure than formerly. The larger the family, the more chance there is that two persons instead of one may be gaining some income (for the surveyed population of 358,000 in 85,000 families with an average size of 4.2, the number of employed persons is 99,000). More significant of severe conditions is the fact that almost every person who has any noticeable income is bound to bring relatives into his own "small family" or otherwise provide for them.

In former times, for earnings groups up to \$30 per month, the average size of family was 3.8 to 4.0; above \$30, it ran higher than 5 persons, but seldom above 6. At present, the large number of families receiving below \$10 average near 3.5; the \$10-\$20 group run just above 4; \$20-\$30 just above 5; \$30-\$40, 5.6; and the small higher groups generally from 6 to 8 persons. Aside from their indication of acute pressure upon all income gaining individuals these reports are of practical meaning to the relief worker. Commonly one finds among the poorest families a smaller number of persons to reckon with; though he must always be watchful of the unusual cases which are in the worst plight, and also of the fact that any considerable relief to particular families may draw relatives to them and thus alter the original position.

The data on Employment and Earnings are given in Tables 4, 5, 6, and 7.

IV. EXPENDITURES

1. GENERAL DATA AND GROUPINGS

22 per cent of all families report an expenditure up to \$10 per month; 53 per cent, from \$10 to \$20; 18 per cent, from \$20 to \$30; 4 per cent, from \$30 to \$40; less than 3 per cent, above \$40; a few uncertain. Thus three-fourths of all families in Nanking are spending less than \$20 monthly, and only 6 per cent are spending more than a dollar a day.

Correlation between family expenditure and size of family is another test of close living. The group under \$10 average only 2.2 persons, and obviously include many broken families with some lone individuals. The large number falling in the \$10-\$20 class approach the general average (4.2) with 4.0. The \$20-\$30 group run almost to 6 persons on the average; \$30-\$40 and \$40-\$50 almost to 7; while the small higher groups average 10 persons to the family.

Comparison between expenditure groupings and income groupings is interesting. Naturally there is none to report "no expenditure" and survive, as against 16 per cent reporting "no earnings"; the \$1-\$10 groups are approximate equivalents; while in the \$10-\$20 class the expenditure reports are sufficiently more numerous than the income reports to restore the balance. Thus 75 to 76 per cent of all families report themselves below \$20 both in expenditure and in income. A graph would emphasize the obvious tendency for total expenditures to exceed total earnings for all families up to the \$20 level. In the small expenditure groups above \$30, there are fewer families by earnings than in the corresponding groupings by income. Some of these "upper" families are contributing to the living of others who are on a deficit basis, and indeed there is a general leveling-down along much of the scale. The whole living problem is worsened, since the data were gathered, by the sharp increase in the price of rice and of many foodstuffs, amounting to some 30 per cent (mid-winter to May).

2. TYPES OF EXPENDITURES

Each family visited by an investigator was asked to state its monthly outlay in each of several main categories. In the case of rice, this was originally stated in terms of quantity (as likely to secure greater accuracy), reduced to money at the current price of \$8 per *shih tan* by measure, for medium grades. The average monthly expenditure by all families for all items was \$16.62, made up as follows: rice \$6.93, or 42 per cent; other foods \$4.22, or 25 per cent; fuel \$1.55, or 9 per cent; clothing \$0.37, or 2 per cent; rent, \$0.80, or 5 per cent; miscellaneous \$2.75, or 17 per cent. Among different families the miscellaneous items would vary widely, such as: light, water, transportation, cigarettes, matches, narcotics, entertainment outside the house, barbering and baths, maintenance of property, household equipment, education.

The average monthly expenditure per capita for all items is \$3.96. The lowest per person expenditures are in Cheng Pei: Tung and in Men Tung, with \$3.44 and \$3.48; the highest in the former Safety Zone, which includes the new residential district with a considerable number of officials, at \$5.08; others not far from the average.

If total food costs are combined, they give a figure of \$11.15, or 67 per cent of all items; to which might be added fuel, for practically no domestic fuel is now used in Nanking for other purposes than cooking, making a total of \$12.70, or 76 per cent. This is an indication of living near the margin of existence. It is obvious that the greater the burden which plain food puts upon total resources, the greater the degree of poverty. 40 per cent is a fairly common figure for food in subsistence or charity budgets in western countries.

3. COMPARISONS

Gamble's careful studies of family budgets in Peiping showed an average expenditure per person for food of \$4.25 monthly (\$2.65 in Nanking, without fuel, or \$3.01 with fuel). The poorer families in Peiping (family incomes up to \$30) ran about \$2.60. A rough comparison of prices suggests that rice and flour alike were about 20 per cent higher in Nanking at the time of gathering the present data than in Peiping during Gamble's investigations; hence the average person in Nanking is almost certainly getting less food than the very poor in Peiping.¹

Gamble's families spent 35 per cent for food, 8 per cent for clothing, 12 for rent, 7 for heat, 38 for miscellaneous. For families with incomes below \$20, the percentages ran 61, 4, 10, 13, 12; \$20 to \$30, 53, 6, 9, 11, 12. Gamble cites several studies of working-class budgets in Peiping and Shanghai, showing 60-70 per cent for food, 5-9 for clothing, 8-11 for rent, 7-11 for fuel, 3-16 for miscellaneous.² Tao's investigations in Peiping indicated an average of 71 per cent for food, without much variation according to class up to \$30 of monthly income. Gamble's surveys report that lower groups use 60 to 70 per cent of all food expenditures for cereals; Adolph and Tao say 75 and 80, without close restriction of class. Gamble's families did not get above \$2 monthly for rent until incomes passed \$25; compare the Nanking \$0.80 for all families or \$1.88 for families actually paying rent.³

4. HOUSING

Over 12,000 families (14 per cent of all families) report that they own the place in which they live; over 36,000 families (43 per cent) that they live in rented quarters; nearly 37,000 (43 per cent) that they "borrow" their rooms or house, which means that they dwell by the deliberate, the unknowing, or the unwilling grace of a landlord who may be here or absent, with or without ties of kinship or friendship. The percentage owned is highest in Cheng Pei, 36;

¹How Chinese Families Live in Peiping, pp. 46, 320.

²Ibid., pp. 290, 321-322.

³Ibid., pp. 61-67, 331.

lowest in Men Tung, 7, and Cheng Tung, 10; with the others very close to the average, except the former Safety Zone at 20. Renting is highest in the Safety Zone at 62, and lowest in Cheng Tung at 21, Men Tung at 32; with the rest running 41 to 46. "Borrowing" predominates in Cheng Tung at 69, and Men Tung 61; and is lowest for the Safety Zone at 17 and Cheng Pei at 22; while the other sections show 40 to 45. Thus on all counts housing conditions would seem to be nearest to economic normality in the Safety Zone and in Cheng Pei; farthest from it in Cheng Tung and Men Tung.

It is hardly necessary to observe that a population of which only 14 per cent lives in "owned" houses, and at the same time expends only 5 per cent (\$0.80 monthly per family) of its current budget for rent, is in a serious plight. The "borrowing" of housing for 43 per cent of all families suggests the pillaged state and general poverty of tenant and landlord alike. It is better not to speak about repair and condition of the general run of surviving buildings. The total rent paid in the entire city is the pitiful amount of \$68,000 monthly, or \$1.88 for each family paying rent. Various private reports are to the effect that \$1.00 paid for one or two rooms is the monthly rent item for thousands of family budgets. Rents have tended to rise during the spring.

The data on Expenditures are given in Tables 7 and 8.

APPENDICES

APPENDIX A

SOURCES OF SUPPLEMENTARY SUPPORT

For the Nanking population as a whole, current earnings do not provide completely for minimum expenditures, and many families depend upon some sort of supplementary support. We endeavored to secure information on this subject from each family concerned, conscious of the fact that subjective elements are here less amenable to control than in any other part of the investigation.

52 per cent of all families report themselves as not living upon current earnings (the necessary supplement might, of course, vary from a trifling fraction to entire support). A very rough comparison may be made with the groupings by expenditure and by earnings, in which it would seem that something like 30 per cent of all families fall into earnings groups lower by \$10-intervals than their position in expenditure groups. It should be recalled that 16 per cent of all families report no earnings at all. Gamble's studies in Peiping showed that in fairly normal times a population averaging better in economic status than the present Nanking population also contained many families that had to be subsidized in some manner and degree. 29 per cent of the families he studied were unable to meet their expenditures, even after counting as income certain of the items which we list as supplementary support.¹

Gamble's studies in Peiping showed current earning as 73 per cent of all "income", rent 15 per cent, interest 3 per cent, draft on capital 6 per cent, miscellaneous 3 per cent. These are quantitative figures. There is no valid comparison between them and the Nanking reports. The meaning of our limitation to "current earnings" will shortly become clearer.

The reported extra sources of support are classified as follows: borrowing (usually a euphemism for receiving more or less regular gifts from relatives and friends, with repayment seldom expected), 39 per cent; savings (usually the proceeds in one degree or another of the "civilian looting" which followed the military looting of the previous year; very rarely the remains of pre-war means), 27 per cent; relief, 20 per cent (a figure that seems a little high for the period of investigation and especially for the few months just preceding it, and may be a convenient cover for some items embarrassing to explain; however, the 20 per cent of 52 per cent is far short of the number of families receiving relief from the Municipal Government and from the International Relief Committee during the late winter and the spring); rent, 6 per cent; remittances from outside, 3 per cent; selling chattels (one's own possessions, not the ubiquitous second-hand trading), 2 per cent; uncertain, over 3 per cent. Note that these percentages have no quantitative significance. They merely indicate the reports given by the "deficit families" (52 per cent of all families)

¹How Chinese Families Live in Peiping, p. 38.

as to the sources of supplementary income, each type of source measured against all sources.

In general, these reports present the worst picture for Cheng Pei: Tung, followed by Cheng Tung and the former Safety Zone area; the best picture for Men Hsi and Men Tung. Rent is rated at 15 per cent in Cheng Pei and at 14 in Men Hsi; it is negligible in Cheng Tung and very low in Cheng Pei: Tung and Cheng Hsi. There is no selling of chattels in Men Hsi and Men Tung, where also the dubious "savings" are lowest. Relief is highest in Cheng Tung at 34 per cent, and lowest in Men Tung and Men Hsi at 6 each. Large-scale winter relief programs were just getting under way near the close of gathering these data; hence these "relief" figures are scant and perhaps unrepresentative as to area. The relief amounts should be examined in juxtaposition, perhaps even in combination with "borrowing", which commonly represents another type of charity. Here Men Hsi and Men Tung are highest, with 64 and 60 per cent; while Cheng Tung, the Safety Zone, and Cheng Pei: Tung are lowest at 27, 29, and 33, respectively. "Borrowing" implies that one has relatives or friends able and willing to help with little assurance of return, thus indicating a "surplus" as well as a "deficiency." But the lenders do not always reside in the same district as the borrowers, so the relative status of districts is not automatically displayed by reports on this topic.

The data on sources of supplementary support are given in Table 9.

APPENDIX B.

INVESTIGATION SCHEDULE

		File No.....
1. Name of family head.....	2. Address	
3. Name of investigator.....	4. Date of investigation.....	
5. Total family members.....		
<p><i>Former Employment</i></p> <p>Relation to head</p> <p>Age</p> <p>Institution or place of service</p> <p>Occupation</p> <p>Earnings by day or month</p> <p>1.</p> <p>2.</p> <p>3. etc.</p>		<p><i>Present Employment</i></p> <p>Institution or place of service</p> <p>Occupation</p> <p>Earnings by day or month</p> <p>No. of days work per month</p> <p>Investigator's estimate of earnings by day or month</p>
6. Living expenses.	7. If recently unemployed or earnings less than expenditures, how do you maintain the family? (1) Remittances from outside, (2), Borrowing, (3) Relief, (4) Savings, (5) Rent, (6) Selling Chattels, (7) Other.	
<p>Type of Daily Monthly</p> <p>Expenditure payments payments</p> <p>1. Rent</p> <p>2. Rice</p> <p>3. Other foods</p> <p>4. Clothing</p> <p>5. Others</p> <p>6. Total</p>		

DESCRIPTIVE SUMMARY

In its effort to keep in close touch with the actual economic problems of the common people, the Nanking International Relief Committee carefully visited every fiftieth house number within the city wall. Reports were secured by experienced investigators from 1,706 families, comprising 7,161 persons. The collected data cover age, sex, and family relationships; employment; earnings; expenditures.

Gradually relaxing from the terrible winter of 1937-1938, Nanking has attained a certain low level of economic and social life from which further improvement will be difficult under present military and political conditions and economic policies. Some real advances have been made by the authorities, but the inherent negations are too strong.

The Chinese population within the wall is estimated as nearly 360,000 at the beginning of this year; for the Municipal Area, near 500,000. It is tending to increase at the rate of several thousand per month, mostly refugees from the country.

The population shows great deficiency in the productive ages, particularly of men; with corresponding excess of children, aged, and women. Now the men 15 to 49 years are only 22 per cent of the whole population. By the most closely comparable Nanking figures, they were 30 per cent before the war—fully one-third more. Now there are only 94 men of vigorous age to 100 families; then there were 130. In the age-group 20 to 29 years, we find only 65 men to 100 women; whereas in various statistics of pre-war years there were from 126 upward.

The average size of family is 4.2 persons, approximating that of poor sections of the city in normal times. It is below that of the whole population before the war (4.9), and that of the emergency period in 1938 (4.7) when there were many combined families.

An abnormality in family composition is the serious excess of broken families (from which husband or wife is missing), now 17 per cent of all families as against 13 per cent in the best pre-war figures—an increase of three-tenths. Yet more critical is the doubling (16 per cent to 8 per cent) of the families without a male head. There are now 14,100 of such families, usually without any adult male.

There has naturally been a big improvement in employment since the paralyzing terror of the early occupation. Yet the present employment rate, 27 per cent of the total population, needs to be increased by one-half to approach normal. Moreover, the current figure is not so good as it seems. Tens of thousands are now driven to crude labor and meagre peddling. Correspondingly, there is relatively little manufacture even on a domestic basis, and professional or skilled tasks of any sort are few.

The employed person makes an average of \$0.49 per day, about 40 per cent of his reported former earnings. This is equivalent to \$0.55 per family, \$16.50 a month for 4.2 persons. Traders are making just about the general average, counting wretched vendors along with moderately flourishing shopkeepers. Ordinary laborers get \$0.26 a day, under \$8 a month. Almost half of all employed persons make less than \$10 monthly; only 4 per cent, above \$30. There is still a vast reservoir of desperately poor persons without work, and inflow from the country continues. Improved earnings are not to be expected without the great change implied by peace and free opportunity.

The inexorable injuries of the war situation would be bad enough. But beyond them are other troubles that keep men poor. It is better not to discuss here the enforced use of military notes, the havoc wrought by opium and heroin, the continual interference with personal liberty and private property; because they are so closely linked with military procedure. They are, however, important bars to economic improvement. Apparently less politico-military and more largely economic in their whole working are the general monopolistic and restrictive controls. Chinese business-men are throttled by the monopoly of transportation and the discriminatory use of it to control all wholesale trade. They complain bitterly that they and their people are reduced to the status of coolies and shopboys for an alien economy. Specifically, they point out monopolies or discriminatory controls in such varied lines as the following: coal, salt, banking, cotton, metals, cement, lime, electric and water installations. Furthermore, they assert that when a Chinese business is painfully developed after the general experience of burning, looting, and confiscation of commercial sites, it is frequently threatened and hampered until it accepts a Japanese partner; who then provides the ever-necessary permits and a measure of security, in exchange for a first claim on returns and a managerial voice that can summon bayonets at will. Under such conditions there cannot be much revival of Chinese commercial and industrial enterprise.

One-fifth of all employed persons are women. Of these 20,000 women now employed only 1800 were working before the war. The average daily wage for women is now \$0.18, or \$5.40 per month. Comparatively few are servants with the extra benefits secured thereby; a majority are general laborers and helpers in domestic industries or shops.

One-sixth of all families have no current earnings; an additional 24 per cent make less than \$10 monthly; 36 per cent between \$10 and \$20; 14 per cent, \$20-\$30; only 9 per cent above \$30. The same population before the war showed one-seventh with no current earnings (i.e., none by people now alive and in Nanking); an additional 7 per cent with less than \$10 monthly; 26 per cent, \$10-\$20; 25 per cent, \$20-\$30; 23 per cent above \$30. The fall even for this remnant population is disastrous.

For 22 per cent of all families, life is maintained on an expenditure of less than \$10 per month; for 53 per cent, on \$10-\$20; for 18 per cent, on \$20-\$30; for only 6-7 per cent, above \$30. Thus three-fourths of all families run below \$30 both in earnings and in expenditures, with earnings tending to lag far behind expenditures in the general record. 52 per cent of all families report themselves

as partly or wholly unable to live upon current earnings, which they supplement by "borrowing" and use of "savings" (both of doubtful character in many cases), and by receipt of relief; rarely by rent, remittances, and sales of personalty. This situation may be compared with the composite estimate made in October last by thirty selected persons, that 44 per cent of their acquaintance could not get through the winter without help. By mid-spring, the International Relief Committee alone had given some small measure of aid to over 130,000 persons, a third of the city's population; and the Municipality had also done widespread relief work, besides the efforts of other private agencies. The situation is greatly worsened since the winter investigation, by increases of 25-35 per cent in the price of rice and other important foods.

Only 14 per cent of all families live in owned quarters, and an additional 43 per cent dwell by the sufferance of others without paying rent. The remaining 43 per cent average less than \$2 monthly for family rent. Houses are generally in bad condition, and owners cannot rent for enough to provide minimum repairs.

The average monthly expenditure per family is \$16.62 (compare the \$16.50 independently reported for current earnings), under \$4 per capita. For the average family, \$11.15 went for food, 67 per cent of the total; and another 9 per cent for fuel, devoted almost entirely to cooking (compare this with the frequent 40 per cent for food in the charity budgets of western countries). The Nanking families used only 2 per cent of their expenditures for clothing and 5 per cent for rent. Miscellaneous items rated rather high at 17 per cent, covering light, water, cigarettes, household equipment, narcotics, besides luxuries like education, baths, and maintenance of property. The picture of the population as a whole reveals the grinding poverty that requires almost all resources for food and is similar to survey reports of the poorer groups in other Chinese cities. These averages are a composite of variations not seldom cruel, though the total range is small compared with that of more prosperous days.

TABLE 1
FAMILIES STUDIED AND ESTIMATED POPULATION
BY SECTION OF THE CITY

Section	Number of families studied	Total family members in families studied	Average size of family	Estimated total number of families	Estimated total family members	Number of persons per square li*
1. Former Safety Zone	275	1,132	4.2	13,750	56,600	11,400
2. Cheng Hsi	394	1,759	4.5	19,700	87,950	35,500
3. Cheng Tung	173	725	4.2	8,650	36,250	5,500
4. Cheng Pei	107	436	4.1	5,350	21,800	1,600
5. Cheng Pei: Tung	300	1,354	4.5	15,000	67,700	8,900
6. Men Hsi	230	943	4.1	11,500	47,150	23,200
7. Men Tung	227	812	3.6	11,350	40,600	15,300
All Sections	1,706	7,161	4.2	85,300	358,050	9,000
1938 Inside of Well	906	4,252	4.7	45,300	212,600	5,300
District Census 1939 Feb.			4.1	83,611	342,664	
Police Census 1939 Feb.			4.0	78,618	315,478	
1932 (Smythe)			4.3			
City Districts 1937 Feb.			4.9	172,464	856,332	

* One li by the recent standard equals 500 meters. Hence 10.36 square li equal 1 square mile.

TABLE 2
AGE AND SEX DISTRIBUTION OF POPULATION STUDIED
SHOWN IN PERCENTAGES

Age Group	Percent in each group									Sex Ratio		
	Male	1939 Fem.	Total	Male	1938 Fem.	Total	Male	1932 Fem.	Total	1939	1938	1932
0- 4	11.1	9.5	10.3	8.1	8.7	8.4	10.7	12.1	11.4	108	97	101
5- 9	13.5	12.5	13.0	12.5	12.5	12.5	9.4	9.8	9.5	100	103	109
10-14	11.7	10.8	11.2	12.3	11.1	11.7	9.9	9.5	9.7	100	114	119
15-19	8.2	8.3	8.3	8.6	8.2	8.4	9.0	8.4	8.7	91	108	123
20-24	4.8	7.8	6.3	6.6	6.5	6.6	8.0	7.4	7.7	56	106	124
25-29	5.7	7.0	6.4	6.1	6.4	6.2	9.7	8.7	9.3	75	100	128
30-34	6.6	6.8	6.7	5.6	6.4	6.0	8.3	7.7	8.0	90	89	123
35-39	7.2	7.1	7.1	6.1	6.0	6.1	8.0	7.4	7.8	95	105	123
40-44	7.6	5.7	6.6	7.8	7.2	7.5	7.4	6.8	7.1	123	112	124
45-49	6.6	4.6	5.6	8.4	5.3	6.9	6.1	5.7	5.9	132	163	121
50-54	6.0	5.6	5.8	5.8	5.8	5.8	4.8	4.2	4.5	99	105	132
55-59	4.2	4.4	4.3	3.9	4.2	4.0	3.7	4.9	4.3	90	96	85
60 and over	6.8	9.9	8.3	8.2	11.7	9.9	5.0	7.4	6.1	64	72	78
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93	103	114

0-14	36	33	35	33	32	32	30	32	31	102	105	109
15-49	47	47	47	49	46	48	57	52	54	91	111	124
50 and over	17	20	18	18	22	20	13	16	15	79	85	94
Total	100	100	100	100	100	100	100	100	100	93	103	115

TABLE 3
FAMILY COMPOSITION
SHOWN IN PERCENTAGE OF EACH TYPE

Survey	Normal		Broken		Non-family		Normal with relatives		Broken with relatives		Non-family with relatives	
	1	2	3	4	5	6	7	8	9	10	11	12
	Husband and wife*	Husband wife children	Man and children	Woman and children	Man alone	Woman alone	Husband wife relatives	Husband wife children relatives	Man children relatives	Woman children relatives	Man with relatives	Woman with relatives
1939 (100.0)	8.3	32.4	2.4	6.2	4.2	2.6	5.0	23.1	3.6	4.5	4.5	3.2
1932 (100.0)	9.5	33.1	2.3	3.4	5.3	2.1	4.1	25.7	4.6	2.6	7.1	0.1
1938 (100.0)	4.4	26.2	2.6	6.6	5.3	2.1	5.0	27.3	5.9	6.3	6.2	2.1

Selected percentages grouped from columns above

	Normal (col. 1, 2, 7, 8)	Broken (col. 3, 4, 9, 10)	Families without men** (4, 6, 10, 12)	Families with children (2, 3, 4, 8, 9, 10)	Non-family type (5, 6, 11, 12)
1939	68.7	16.7	16.5	72.2	14.5
1932	72.4	12.9	8.2	71.7	14.6
1938	62.9	21.4	17.1	74.9	15.7

*See text, p. 6.

**See text, p. 6.

TABLE 4
FORMER AND PRESENT EMPLOYMENT AND EARNINGS,
BY OCCUPATION*
COMPARED WITH 1938 DATA

	Persons employed (1939 population)**		Percent of persons employed				Average daily earnings			
	Former-ly	Present-ly	Formerly 1938	Presently 1939	Formerly 1938	Presently 1939	Formerly 1938	Presently 1939	Formerly 1938	Presently 1939
1. Agriculture	5,300	3,000	10	6	12	3	\$0.73	\$0.71	\$0.20	\$0.48
2. Manufacture, Mechanical	21,950	18,000	18	26	5	18	1.08	1.02	0.38	0.47
3. Trade	22,650	33,150	34	26	67	34	1.20	1.54	0.31	0.49
4. Transportation	10,500	9,300	6	12	4	10	1.14	1.24	0.42	0.67
5. Domestic personal service	4,600	7,100	12	5	5	7	0.96	0.79	0.45	0.36
6. Public Service	4,350	1,800	3	5	1	2	1.03	1.36	1.00	1.06
7. Professional	3,750	2,650	3	4	—	3	1.05	1.45	0.55	0.72
8. General Labor	5,950	20,850	7	7	3	20	0.34	0.43	0.25	0.26
9. Combined shops	6,300	3,100	5	7	3	3	0.91	2.88	0.22	1.13
10. Clerical	1,300	400	2	2	—	—	0.86	0.99	—	0.79
Total and average	86,650	99,350	100	100	100	100	1.01	1.30	0.32	0.49
Percent of population employed			26	24	9	27				
Percent of population 10 years and over employed			33	32	12	35				
Percent of population 15 years and over employed			38	37	14	41				

* This classification follows the main groupings of the United States Census, adapted for local use by dropping the two groups of forestry and fishing, and extraction of minerals; and by adding the two groups of general labor and combined shops. "Combined shops" refer to the common case of shops that both make and sell, and therefore do not belong solely to manufacture or to trade. There are many border-line instances, and division among these three last-named groups cannot be made with confidence. "Public service," as in America, excludes those readily classified elsewhere.

** For some of those persons whose occupation is reported, formerly and presently, a figure for earnings is not reported (often because of irregularity in employment or in rate of earnings). The number of persons whose "average daily earnings" are known is smaller than the number of persons whose occupations are known, by the following figures for each occupation in the Table: Formerly, (1) males 950, females 50; (2) m 1150, f 100; (3) m 550; (4) m 150, f 50; (5) m 350, f 100; (6) m 50; (7) m 250; (8) m 1600, f 50; (9) m 150; (10) none; total males 5200, females 350, altogether 5550. Presently, (1) m 200, f 150; (2) m 200; (3) m 50; (4) m 50; (5) m 300; (6) none; (7) m 50; (8) m 1150, f 100; (9) none; (10) none; total males 1950, females 300, altogether 2250.

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TABLE 5
FORMER AND PRESENT EMPLOYMENT AND EARNINGS, BY OCCUPATION
ACCORDING TO SEX

Occupation	Number of persons employed (1939 population) *				Average daily earnings (1939 population)							
	Formerly		Presently		Formerly		Presently					
	Males	Females	Total	Males	Females	Total	Males	Females	Total			
Agriculture	5,100	209	5,300	2,750	250	3,000	\$0.79	\$0.40	\$0.71	\$0.49	\$0.30	\$0.48
Manufacture, mechanical .	21,300	650	21,950	11,600	6,400	18,000	1.05	0.22	1.02	0.63	0.17	0.47
Trade	22,550	100	22,650	31,300	1,850	33,150	1.53	3.00	1.54	0.51	0.20	0.49
Transportation	10,450	50	10,500	9,250	50	9,300	1.24	—	1.24	0.67	0.40	0.67
Domestic, personal service	4,250	350	4,600	1,450	5,650	7,100	0.81	0.37	0.79	1.01	0.23	0.36
Public service	4,350	—	4,350	1,800	—	1,800	1.36	—	1.36	1.06	—	1.06
Professional	3,550	200	3,750	2,550	100	2,650	1.48	0.99	1.45	0.74	0.17	0.72
General labor	5,750	200	5,950	15,150	5,700	20,850	0.44	0.16	0.43	0.31	0.14	0.26
Combined shops	6,250	50	6,300	3,100	—	3,100	2.89	1.50	2.88	1.13	—	1.13
Clerical	1,300	—	1,300	400	—	400	0.99	—	0.99	0.79	—	0.79
Total or average	84,850	1,800	86,650	79,350	20,000	99,350	1.31	0.64	1.30	0.56	0.18	0.49
% of total population employed	24	0	24	22	6	28						
% of persons 10 years and over employed	31	1	32	29	7	36						
% of persons 15 years and over employed	36	1	37	34	8	42						

*See Note 2, Table 4.

TABLE 6
FORMER AND PRESENT EMPLOYMENT AND EARNINGS
BY SERVICE

Service*	Number of persons employed				Percent of all persons employed				Average daily earnings per person employed**			
	Formerly		1939		Formerly		1939		Formerly		1939	
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Agriculture	5200	200	5400	2750	250	3000	6.2	3.0	\$0.62	\$0.40	\$0.57	\$0.49
Manufacture, mechanical ..	21000	250	21250	11550	2450	14000	24.5	14.1	1.10	0.43	1.10	.58
Trade	22900	100	23000	31950	1900	33850	26.6	34.1	1.52	3.00	1.53	.51
Communications	11250	50	11300	9200	50	9250	13.0	9.3	1.23	0.50	1.23	.69
Family service	1450	750	2200	750	10550	11300	2.5	11.4	.42	.26	.37	.33
Public service	5250	—	5250	11100	600	11700	6.1	11.8	1.20	—	1.20	.52
Professional	4200	200	4400	2900	150	3050	5.1	3.0	1.31	1.32	1.31	.70
Rough labor	850	150	1000	2500	3650	6150	1.2	6.2	.54	.13	.49	.26
Combined shops	12750	100	12850	6650	400	7050	14.8	7.1	1.85	.92	1.84	.82
Total or average	84850	1800	86650	79350	20000	99350	100	100	1.31	.64	1.30	.56
% of total population employed	23.7	0.5	24.2	22.2	5.5	27.7						
% of persons 10 year and over employed	30.9	0.7	31.6	28.9	7.2	36.1						
% of persons 15 years and over employed	36.2	0.8	37.0	33.8	8.5	42.3						

*This is a Chinese classification of employments, emphasizing the place of work, the institutional or economic attachment, rather than the type of work performed. E.g. there is no clerical group, since no clerk would work independently, but in a shop or office otherwise classified. "Rough labor" (coolies) is a smaller group than the occupational "General labor," since many of the latter are here shown as working for the military or the government. Many classed occupationally as "Manufacture, mechanical," are here redistributed. "Combined shops" and "Family service" in this classification include some persons listed under occupations as general laborers.

**The number of persons whose "average daily earnings" are known is smaller than the number of persons whose services are known, by the following figures for each service in the Table: *Formerly*, (1) males 950, females 50; (2) m 1450, f 100; (3) m 950; (4) m 300; (5) m 100, f 50; (6) m 250; (7) m 300, f 50; (8) m 100, f 50; (9) m 800; total males 5200, females 350, altogether 5550. *Presently*, (1) males 200, females 150; (2) m 500; (3) m 500; (4) m 50; (5) m 50, f 50; (6) m 50, f 100; (8) none; (9) m 550; total males 1950, females 300, altogether 2250.

TABLE 7
FAMILIES AND EMPLOYED PERSONS GROUPED ACCORDING TO
PRESENT AND FORMER EARNINGS, ALSO BY
PRESENT EXPENDITURES
WITH SUPPLEMENTARY INDICATION OF SIZE OF FAMILY

Monthly earnings or expenditure	Percentage of total families		Average size of family		Persons Employed			
	By earnings		By expenditure		Past		1939	
	Past	1939	Past	1939	Past	1939	Past	1939
No earnings	14.8	16.5			4.0	3.6		
\$0.1- \$10	7.2	23.9	22.3	3.8	3.4	2.2	10100	47500
10.1- 20	26.3	35.6	53.2	3.9	4.1	4.0	30450	35650
20.1- 30	24.7	14.2	17.9	4.0	5.1	5.9	24050	9400
30.1- 40	4.6	3.3	3.8	5.2	5.6	6.9	3100	1250
40.1- 50	4.7	2.1	0.9	4.9	6.4	7.1	3100	850
50.1- 60	5.4	1.4	0.5	5.4	6.8	9.3	3800	1050
60.1- 70	0.3	0.2	0.4	5.4	8.7	8.3	50	50
70.1- 80	1.2	0.5	0.1	5.3	5.4	10.5	750	250
80.1- 90	1.9	0.4	0.2	4.9	6.1	14.8	1550	300
90.1- 100	0.9	0.2	0.1	6.0	5.8	14.0	850	200
100.1- 200	2.5	0.5	0.1	6.3	9.1	8.0	1750	300
200.1-1000	1.7	0.3	0.1	7.0	8.0	8.0	1550	300
Unknown	3.8	0.9	0.4	3.2	3.3	1.1	5550	2250
Total or average	100.0	100.0	100.0	4.2	4.2	4.2	86650	99350

TABLE 8
CLASSIFIED LIVING COSTS, WITH SUPPLEMENT ON HOUSING
BY SECTION OF THE CITY, SHOWN IN PERCENTAGES

Sections	Principal items of expenditure							Average per family cost per month	Average per person cost per month	Percent of families in houses		
	Rent	Rice	Other foods	Fuel	Cloth- ing	Miscel- aneous	Total			Owned	Rented	Bor- rowed
Former Safety Zone	7	34	40	5	4	10	100	\$20.91	\$5.08	20	63	17
Cheng Hsi	5	44	23	9	1	18	100	17.94	4.02	12	43	45
Cheng Tung	2	53	20	10	-	15	100	16.66	3.83	10	21	69
Cheng Pei	3	42	27	15	-	13	100	16.16	3.97	37	41	22
Cheng Pei Tung	4	46	22	12	1	15	100	15.51	3.44	14	42	44
Men Hsi	5	32	19	10	8	26	100	15.39	3.75	13	46	41
Men Tung	3	44	18	10	3	22	100	12.45	3.48	7	32	61
All Sections	5	42	25	9	2	17	100	16.62	3.96	14	43	43
Average per family	\$0.80	6.93	4.22	1.55	0.37	2.75	16.62					

TABLE 9
SOURCES OF SUPPLEMENTARY SUPPORT
AMONG FAMILIES UNABLE TO LIVE UPON CURRENT EARNINGS
SHOWN IN PERCENTAGES

Sections	Percentage of total families unable to live upon current earnings	Sources Reported							Unknown
		Total	Borrowing	Relief	Savings	Rent	Remittances from outside	Selling chattels	
Former Safety Zone	58	100	29	24	31	6	3	1	7
Cheng Hsi	50	100	37	23	29	4	3	2	2
Cheng Tung	59	100	27	34	28	1	2	2	6
Cheng Pei	46	100	43	10	22	15	7	3	-
Cheng Pei: Tung	64	100	33	21	32	4	3	3	4
Men Hsi	40	100	63	6	12	14	4	-	1
Men Tung	43	100	60	6	20	7	5	-	2
All Sections	52	100	39	20	27	6	3	2	3

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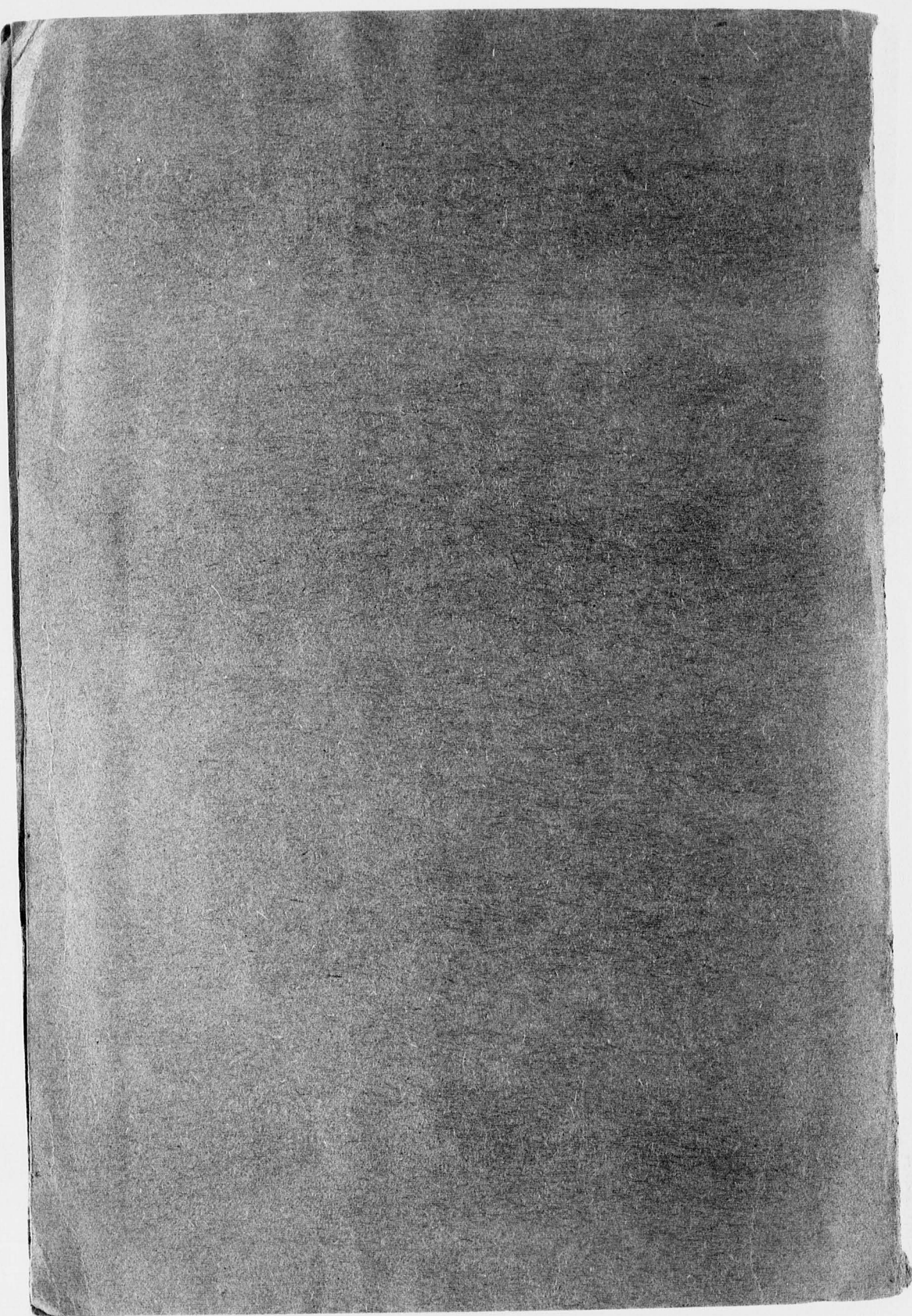
THE EFFECT OF THE JAPANESE INVASION
ON HIGHER EDUCATION IN CHINA

By
WILLIAM P. FENN, Ph. D.

*Head of the Department of Foreign Languages
University of Nanking
Chengtu*

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2 TAK SHING STREET, KOWLOON, HONGKONG
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FOREWORD

The distribution of our population is lamentably unequal. According to an estimate made by Dr. Wong Wen-hao a few years ago, we have 83 per cent of our people thickly compressed in 17 per cent of our territory, while the remaining 17 per cent is thinly distributed in areas which comprise 38 per cent of our territory as a whole. Result: over-population, which is the cause of our low standard of living.

The Japanese invasion which began in 1937 is indeed an utterly barbaric one. It is unprovoked, unjustified and historically unprecedented. But it is producing an effect for which, taking a long view, we are almost grateful! It is changing the picture of the distribution of our population.

The highly specialized nature of our agriculture has always been concentrated on areas which can be irrigated to get the maximum production per acre, combined with the maximum population per square mile. No force in our history has ever been able to change this picture. Now, the Japanese are doing it without knowing what they are doing. Already more than 40 millions of our people who are unwilling and unable to remain under the Japanese rule in the temporarily occupied areas have migrated inland, going West, North-west and South-west. They have carried with them, lock, stock and barrel, their families, their capital, their plants, tools, and their talents. In our vast hinterland to-day, new roads are built, new lands are reclaimed, and new factories are put up. Industrial co-operatives are spread everywhere and vigorous experiments are being made in extensive farming. Above all, an advance from a traditionally regional to national viewpoint has already been achieved. This opening of the interior and the linking of the people is one of the greatest phenomenon in all history. As Owen Lattimore put it, "Dragons' teeth are being sowed that are going to sprout into something new and formidable!"

The migration of our colleges and universities is a special feature of this greatest phenomenon in all history. Supported by factual materials and accurate statistics, the following pages tell a fascinating story. Like all phenomenal histories, the effect of the Japanese invasion on our higher education should be told by a distinguished scholar of a friendly Power. Professor William P. Fenn needs no introduction.

The China Institute of Pacific Relations, under whose auspice this monograph is published, does not assume responsibility for statements of fact or opinion contained in it. They remain the personal expression of the author.

Hongkong, May 1, 1940.

Liu Yu-wan

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THE EFFECT OF THE JAPANESE INVASION ON HIGHER EDUCATION IN CHINA

INTRODUCTION

THE JAPANESE invasion of China has made itself felt on all phases of Chinese life, but nowhere perhaps with more overwhelming and significant effect than on Chinese education. Physical plants have been bombed out of existence, institutions have been driven from their homes, and students have seen their educational opportunities vanish. Yet today, higher education in China is being pushed with a vigor never seen before and along lines which are likely profoundly to influence the future of the Chinese people. The purpose of this study is to present a clear and objective analysis of the changes which have taken place in higher education in China during the first two years of the Sino-Japanese War.

THE ATTACK ON EDUCATIONAL INSTITUTIONS

HARDLY had the first guns been fired at Lukouchiao than the Japanese military began an attack on Chinese cultural institutions which has continued to the present day. Within three months of the outbreak of hostilities, no less than twenty-three universities, colleges, and technical schools had been destroyed, completely or in part. Beginning with the "peaceful" closing up of universities in Peiping and the ruthless destruction of Nankai University in Tientsin, such institutions were driven out of all areas into which the Japanese penetrated. It is impossible to describe this process in detail, but a few instances will make the situation clear.

The Japanese first struck Peiping. With the occupation of the city in July 1937, all but a few institutions of higher learning were obliged to close down. Before the war there had been fourteen such institutions; three months later there were only four.

The fate of Tsinghua University is typical. Founded in 1912 as a result of the return of the balance of American Boxer Indemnity Funds, it long served as a preparatory college, sending its graduates to the United States. In 1927 it was made into a national university and soon became the best equipped and best staffed university in the country, with 1,000 students and 200 teachers. Long regarded as one of

the principal fountain-heads of anti-Japanese propaganda, it was invaded by the Japanese on October 13th, 1937, and has since been used as barracks. Efforts of the American Embassy to limit occupation have proved unsuccessful, and protests against the systematic looting of the library—the best in China—have also been unavailing.

Peking National University, China's oldest modern university, founded shortly after 1900 and the home of the Chinese "Literary Renaissance" and of Dr. Hu Shih, was similarly occupied. Peiping National University, National Normal University, and others suffered similar fates; and the only institutions of higher education of any importance now functioning in Peiping are three which are foreign-supported.

In August 1937, the Japanese forces in Tientsin completely destroyed Nankai, the outstanding private Chinese-supported university in China, founded and headed by the noted educator, Dr. Chang Po-ling, demolishing its plant by means of artillery, bombs, and fire. The reasons given were; (1) that it had been a center of anti-Japanese agitation (which was probably true) and (2) that it was being used as a Chinese military center (which was false). Most of the staff of 100 and student body of 500 had already fled south.

As the center of warfare moved to Shanghai, the institutions crowded so thickly in that area began to receive their share of attention. In a short time, fourteen of these had been subjected to artillery and air attack. Among Chinese-owned universities, as least four (Tungchi, Fuhtan, Tahsia, and Kwanghwa) were practically levelled to the ground. Foreign-owned universities fared but little better, the University of Shanghai having its plant occupied by Japanese soldiers, and St. John's University being forced to abandon its campus even though it was mostly within the bounds of the British defence sector.

Other East China centers were affected as the front moved westward. Soochow University was bombed out of its home; Hangchow Christian College had to leave its campus; and, in December 1937, the University of Nanking started its long trek westward. None of these institutions, however, suffered as did National Central University of Nanking, which was the object of several Japanese air raids during the fall of 1937. These attacks resulted in the destruction of the Dental School, a girls' dormitory, two chemical laboratories, and the Experimental School, and the partial demolition of the Library and Auditorium.

Other widely scattered institutions began to feel the effect of the ever-widening aerial bombardment. Hunan University was destroyed as a "Chinese military establishment" on April 10, 1938, when planes dropped forty to fifty bombs. A laconic report stated that, "because the day was Sunday, there were few casualties." On May 10, 1938, Amoy University was partly destroyed by bombs. Before it left Wuchang, Huachung College suffered considerable damage. And so, institution after institution found itself the victim of aerial attack. In June 1939, the campus of West China Union University was visited; in August, Wuhan National University suffered in the bombing of the small West Szechuan city to which it had fled. At the time of writing there are still no signs of there being an end to this.

The plea that these bombings were the result of military necessity or of accident can be dismissed, at least in the majority of cases, as completely without foundation. The thorough and systematic way in which Nankai University was destroyed by shell-fire, aerial bombs, and fire when the Japanese were in a position to seize the place and evict such students as had not gone home for the summer vacation was not military necessity or accident. Nor can the bombing of Central University on four different occasions be so excused. These cases, as well as those of Amoy University, Hunan University, and many others leave in the minds of impartial observers no room for doubt that most of the Chinese educational institutions destroyed by the Japanese were destroyed deliberately as such, and not as military objectives or by mistake.

THE EXTENT OF WAR LOSSES

IT IS not yet possible to arrive at any completely accurate figures regarding the losses suffered by educational institutions as a result, direct or indirect, of the war. Figures supplied by the Minister of Education for the period ending August 1938, however, set the losses and damage sustained by institutions of higher learning at more than Ch.\$33,600,000.

These losses were distributed as follows:

Private Institutions	Ch.\$ 7,545,812
Provincial Institutions	3,567,200
National Institutions	22,491,867
Total	Ch.\$33,604,879

The following is a list of all losses greater than Ch.\$500,000:

Tsinghua University	Ch.\$6,050,000
Nankai University	3,750,000
Shantung University	3,611,663
Central University	3,383,400
Peking University	1,922,317
Honan University	1,600,000
Chekiang University	1,560,000
Tungchi University	1,480,000
Amoy University	1,288,202
Peiping Normal University	1,030,471
Kwanghwa University	800,000
Hopei University	800,000
Hunan University	700,000
Hopei Provincial Girls' Normal College	696,000
Peiping University	600,000
Tahsia	550,000
Chih Tze College	511,000
Shanghai College of Law	510,000

But these figures make no distinction between actual damage and confiscation. Tsinghua University is said to have suffered a loss of over six million though its buildings have not been seriously damaged. On the other hand, Nankai's loss of nearly four million represents almost entirely actual loss through destruction. Again, the University of Nanking is credited with a loss of only one hundred thousand because, though it has also had to leave its campus and take refuge elsewhere, being a foreign institution it still retains possession of its property in Nanking. It is evident, therefore, that these figures provide no very accurate picture of the various types of losses suffered.

However, it does not appear likely that actual destruction will run higher than 20 per cent of the total loss. If this figure be accepted and if the loss of such plants as Wuhan and Sun Yat-sen Universities (which occurred later than August 1938) and the effect of further bombings be taken as bringing the total to the Ch.\$50,000,000 mark, it is probable that the actual destruction amounts to some \$10,000,000. The remaining \$40,000,000 represents relatively undamaged property now in Japanese hands, which may, in the event that the war ends in China's favor, return to Chinese hands more or less intact. Depreciation of course will considerably decrease the value of such property as the

Chinese recover; so the actual permanent loss is certain to amount to considerably more than the figure of Ch.\$10,000,000 mentioned above.

REFUGEE INSTITUTIONS

DESTRUCTION of property and enemy-occupation of buildings has not, however, prevented most of the institutions affected from continuing their activities. With few exceptions, those which have found it impossible to continue in conquered areas have managed to re-establish themselves either in foreign concessions or in Free China. The story of the difficulties met by many of these and the undaunted courage with which they faced these trials is an epic of which we can only sketch the barest outlines.

Universities and colleges in and near Shanghai were, in some cases, able to take advantage of the relative safety of the nearby International Settlement and French Concession. The mission institutions—the University of Shanghai, St. John's, Soochow, and Hangchow—share rented quarters in the heart of the International Settlement. A number of Chinese private or government institutions have found similar quarters. For institutions in conquered cities like Peiping, Tientsin, and Nanking, however, no such simple solution was possible; for most of these, refugeeing meant a trip of from one to two thousand miles. But most of them chose to move rather than close up entirely. Tsinghua, Peking National, and Nankai all made the long journey, first to Changsha in Hunan, 800 crow-miles away, and then on to Kunming, Yunnan, a further 600-700 miles. Other Peiping institutions went to Sian, Shensi, some 550 miles, and then on to Nancheng. National Central of Nanking sought refuge in Chungking, 700 crow-miles up the Yangtze River; while Ginling College and the University of Nanking went on to Chengtu, Szechuan, another 200 miles west. National Wuhan moved to Kiating, Szechuan, 600 miles west; Sun Yat-sen University of Canton transferred to Kunming, Yunnan, 650 miles west.

In all cases the actual journey was a great deal longer, sometimes two or even three times the straight line distance. Mere mileage, however, gives but an inadequate picture of the stupendous nature of these undertakings and of the heart breaking difficulties encountered. The trip from Peiping to Changsha was a not-too-difficult one by rail; but

the move from there to Kunming offered the alternative of a hazardous bus trip across mountainous provinces or of rail to Canton, boat to Indo-China, and then rail to Kunming—some 1,300 miles. The trip from Nanking to Chengtu involved a 1,200-mile boat trip up the Yangtze River and then a 250-mile bus trip across Szechuan. The difficulties of transporting any large quantity of equipment such great distances were enough to discourage the bravest.

Nor was the refuge chosen always a haven of safety. The Peiping-Tientsin institutions now forming Southwestern and Northwestern Union Universities were all forced to leave the cities first chosen, the former moving from Changsha to Kunming and the latter from Sian to Nancheng. Huachung (Central China) College tried Changsha (Hunan), and Kweilin (Kwangsi), before seeking safety in far Yunnan, west even of Kunming. Even Western Szechuan has not provided complete immunity for National Wuhan, for seven of its students were killed in a raid as late as August 1939.

In spite of these difficulties, however, thousands of students, hundreds of professors and their families, and great quantities of equipment and supplies were transported, in one way or another, to the new homes. At best, travel was difficult; for those without money for train, boat, or bus fares, it sometimes meant tramping across entire provinces on foot. The stories of all of these moves would provide adventure of the most thrilling sort and instances both of inspiring courage and of tragedy. There is space, however, for only a few brief summaries—the bare facts of the travels of four representative institutions: National Central (Nanking), National Wuhan (Wuchang), National Sun Yat-sen (Canton), and Huachung College (Wuchang).

On September 22, 1937, after air raiders rained destruction on the campus, the order was given for National Central University to leave Nanking for Chungking (Szechuan). Early the next month, construction began on new buildings in Chungking. In early November, after a 1,200-mile trip up the Yangtze River, the university reached its new site. By the middle of November, classes had been resumed, after a lapse of only 43 days, in 24 temporary structures which had been erected in 40 days. Starting before the final evacuation of Nanking had begun, Central was able to remove almost all of its books and apparatus.

Long before the fall of Hankow, but not before it had been the object of Japanese bombs, National Wuhan

University moved from Wuchang to Kiating (Szechuan). In spite of bombings at Shasi and Wanhshien en route (in which some equipment was lost) 500 students and 40 faculty members reached Kiating on April 28, 1938, with all the library and most of the scientific equipment. Formerly one of the most beautifully and sumptuously housed of all Chinese universities, it had to adjust itself to life in temples, barracks, city gates, and other rented buildings. It is carrying on under most adverse conditions, including another bombing, with splendid morale.

National Sun Yat-sen University left its recently erected campus in Canton in October 1938, just before the Japanese entered the city. The first move was up the river to Loting, in Kwangtung, which was reached October 30th. But that was too close to Canton, and in January 1939, the university moved to Lungchow in Kwangsi. Hardly had it settled there, however, than it was ordered to Yunnan. The physical property was transported by trucks and animals. Students followed three routes: 300 went by truck across Kwangsi; 800 took boat and train by way of Hongkong and Haiphong; 200 went on foot. In spite of difficulties, over 1,300 students, representing 70 per cent of the enrolment, finally found their way, after a 2,000-mile odyssey, to Chengkiang (Yunnan), where regular class work was resumed on March 1, 1939. The enrolment has since increased to 4,200 students, making it the largest single university in the country.

Probably the longest trek taken by any mission institution was that made by Huachung College, from its home in Wuchang to its present site not far from the Burma border. The college left Wuchang on July 11, 1938, and established itself at Kweilin (Kwangsi), its Library School going directly to Chungking. The trip, made overland by train, by truck, and on foot, took 43 days. But raids soon became too severe and the college sought some location more nearly beyond the reach of bombers. Early in 1939, the first group left for Yunnan. Some travelled by truck; others went by way of Hanoi and Kunming. Finally, in the late spring, Huachung had established itself in a little town near Talifu, Yunnan, where it hopes to continue until the end of the war.

The extent of this flight of institutions from territory occupied by the Japanese can best be seen from the following table:

TABLE 1: THE DISTRIBUTION OF INSTITUTIONS OF HIGHER LEARNING IN OCCUPIED AREAS, FREE CHINA, AND FOREIGN CONCESSIONS BEFORE THE WAR (JUNE 1937) AND AT THE END OF THE SECOND YEAR OF WAR (JUNE 1939).

	JUNE 1937					JUNE 1939				
	Univ.	Coll.	T.S.	Total	%	Univ.	Coll.	T.S.	Total	%
Occupied Areas	34	29	29	92	82.9	2	2	0	4	4.4
Free China	6	5	2	13	11.7	22.5	20	17	59.5	65.4
Foreign Concessions	3	3	0	6	5.4	11.5	12	4	27.5	30.2

OLD EDUCATIONAL CENTERS AND NEW

THE MOST obvious effect of the war on higher education in China has been the redistribution of educational institutions and the accompanying disappearance of old centers and establishment of new.

Before the war, North China was one of the two chief educational centers of China. The three cities of Peiping, Tientsin, and Poating had among them eight universities, eleven colleges, and three technical schools—twentytwo such institutions in all. There are now only three universities, two colleges, and one technical school. Tientsin's one university, Nankai, was forced to flee when its plant was completely destroyed. Of its four colleges, one has fled, two have ceased to exist, and only one continues. Paoting's two colleges have both gone out of existence.

For Peiping, which before the war was the cultural center of China, the result of the war was dislocation of the educational life of the city. It has been estimated that not more than one-third of the former teachers and students of Chinese-owned institutions remained in Peiping after the outbreak of hostilities. Of that number, most either went into hiding or joined the guerillas, some bands of which are now led by former Peiping professors. Before the war, Peiping boasted fourteen institutions of higher education. Of these only three of any importance have been able to continue. These are all foreign owned or supported; Fujen University (the Catholic University of Peiping), Peking Union Medical College (Rockefeller supported), and Yenching University (American and British mission supported). In addition, the Sino-French University continued for some time its Peiping as well as its Shanghai branch. Chungkuo College and the Peiping School of Railway Administration made a pretense

of carrying on under Japanese supervision. The former Hua Pei College is now devoted to the teaching of Japanese. The plants formerly occupied by all other institutions are being used primarily for barracks, not for educational purposes.

The greatest educational center in China, Shanghai is no less an educational center after two years of war, but under utterly changed conditions. Before the war, Shanghai was the home of twelve universities, ten colleges, and six technical schools—a total of twentyeight institutions. Of these, a very large majority were situated outside the International Settlement and the French Concession and soon fell prey to the Japanese. So today, while Shanghai has eleven universities (including branches), eleven colleges, and four technical schools—a total of twentysix—these are all within one or the other of these foreign controlled areas. Of the original twentyeight only two were forced to close; two migrated; and three moved in part, leaving branches in Shanghai. Two institutions moved in from the nearby cities of Hangchow and Soochow.

But all of these schools are carrying on under the most difficult conditions. The same forces which brought them into their new home also brought an influx of refugees from the surrounding country which raised the population of the foreign area from two million to over four million. It has been estimated that there are a thousand schools of all sorts in the International Settlement alone, with a student population of 300,000. The entire foreign area now houses 28 colleges and universities, 200 middle schools, 175 vocational schools, and innumerable primary schools. As a result, classes have to be carried on in rooms rented in office buildings, and students and faculty alike suffer from crowded housing conditions. Many institutions, having lost part or all of their books and equipment, are trying to carry on with inadequate equipment or none at all. The four mission institutions—St. John's University, Shanghai University, Soochow University, and Hangchow Christian College—are cooperating in the Associated Christian Universities in Shanghai, pooling all equipment and sharing alike. In the summer of 1939, St. John's finally succeeded in starting a few classes on its own campus in spite of Japanese encroachments in the area nearby. The safety of the students is assured only by the regular patrolling of the campus by British soldiers, for the simple truth is that no students are safe where Japanese exercise any measure of control. For instance, St. John's cannot use its science laboratories or its

athletic fields because those are outside the British defence sector."

Other centers of education like Tsinan (Shantung), Nanking, Wuchang (Hupeh), Hangchow (Chekiang), and Canton have also disappeared. To take their places new educational centers have opened in Free China, away from the seaboard and other "conquered" areas. The center of the educational population has shifted to the west and southwest. The chief of these new centers are Chengtu and Chungking in Szechuan and Kunming in Yunnan.

For many years before the war, Chengtu was the home of two recognized universities, Szechuan Provincial University and West China Union University, a mission supported institution. The former was constituted a national university in 1937 being strengthened by agricultural departments from National Central University. After the intensification of Japanese air raids on Szechuan cities in the spring of 1939, however, it moved to Omei, a small city one hundred miles from Chengtu and at the foot of famous Mt. Omei. Meanwhile, Kwanghwa University, while retaining a branch in Shanghai, transferred most of its work to the vicinity of Chengtu; and Chaoyang College of Peiping arrived after a series of moves.

West China Union University was joined early in 1938 by several mission institutions—the University of Nanking, Ginling Women's College (Nanking), Cheeloo University (Tsinan, Shantung), and part of the College of Science of Soochow University. Its Medical and Dental Schools were strengthened by the arrival of the Medical Schools of National Central and of Cheeloo and of the Central School of Dentistry (Nanking). These additions made Chengtu the home of five (now four) complete universities, two colleges, and several technical schools which form parts of the universities.

To Chungking and vicinity, formerly the site only of Chungking Provincial University and Szechuan School of Education, have now come Central University (Nanking), one of the largest government institutions, a branch of Fudan University (Shanghai), part of the College of Science of the University of Nanking, Chunghwa College (Wuchang), the National School of Pharmacy (Nanking), the Wenhua (Boone) Library School (Wuchang), and the Wuchang School of Fine Arts. As a result, Chungking, a commercial center which was little concerned with education before the war, is now being referred to as the "Athens of China." Because of air raids, these institutions are scattered through-

out the neighboring country rather than located in the city itself. For example, within an hour's ride of the city, a rustic village is now the seat of two universities and one technical school.

Kunming, a provincial capital with little in the way of educational facilities, has suddenly become the center for a number of refugee institutions in addition to its own revamped provincial university. Amalgamated under the name of Southwest Associated University, Tsinghua (Peiping), Nankai (Tientsin), and Peking National Universities are now carrying on corporate existence in or near Kunming, forming one of the strongest units in the country. Tungchi University (Shanghai), Chungcheng Medical School (established two years ago in Nanchang by the Generalissimo), Shanghai Medical College, and the National School of Fine Arts (combining Schools of Fine Arts from Peiping and Hangchow) have all settled in or near Kunming, making this relatively backward city now the third largest educational center in China.

Other centers of importance include Kweiyang (Kweichow), Nancheng (Shensi), and Hongkong. In Kweiyang have settled Tahsia University (Shanghai), Hsiangya (Yale-in-China) Medical College (Changsha, Hunan), and the newly opened Kweiyang Medical School. At Nancheng, a hitherto relatively unknown commercial center in South Shensi, three former residents of the Peiping-Tientsin area, Peiping National University, National Normal University (Peiping), and Peiyang Engineering College (Tientsin) now form Northwest University. Shensi Medical School is also there. This city has taken the place of Sian, the capital of the province, where these institutions first settled but from which they were driven by Japanese bombs. Finally, Hongkong, while technically not a part of "Free China," serves so predominantly a Chinese clientele that it must be counted among the centers of Chinese higher education. Hongkong University has become the host to Lingnan University, a mission institution forced to leave Canton even before the Japanese arrived. Kwanghwa Medical College (Canton) and part of Canton University have also fled to Hongkong.

Another educational center of an unique character is to be found at Yen-an in North Shensi, in the so-called Communist University, Kangjih (Resist-Japan) University. This, the largest single educational unit in the country, numbering at times as high as ten or fifteen thousand, is housed almost entirely in caves in the loess. It is not, however, of

true university grade, offering only short periods (from three to nine months) of intensive training for service behind the lines.

Probably more significant, however, than the development of a few large new educational centers is the establishment in hitherto institutionless cities of single universities, colleges, and technical schools. Before the war, China's institutions of higher learning were concentrated in 30 cities; today, in spite of a decrease in the total number, they are scattered among 44. Even more significant is the fact that 33, or 75 per cent of these cities were unoccupied before the war.

Furthermore, many of these new centers are relatively small. Chengtu, Chungking, Kunming, Kweiyang, and Kweilin are either provincial capitals or commercial centers; but the names of most of these other places are quite unfamiliar, not only to foreign residents in China but even to the average educated Chinese. The impact on these communities of the sort of new life bound to accompany universities and colleges should influence profoundly the intellectual and physical life of large parts of the country.

Indeed, the driving of universities, colleges, and technical schools inland from the coast may well prove to be the most permanently significant effect of the war on Chinese life. Perhaps the greatest weakness of the Chinese educational system was the fact that so large a percentage of institutions of higher learning had been concentrated in a few provinces—indeed, in a few cities. The extent of this shift of educational population can best be shown by the following tables:

TABLE 2: THE RELATIVE DISTRIBUTION OF UNIVERSITIES, COLLEGES, AND TECHNICAL SCHOOLS IN SIX COASTAL PROVINCES (HOPEI, SHANTUNG, KIANGSU, CHEKIANG, FUKIEN, AND KWANGTUNG) AND IN THE REST OF THE COUNTRY BEFORE THE WAR (JUNE 1937) AND AT THE END OF THE SECOND YEAR OF WAR (JUNE 1939).

	Universities		Colleges		Technical Schools		Total	
	1937	1939	1937	1939	1937	1939	1937	1939
Six Coastal Provinces	73.8	44.7	77.7	51.4	62.5	30.4	72.3	43.7
Rest of the Country	26.2	55.3	22.3	48.6	37.5	69.6	27.7	56.3

TABLE 3: THE RELATIVE DISTRIBUTION OF UNIVERSITIES, COLLEGES, AND TECHNICAL SCHOOLS IN SIX LARGE CITIES (PEIPING, TIENTSIN, SHANGHAI, NANKING, CANTON, AND WUCHANG) AND IN THE REST OF THE COUNTRY BEFORE THE WAR (JUNE 1937) AND AT THE END OF THE SECOND YEAR OF WAR (JUNE 1939).

	Universities		Colleges		Technical Schools		Total	
	1937	1939	1937	1939	1937	1939	1937	1939
Six Cities	67.5	31.7	55.3	37.1	42.4	18.8	56.1	30.3
All Others	32.5	68.3	44.7	62.9	57.6	81.2	43.9	69.7

The actual figures are as follows: the six coastal provinces now contain only 17 universities in place of 33; 18 colleges in place of 28; and 7 technical schools in place of 20. This is a total reduction from 81 to 42, or 48.1 per cent. On the other hand, in the interior there are now 21 universities instead of 11; 17 colleges instead of 8; and 16 technical schools instead of 12. This is a total increase of from 31 to 54, or 74.2 per cent.

Still another way of looking at this shift is to examine the ratio of universities, colleges, and technical schools to population. In 1937, in the coastal provinces with a population of 166,514,841, there were 81 such institutions, or one for each two million (2,055,739) people; while in the rest of the country, with a population of 254,288,737, there were only 31 such institutions, or one for each eight million (8,202,862) people. In other words, the density of institutions in the coastal province was four times that in the rest of the country. The result of the shift has been that the six coastal provinces now have approximately one for each four million (3,964,639) while the rest of the country now has one for each four and a half million (4,409,051), making the ratios almost equal.

These figures do not take into consideration two at present uncertain factors: the great population shift westward, and the concentration of all institutions in the coastal provinces in Peiping and Shanghai. It would probably be more accurate to divide the country into three sections, not two: the cities of Peiping and Shanghai, in which the educational population is still high; the rest of the "occupied"

territory, which constitutes an institutionless no-man's land; and Free China, which is now experiencing an educational renaissance.

STUDENTS: ORPHANS, REFUGEES, AND GUESTS

SUCH dislocation of the customary centers of higher education naturally had a profound effect on thousands of students. For many students, the flight of institutions meant the loss of educational opportunities. Unable for one reason or another to follow their alma maters into exile, they have been left stranded as orphans. Whereas the "occupied" territory, as has already been pointed out, once held 95 institutions (101 including foreign concessions) but now holds only 6 (and only 35 including foreign concessions), the point has not been emphasized that, outside of the three cities of Shanghai, Peiping, and Tientsin, there is now no university, college, or technical school in any of the "occupied" areas. Even in a city like Peiping, ten students must be turned away for every one admitted to the universities still functioning. And for thousands, unable to go either to Peiping or Shanghai or to one of the centres in Free China, education is no longer available.

Nor have Japanese or Puppet-sponsored institutions taken the place of those which have fled. The fact is that no such institutions of university grade have been established. And if we can judge by the experience of other territories which the Japanese have occupied, there is little likelihood that any will be. In Korea, which was made a protectorate in 1905 and annexed in 1910, and where even elementary education is not compulsory, there are now only five government colleges and one government university in addition to a few private institutions; and it is well to note that, in the university, Japanese students outnumber Koreans more than two to one. And in Manchuria, since the closing of Northeastern University (now in Northwest China) immediately after the Japanese Conquest in 1931, no universities or colleges have been opened. Today, there is no university or college in Manchuria, and only a few purely technical schools.

Thousands of other students, however, have followed their own institutions into exile. A majority of those in Peiping and Tientsin had left these cities before the Japanese arrived; and it is safe to conclude that many of these continued to the far west. In each of the Union Universities there is still a considerable nucleus of old students. As has

already been pointed out, over 1,300 of the students of Sun Yat-sen University followed it from Canton to Yunnan; while 500 students of Wuhan University went from Wuchang to Szechuan. Of course the mortality was often high; in the case of Huachung, only a handful of students finally reached haven in Western Yunnan. But the fact that so many students followed their institutions all the way and that so many others went at least part way indicates both an encouraging patriotism and a real passion for learning.

The Ministry early recognized the fact that students might not always find it feasible to remain with their institutions and devised a plan under which such students might stay as "guests" in other institutions but finally graduate from the ones in which they originally matriculated. By July 1938, some two thousand students had taken advantage of this plan, which still continues in effect.

Despite such arrangements, however, the net result of the closing of some institutions and the migration of others has undoubtedly been a definite loss in enrolment. There are no complete figures for all institutions, but official figures for 71 government institutions provide an indication. These show a decrease from 32,888 students in 1936 to 25,746 in 1937, a loss of 7,142. If these figures be taken as representative, it seems probable that the country as a whole suffered a loss of approximately 22 per cent, or something over 9,000 students. That the figures are no higher is undoubtedly due in part to the fact that the transfer of institutions to new territories provided educational opportunities for many new students. They do not, therefore, truly represent the actual gross loss of students suffered by these institutions but only the net loss after the registration of new students. Although no figures are yet available for the year 1938, indications are that there was a very considerable increase over 1937, and it is not at all improbable that there are at present more students in universities, colleges, and technical schools than there were immediately before the war.

What effect, if any, has the war had on the courses of study followed by those students who have chosen to continue their university work? The impression among educators is that there is a definite trend away from the Arts toward the practical and utilitarian, an impression which receives support from the stated principle of "more intensive study of natural sciences to meet present needs." The demand for technical experts in all phases of Chinese life, in war and in peace, would be sufficient, without government encourage-

ment, to lead students from the liberal arts to the practical sciences.

It would be wrong, however, to think of this as solely the effect of the war; it is merely the acceleration of a tendency apparent for many years. This fact is clearly evident in the following table:

TABLE 4: MAJOR FIELDS OF ALL STUDENTS IN INSTITUTIONS OF HIGHER LEARNING FOR THE YEARS 1931 AND 1936.

SCIENCE AND APPLIED SCIENCE				
Field	1931		1936	
	Number	Percent	Number	Percent
Science	3,930	8.8	5,484	13.2
Agriculture	1,413	3.2	3,395	8.2
Engineering	4,084	9.3	6,987	16.8
Medicine	1,800	4.1	2,590	6.2
Total	11,227	25.4	18,456	44.4

GENERAL ARTS				
Field	1931		1936	
	Number	Percent	Number	Percent
Letters	10,006	22.7	8,364	20.2
Law	16,487	37.4	8,253	19.8
Commerce	2,156	4.9	3,292	7.9
Education	4,231	9.6	3,243	7.7
Total	32,880	74.6	23,152	55.6

There are no exactly comparable figures for 1937 or 1938, but the expressed interests of 11,000 candidates taking the entrance examinations for government universities in 1938 should provide some indication of the condition in that year. These are shown in the following table:

TABLE 5: FIELDS OF INTEREST OF 11,119 CANDIDATES FOR ADMISSION TO GOVERNMENT UNIVERSITIES IN 1938.

SCIENCE AND APPLIED SCIENCE			GENERAL ARTS		
Field	Number	Percent	Field	Number	Percent
Science	539	4.85	Letters	1,016	9.14
Agriculture	978	8.79	Law	2,437	21.91
Engineering	3,773	33.94	Commerce	120	1.08
Medicine	608	5.47	Teaching	1,648	14.82
Total	5,898	53.05	Total	5,221	46.95

It will be seen that the trend toward science has been accelerated by the war. Even more significant, however, are the shifts from pure science to such applied science as engineering and from letters to education. It is obvious that the "liberal" elements in education are rapidly yielding to the "utilitarian."

One may wonder whether any students or teachers are serving their country on the battlefield or whether all are living a secluded institutional life. According to the war-time program of the Chinese government, college students and graduates have been discouraged from enlisting. This policy, which is in striking contrast to that of Western nations during the Great War (and also to present Japanese policy) is not a result of the respect in which learning has always been held but rather a reflection of the far sighted policy which is already planning for reconstruction after war. The Chinese see little excuse for winning the war at the cost of the leaders of the future. Actually, however, a considerable number of students have joined the army, especially through the Central Military Academy and training schools for air pilots. Others are taking part in social education and other work behind the lines. Many thousands have gone to the territory of the Eighth Route Army in Shensi, where, after a short period of training, they have been given active outlet for their patriotic enthusiasm. But the majority, through a variety of causes ranging from patriotism to inertia, are following the wishes of the government in continuing their education, preparing themselves to serve their country more effectively than as cannon fodder.

Many teachers too have enlisted in definite war-time activities. One of the most interesting of these is that of guerilla leaders. Well-known professors from such institutions as Northeastern, Peiping Normal, Yenching, and the College of Law and Commerce (Tientsin) have been active leaders of guerilla groups in the provinces of Hopei, Chahar, Shantung, and Shansi; and more than one has already given his life in this way. Professor Wen Chien-kung, who helped organize the populace in Shansi, was killed in a raid in December 1938; Professor Yuan Mo-han, organizer of guerillas on the Chahar-Shansi border who was especially adept at winning over Chinese and Mongol troops, was captured in the same month. Professors Chang Yu-kwang and Chen Yen-ming, who trained political workers in Shantung, were both reported missing in November, 1938. Meanwhile, Professor Yang Siu-ling, "grandfather" of the Taihang Mountain Guerillas, continues to lead a band on the Hopei-Shansi border.

A WAR-TIME EDUCATIONAL PROGRAM

CONFRONTED by the emergency caused by the Japanese invasion, first of North China and then of the Shanghai area, the Ministry of Education acted promptly to expedite the removal of institutions and educational personnel.

Fundamental changes of policy, however, followed but slowly. The immediate effect of the war on curricula was not great; here and there a course was dropped for lack of teaching personnel; absence of essential equipment sometimes resulted in skeleton schedules of laboratory work while research and experimentation took on a more practical and sometimes warlike aspect. But there was little change in the nature of the courses offered or in their total number. It was not until near the end of the first year of the war that an attempt was made to formulate a comprehensive policy for higher education in China. Consequently, it was not until the second year of the war that the effects of this policy began to be felt.

The first serious step was taken by the Kuomintang Emergency National Congress, which met in Hankow during April 1938. After giving considerable attention to the educational problems of the country, the Congress passed four resolutions dealing with education:

1. The educational system and course contents are to be so revised as to produce a wartime curriculum which will emphasize the moral training of the people, raise the standard of scientific research, and augment scientific equipment.
2. Specialists and technicians of all kinds are to be trained and so placed as best to meet wartime demands.
3. The youth of the country are to be so trained that they will be able to serve in war areas and rural districts.
4. The women of the country are to be so trained that they can, through social service, increase the country's powers of resistance.

The Congress further laid down the principles for the development of a more detailed program. These were, briefly, the following:

1. Equal development of mental, moral, and physical aspects.
2. Combination of civil and military training.

3. Equal emphasis on agricultural and industrial needs.
4. Unification of educational and political aims.
5. Closer coordination between home and school training.
6. Scientific re-evaluation and propagation of China's literary, historical, and philosophical heritage.
7. More intensive study of natural sciences to meet present needs.
8. Introduction of new ideas into the political system through the study and assimilation of the heart of Western social sciences.
9. Systematization and equalization of educational development; enforcement of compulsory education; and extension of social education.

Some of these are obviously educational platitudes of the sort that must be included in every program. Among the others, the most significant emphasis would appear to be on scientific, military, and political training.

On the basis of these principles, the Ministry of Education formulated a working plan for the improvement of public education, which was approved by the Plenary Session of the National Congress in April, 1938. The main features of this plan, so far as they effect higher education, are as follows:

1. The present school system (6-3-3-4) is to be maintained, but modifications may be made wherever the system is found not to fit local conditions. (This means the continuation of a four-year university course).
2. Plans for the removal and establishment of schools must be in accordance with the political and economic policies of the nation. The founding of any school, the establishing of any department, and the opening of any course must be based on definite objectives and working programs which will make them of practical use and value to the country.
3. The old system of normal colleges must be examined and adapted to present needs.
4. Courses must be systematized so as to meet the needs of resistance and reconstruction.
5. The departments and courses of universities must be adapted to meet the requirements of economy and the needs of the students.
6. Standards of discipline must be fixed for different

grades of schools; the tutorial system must be strictly enforced so that every student may receive adequate character training, guidance in daily life, and civic and moral education, and so that at the same time, the dignity of the teaching profession may be established.

7. Physical education must be universal, and the curriculum must be so coordinated with military drill and boy-scout activities as to correct the mistakes of the past. Extracurricular activities must be made compulsory; and the hygiene and diet of students must be supervised.
8. All middle schools, colleges, and universities must adopt military discipline in order to train students in the traits of cleanliness, orderliness, and alertness, in the habit of voluntary service, and in the sense of responsibility in group life.
9. With regard to educational appropriations by central and local governments, there must be not only a comprehensive plan for providing and increasing appropriations, but also supervision to insure their wise and efficient use.
10. Simplicity and serviceability must be emphasized in the construction of school buildings, but scientific apparatus and laboratory equipment must be kept up to fixed standards.
11. All administrative organs of the different grades of education must be coordinated. . . . Administrative personnel of all grades must be chosen on the basis of character and scholarship.
12. In order to raise the standard of scholarship, a national supreme council for research and studies must be established.
13. Regulations concerning the sending of students abroad must be revised so as to make the practice an integral part of the educational policy of the country. Proper control must also be provided for self-supporting students abroad so as to eliminate evils resulting from past laxity.
- 14, 15, 16, and 17. (These are concerned only with primary and secondary education.

So much for paper plans. Let us now see what practical steps the Ministry may have taken to put these, and other, perhaps unstated, principles into effect.

A. REMOVAL AND DISTRIBUTION OF INSTITUTIONS.

As has already been stated, the Ministry acted promptly and efficiently when the Japanese invasion started. It early ordered the withdrawal of all universities, colleges, and technical schools from the war zones, in many cases providing financial assistance not only for institutions but also for a large number of refugee students and teachers. In this it was helped by provincial authorities.

One of the first steps taken by the Ministry was the allocation of institutions and the elimination of wasteful duplication. For example, Tsinghua, Peking National, and Nankai were combined in the formation, first, of the Temporary University at Changsha, and then, of Southwestern Union University; while Peiping National Normal, and Peiyang formed, first, the Temporary University at Sian, and then, Northwestern Union University; and, at Chungking, Shantung National was amalgamated with Central. The result was three extremely strong institutions with great reduction in overhead.

The same policy of centralization was followed in the development of medical centres. At Chengtu, the Colleges of Medicine and Dentistry of West China Union University were joined by the Medical Schools of Central (Nanking) and Cheeloo (Tsinan, Shantung), and the Central School of Dentistry (Nanking). At Kunming, National Chungcheng Medical College (Nanchang), the Medical School of Yunnan University, and the National Medical College (Shanghai) joined forces. At Kweiyang, Central Hospital and the National Training Institute for Public Health, both from Nanking, and Hsiangya (Yale-in-China) Medical College reinforced Kweiyang Medical College and the Kweichow Provincial Public Health Commission.

The opening of new institutions has been entirely in the hands of the Ministry of Education ever since the war began, and no new schools have been started except by the Ministry itself. Although some courses have certainly been opened without authorization, no departments are now being established without approval.

Beginning with the fall of 1938, common entrance examinations are being given, in strategic centres, for all government institutions. That year over 11,000 candidates took the examinations, and something over 5,000 were admitted. In addition to its obviously greater efficiency, this plan has the added advantage of enabling the Ministry to apportion students not only among institutions but among

major fields. A comparison of the following table with Table V will make this latter point clear; for, whereas the relative percentages assigned to science and to arts follow closely the percentages of student preferences, the percentages assigned to various departments show marked discrepancies. The government has strengthened pure science at the cost of engineering and teaching, and letters at the cost of law. This directive influence is probably the result of lack of adequate facilities in engineering and law rather than of objection to their popularity.

TABLE 6: FIELDS ENTERED BY 5,460 STUDENTS REGISTERED IN GOVERNMENT UNIVERSITIES IN 1938.

SCIENCE AND APPLIED SCIENCE

GENERAL ARTS

Field	Number	Percent	Field	Number	Percent
Science	625	11.5	Letters	639	11.7
Agriculture	607	11.1	Law	602	11.0
Engineering	1,394	25.5	Commerce ..	186	3.4
Medicine	315	5.8	Teaching	1,091	20.0
Total	2,941	53.9	Total	2,518	46.1

B. IMPROVEMENT OF TEACHER TRAINING

In the first half of 1938 the Ministry took steps to improve normal training. It established a new and independent teachers' college with seven departments (education, citizenship, Chinese language and literature, mathematics, English, and science) at Ishan, Kwangsi, (later removed to Anhwa, Hunan) to which it contributes Ch.\$150,000—200,000 annually. At the same time, five teachers' colleges were incorporated into five existing institutions: National Central, National Northwest, National Southwest, National Sun Yat-sen, and the National University of Chekiang. A period of five years has been prescribed for graduation, and graduates of other institutions are required to spend one year in one of these colleges before being recognized as qualified teachers for middle schools. The six teachers' colleges are as follows:

Name	Location	Organization
National Teachers' College	Anhwa, Hunan	New and Independent
Teachers' College of National Central University	Chungking, Szechuan	Formerly the College of Education

Name	Location	Organization
Teachers' College of Northwest University	Nancheng, Shensi	Formerly Peiping Normal University
Teachers' College of Southwest Associated University	Kunming, Yunnan	Combination of Several Departments of Education
Teachers' College of Sun Yat-sen University	Chengkiang, Yunnan	Combination of the Department of Education and Educational Research Institute
Teachers' College of Chekiang University	Ching Chung Hai, Chekiang	Formerly the Department of Education

While such a system is open to criticism on the grounds of efficiency and quality, the most obvious effect is to place all teachers more directly under the control of the Ministry by taking away from private institutions the privilege of training teachers and requiring at least a year's attendance at one of these teachers' colleges. It is significant that, in April 1939, the Presidents of the Christian Colleges in China voted to "present to the Ministry the desires and needs of the Christian Colleges to continue to carry on major and minor departments of education, and to establish individually or jointly the fifth year in certain centres."

C. STANDARDIZATION OF THE CURRICULUM

Immediately after the Kuomintang Congress of April 1938, the Ministry of Education appointed a commission of "specialists" to standardize the requirements for graduation from universities and technical schools. The influence of Continental educational theory is clearly visible in this step, the theory behind which seems to be that standardization of courses produces effective education. The principles laid down as a basis for the work of the "specialists" were: (1) that certain courses be required of all students, (2) that all required courses be standardized, and (3) that specialization be facilitated. Further specifications were as follows:

1. Chinese and one foreign language are to be basic tools, and all students are to be examined in them at the end of the freshman year.
2. All courses are to be on a year basis. One credit is to equal one hour of lecture and two of study.

3. Emphasis is to be laid on other forms of work besides lectures.
4. Students are to be required to do outside reading and to take notes.
5. Students are to be given direction in the writing of the graduation thesis.
6. Final examinations are to include all courses studied in the four years.

There are to be comprehensive examinations in at least five subjects. Some of these, like 2, 3, and 4 provide a none too flattering commentary on the present state of higher education, but numbers 1 and 6 are important, though simple, suggestions.

This program was originally intended to start in 1941 and to be revised after five years. As a matter of fact, the first half, dealing with the requirements of the first two years, was completed by the end of 1938 and went into effect in the spring of 1939; while the second half, dealing with the problem of major requirements, was announced in September 1939.

The effect of the plan is, in brief, as follows. While distinctions are made between students in different colleges—Arts, Science, Agriculture, and so on—all the courses of the first year and many of the courses of the second year are rigidly specified for all students. Minors have now been done away with, and the work of the major begins in the sophomore year. From then on, for the next three years, from one-half to three-quarters of a student's curriculum is made up of required courses. In the case of a subject like English, sixty out of eighty-four credits beyond the general requirements are rigidly specified; and of the remaining twentyfour, eighteen must be chosen from a limited number of electives within the major field.

Thus, specialization has not only been made possible but emphasized with a vengeance. The apparent objective has been to develop well-trained men and women; a result that is likely to be achieved so far as amount of work can produce it. It is to be feared, however, that standardization has become such a fetish that true educational progress will suffer. There has already been considerable criticism of the plan, perhaps represented by the decision of the Presidents of the Christian Colleges to "lay before the Ministry the desirability of specifying minimum rather than maximum requirements in the college curriculum."

D. DISCIPLINE

It is not easy to gain any very clear impression of what is going on in the field of student discipline. All official descriptions are very wordy and too often meaningless, while actual results are hard to evaluate. The official statements include such advice as: (1) to follow the doctrines of Dr. Sun Yat-sen, (2) to train the body, (3) to study deeply, (4) to develop the personality through a love of nature and music, (5) to be thrifty, simple, and practical, (6) to develop the habit of obeying rules, (7) to learn cooperation, (8) to organize for service and sacrifice, and (9) to love country and Party.

1. An Attitude toward Life which sees as the purpose of Life the improvement of the human race, and as the meaning of Life the perpetuation of Life.
2. An Attitude toward Race which considers the Chinese race as one of the superior races and which recognizes the greatness of China's contribution to civilization and her responsibility for playing a creative role in the future.
3. An Attitude toward the Nation which places the Nation above all belief, and which studies the conditions in the country and how to improve them. (This is not a case of State vs Church, but rather of State vs Party.)
4. An Attitude toward the World which understands present conditions, appreciates China's place and responsibility, and is determined to recover freedom as a prerequisite for the realization of the ideal of brotherhood.

These ideals are supposedly inculcated in part by the use of printed slogans posted in conspicuous places.

It is to be presumed, however, that the Ministry will not rest content with slogans. Indeed, it has already put into effect the "Tutor System" referred to in Principle 6. This has been the subject of much discussion and the cause of considerable misunderstanding since its adoption early in 1939. The name itself is misleading for it in no sense resembles the tutorial system of Oxford or Cambridge. As the Ministry has said it is designed to do away with the former practice whereby a teacher felt no responsibilities outside the classroom. Thus, it is rather a moral and spiritual supervision than an intellectual training. Under the

plan, each student is assigned a member of the faculty who will counsel and advise; but even though the tutor is supposed to instruct the student "according to his individual habits of thinking, behaving, and learning," he has nothing to do with the curriculum. As a matter of fact, the emphasis seems to be on "thinking and behaving" rather than on "learning." While, as in the old education, the teacher is supposed to share in the honors won by the student, he is also "to be held responsible for the thoughts and conduct of his students both inside and outside the campus."

Another development along similar lines was the organization by the Kuomintang in April, 1938, of the San Min Chu I (People's Three Principles) Youth Corps. According to the Generalissimo, the purpose of the Corps is to aid in war and in reconstruction. It includes youths of all ages, both in school and out, and seems to have had its origin in a desire to offer a counter-attraction to the appeal that the Communist groups in Shensi are making to Chinese youth. It resembles various youth organizations in European countries in being definitely a Party organ.

It is not yet possible to judge the effectiveness of either of these plans, either in character training or in developing party loyalty. While some teachers look on the Tutor System with suspicion and others consider it as offering great opportunities for good, the great majority still view it with apathy. The San Min Chu I Youth Corps has had much greater success in middle-school circles than in universities and colleges.

E. MILITARY TRAINING

The present emphasis on military training is nothing new. Since 1928, military training has been a regular requirement in all registered institutions. This training, however, was of a purely nominal sort, requiring two to three hours of lecture and drill each week for the first two years of the university course. One year before the war, however, in the summer of 1936, the authorities had already decided that such training was insufficient and were requiring attendance at a three month's training camp in the summer. This requirement was continued in the summers of 1937 and 1938. Plans were made, however, without any consideration for the academic calendars, with the result that the students involved lost a considerable amount of time each year from their school work. Educators were almost unanimously opposed, if not to the requirement itself, at least to the manner of carrying it out.

Apparently such summer training proved not only a hindrance to education but also less valuable from a military point of view than had been expected, for the summer training period was done away with in 1939, and military training is now more or less on the pre-war basis.

As such, it remains in part a supplement to physical training and in part, as Principles 7 and 8 suggest, an aid to the development of discipline and the inculcation of patriotism. It has so far proven of doubtful efficiency in either way and is generally not taken too seriously by college students.

F. CHINESE STUDENTS ABROAD

The war has naturally had an immediate and considerable effect upon the government's policy in regard to sending Chinese students abroad for graduate study. Two factors have dictated the present policy. For one thing, many students were caught at the beginning of the war without sufficient funds either for a livelihood or for transportation home. For another, China's need for foreign exchange for the sinews of war has made it seem unwise to waste it on sending or supporting students abroad.

The first step taken was a decree ordering all who had been abroad three or more years to return before September, 1938, if they in any way expected assistance. Special exception was made of those whose further study was considered a wartime necessity. To all students on government scholarships was sent Ch.\$700, either for living purposes or for passage home; for students on their own, the sum was Ch.\$600. The second step was a decree limiting those students going abroad in the future to those who were studying subjects related to national defence and reconstruction. Furthermore, these must be either college graduates with two or more years of experience, or research men and technical school graduates with three or more years experience. While there are apparently still ways of getting around these restrictions, the path is made difficult for the unauthorized student by his inability to secure the official exchange rate and so having to face the almost prohibitive cost of travel and living abroad when translated into Chinese currency.

The effect of the war and of these restrictions is indicated in the following table, which shows the number of students going abroad in the years 1929, when such study

was at its height, in 1936, the last year before the war, and during the first two years of the war.

TABLE 7: CHINESE STUDENTS GOING ABROAD FOR STUDY IN 1929, 1936, 1937, AND 1938 ACCORDING TO COUNTRY OF RESIDENCE.

Year	United States	Great Britain	Germany	France	Belgium	Japan	Others	Total
1929	272	49	86	165	56	1025	4	1657
1936	255	86	9	22	7	496	19	894
1937	202	37	51	14	0	49	13	366
1938	10	30	10	7	2	0	0	59

It is significant that the great flood of students to Japan had already, probably as a result of increasing Japanese aggression, suffered a heavy decline before the war. The excellent showing still made by Great Britain is due to the fact that the support of most of these students comes, not from Chinese sources, but from the British Boxer Indemnity Funds.

The effect of these restrictions will not be immediately felt, but must eventually be a lack of adequately trained specialists. Though China may increase her own facilities for graduate study, the process must of necessity be very slow, and in the meantime at least one generation of students will have gone without that needed training. Only extreme financial strain could have forced such a decision.

G. PLANTS AND EQUIPMENT

A major problem faced by Chinese education is that raised by the destruction of so much physical property and the removal of institutions to new sites. Very few universities, even in Shanghai, still carry on in their pre-war plants. Almost the only exceptions are Yenching and Fugen Universities in Peiping, Hongkong University, Chungking University, the University of Yunnan, and West China Union University (Chengtu). In some cases, such as Wuhan at Kiating, others have been able to rely on buildings already in existence, adapting them for educational needs. In other cases, such as Central University it has been necessary to erect new plants. The fact that these are, almost without exception, of a temporary nature, reflects probably both a need for economy and some degree of uncertainty as to the future. In view of repeated moves already made by some schools

and the fact that schools are still being bombed, though far inland, no site can well be considered permanent. While construction was being continued on the new campus of Szechuan University, just outside the city of Chengtu, (probably the only buildings of a really permanent nature now being erected) that institution was obliged to move to an objective less tempting to bombing squadrons.

The problem of equipment is perhaps even more serious. Some few institutions were fortunate enough to be able to carry with them all but the heaviest pieces of equipment. Others, especially those from North China, arrived in their new homes almost destitute. In Shanghai, mission institutions were able to meet the crisis by pooling resources and sharing alike. But such a policy has been impossible for single institutions or where all have been refugees. The Ministry has made strenuous efforts to provide at least a minimum of standard equipment. Its appropriations have been perhaps doubled by funds and actual equipment from other sources. In spite of gifts from abroad, however, there is still a very great lack of books and laboratory equipment of all sorts, a dearth which is bound to have an unfortunate effect on the standard of education if continued too long.

At the same time, it must be recognized that most universities and colleges are carrying on with commendable efficiency and remarkable morale. There has possibly been something of a return to the Mark Hopkins type of education as a result of inadequate and unsuitable accommodations; and equipment is being used with far greater efficiency than ever before.

H. FINANCIAL AIDS TO STUDENTS

One policy of the Ministry which, in its present manifestations, is open to criticism is the giving of subsidies to university students. Starting in the natural desire to help destitute and needy students from the "occupied" territories, the policy of financial assistance has developed into complete support of a large number of students in government institutions. Not only is tuition free; room is provided without cost, and the student is also given from six to twelve dollars a month for food. While there can be no objection to assisting destitute students, such help is very open to abuse. At present, some money is undoubtedly going to those who do not really need it, while the amount allowed for food is sometimes enough to provide the recipient with pocket money as well. There is also a very great danger lest such in-

discriminate subsidies become a permanent feature of government education.

More serious, however, is the effect which this policy is having on private institutions. Competition with government institutions, where tuition has always been purely nominal, has been difficult at best. Now, although private schools are able to offer a few needy students loans (in which they are helped by the government as well as by student relief funds contributed abroad) they cannot possibly compete with these other inducements. Consequently, the enrolment of government universities and colleges is being swelled at the expense of private. If continued, this sort of competition for students is likely to produce a completely governmentalized educational system, whether or not that is the actual aim of the policy.

I. HIGHER EDUCATION AND RECONSTRUCTION

All policies in China to-day are guided eventually by two objectives: (1) the successful termination of the war, and (2) reconstruction after the war. As General Chiang Kai-shek said in a speech:

"I have often said that a modern nation derives its vitality from three things: namely, education, economic strength, and military force. Education, the base of all enterprises, provides the central link between the other two factors. It follows that the aim of our education is economic development and enhancement of our military strength."

In August 1938 was appointed a Commission on Education and Reconstruction, composed of representatives from various branches of the government and chaired by someone from the Ministry of Education. Its objectives have been:

1. To survey the need for technical personnel.
2. To plan for needed technical schools and to establish subjects and departments.
3. To suggest methods of training.
4. To coordinate national defence and reconstruction.
5. To distribute graduates where they are most needed.
6. To survey and to register technical personnel of all sorts.

The activities of this commission are necessarily still in a preliminary stage, but it is already obvious that the emphasis in reconstruction is to be on applied science.

Emphasis is being laid on subjects related to the dual problems of national defence and reconstruction. Several

schools have established special courses such as Explosives, Air Defence, Automotive Engineering, First Aid, Colonization, Reclamation, Military Tactics, War Finance, Wartime Sociology, Military Psychology, and Aviation Engineering. And in perhaps a dozen selected institutions a number of short courses have been inaugurated by order of the Ministry. These are mostly two-year courses in such subjects as Mechanics, Wireless, Automotive Engineering, Agricultural Economics, Sanitation, and the manufacture of such products as paper, leather, silk, and weaving. The purpose appears to be two-fold: (1) to take care of students who are not of university caliber, and (2) to provide as soon as possible a moderately trained personnel for the technical problems of reconstruction.

Of more permanent significance is the establishment, already under way or only projected, of numerous technical schools of both secondary and university grade. These include such schools as Northwestern Industrial College, which is already functioning, and the Chungking Commercial Navigation School, which is still incomplete. There are separate three-year plans for industrial and agricultural schools, both beginning in 1939. The first plan calls for 47 new schools of all grades; the latter for 36. Possibly the most interesting institution of all is the new University for Rural Reconstruction which is being established, under the sponsorship of the Generalissimo and with James Yen (of Tingsien and 1000-character Movement fame) at its head. Certain departments have already started work in Chungking.

J. GOVERNMENT SUPPORT

A striking feature of the educational situation in China during these two years of war has been the extent to which the government has continued not only to support national universities, colleges, and technical schools, but also to subsidize provincial and private institutions.

In the last year before the war, the national budget provided Ch.\$21,918,457 or 2.21 per cent of its total for institutions of higher learning. Of this sum, Ch.\$19,762,397 went to national schools, and Ch.\$2,156,160 went to provincial and private. For the first year of the war, the sum was Ch.\$24,546,609 or 2.45 per cent of the total; Ch.\$22,216,449 going to national schools and Ch.\$2,330,160 to provincial and private. No exact figures are available for the second year of the war, but a 70 per cent cut in educational items was ordered for the first six months,

while, for the last six months, the government aid amounted to nearly Ch.\$8,500,000, not only for current expenses but also for transfer of school plants.

The total cost of higher education during the years immediately preceding the war had been steadily rising from Ch.\$33,564,921 in 1933-34 to Ch.\$39,275,386 in 1936-37. In the first year of the war, however, there was a decided drop, the total for the year 1937-38 being Ch.\$27,809,291. No figures are yet available for 1938-39. In 1935-36, 62 per cent of the necessary funds came from national and provincial sources, 19 per cent came from endowments and gifts, 11 per cent from students fees, and 8 per cent from all other sources. Naturally, private institutions relied more completely than did national on endowment and student fees, the proportions in 1935-36 being 45.3 per cent from endowments and gifts and 24.4 per cent from student fees. No figures are available for later years, but the proportion from student fees in government institutions has shrunk to nil, and it is probable that most government schools are depending almost entirely on government support. In other institutions also there has been a lowering of tuitional and other charges. The 30 per cent decrease in government appropriations, has not, however, had as serious an effect as would appear likely. For one thing, the total number of institutions has been reduced from 108 to 94. Consequently the average decrease per institution amounts only to some 13 per cent. For another thing, there has been considerable reduction of overhead, especially through the amalgamation of several expensive institutions into one, and also in part through the increased thrift efficiency. It is probable, therefore, that the Central Government is at present providing for higher education as adequately as it did before the war.

CHRISTIAN COLLEGES IN CHINA

THIRTEEN of the institutions dealt with in this report form so clear a unit by themselves that it is necessary to consider them briefly. These are the "Christian Colleges in China," a term which includes all American and British mission-supported institutions except the Catholic University in Peiping. They are listed in Table 8.

Of these thirteen, eleven (that is, all except West China and Yenching) have been forced by the war to leave their campuses. These moves range in distance from the transfer

of Shanghai University and St. John's University into the safer International Settlement to the longer journeys of Nanking University up the river to Szechuan and of Huachung from Wuchang to Western Yunnan. In all cases these have necessitated the renting or building of new plants, even where (as in the case of Lingnan at Hongkong, and of Ginling, Cheeloo, and Nanking at West China) it has been possible to share already existing plants. The cost of removal, of building, and of increased overhead has been a heavy one met in part by emergency funds raised abroad and in part by local contributions. In the year 1938-39 a total of US\$300,000 was raised in the United States, forming a not-insignificant contribution to China's educational budget.

As in the case of other institutions, these moves have not been without some loss of student enrolment, as can be seen in the following table:

TABLE 8: ENROLMENT OF CHRISTIAN COLLEGES IN CHINA FOR THE LAST YEAR BEFORE THE WAR (1936-37) AND FOR THE FIRST TWO YEARS OF THE WAR (1937-38, 1938-39).

Institution	Enrolment		
	1936-37	1937-38	1938-39
Cheeloo University	567	367	150
Fukien Christian University ...	169	174	163
Ginling College	259	85	115
Hangchow Christian College ...	537	180	474
Huachung College	207	350	162
Huanan College	96	84	72
Lingnan University	560	400	458
Nanking, University of	908	250	506
St. John's University	578	632	872
Shanghai, University of	629	396	625
Soochow University	667	429	851
West China Union University ..	440	563	573
Yenching University	807	588	931
Total	6,424	4,498	5,952

Though some schools have suffered heavily, others have gained, with the result that the net loss as compared with the last year before the war is just over 7.3 per cent.

The year 1938 was made memorable for the Christian colleges, as indeed for all Christian education, by the announcement made by the Generalissimo that, in view of the very great service missionaries had rendered the Chinese people during the first year of the war, restrictions against the teaching of religion would be removed.

It may well be asked why it was necessary for Christian institutions, foreign-supported, to join the migration at all. The question is particularly pointed when it is remembered that Yenching has so far been able to continue its work in Peiping. The answer seems to be that there is a vast difference between areas in which Japanese soldiers have been turned loose, as in Nanking, to loot and to rape, and Peiping which had really been conquered by Japan before the first gun was fired and in which there was no real fighting. The almost universal opinion is given in a statement unanimously adopted by the Presidents of the Christian Colleges at their meeting of April 1939, which reads in part as follows:

"We believe that Christian character, academic freedom, and national loyalty should be upheld, particularly during this time of national crisis in China. . . .

All our colleges have been animated by this determination and eleven out of thirteen have found it necessary to remove their academic work from their campuses and become refugee colleges because they could no longer give effect to these ideals owing to unfavorable circumstances."

Most observers agree that, in most of the "occupied" areas higher education is still quite out of the question.

Mention should be made of certain theological seminaries and schools of religion which, while not recognized by the government, are providing a special type of training on the college level. Canton Theological Seminary has moved from Canton to Kunming, Yunnan; Cheeloo School of Theology has remained in Tsinan, Shantung; and Nanking Theological Seminary now has its headquarters in Shanghai and a branch in Chengtu where it is collaborating with West China Union Theological College. Yenching School of Religion, a graduate school, continues in Peiping. The Women's Christian Medical College of Shanghai is also a mission institution.

CONCLUSIONS

WHAT THEN is the balance sheet for Chinese education after two years of war? The exact answer will of course depend to a certain extent on one's point of view. There has been much to admire, but there has also been not a little to criticize in the developments of the past two years. Let us examine the ledger as objectively as possible, point out

assets and liabilities, but leave it to the reader to strike his own balance. Let us begin with the liabilities.

One of the major catastrophes of this war is the depriving of thousands of students of their opportunities for higher education. Only the existence of the foreign concessions in Shanghai and the fact that, as yet, the Japanese have not cared to interfere seriously with foreign-owned institutions in Peiping makes it possible for students remaining in "occupied" areas to continue their education without migrating to Free China.

Furthermore, the limitation of the number of students going abroad for graduate study must of necessity result in a decrease of the number of highly trained specialists prepared to serve the New China which it is hoped will emerge from the War. And for these two educational deserts, the new cases in Free China can only partially compensate.

Then too, the burden placed on universities by inadequate quarters, lack of needed books and apparatus, difficulty of obtaining supplies, and by the constant menace of indiscriminate bombing cannot fail to exact a heavy toll in efficiency. The increased morale which is evident in many institutions cannot entirely compensate for such handicaps. While Chinese higher education may be richer spiritually at the end of the war, it certainly will be very much poorer physically.

For another thing the edicts and activities of the Ministry of Education indicate tendencies in China's emerging educational policy which give rise to some concern: centralization, standardization, and regimentation. In one sense, these are merely nothing more than natural and temporary results of a wartime program; in another, they merely reflect a leaning toward European rather than British or American educational philosophy. At the same time, they bear within them the seeds of future trouble.

The tendency toward centralization is best seen in the edict limiting the training of teachers to six government-controlled institutions, and in the subsidizing of students in government institutions. It is difficult not to see in these moves a clear threat to private universities and colleges as a whole and particularly to mission institutions, much of whose contributions in the past has been in the training of teachers.

That the Ministry is embarked on a policy of standardization is obvious and admitted. The reasons for this policy are less obvious. Is it the expression of a carefully thought-

out and sincere educational philosophy, is it simply the easiest solution for current weaknesses, or is it possibly a part of a larger program of regimentation? While it may result in the improvement of the education given by the weaker institutions and departments, it is almost certain to result in the stifling of initiative and experiment in the stronger. Again, this effect is likely to be felt most strongly in private and mission institutions.

Closely related to both of these is the growing tendency to use institutions of higher learning for the political and social regimentation of youth. While this has not yet gone very far, the signs appear unmistakable. Government control of teacher-training obviously lends itself to such purposes; while both the San Min Chu I Youth Corps and the "Tutor System" offer unique opportunities for the control of student opinion. While actual suppression of freedom of thought and expression among students has not, on the surface, gone very far, the latent possibilities are too pregnant to ignore. It will be most unfortunate if this tendency is allowed to develop, justifying the fears of those who say that China is becoming totalitarian and fascist.

There is, however, another side to the picture.

As one surveys the events of the past two years, one is impressed by the fact that, in what has been transpiring in Chinese education, the world has been witnessing a development quite without parallel. Heretofore, the conquest of a city has usually meant the suppression or control of its cultural institutions. Even when educational institutions have been able to escape, such moves have been on a relatively small scale. Here, for the first time in history, has occurred a mass migration of educational institutions on an unprecedented scale. Not one, but scores of institutions; not tens but hundreds of professors; not hundreds, but tens of thousands of students have travelled hundreds and even thousands of miles to new homes. The wonder is not that this migration has been managed with a surprising degree of efficiency, but that it has been carried out at all. It is a record of which the Chinese people can well be proud.

Another significant fact is the manner in which the Chinese government has supported the educational program of the country during these two years. In spite of the financial strain caused by the terrific cost of the war and the heavy losses not only in property but also in sources of revenue, the government has continued to support education to almost as great an extent as it did before the war. That

it should be able and willing to find and to devote the necessary funds is an indication both of the soundness of the government and of the strength of its determination to build a new China after victory.

And though this education is bound to be physically poorer as a result of the war, it is likely to emerge richer spiritually. Necessity has been the mother of both invention and efficiency, and faculty and students once accustomed to the finest buildings and the most up-to-date equipment are now carrying on with new enthusiasm in poor quarters and with inadequate equipment. If the new spirit of cooperation, sacrifice, and service which has been born in many institutions is still alive after the war, China itself will be that much the richer.

Finally—and this is probably the greatest asset of all—the transfer of educational institutions from one part of the country to another constitutes a movement of great significance for the future. Vast areas of Free China hitherto undeveloped educationally are now feeling the influence of universities, colleges, and technical schools, and of the students and professors who accompanied them in their migration. As a result, the intellectual and physical development of undeveloped territories with a population of 200,000,000 has probably been advanced a generation. It is impossible as yet to estimate the ultimate benefits to China of this great migration. But in that opening up of the hinterland of China, which may prove to be the most important effect of the war, education is playing a very large part.

APPENDIX I

A LIST OF CHINESE UNIVERSITIES, COLLEGES, AND TECHNICAL SCHOOLS
GIVING THEIR LOCATIONS BEFORE THE WAR (JUNE 1937) AND
AT THE END OF THE SECOND YEAR OF WAR (JUNE 1939)

Name of Institution	Location June 1937	Location June 1939
1. Amoy, University of	Amoy, Fukien	Changting, Fukien
2. Anhwei, University of	Anking, Anhwei	(Temporarily closed)
3. Canton, University of	Canton, Kwangtung	Hoiping, Kwangtung Hongkong.
4. Central University	Nanking, Kiangsu	Chungking, Szechuan
5. Chaoyang College	Peiping, Hopei	Chengtu, Szechuan
6. Cheeloo University	Tsinan, Shangtung	Chengtu, Szechuan
7. Chekiang School of Medicine & Pharmacy	Hangchow, Chekiang	Linhai (Taichow), Chekiang
8. Chekiang, University of	Hangchow, Chekiang	Ishan, Kiangsi
9. Chengfeng College of Arts.	Shanghai, Kiangsu	Shanghai, Inter- national Settlement
10. Chengtan University	Shanghai, Inter- national Settlement	Shanghai, Inter- national Settlement
11. Chiaotso College of Engineering	Tsiaotso, Honan	(See Northwestern College of Engineering)
12. Chiaotung University	Shanghai, Kiangsu	Shanghai, Inter- national Settlement <i>Pingqueh Kweichow</i>
13. Chihchih College	Shanghai, Kiangsu	Shanghai, Inter- national Settlement
14. Chinan University	Shanghai, Kiangsu	Shanghai, Inter- national Settlement
15. Chunghih School of Agriculture and Commerce	Changsha, Hunan	Changsha, Hunan
16. Chungcheng Medical College	Nanchang, Kiangsi	Kunming, Yunnan
17. Chungfa College of Mechanical Engineer- ing	Shanghai, Inter- national Settlement	Shanghai, Inter- national Settlement
18. Chunghwa University	Wuchang, Hupeh	Chungking, Szechuan
19. Chungking University	Chungking, Szechuan	Chungking, Szechuan
20. Chwanchih Medical School	Taiyuan, Shansi	Sian, Shensi
21. Far East School of Physical Education	Shanghai, Kiangsu	Shanghai, Inter- national Settlement

Name of Institution	Location June 1937	Location June 1939
22. Fujen University	Peiping, Hopei	Peiping, Hopei
23. Fukien College	Foochow, Fukien	Mintsing, Fukien
24. Fukien Medical School	Foochow, Fukien	Nanping, Fukien
25. Fukien Christian University	Foochow, Fukien	Shaowu, Fukien
26. Futan University	Shanghai, Kiangsu	Chungking, Szechuan Shanghai, Inter- national Settlement
27. Ginling College	Nanking, Kiangsu	Chengtu, Szechuan
28. Hangchow Christian College	Hangchow, Chekiang	Shanghai Inter- national Settlement
29. Hangchow School of Fine Arts	Hangchow, Chekiang	(See National School of Fine Arts)
30. Honan School of Hydraulic Engineering	Kaifeng, Honan	(Joined University of Honan)
31. Honan, University of	Kaifeng, Honan	Chenping, Honan
32. Hongkong University	Hongkong	Hongkong
33. Hopei College of Agriculture	Paoting, Hopei	(Temporarily closed)
34. Hopei College of Engineering	Tientsin, Hopei	(Temporarily closed)
35. Hopei Medical College	Paoting, Hopei	(Temporarily closed)
36. Hopei Girls' Normal College	Tientsin, Hopei	(Temporarily closed)
37. Hsiangya Medical College (Yale-in- China)	Changsha, Hunan	Kweiyang, Kweichow
38. Huachung (Central China) College	Wuchang, Hupeh	Tali, Yunan (Hsichow, via Tali)
39. Huanan Girls' College	Foochow, Fukien	Nanping, Fukien
40. Hunan, University of	Changsha, Hunan	Chenki, Hunan
41. Hupeh School of Agriculture	Wuchang, Hupeh	Enshih, Hupeh
42. Jang Chin Business College	(from Jang Chin University)	Sunyi, Kwangtung
43. Jang Chin University	Canton, Kwangtung	(Temporarily closed) (See 42 and 56)
44. Kansu, Provincial College of	Lanchow, Kansu	Lanchow, Kansu
45. Kiangsi School of Engineering	Nanchang, Kiangsi	Kanhsien, Kiangsi

<i>Name of Institution</i>	<i>Location June 1937</i>	<i>Location June 1939</i>
46. Kiangsi Medical School	Nanchang, Kiangsi	(Temporarily closed)
47. Kiangsi Veterinary School	(Estab. 1937)	Kian, Kiangsi
48. Kiangsu College of Education	Wusih, Kiangsu	(Temporarily closed)
49. Kiangsu Medical College	Chinkiang, Kiangsu	Chungking, Szechuan
50. Kiangsu School of Banking	Chinkiang, Kiangsu	Kiencheng, Hunan
51. Kiangsu School of Sericulture	Soochow, Kiangsu	(Temporarily closed)
52. Kuomin University	Canton, Kwangtung	Hoiping, Kwangtung Hongkong
53. Kwanghwa Medical College	Canton, Kwangtung	Kowloon, Hongkong
54. Kwanghwa University	Shanghai, Kiangsu	Chengt, Szechuan Shanghai Inter- national Settlement
55. Kwangsi, University of	Wuchow, Kwangsi	Kweilin, Kwangsi
56. Kwangtung College of Education	(from Jang Chin University)	Junghsien, Kwangsi
57. Kwangtung School of Physical Education	Canton, Kwangtung	Wanfow, Kwangtung
58. Kweiyang Medical College	(Estab. 1938)	Kweiyang, Kweichow
59. Lingnan University	Canton, Kwangtung	Hongkong
60. Minkuo College	Peiping, Hopei	Supu, Hunan
61. Nankai University	Tientsin, Hopei	(See Southwestern University)
62. Nanking, University of	Nanking, Kiangsu	Chengt, Szechuan
63. Nantung College	Nantung, Kiangsu	Shanghai Inter- national Settlement
64. National School of Fine Arts	(Estab. 1938 See 29 and 75)	Kunming, Yunnan
65. National School of Music	Shanghai, Kiangsu	Shanghai Inter- national Settlement
66. National School of Physical Education	Nanking, Kiangsu	Kunming, Yunnan
67. National Teachers' College	(Estab. 1938)	Anhwa, Hunan

<i>Name of Institution</i>	<i>Location June 1937</i>	<i>Location June 1939</i>
68. Northeastern University	Peiping, Hopei	Santai, Szechuan
69. Northwestern College of Engineering	(Estab. 1938. Combination of College of Engineering of Northwestern Union University and Chiaotso College of Engineering)	Chengku, Shensi
70. Northwestern School of Agriculture	(Estab. 1938)	Wukung, Shensi
71. Northwest University	(Estab. 1937)	Nancheng, Shensi
Peiping National University	Peiping, Hopei	
Peiping Normal University	Peiping, Hopei	
Peiyang Engineering College	Tientsin, Hopei	
72. Peiyang Engineering College	Tientsin, Hopei	(See Northwestern Union University)
73. Peiping Municipal School of Physical Education	Peiping, Hopei	(Temporarily closed)
74. Peiping Normal University	Peiping, Hopei	(See Northwestern Union University)
75. Peiping School of Fine Arts	Peiping, Hopei	(See National School of Fine Arts)
76. Peiping School of Railway Administration	Peiping (Tongshan), Hopei	(Temporarily closed) <i>New with Chiating #12</i>
77. Peking Union Medical College	Peiping, Hopei	Peiping, Hopei
78. Peiping National University	Peiping, Hopei	(See Southwest Union University)
79. Peking National University	Peiping, Hopei	(See Southwestern Associated University)
80. St. John's University	Shanghai Kiangsu	Shanghai Inter- national Settlement
81. Shanghai College of Commerce	Shanghai Kiangsu	Shanghai Inter- national Settlement
82. Shanghai College of Law	Shanghai Kiangsu	Shanghai Inter- national Settlement
83. Shanghai College of Law and Political Science	Shanghai, Inter- national Settlement	Shanghai Inter- national Settlement

<i>Name of Institution</i>	<i>Location June 1937</i>	<i>Location June 1939</i>
84. Shanghai School of Fine Arts	Shanghai, Kiangsu	Shanghai International Settlement
85. Shanghai School of Physical Education	Shanghai, Kiangsu	(Temporarily closed)
86. Shanghai Medical College	Shanghai, Kiangsu	Kunming, Yunnan
87. Shanghai, University of	Shanghai, Kiangsu	Shanghai International Settlement
88. Shansi School of Agriculture	Taiyuan, Shansi	(Temporarily closed)
89. Shansi School of Commerce	Taiyuan, Shansi	(Temporarily closed)
90. Shansi School of Engineering	Taiyuan, Shansi	(Temporarily closed)
91. Shansi, University of	Taiyuan, Shansi	(Temporarily closed)
92. Shantung Medical School	Tsinan, Shangtung	Wanh sien, Szechuan
93. Shantung, University of	Tsingtao, Shangtung	(Joined Central University)
94. Shensi Medical School	Sian, Shensi	Nancheng, Shensi
95. Sinhwa School of Practical Arts	Shanghai, Kiangsu	Shanghai International Settlement
96. Sinkiang College of Law	Tihwa, Sinkiang	Tihwa, Sinkiang
97. Sino-French University	Peiping, Hopei Shanghai, International Settlement	Peiping, Hopei Shanghai International Settlement
98. Soochow School of Fine Arts	Soochow, Kiangsu	(Temporarily closed)
99. Soochow University (Tungwu)	Soochow, Kiangsu Shanghai, International Settlement	Shanghai International Settlement
100. Southeastern (Tungnan) Medical College	Shanghai, Kiangsu	Shanghai International Settlement
101. Southwest Associated University	(Estab. 1937)	Kunming, Yunnan
Nankai University	Tientsin, Hopei	
Peking National University	Peiping, Hopei	
Tsinghua University	Peiping, Hopei	
102. Sun Yat-sen University	Canton, Kwangtung	Chengkang, Yunnan
103. Szechuan College of Education	Chungking, Szechuan	Chungking Szechuan

<i>Name of Institution</i>	<i>Location June 1937</i>	<i>Location June 1939</i>
104. Szechuan, University of	Chengtú, Szechuan	Omei, Szechuan
105. Tahsia (Great China) University	Shanghai, Kiangsu	Kweiyang, Kweichow Shanghai International Settlement
106. Tatung University	Shanghai, Kiangsu	Shanghai International Settlement
107. Tientsin College of Engineering and Commerce	Tientsin, Hopei	Tientsin, Hopei
108. Tongshan Engineering College (of Chiaotung University)	Tongshan, Hopei	Pingyueh, Kweichow
109. Tsinghua University	Peiping, Hopei	(See Southwest Associated University)
110. Tungchi University	Shanghai, Kiangsu	Kunming, Yunnan
111. Tungteh Medical College	Shanghai International Settlement	Shanghai International Settlement
112. Wenhua Library School (Boone)	Wuchang, Hupeh	Chungking, Szechuan
113. West China Union University	Chengtú, Szechuan	Chengtú, Szechuan
114. Women's Medical College	Shanghai, Kiangsu	Shanghai International Settlement (Temporarily closed)
115. Woosung School of Navigation	Shanghai, Kiangsu	
116. Wuchang School of Fine Arts	Wuchang, Hupeh	Chungking, Szechuan
117. Wuhan University	Wuchang, Hupeh	Kiating, Szechuan
118. Wusih School of Chinese Classics	Wusih, Kiangsu	Paklow, Kwangsi
119. Yenching University	Peiping, Hopei	Peiping, Hopei
120. Yunnan College of Law and Political Science	Kunming, Yunnan	Kunming, Yunnan
121. Yunnan, University of	Kunming, Yunnan	Kunming, Yunnan
A. Canton Union Theological Seminary	Canton, Kwangtung	Kunming, Yunnan
B. Cheeloo School of Theology	Tsinan, Shangtung	Tsinan, Shangtung
C. Nanking Theological Seminary	Nanking, Kiangsu	Shanghai International Settlement Chengtú, Szechuan Chengtú, Szechuan
D. West China Union Theological College	Chengtú, Szechuan	
E. Yenching School of Religion	Peiping, Hopei	Peiping, Hopei

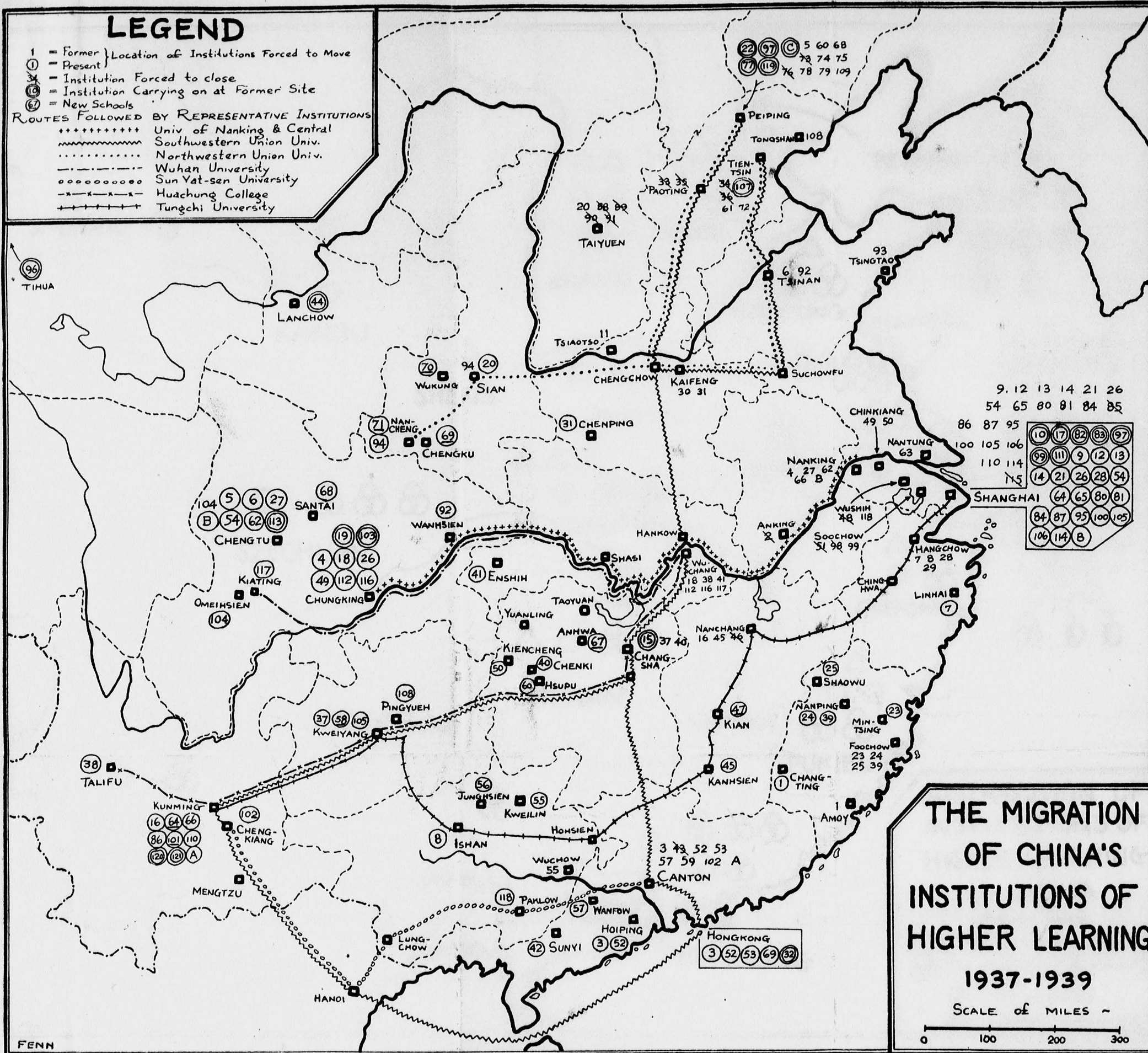
APPENDIX II

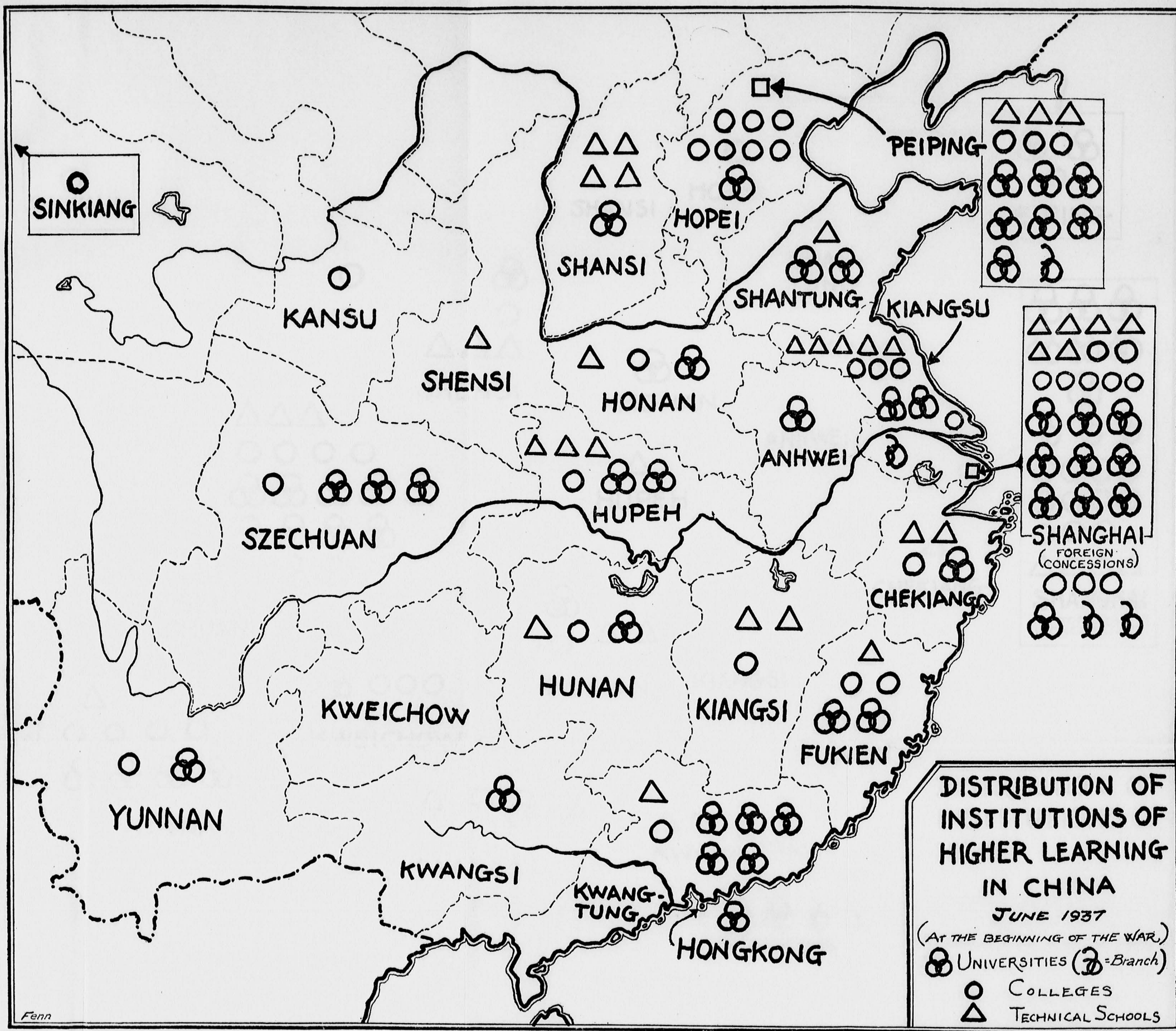
SHOWING TEMPORARY LOCATIONS OF CHINESE UNIVERSITIES, COLLEGES, AND TECHNICAL SCHOOLS

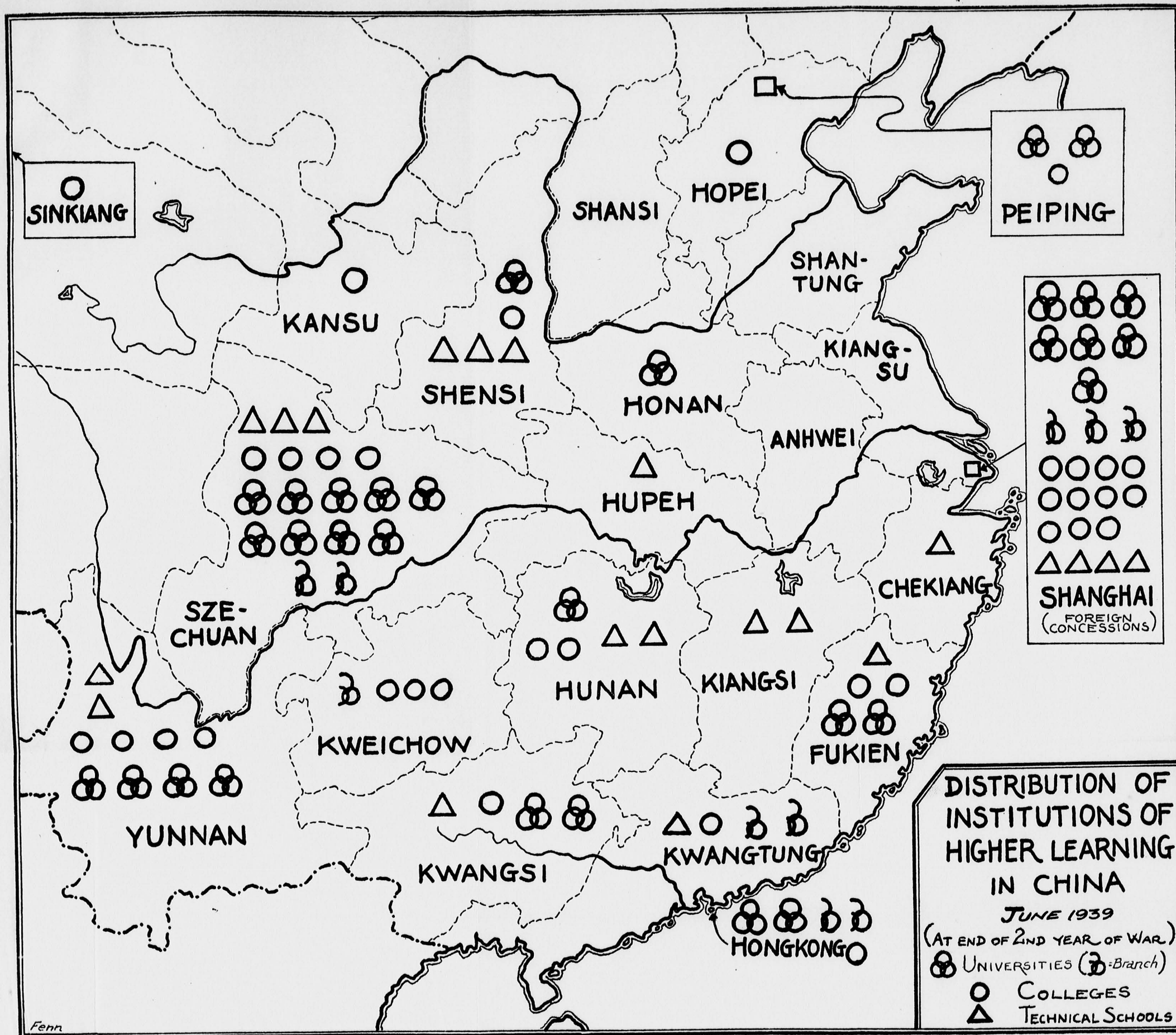
<i>Name of Institution</i>	<i>Temporary Location</i>
2. Anhwei, University of	Shasi, Hupeh
5. Chaoyang College	Shasi, Hupeh Kienyang, Szechuan
8. Chekiang, University of	Kienteh, Chekiang Taiho, (near Kian), Kiangsi
16. Chungcheng Medical College	Yungsin (Kian), Kiangsi
18. Chungwa University	Ichang, Hupeh
26. Futan University	Shanghai International Settlement
38. Huachung (Central China) College	Tali, Yunnan
46. Kiangsi Medical School	Taiho (near Kian), Kiangsi
49. Kiangsu Medical College	Yuanling, Hunan Kweiyang, Kweichow
50. Kiangsu School of Banking	Taoyuan, Hunan
54. Kwanghwa University	Shanghai, International Settlement
60. Minkuo College	Changsha, Hunan Ichang, Hupeh
66. National School of Physical Education	Changsha, Hunan Kweilin, Kwangsi Lungchow, Kwangsi
68. Northeastern University	Sian, Shensi
71. Northwest University Peiping National University Peiping Normal University Peiyang Engineering College	Temporary University at Sian, Shensi
93. Shantung, University of	Wanhsien, Szechuan
101. Southwest Associated University Nankai University Peking National University Tsinghua University	Temporary University at Changsha, Hunan
102. Sun Yat-sen University	Loting (near Wanfow), Kwangtung Lungchow, Kweichow
105. Tahsia (Great China) University	Shanghai International Settlement
110. Tungchi University	Chinghwa, Chekiang Kanh sien, Kiangsi Hohsien, Kwangsi
118. Wusih School of Chinese Classics	Kweilin, Kwangsi

LEGEND

- 1 = Former } Location of Institutions Forced to Move
 ① = Present }
 34 = Institution Forced to close
 ③ = Institution Carrying on at Former Site
 ⑥ = New Schools
- ROUTES FOLLOWED BY REPRESENTATIVE INSTITUTIONS
- | | |
|-----------|----------------------------|
| +++++ | Univ. of Nanking & Central |
| ~~~~~ | Southwestern Union Univ. |
| | Northwestern Union Univ. |
| ----- | Wuhan University |
| oooooooo | Sun Yat-sen University |
| -x-x-x- | Huachung College |
| + + + + + | Tungchi University |







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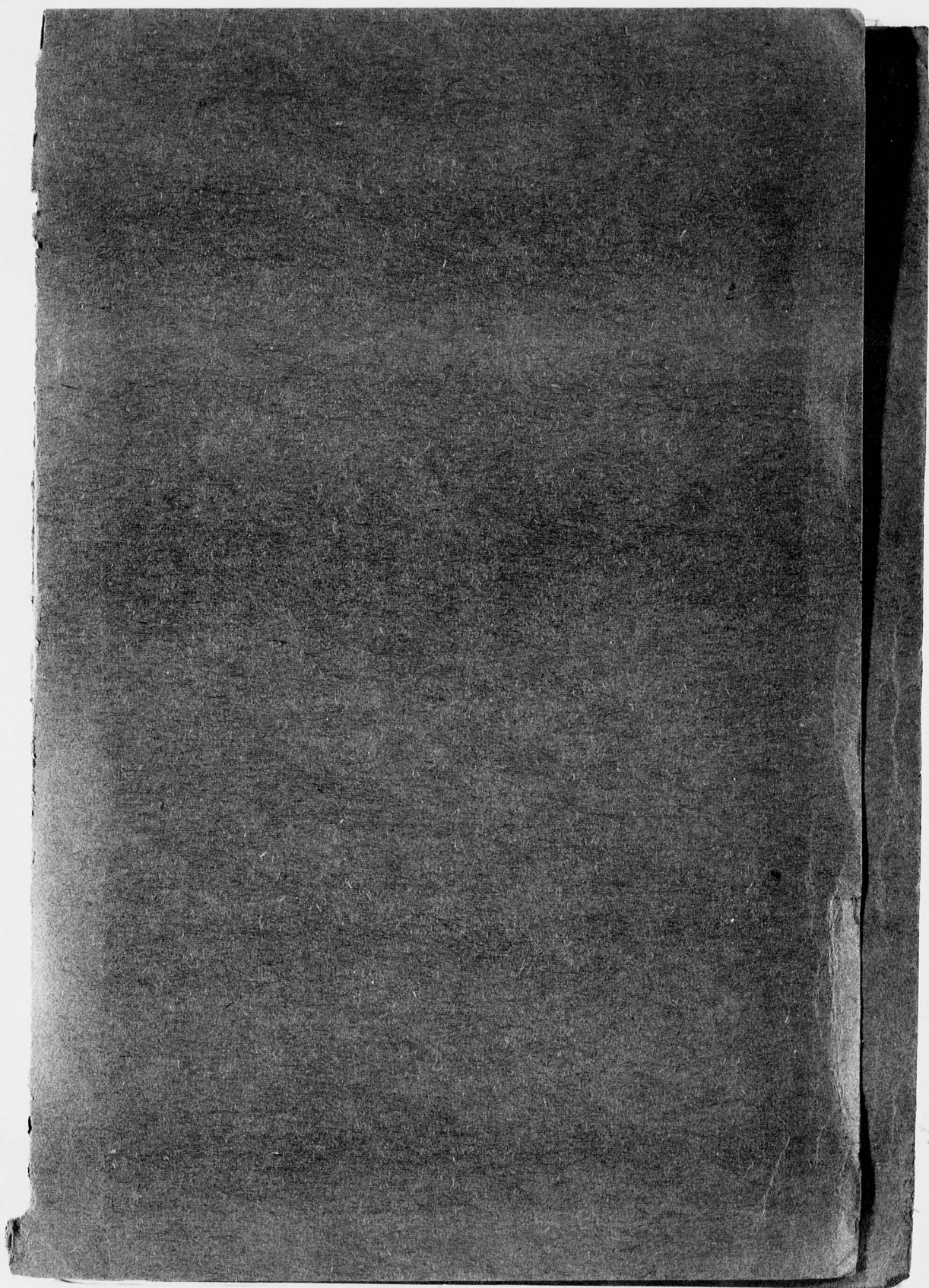
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Women
Charlotte Mew (1870-1928)

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Education

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New requirements for repist.
of scholars in Shantung (Gedick)
Dr. Williams, M.O., & Mrs. J.B. Hippis-
worthy pamphlet on effect on
education in China



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Nanking

Missions In War



THE UNITED CHRISTIAN MISSIONARY SOCIETY
222 Downey Avenue
Indianapolis, Indiana
Printed in U. S. A.

By
M. SEARLE BATES
Missionary to China

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Missions In War

M. Searle Bates

I. THROUGHOUT HISTORY THE CHURCH HAS GONE FORWARD IN SPITE OF WAR.

1. The New Testament World Was a Soldiers' World.

The Church of Jesus Christ was born in the presence of the imperial legionnaires. Soldiers bulked so large in that society that part of the meager teaching of John the Baptist had been directed to them alone. Jesus healed the centurion's servant, and employed the officer as a natural and proper example of adequate faith. In the Gospel records, the climax of the life of Christ is approached with descriptions of armies in tumult against Jerusalem, "upon the earth distress of nations" (Luke 21:25). Soldiers were the agents of the Crucifixion, the immediate witnesses of the central experience of Christianity. When it had to be written of the disciples, "They all left him and fled," when Peter cursed and swore, "I know not the man", it was a centurion who declared, "Truly this man was the Son of God."

2. The Early and the Medieval Church Evangelized a Warring World.

The Apostles toiled and died in an advancing military Empire. From those days unto this, the Church has scarce known a year without the violence of armies, scarce a decade free from extended war. The centuries of struggle on the frontiers of Rome, the millennial conflicts of Teuton and Slav, the invasions of Hun and Mongal and Turk, the struggles of the Moslem advance and repulse in which the Crusades were mere episodes, the interminable feudal strife of the Middle Ages, the perennial warfare of the Holy Roman Empire and its Germanic heirs: through them all

in bloodshed and in misery the Church went on with its preaching and teaching and worship, converting the Roman and the Greek, the Frank and the Teuton, the Briton and the Northman, the Slavs in their profusion, yea the offspring of the Vandal and the Hun.

3. "The Light Shineth in the Darkness."

In the darkest centuries the Church's light was most precious: its faith in the God of Love and Truth; its never-extinguished reminder that sinful men require reconciliation with God and with each other; its eternal begetting of simple piety and good will; its flowering now and again in saints and in mighty leaders; its protection and reproduction of the Scriptures; its fostering of common language and common thought about the issues of life; its conservation of learning and beginnings in education; its lonely service of providing illiterate warrior-lords with intelligent administrators and judges; its development of law; its maintenance of industry and charity in monastic centers; its building for the centuries in strength and beauty; its interchange of priests and monks from land to land; its vision and practice of unity in Christendom. What are the present-day counterparts of these services of the Church? If the Holy Spirit thus labored in the rude men of the Dark and Feudal Ages, will He not work amid our violence?

4. The Protestant Movements Have Made Their Way Through Great Conflicts.

Luther and Calvin were called in an era of warfare; and the major settlement of Reformation was made at the close of the Thirty Years' War which destroyed a large part of the population of Germany. Knox and Wesley toiled through the "world wars" of their times. Our own Alexander Campbell and his colleagues in the westward spread of the American Churches were formed in the catastrophic era of Napoleon, which shook both India and North America as it ruined Europe. Moscow and Washington were burned; Paris, Berlin and Rome, all three shuddered beneath the tread of alien armies. Yet in those very years

Carey and Morrison went forth, as the churches of Britain and soon of America rallied to the age-long responsibility for sharing the Good News and the Good Life of Christ

5. Even the Nineteenth, the Great Century, Surrounded the Church with Violence.

The Nineteenth Century is now dimly remembered as an epoch of peace and security. Yet the Church had to maintain its life and develop its mission through our great Civil War, through violent recurring revolutions and wasting conflicts in all of Latin America, through several desperate struggles in the Balkans, through the revolutions and whole series of nationalist wars in France and Germany and Italy and Austria, through the terrible Taiping Rebellion in China, the Mutiny and the successive frontier wars in India, not to mention a score of lesser struggles. Yet those were the great days of Protestant pioneering and foundation-building among half the peoples of the earth, in most of Asia and Africa and Latin America and a hundred islands of the sea. We now take it utterly for granted that the Church of our grandfathers should have pushed steadily onward throughout and in spite of grievous wars. They were faithful to the heavenly vision.

II. TWO GREAT WARS IN OUR GENERATION STRIKE THE CHURCH AND ITS WORLD MISSION

1. The First World War Not Catastrophic, Nor the Church Greatly Heroic.

1914 brought the first world-wide war since the telegraph, the newspaper and general education have made it possible for whole peoples to respond sensitively to manifold crisis. The peace sentiment which had developed among the churches, especially in set-apart America, did not have much effect upon practical attitudes, even toward other Christians. The Continuation Committees of the Edinburgh Conference had provided by 1914 rudimentary organs for international contact among the

varied Protestant bodies. Yet institutional touch with the German churches was quickly broken. "Enemy" and neutral churches did much to maintain the work of the German missions in Asia and Africa, however, taking them over in an informal trusteeship as branches of the total Church of Christ. In difficult negotiations following the war, the work and the properties were fully restored to German hands. Meanwhile, the major areas of missionary concentration were not immediately involved in warfare and no "Protestant country" was devastated by the war. In this doubly good fortune, missions stood fairly well the strains of dislocated transportation, currencies and price levels. Extraordinary services rendered by missions and their personnel, such as the aid to Chinese labor corps in France out of which grew Jimmy Yen's Mass Education enterprises, compensated for minor difficulties in their ordinary programs.

2. Now in Totalitarian Perils, the World Character of the Church Is More Clearly Valued.

In the present conflict, the outlook for the Christian World Movement is both darker and brighter than in 1914. The Russian, the German, and the Italian Governments have severely attacked and oppressed the Church within their borders. In the case of Germany, Protestantism and its missions are seriously affected, although there are some aspects of remarkable purification among the Christians of that nationality. Of especial bearing on the immediate subject is the fact that German missionary leaders have kept their contact with the International Missionary Council (the connecting link among some organizations in some forty countries concerned with sending or receiving missionaries.) Cut off from financial or other communication with their missionaries, the German leaders regard the International Council, through its centers in London and in New York, as representing them—a great gain since 1914. Moreover, other valuable connections with the German churches are maintained by the nascent World Council of Churches and the World's Christian Student Federation, both centered in Geneva. Thus many

a significant spirit is saved the consequences of complete break in the supra-national fellowship, and is kept in readiness for constructive fellowship in the coming crisis of international settlement and readjustment.

3. Courageous Outreach of the European Churches.

This time the blows and restrictions put upon the Danish, Norwegian, Dutch and French churches (Protestants, we mean), are a new factor of damage. They have been physically prevented from support of their missions by home churches. But the Government of the Netherlands East Indies has extensively aided the large missions in its territories; the Norwegian Government in exile has granted a generous fund for Norwegian missions abroad; and in a remarkable rally the grievously burdened French churches have recently been able to resume support of their important missions in Madagascar, as the head of their society comes forth from fourteen months in prison. Meanwhile the Danish Church has increased its annual gifts for missions, seeking the means and occasion for despatching them; and the home churches of the Netherlands are ordaining new missionaries for the day of freedom to take their normal part in the ongoing of World Christianity. These achievements, like those of the British, Swedish and Swiss churches, have been made in the face of economic loss and stringency beyond any American experience. They challenge the complacency and half-heartedness of many American Christians.

4. The Miracle of the Orphaned Missions.

It is to the Christian merit of the churches of North America, generously aided by those of Great Britain and of many other countries, that they have maintained the work of German and other continental missions by continued support of 120 Orphaned Missions, administered as one whole from the New York office of the International Missionary Council. Not one discovered need has gone unanswered, not one missionary is known to have ceased labor because of lack of support. Almost two million dollars have been contributed for this purpose. Great sac-

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rifices in standard of living and in freedom of movement have been made by missionaries and their native associates, as their extraordinary contributions toward meeting the crisis. For routine example, a group of French missionaries in unhealthy portions of Africa are already two years past their furlough time, with peril to their strength and to their future service.

5. The Miracle Is a Testimony to Our Day and a Promise of Greater Things To Come.

By any Christian standard this work for the Orphaned Missions is a great advance. It is fully recognized that the work is God's and for His Kingdom, not for the political interest of any national group. The gratitude of the continental societies, and of the missionaries and their fellow-workers, is magnificently expressed; it is a glad earnest of deepened fellowship in freedom at the close of the war. Here is living evidence that the Christian bonds of God's family are indestructible by political requirements of whatever urgency. It is to the credit of the American and of the various British Governments concerned, that they have been willing to facilitate the transfer of missionary funds and personnel, even in the teeth of wartime controls over currencies and travel. They recognize that the Christian interests are deep and enduring, and should be hampered as little as possible by the general restrictions.

III. MISSIONS SEIZE THE DANGEROUS OPPORTUNITY

1. Danger Roams Far and Wide.

Danger and opportunity, twin challenge to the Christian, have lain in the devastation by war of important mission fields, and the radical involvement of others. The invasion of China has now continued four years and a half; and that of the Philippines, Malaya and the East Indies is current history. Totalitarian pressure in one way or another has put missions out of action and the native churches on the spot in Japan (with Formosa, Korea, Manchuria), Thailand, and largely in Indo-China.

The East Indies and the Pacific islands, Burma and the Near East are imperilled; while India and some parts of Africa are anxious.

2. Yet the Outlook Is Not Terrifying.

But a realistic view of danger and turmoil must be taken in proper perspective. In cold fact, the three great missionary fields of Latin America, Africa and India have not been significantly disturbed. Indeed, China is the only major field to be invaded; and that, with several areas of smaller effort, has been closed only in part. (Even since the internments following Pearl Harbor, there are well toward 2,000 missionaries, the majority of them not American, at work throughout the free regions of China.) Furthermore, we must always be clear that in any well-established field of Christian work, the native church is more important than missionary interests narrowly considered. Growth may be seriously retarded or warped by the temporary cessation of mission aid in personnel and in resources; but in most of the fields it will not fail, even as judged in human terms. And we of little faith are continually astonished by the deeds of the Spirit of God in the hearts of men who have heard and received the Good News.

3. Opportunity Transcends Danger.

Other considerations press. As in all the dark and bloody centuries of man's warfare against man, human needs are deepened just where danger and disorder prevail. When human life and liberty are insecure, when misery and despair abound, man's need for faith and loving fellowship is greatest. Shall the Christian pass by on the other side? Shall the world be consigned by Christians to the Devil, until he makes it comfortable for us to resume work? That is not the faith that overcomes the world, but the unbelief of indifference, indolence and cowardice. Looking squarely at the multitudes bombed and confused, wounded and hungry, homeless and despairing, captive and oppressed, what do you preach and what do you practice in the World Mission of Christ? There were no rain-checks and no war-risk exemptions in the commandments of our Master. Beware of those who forge them, saying it is

unprofitable or it is inopportune to minister in wartime to other than our own communities.

4. China's Experience of Missions on a Vast Battlefield.

Rather it is among the glories of the Christian Church in our time, that missions did not simply fold up and quit when China was invaded, as so many of the worldly wise and the financially reluctant were quick to urge. With the active help of Christian folk in this and other lands, supplied and expressed through missionaries who shared the full experiences of Chinese Christians and of all the plain people as they passed through the valley of violence, the entire Christian enterprise rose to new levels of faith and love and service. A fourth of the Christian hospitals, more than half the schools, were put out of action by bombing and burning and the shocks of the invasion. Yet with inadequate staffs, with remnants of equipment, they were replaced in service amid continuing destruction and impoverishment. Many a town knew for months, even for years in its most abject need, only the Christian hospital and the Christian school. For all others failed.

5. Christians Multiply Their Service.

Crippled as they were, the Christian forces in China reached out to others more needy than themselves. Shelter and care for refugees numbered in the millions, relief enterprises aiding other millions in hunger and distress, the organization of many thousands of persons to care for China's three million wounded soldiers, all these represent uncounted days of devoted effort by tens of thousands of men and women ministering "unto the least of these my brethren." The myriad acts of mercy have been to the previously untouched and the skeptical a colossal demonstration of the Word. "Now we know what you have been talking about all the years," is the manifold saying of multitudes. The same acts have been a magnificent project of "religious education" for all who took part in them, Christians and non-Christians alike. Cooperative service and purposeful fellowship under Christian inspiration and leader-

ship, experienced through crises of bombardment and assault, through the greater, continuing damage of poverty and the dislocation of society, build character that can confront this present world.

6. Congregational Life Is Vigorously Renewed.

Scattered congregations restored, lost leaders replaced by earnest lay members, new life in the western centers that received the cream of the migration, and overwhelming eagerness of the young for spiritual direction and for conviction of The Way, these are the characteristics of the Chinese Church in its inner activities. Tens of thousands of students have thronged evangelistic meetings and Bible classes in universities and schools that before the war forbade any religious service or instruction upon their campuses. Well over 200,000 Bibles and Testaments are sold each year, with more than 4,000,000 Gospels and portions, even while there is no transportation to many regions, and while paper has risen to twenty and forty times the old prices. During the war period, the total sales of the new union hymnal have reached 300,000, under similar difficulties. Such are the outreaches from a membership of Protestant communicants numbering only 600,000, almost all of whom are poor and some of whom cannot read. "Man's extremity is God's opportunity." This advance through slaughter and devastation is joy to those who have shared in it. Those who wilfully or indifferently stand aside are defrauding themselves even as those whom they might help.

7. The Price Is Gladly Paid.

One may estimate that two to three hundred Chinese Christian workers have met death at their posts of duty. Twelve Protestant missionaries (and as many Catholics) have been killed by bombs or soldiers' bullets. Within a few months' time, three missionaries from the China colleges took their own lives in the collapse of nervous disease. But who has lost life and who has gained it in the total story of that Christian service in wartime? Would any sane person want to buy the prolonged physical existence of those three hundred comrades at the price of the

courage of the Christian effort in China? Let millions of refugees and starvelings, hundreds of thousands of wounded, hundreds of thousands of those who hunger and thirst in spirit, make answer. Christ's answer was given long ago, against these hours in China, and not less against the days of spiritual and bodily need in the other lands wrecked by war. The real dead are those who stifle in pettiness and selfishness. The real living are those who give themselves for their brethren.

IV. THE WORLD MISSION IS ESSENTIAL TO PEACE AND A NEW HUMANITY.

1. A New Earth Requires New Persons.

Wartime enhances the significance of missions for the New Heaven and for the New Earth. To build the Church in all lands, with its intimate part in the realization of God's Kingdom, is a task of more than human import, magnified in the midst of man's degradation. But it also has special meanings for the New Earth continually brought before us in glimpses lighted from the New Heaven. Who will plan now, on bases true and sure, for a peace that opens the way to helpful association of the peoples embittered in war? Who is concerned for sound reconstruction of ally and enemy alike, to heal the wounds and restore the damaged circulation in the social body? Where will the world find the personnel who can be trusted, when dire need and suspicious hate are the twin foes of healthful recovery, to carry the burden of relief administration, to temper the rigor of bureaucrats to the sensitive spirits of the defeated and the war-weary, to strengthen the souls broken in disillusionment at the never-ending selfishness of men, to translate the general programs into more abundant life within the individual heart, the village home, the neighborhood church, the classroom and the clinic?

2. The Christian Church Must Supply the New Men.

Only persons devoted to the highest interests of life, above the divisive barriers of nation, race or class; persons experienced in the

remedial, constructive tasks; persons who possess the effective confidence and the working organizations both in the countries that can give and in the countries that can receive; persons who know the language, both literally and figuratively, that is required on the spot of the most difficult contacts and adjustments. The only large body of them is to be found among the Christian churches in their world-wide and missionary aspects. The most conspicuous of the secular organizations that work in these fields, the International Red Cross, draws its field agents largely from the Christian groups. And there are many tasks that require a greater continuity, depth or delicacy than the mass enterprises of the Red Cross can claim.

3. The Church Sets Its Mind to Peace.

The existent international ties of the Christian Church are precious in the midst of war. They represent the spiritual commitment of a great number of useful lives to humanity, above and beyond the battle. This commitment is nourished in faith and prayer, with enormous potentiality for good. Its vision of the kind of peace that can reduce the harm of war, that can snatch from the grim sacrifices men make for power and for liberty, some measure of justice and fair opportunity—that vision is being expressed in a wealth of thoughtful study and conference, of concrete counsel in London, Washington and other capitals.

4. We Christians Have Received the Ethic of Brotherhood. Are We Devoted to It?

If there is to be a friendly and mutually beneficial organization of the nations, rather than war unending or unity by conquest, it must rest upon a world ethic, a recognition that we are all of one blood, and that the standard of conduct and attitude which we recognize as right among Americans is also valid in our relations with other peoples. Christianity has that ethic, that Good News for a world that desperately needs it. The Christian churches possess in their missionary effort the experimental basis, the nucleus of personnel, the rudiments of education for

the moral foundation of a decent world society. When our churches show half the vigor in God's cause that the Hitler troopers and the Japanese devotees put forth in mighty effort for their New Orders; when we are half as willing to subject our lives and our means to the requirements of God as to the requirements of national defense, then we can see in the making a world prepared to use for human welfare the wealth and labor and life that now are doubly destroyed in destruction.

5. Missions and the Course of This War.

We cannot shrink from the present international struggle. Our part must be done if there is to be even a chance of a livable world. But in the victory necessary for mankind, we must have held fast to the good, not have let it slip. In the war and after the war, our Christian ties with other peoples need strengthening in love and mercy. We seek in every land Christian men, whose spirit and ethic we share, with whom we may join in the eternal fellowship of good will and good works. Of such fellowship is the Kingdom of Heaven, and a fairer earth.

Miner Searle Bates is a missionary of The United Christian Missionary Society, serving as professor of history in the University of Nanking, China. He is recognized as an authority and interpreter of Far East affairs. He is now in the United States assisting the International Missionary Council and the Foreign Missions Conference of North America with headquarters in New York City.