

INSTITUTE OF CURRENT WORLD AFFAIRS

CHGO-3
Stirrings of British Interest
in Chinese Science

The Pines, Nuns Walk,
Virginia Water, Surrey,
England.

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Dear Dick,

From time to time since my arrival in England last September, I have been making enquiries about the amount of British interest in Chinese science. One of the places I visited in this connection was the United Steel Research Laboratories at Rotherham, and this newsletter will mainly be devoted to describing an interview which I had with United Steel's Mr. Robert Sewell. But in order to put this interview in its proper perspective I want first to give a brief summary of other interest in Chinese scientific developments that I have so far been able to find in Britain.

The interest falls into four main categories. First of all there are the individual scientists who, for various reasons, are interested in Chinese science. Most of these are connected with academic institutions and in several instances their interest in China and Chinese science originated in the years prior to the communist revolution. Pre-eminent among this group of scientists is Dr. Joseph Needham of Cambridge University. His outstanding work "Science and Civilization in China" has shown him to be one of the foremost authorities on the history of science in China.

Secondly there are the scientific societies and professional associations, several of which are beginning to take an interest in sponsoring exchanges of delegations with China. The Royal Society have been particularly active in this respect. Its president (then Sir Cyril Hinshlewood) visited China in 1959 and a year later a Chinese delegation attended the Society's tercentenary celebrations in London. Another Chinese delegation has been invited by the Royal Society and is expected to visit Britain in October of this year. In December 1960 a group of medical experts from China arrived in Britain to inspect medical institutions. They were invited by the Royal College of Physicians, and their visit provided the first official meeting of doctors of the two countries.

Thirdly there are the universities and technical colleges which are just beginning to take an interest in teaching Chinese to scientists. Here it seems to be the technical colleges which

have taken the initiative. In September 1960, both the Sheffield Technical College and the Holborn College of Law, Languages and Commerce, began courses in Chinese for scientists. The Sheffield course is based on the language textbook published by the Chinese in Peking. The Holborn course however, is designed to teach scientists how to approach the problem of translating scientific Chinese, - this is quite a different proposition from learning to speak the language.

Finally there are those groups and organizations, as distinct from individuals, which are following Chinese scientific developments. Two of these stand out as being most active in this field; one is a Government group and the other an industrial organization.

The Government group is the National Lending Library Unit of the Department of Scientific and Industrial Research. The National Lending Library Unit was first planned by its present Director, Dr. D.J. Urquhart, in 1956. Since then the library has been collecting scientific journals from all over the world. Its work also includes the Russian translation program which is carried out in cooperation with the National Science Foundation of America. In 1958 the Lending Library Unit began to collect Chinese scientific literature. In June 1959 a list of Chinese holdings was prepared which showed that one hundred different titles were being received. Twenty-one of these journals were obtained by exchange, the rest by purchase. However, in October and November 1959 the supply of scientific journals began to be restricted by the Chinese, due to a paper shortage, and by mid-1960 only sixteen titles were being received. (This report of a paper shortage in China was verified for me recently by a Chinese friend whose brother, writing from Peking, mentioned he had been unable to buy engineering textbooks because of a paper shortage.) The journals can be borrowed by anyone interested, and the Library provides the chief source of supply of Chinese scientific literature in Britain. A few other groups, and in particular the British Museum, also receive Chinese scientific literature, but the Lending Library collection is the most complete.

The industrial organization which is following Chinese scientific developments is the United Steel Company, and the man largely responsible for this interest is Mr. Robert Sewell. I first came across a reference to Mr. Sewell in an article in the London Times dated July 17, 1960. This article reported that a course to teach scientists Chinese had just been established at Sheffield Technical College. Mr. Sewell was the man responsible for organizing the course. Then, whenever I talked with people in England about contemporary Chinese science, I was told the same thing - the person who could probably tell me most about British interest in the subject was Mr. Sewell. Consequently I visited Mr. Sewell at the United Steel Research Laboratories in Rotherham.

Rotherham is a small grey mill town about eight miles northeast of Sheffield. Like many research laboratories in England the United Steel Laboratory is built in the grounds of a

large estate. The research is carried out in new modern buildings arranged around the large old house which now forms the administrative centre and library.

I discovered that Mr. Sewell himself is not a scientist but a linguist; he can speak French, German and Russian and can read six other languages. His job is to cull the world's technical literature for information which might be of interest and value to the scientists, economists and management of the United Steel Company. He has a staff of twelve to help him.

"We have been studying the Soviet literature since 1952 -- long before the Sputnik went up" he said. "It was through the Soviet literature that we began to get information about Chinese work in the iron and steel industry".

This beginning had led him to look closer at the Chinese literature itself. He soon realized that within five years or so the amount of scientific literature from China would be tremendous and that unless we in the West began to prepare our scientists now, so that they could assimilate some of this material, we would miss a lot of useful knowledge.

"I first tried the Universities" he said. "I wanted to see if they would be willing to set up courses aimed at educating scientists in the Chinese language and in contemporary China. Without exception I found them unwilling to co-operate. All that the universities are interested in is the old classical approach". One university had suggested that there would be very few jobs in industry for persons with a scientific training and a knowledge of Chinese, and gave this as the reason for not being interested in teaching Chinese to scientists.

Eventually the Sheffield Education Committee agreed to put on a course at the Sheffield Technical College. It was this course which I had seen reported in the London Times. The students, fourteen of them, meet once a week for two hours. At this rate Mr. Sewell estimated that a scientist should be able to read a paper in his field of interest within four or five years.

I asked if United Steel had been able to make any use of the ideas which they had gleaned from the Chinese technical journals. He said that one process had turned out to be extremely successful. He had first seen the technique described in general terms in English in the publication "Science Abstracts of China". He told one of the foundry managers of this and on the meagre information contained in the abstract the method was tried, but without success. He had later managed to get hold of the original article and have it translated into English. The extra information was sufficient to enable United Steel to apply the method successfully, and this had led to several new research ideas. Mr. Sewell added "The Chinese are installing some of the biggest and most modern blast furnaces in the world. Any information we can get about their performance will be of great interest and value".

In addition to promoting the study of Chinese by British scientists, Mr. Sewell has been trying to promote exchange visits between British and Chinese delegations in the iron and steel industry. He believes that there is no time like the present and has been agitating for the British Government to issue an invitation to the Chinese to send a delegation to Britain, hoping that the Chinese will in turn invite a British delegation to visit China. In principle, the British Iron and Steel Federation support the idea, but believe the time is wrong. Prime Minister Macmillan also thinks the time is wrong, and so an invitation has not been sent. Sewell thinks that the authorities don't want to risk the embarrassment of having their invitation turned down; but in view of the recent drastic cut-back in the export of Chinese journals to the West he feels that it is becoming increasingly important for scientists to go and see for themselves.

Mr. Sewell has also been active in the Development and Information Services branch of the British Iron and Steel Research Association. This organization has proposed that a China study group be set up to collect and evaluate information of interest to the iron and steel industry on a co-operative basis. In addition to the review of technical information they also propose to set up biographical files on Chinese people, organizations and places connected with the industry.

The British iron and steel industry have realized the importance of China's industrial progress and are taking steps to keep abreast of her developments. There surely must be other industries that would benefit by similar research and the energetic needling of a Mr. Sewell.

Yours sincerely,

Geoff. Oldham

C.H.G. Oldham.

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