# Scholarly Exchanges with China

*Contacts are proliferating at a great rate, but do both sides stand to benefit equally?*

For the past several years the skies have been teeming with jetliners carrying American and Chinese "survey delegations" of scholars who have been conducting short exploratory trips in anticipation of the day when full fledged academic exchanges could begin. "Viewing flowers from horseback," as the Chinese call it.

Now, with normalization of diplomatic relations, the two countries are moving in for a closer look at each other and there has been a virtual explosion of exchange agreements, plans, and proposals designed to fill in the cultural gap that has yawned for the better part of 30 years and to speed China on the road to "development."

Since 1949, a generation of American Sinologists has grown up—who never set foot on the land they have made their life-work. Some intellectual continuity with the Chinese is furnished by the cadre of Chinese who received training in this country in the 1930's and 1940's, many of whom have risen to positions of authority in Chinese universities and research institutes. But the world has taken a few turns since then, China is no longer an open society, and what we want from them is different from what they want from us. It is a whole new ball game and it will be some time before the rules emerge.

Arrangements are being hammered out in so many places and things are happening so fast that it is difficult to deliver a comprehensive summary. In addition to a government-funded exchange program being handled by the Committee for Scholarly Communications with the People's Republic of China (CSCPRC),* a handful of American universities have fashioned reciprocal programs of study and research with Chinese universities and institutes. Many other American institutions have or are expecting visiting Chinese scientists and technical people and are in the process of arranging visits to China by American graduate students and faculty.

The CSCPRC and another group, the National Committee on U.S.-China Relations (which made its debut handling the American Ping-Pong trip in 1971 and which handles mainly cultural exchanges), have been the chief scholarly and cultural intermediaries between the United States and China. The fact that these activities have been handled by private groups rather than the governments has set the tone for the now-expanding exchanges, which, unlike the official and highly circumscribed dealings with the Soviet Union, are decentralized and encompass a great variety of private arrangements.

So far, the CSCPRC has selected seven Americans, most of them graduate students in history, to polish up their Chinese at the Language Institute in Peking, after which they will have up to 1 year of study at universities. It has also named the first of two small groups of "research scholars," which includes a chemist who will be working on fossil dating, a geologist studying earthquakes, an art historian, and two social scientists who plan to do fieldwork in villages. Money for these groups is being supplied by the International Communications Agency (formerly the United States Information Agency). In addition, the CSCPRC has its own program, for which it is in the process of selecting up to 15 "senior scholars"—from a total of about 100 applicants—to do studies in China in the natural and social sciences and the humanities.

The degree to which American sociologists and anthropologists will be allowed to do fieldwork, referred to these days as "social investigation," is a touchy matter. In late January the Chinese balked at accepting two applications from social scientists—Deborah Davis-Friedman of Yale University, who wants to study Chinese attitudes toward aging and the well-being of elderly Chinese, and Jack and Shulamith Potter of the University of California at Berkeley, who want to go to an agricultural commune to study social changes among Chinese peasants. The Chinese are sensitive about being studied for various reasons, although they have couched their reluctance in terms of logistical problems and concern for the comfort of the visitors, who will be living under extremely primitive village conditions.

So far, only one foreign group has been permitted to live and study in a village since the revolution. Four political scientists and historians, including Edward Friedman of the University of Wisconsin, spent a little over a month last spring in a village on the North China plain collecting detailed social, economic, political, and educational information about 656 families in an agricultural brigade. This group, however, had been trying to get into China for years and were regarded as sympathetic by the Chinese. ("The Chinese want to pick their China experts," notes Roy Hofheinz, director of Harvard's John King Fairbank Center for East Asia Research.) Observers therefore believe that the Chinese reception of subsequent social scientists will set the real precedent. Says Joyce Kallgren of Berkeley's Center for Chinese Studies, "If the Chinese agree to let in people like the Potters they're opening the way for people from all over the world. It is a very basic decision to open up the country in that kind of a way." She notes that all socialist countries are very uptight about this sort of thing—in the Soviet Union for example, it is only recently that any American sociologists have been allowed to participate in social investigations.

Meanwhile, new contacts are being made almost daily between Chinese and American universities. Stanford was the first to get into the act and now has a staff of six working on its U.S.-China Relations Program. Six Chinese scientists arrived at Stanford last November, and a number of graduate students in various fields are going over for language study and will then be farmed out to various institutions.

Last summer the Chinese, in an attempt to bring some order to the burgeoning contacts, assigned "sister universities" to about a half-dozen American universities. Several of these relationships have already spawned extensive arrangements. The University of California at Los Angeles, which has an informal agreement with Zhong Shan University in Canton, has a four-pronged deal tentatively worked out. First, UCLA is to set up an English as a Second Language Institute in the Canton area. The idea is for UCLA to supply expertise and train the Chinese, who are to take it over within 30 months. Next, UCLA plans to send a small number of

*Set up in 1966 by three organizations—the National Academy of Sciences, the American Council of Learned Societies, and the Social Science Research Council—the CSCPRC lay pretty much dormant until 1972, the year of the Nixon China visit.


0036-8075/79/0316-1092$00.75/0 Copyright © 1979 AAAS

advanced graduate students each year to Peking Language Institute, followed by course work at the Canton university. To reciprocate, UCLA is agreeing to screen 50 Chinese applicants a year for advanced study, either taking them on or acting as a clearinghouse to refer them elsewhere. Finally, according to political scientist Richard Baum, UCLA has initiated three research projects that have preliminary approval from the Chinese. One is a joint Chinese-American study of the movement of overseas Chinese in and out of Canton and of their impact on the local economy. Another involves gathering seismological data, and the third and most ambitious is a multidisciplinary environmental sciences study project encompassing public health, pollution, and engineering.

Another institution with fairly well developed plans is the University of Wisconsin, which is setting up exchanges with Nanking University. Wisconsin is planning to send several top engineering administrators to China to spend a year helping them "upgrade their technical schools into international engineering universities," according to Friedman. It is also putting together formal research arrangements with the Chinese Academy of Sciences, with a particular eye to agriculture. "They have the greatest untapped unhybrid germ plasm in the world," says Friedman.

"The Chinese want to pick their China experts."

The University of California at Berkeley, which has a relationship with Tsing Hua University ("the MIT of China"), is also busy cultivating its Chinese contacts. According to Frederick Wakeman of the Center for Chinese Studies, it has received two mathematicians and two geophysicists from China and expects 15 more Chinese from the first wave of those who are now getting language training at American University and Georgetown University in Washington, D.C. (Georgetown and AU are acting as a filter for an anticipated 500 to 700 Chinese, virtually all of them mid-career scientists and engineers, who will then fan out to universities around the country.) In return, seven Berkeley students doing advanced doctoral work in philosophy, history, literature, and linguistics have been accepted at three Chinese universities.

These arrangements are only a sampling of what is going on. It is probably safe to say that most of this country's major universities are planning some sort of exchange or at least sending over a survey delegation or two to get the lay of the land.

As to the outcome of these arrangements, the Americans and Chinese have very different expectations. The Americans are interested in social sciences, linguistics, history, art, and archeology. In science and engineering, Americans are going to be contributing far more than they gain. There is, however, much interest in Chinese earthquake research, and with its large and relatively immobile population China offers a gold mine for epidemiology. Other health-related interests are Chinese herbal medicine and rural health care delivery. Some natural scientists, of course, long to have access to China to complete their inventories of flora and fauna in an area that now constitutes a huge gap in global taxonomy.

The Chinese, on the other hand, are interested in practically nothing but science and technology. As contacts expand, they will undoubtedly want to send people to the United States for training in various types of management, since the lack of trained administrative talent is a serious obstacle in every area of development. Social science can wait, as far as they are concerned, although some Americans are urging them to broaden their interests. Anthropology and sociology do not exist, per se, in China, although some related research is conducted under the name of ethnic studies of Chinese minorities. Basically, says Edward Friedman, "the whole range of social sciences will have to be created or recreated in the years to come." A sign of growing interest is the fact that in 1977 the Chinese created a separate Academy of Social Sciences, which covers law, economics, history, archeology, literature, language, and ethnic studies. And within the new academy is a new Institute of Religion.

The euphoria surrounding the sudden blooming of contacts is undoubtedly obscuring some hard realities that are bound to emerge later. Just how well the two countries understand each other's long-term goals is not clear. The Chinese may decide they do not have the facilities to cope with the influx of Americans and may shut some doors. Some American universities may find themselves with unanticipated costs for training the Chinese they welcomed with such enthusiasm.

Albert Feuerwerker, director of the Center for Chinese Studies at the University of Michigan, has also expressed the fear that American universities, in their eagerness to get a piece of the action, "may not be interested in getting any real quid pro quo." It is important, he says, that we "treat the Chinese as adults" and see to it that the scholarly substance of exchanges not be sacrificed in the interests of politics or warm feelings. Fully open exchanges, equally profitable to both sides, such as those with European countries, may never be possible with China. But Feuerwerker believes that is the model we should set our sights on.

So far, Chinese-American relations have had a very different tone from that characterizing dealings with Russians. Americans find themselves easily charmed by the Chinese smiles, good manners, and humor. Russians, by contrast, have a tendency to dourness and are less open and communicative than the Chinese. "Chinese on their first visit to a laboratory are much more relaxed than Russians who may be on their third or fourth visit," says one observer.

Can we anticipate anything about future scholarly relations with China on the basis of past experiences? According to Wakeman, the post-Ping-Pong elation of the last year is "hauntingly reminiscent" of the early years of the century, after the Boxer Rebellion, when the Chinese used the Boxer Indemnity Fund to subsidize study in the United States. Reciprocal movement to China was largely initiated by missionaries, who ran schools there for a century, starting in the 1840's. American academic involvement in this century—such as that of Oberlin College students who went to China to teach English, Yale's participation in the building of the Peking Union Medical College, and the Harvard-Yenching Institute—has had a strong missionary flavor. Now such paternalistic relations are completely out of line with the aspirations of the People's Republic. But as Wakeman remarks, in the U.S. attitude toward China "there is a strange mixture of admiration and benevolent paternalism." Perhaps, he muses, "our missionary zeal has now been transformed into a secular analog—the zeal for development. . . . We seem to have a special sense of mission in Asia—that nerve is being strummed at this point."

One of the best historical models for current exchanges is the remarkably successful Fulbright exchange, which lasted little more than a year, in 1948 and 1949. It was the first Fulbright program, and it might never have been carried through if Americans had realized the seriousness

of the military situation on the eve of Mao's takeover. Some Americans (a total of 27 went to China under this program) had to evacuate to places farther south almost as soon as they arrived in Peking in order to escape the Communists coming down from the north. Nonetheless, according to Wilma Fairbank's book *American's Cultural Experiment in China*, the program resulted in studies that remain of great value for Westerners. Two scholars, for example, translated books on Chinese philosophy and society in collaboration with the authors, who subsequently repudiated their work for the revolution. Thus, writes Fairbank, the program offered a chance to absorb the views of significant Chinese thinkers "while they were still addressing us in our terms."

Now they are addressing us in their terms, and few people have a very good idea of what that is ultimately going to mean.—CONSTANCE HOLDEN

# The Phenformin Ban: Is the Drug an Imminent Hazard?

*Phenformin is the only drug ever removed from the market as an imminent hazard*

On 25 July 1977, Health, Education, and Welfare Secretary Joseph Califano banned phenformin, an oral anti-diabetes drug, as an "imminent hazard to the public health." This was the first, and so far the only, time an HEW secretary has exercised his power to remove a drug from the market, and Califano's action is being legally contested by a group who says it was unwarranted. The action "opened the door for more drugs to be banned as imminent hazards," says Richard Merrill, who is now at the University of Virginia Law School and who was chief counsel for the Food and Drug Administration (FDA) at the time phenformin was banned. Merrill cautions that it is not clear how wide the door is open, and, in fact, Califano recently denied a petition that the drug Darvon be similarly banned (*Science*, 2 March, p. 857). But since the phenformin case set a precedent, it is worth recounting.

In banning phenformin, Califano acted in part at the urging of Sidney Wolfe, a physician who heads Ralph Nader's Health Research Group. In April 1977, Wolfe hand delivered a petition to Califano demanding that phenformin be immediately removed from the market and estimating that 17 people had been killed by the drug in the past 6 months. Wolfe had become impatient with the pace of the federal bureaucracy. Six months before he wrote his petition, the FDA's advisory committee had recommended that phenformin be removed from the market because of a serious side effect called lactic acidosis, which is sometimes associated with the drug. But it could take 2 years before the drug would be removed if normal procedures were followed. The delay is mainly due to hearings and appeals.

Lactic acidosis had been known for several years to be a side effect of phenformin, although the mechanism by which the drug causes the disorder is unknown. The condition was first discovered 20 years ago, and some doctors suspect that reports of its increased incidence may reflect increased attention to and detection of it. As its name suggests, lactic acidosis results from an excess production of lactic acid by the body's tissues. It is accompanied by weakness, lethargy, rapid breathing, abdominal pain, nausea, and vomiting. It is fatal in about half the cases, but patients who recover have no lingering effects. In addition to being caused by phenformin, lactic acidosis can also be caused by diabetes itself or it can occur in patients who do not have diabetes but have other serious disorders such as heart failure or shock.

Wolfe kept hammering home his contention that patients were dying while the FDA delayed taking action. At that time, the drug was being taken by more than 300,000 Americans and had annual sales of $25 million. The result of Wolfe's actions was a hearing before an FDA advisory committee on the question of whether the drug was an imminent hazard.

Shortly after the hearing, Marion Finkel, the FDA's associate director for new drug evaluation, recommended in a memo that the imminent hazard clause not be invoked. Finkel said the FDA had calculated that phenformin caused lactic acidosis at an annual rate of 0.0125 to 2.0 per 1000 users—a rate 5 to 80 times higher than side effects of other drugs that cause fatal reactions. Yet Finkel admitted that these estimates were shaky and that a new warning label that had been placed on the drug in February of 1977 might have decreased the incidence of this disorder. The new warning label halved the recommended maximum dose (higher doses are more likely to cause lactic acidosis), it mentioned, as did a previous warning label, that the drug is contraindicated in patients with certain conditions such as heart and kidney disease, and it advised doctors to consider phenformin a drug of last resort for use in patients with symptoms of diabetes.

In her memo, Finkel argued that phenformin should not be removed from the market entirely because it is useful for a small group of patients. These are people who have symptoms of diabetes and who do not respond to sulfonylureas, the only other type of oral anti-diabetes agents sold, and who are unable to take insulin, either because they have a physical disability such as blindness, or because they have jobs in which they cannot risk becoming unconscious from hypoglycemic shock following an accidental overdose of insulin. Finkel discussed various options available to the FDA, concluded that an imminent hazard ban would be upheld by the courts, but recommended that the phenformin manufacturers be asked to voluntarily restrict the drug's distribution under threat of removal of the drug as an imminent hazard if the restrictions failed.

The importance of the phenformin ban is that the FDA is now convinced that the imminent hazard provision is a tool it can use.


0036-8075/79/0316-1094$00.50/0 Copyright © 1979 AAAS