INSTITUTE OF CURRENT WORLD AFFAIRS

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Science in Hong Kong IV:
Conclusions and Prospects

4 Kotewall Road, 4/floor,
Hong Kong.

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Mr. R.H. Nolte,
Institute of Current World Affairs,
366 Madison Avenue,
New York 17, N.Y..

Dear Mr. Nolte,

The last three letters have described my impressions of science in Hong Kong. The main conclusions of this informal survey are that although about 15% of Hong Kong's children of high school age are receiving a formal education in one or more science subject, very few have the opportunity to make any use of their scientific training in their jobs. Science is not being used effectively in the economic development of Hong Kong. And finally, there is very little financial support for any form of scientific research, pure or applied, in government, university or industry.

The consequences of this situation may possibly be serious, for it is unlikely that Hong Kong's industry will long survive foreign competition - unless it does more to incorporate science. Also there will soon be a shortage of jobs for the science graduates from the universities. At the moment nearly all the science graduates become school teachers. As one University lecturer put it, "Teaching science in Hong Kong is like teaching Latin - we just train students to be teachers who train students to be teachers etc.". But when and if the new Chinese university grants degrees, there could be as many as 250 to 300 scientists graduating each year. The teaching positions would rapidly be filled and there would be large numbers of unemployed, or at least under-employed, scientists. Nor are there many opportunities for these people to work elsewhere. At present a few manage to go abroad, most to either Britain or America, but these amount to only a small percentage of the total.

There are several reasons why science is so poorly supported in Hong Kong, but the main one is undoubtedly the uncertain future of the Colony. It is this which makes Hong Kong unique among the developing countries. Solutions for similar problems elsewhere do not necessarily apply here, and vice versa. Most political experts are agreed that as soon as the Colony ceases to be of value to China, then China will demand its return. Just when this will be no one knows, of course, but the most obvious consequence is that it is never possible to get long term loans in Hong Kong, and without long term loans it is more difficult to put industry on a scientific footing. The British Government is also reluctant to spend money on the Colony. For example, in 1960 Britain (through the Colonial Welfare and Development Corporation) spent £5 million on British

Guiana, £3½ million on Sarawak, and only £¼ million on Hong Kong. Hong Kong Government employees however, say that the uncertainty of the future does not influence their planning, and as evidence, pointed to such long range plans as the water schemes and the new Chinese university (neither of which have yet been given final approval!). The fact remains - the Hong Kong Government gives very little financial support for scientific activities.

What then is the future of science in Hong Kong? What can be done to advance science here? I put these questions to many Hong Kong scientists and from their replies I have compiled a list of possible projects - some pertain to Hong Kong alone and others relate to the part Hong Kong could play in international science.

Projects for the advancement of science in Hong Kong

Support for fundamental research at the universities

The University science professors were unanimous in their opinion that there should be greater opportunity for the brilliant student to pursue pure research in Hong Kong. It is the tradition of most Western universities to encourage the pursuit of knowledge for knowledge's sake. This concept is not universally accepted, but a strong case can be made for greater financial support for research at Hong Kong's universities.

Industrial Research

There is a dearth of really good ideas on how science can be introduced into industry. The idea which has most support is for the Committee for Scientific Co-ordination to be expanded to include a 'Department of Scientific and Industrial Research' which could look into the matter in detail. Various people suggested the formation of some type of research association which would be devoted to adapting existing scientific knowledge to the problems and conditions in Hong Kong. But other scientists thought that it would be extremely difficult to introduce this kind of association. One Chinese scientist said "I cannot think of a way round the problem of bribery. If someone in the research association came up with a good idea - he would immediately be offered bribes by industrialists."

An Oceanarium

One scheme which has already received much thought and planning is an oceanarium. It would provide research facilities for scientists but operating expenses would be met by opening it to the public and charging admission fees. Land has been allocated by the Government, and it is expected that construction costs would come from a non-Government source. First of all, the Government must carry out an official feasibility survey but so far it has been unwilling to provide the money to do this. The plans have been in abeyance for almost two years.

Science in Government

There were several suggestions for improvements in the scientific work carried out by the Government. They included modest proposals and suggestions for better co-ordination between different departments, a plea from many scientists to be relieved of routine tasks so they can do more research work, and a suggestion that scientists be permitted more time to prepare their research results for publication. Suggestions for new activities for the Government ranged from industrial research associations to proposals for the establishment of a geological survey and a planetarium. Some of these activities may follow from the work of the Committee for Scientific Co-ordination.

An Association For the Advancement of Science in Hong Kong

Attempts were made last year to form a Hong Kong association for the advancement of science, but it was not very successful. The main reason given for its lack of success was that the majority of graduates here are school teachers who work long hours and are not very enthusiastic about evening meetings. Some of the supporters of such an association pointed out that an enthusiastic group could organize conferences, arrange exhibitions (always very popular in Hong Kong) and possibly publish a local science journal which could include articles of local interest. Actually two semi-popular monthly science magazines are published in Chinese in Hong Kong - mainly for the South East Asian market - and occasionally they carry articles about Hong Kong.

The above projects would further the advancement of science in Hong Kong, but other projects were mentioned which had more to do with the part Hong Kong could play in international science. They depend upon the fact that Hong Kong has several attributes which would be of value in making it a center for international science projects. In the first place, despite the uncertain future of the Colony it has a far more stable government than most of the countries in South East Asia. Secondly, Hong Kong is in a central position geographically - particularly as a center of air routes,- for the whole Far Eastern area. Thirdly, Hong Kong is in closer contact with China than any other country except perhaps Russia and North Korea. A constant stream of artistic teams from the Mainland perform in Hong Kong and many Hong Kong Chinese still send their children to be educated on the Mainland.

Projects relating to the role of Hong Kong in international science

Hong Kong as a site for a regional research center

One of the recommendations contained in the UNESCO publication "Current trends in Scientific Research" was that regional scientific and technical training institutes be established in different parts of the world. One logical extension of the oceanarium project would be to convert it into a regional center

for marine biology which could serve the whole of South East Asia.

Several people suggested that it might be very difficult to persuade the United Nations to support a regional center which was located in a "colony" - but others pointed out that the stable government here might outweigh the prejudice against colonies.

International science conferences

With the colossal growth in scientific activities in recent years and the consequent problems of scientific communication, the number of international meetings has grown at an astounding rate. There are now about 2,000 international scientific meetings held every year. Most of them are organized by professional scientists in the host country, and for the larger meetings this can mean an interruption of their normal scientific work for long periods - sometimes one or even two years. Not only that but facilities and organization are sometimes inadequate and scientists who have given their time and often travelled great distances, cannot so much as hear the papers which are read. So that although there are good arguments for rotating the meetings between countries, there is a growing need for well organized regional centers with full-time organizing staff and specialized facilities for large meetings. There are now so many meetings that a few such centers throughout the world would be likely to be kept busy the year around. The excellent airline communications and hotel facilities here would make Hong Kong a strong contender to have the East Asian center ... if ever a decision were taken to implement this idea.

More immediately, Hong Kong could take the initiative in hosting symposia of regional interest. It might provide an opportunity for scientists from China to meet with other Asian scientists working in the same field. As far as I can tell, no Chinese scientist from the Mainland has been invited to visit Hong Kong - not even at the time of the University Jubilee Symposia last year. The Vice Chancellor however, said that as a matter of principle the University would welcome scientific symposia at which all scientists, regardless of nationality, should be free to attend. He pointed out though, that the Hong Kong Government would have the final word on who attended meetings in Hong Kong since it is they who issue visas.

Hong Kong as a translation center for Chinese scientific journals

One project mentioned by many people was the establishment of a centralized translation bureau to translate Chinese scientific journals into English. It was noted that at present there is only one Chinese scientific journal that is translated cover-to-cover into English (compared with 85 Russian scientific journals). There are many bilingual Chinese scientists here in Hong Kong, several of whom are familiar with Mainland terminologies. It should not be difficult to staff such a translation bureau.

Co-operative research projects with neighbouring countries

There is already a certain amount of co-operative work done with scientists in Macao, Singapore and the Philippines, but

none with scientists from the Mainland. There are several projects which, from the scientific point of view, would be best carried out in co-operation with the Chinese scientists. It may be that the politicians on both sides would prohibit such co-operative projects, but there was some support among the scientists in Hong Kong for the idea of trying to initiate joint research projects with scientists in China. Fisheries research is one field which might serve as a start. Continental shelf studies and research into metereorological problems of mutual interest might follow.

If the present policies of the British and Hong Kong Governments are maintained there is little likelihood of Government support for the above schemes. Yet without financial support most cannot be initiated. An alternative policy which might lead to support from the Government and from individuals, was outlined recently by Mr. Evan Luard in his book "Britain and China". Mr. Luard is an ex British Foreign Office man and is now at St. Antony's College, Oxford. Briefly his argument runs like this: Sooner or later China will take back Hong Kong. It is therefore important that there be developed here in Hong Kong an alternative to the Communist way of life which embodies all that is good in the non-Communist system, i.e. Hong Kong should be made a show case for the West. If such a society were to exist in Hong Kong, Luard feels that it could have a significant impact on China, because it is only here in Hong Kong that East and West really meet. Such a policy would mean a greater financial commitment from Britain and a more positive attitude on the part of the Hong Kong Government. Luard suggests several things which might be done to improve Hong Kong - and to his proposals in the Arts I would add the above list in the Sciences.

Yours sincerely,

C.H.G. Oldham.

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