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INTERRUPTION OF CENTRAL ASIATIC EXPLORATION BY THE AMERICAN MUSEUM OF NATURAL HISTORY

By Dr. HENRY FAIRFIELD OSBORN
AMERICAN MUSEUM OF NATURAL HISTORY

IT will be a matter of very great regret to all members of the American Association for the Advancement of Science, and of the allied societies, to learn of the enforced interruption by the "Cultural Society" of Peking of the explorations by the American Museum of Natural History in Central Asia.

Scientists and educators of America have taken a very keen interest in the advancement of science in China, both indirectly by the establishment of educational institutions and directly by scientific surveys, such as those of Professor Bailey Willis. We have also opened all our educational institutions, both in pure and applied science, in all parts of the country, to students coming from China. We have extended to them other facilities and hospitalities, as well as financial aid, in many cases. In brief, it has been one of the dreams of our ever-hopeful and optimistic country to see China realize the full benefits of the "advancement of science."

It is one of the most regrettable incidents of recent times that the new Nationalistic spirit in China, in which we all rejoice, has been accompanied, and partly developed, by a spirit of anti-foreignism. This spirit is by no means confined to the political and economic sphere, but has also entered the intellectual and scientific sphere. The purely scientific and educational aims of other countries are misrepresented in the Chinese press, and popular opinion is inflamed against scientific exploration as hostile to the best interests of China. Striking examples of the working

of this anti-foreign spirit are seen in the new attitude towards scientific work and exploration in all parts of China. In order to illustrate what is going on and to correct certain misstatements which have appeared in the daily press, I have requested Dr. Roy Chapman Andrews, leader of the Central Asiatic Expeditions of the American Museum of Natural History, to submit a statement for the information of readers of SCIENCE regarding the interruption of the work of the Central Asiatic Expedition.

HEADQUARTERS OF THE CENTRAL ASIATIC EXPEDITION OF THE
AMERICAN MUSEUM OF NATURAL HISTORY
PEKING, CHINA, JULY 22, 1929

Because of its bearing upon all foreign scientific exploration in China, it is desirable that the reasons for suspending exploration in Mongolia, during the year 1929, by the Central Asiatic Expedition of the American Museum of Natural History should be made known to the scientific world.

In 1926 the famous Swedish explorer, Dr. Sven Hedin, arrived in Peking and made preparations for a great scientific expedition to Inner Mongolia and Chinese Turkestan. Just before he was ready to depart in the spring of 1927 the "Society for the Preservation of Cultural Objects" started a newspaper campaign against Dr. Hedin. Although the main purpose of the Swedish expedition was meteorological investigations it included geologists, archeologists, zoologists and other scientists. The Cultural Society stated that Dr. Hedin intended to rob China of priceless treasures, infringe its "sovereign rights," and much more in the same vein. The Cultural Society, an entirely unofficial body, made its first appearance in a public way at that time; its activities had not previously come to the attention of foreign residents in Peking.

By an organized publicity campaign in the Chinese press it aroused such opposition to the Swedish expedition that the officials were intimidated and did not give permission for Dr. Hedin to depart until he had made arrangements with the Cultural Society. Negotiations dragged over many months. Finally Dr. Hedin felt that it was better to accede to the Cultural Society than to give up his entire expedition, which had been assembled in Peking at great expense and then was ready to go into the field. He was forced to accept a Chinese codirector, pay the salaries and expenses of ten Chinese students to accompany him on the expedition and agree to turn over all his collections to the Chinese. The Cultural Society agreed that they would give him back some of his material.

The peculiar circumstances which influenced Dr. Hedin in agreeing to such unfair conditions made future work most difficult for other foreign scientists. In the spring of 1928, when the Central Asiatic Expedition of the American Museum departed for the field, a war was in full progress not far from Peking. Marshall Chang Tso-lin, who represented the recognized government of China at that time, personally gave his permission to American Minister John Van Antwerp MacMurray for the expedition of 1928 to continue its explorations in Mongolia. Unfortunately, before the expedition returned to Peking in the autumn Chang Tso-lin was dead, his government had fallen and the Nationalists of Nanking were in control.

The Cultural Society, when our caravan arrived in Kalgan from Mongolia in August, 1928, carrying eighty-five boxes of fossils, telegraphed to the governor of the district ordering him to seize our collections. Meanwhile the society pursued its course of publishing articles in the Chinese press calculated to inflame public opinion, which had been so successful in the case of Dr. Hedin. We were charged with "stealing China's priceless treasures," "infringing her sovereign rights," "seeking for oil and minerals," "being spies against the government," etc., etc.

Although there is no law in China prohibiting or regulating in any way the collecting or exporting of fossils, this unofficial body, the Cultural Society, was able so to intimidate the officials that our collections were held at Kalgan for six weeks, namely, until late in September. Before the fossils would be released for preparation in Peking we were forced to sign an agreement with the Cultural Society stating, among other provisions, that in the future we must have their permission before carrying on further scientific work in China.

In January, 1929, Assistant Chief Walter Granger approached the Cultural Society in regard to the 1929 expedition which was intended to be the last of the series of seven. He was presented with the following demands which are herewith literally translated from the original Chinese by the Chinese secretary of the American Legation, Peking:

ARTICLE I

The Central Asiatic Expedition shall be commissioned by the Committee for the Custody of Ancient Objects to proceed to Mongolia to conduct explorations.

ARTICLE II

That the expedition shall consist of half each of Chinese and foreign members shall be taken as the fundamental principle in determining the number of members of the expedition. From each half of the members one shall be appointed as leader of the expedition.

ARTICLE III

All scientific materials collected, with the exception of the vertebrate fossils as provided for by Article IV, must be retained in China.

ARTICLE IV

(A) All duplicate specimens of vertebrate fossils obtained or those which are similar to previous finds shall be retained in China.

(B) As to those which differ from previous finds, but which for research must in fact be shipped to the United States, their shipment to the United States under the following conditions may be considered:

1. China shall send experts to collaborate whose traveling expenses for the round trip and all other expenses during the period of research shall be borne by the Museum of Natural History.

2. The American Museum of Natural History shall afford these experts with facilities for independent research.

3. After the completion of research, these articles in their original form must be shipped back to China. Those articles which must temporarily be retained in the United States for reference shall be clearly marked, when exhibited, "Deposited by the Society for the Preservation of Cultural Objects, Peking, China." In addition, two sets of casts shall be made exactly similar to the originals and sent to China.

These demands were so contrary to all precedent in China or any other country that at first we refused to accept them. However, we were willing to make unusual concessions in order to complete our eight years of work, by the 1929 field expedition. Eventually we agreed to all the demands except Article IV, A. It is obvious that until the fossils had been prepared and studied, under expert scientific direction, no one could say what was or what was not a "duplicate." We asked that the collection be allowed to go to the American Museum for this purpose, and after its preparation and study duplicates would be returned to China. The Cultural Society refused to agree to this proposal. They insisted that they had the final right to determine what fossils were to remain in China and what were to be sent to New York.

At this point negotiations were broken off in Peking but were continued in New York and Washington by President Henry Fairfield Osborn and Secretary of State Henry L. Stimson with the Chinese minister, Dr. Chao Chu Wu. Two months of continued negotiations ended in failure because, when an agreement with the Chinese minister was reached, the Cultural Society insisted upon the acceptance of its original demands, with only minor and unimportant modifications.

It had become obvious that the Cultural Society intended to hold, maintain and control the fossil collections of the expedition. In all our negotiations neither Mr. Granger nor I was able to discover any desire on the part of the Cultural Society to cooperate in a scientific spirit.

At the present time the Nanking government is discussing certain regulations governing the future collections of fossils in China. Press reports foreshadow the regulations. They state that one group wishes to keep all fossils in China, allowing only photographs to be taken out. The other, and moderate, group is willing to concede that duplicates may be taken away but the type and unique specimens must remain in China.

Laws already are in force prohibiting the shipping out of China of any bird skins at all, and of more than three specimens of mammals and reptiles of a single species for museums. But no laws are enforced prohibiting the killing and selling of birds by natives. In the market at Peking throughout the year thrushes and other song-birds are always on sale for food with ordinary game.

Such an attitude on the part of the Cultural Society and of the government of China means that all foreign scientific work in the country must cease. Museums can not send expensive expeditions if they are not allowed control of their collections. The Chinese themselves can not do the work, for they have neither adequately trained men nor the money to conduct investigations, and will not have for many years. Instead of opposing the progress of world science they should aid it, for they themselves have much to gain by cooperating in a true scientific spirit.

The American Museum of Natural History has already presented freely to China many prepared duplicate specimens of its Mongolian and other collections. It has repeatedly expressed its willingness to continue such gifts. It has given the Library of the Geological Survey of China scientific publications worth many thousands of dollars. President Osborn, when he visited Peking in 1923, discussed with the premier and cabinet officials plans for a great natural history museum in Peking and promised his enthusiastic support. The present paleontological section of the Museum of the Geological Survey, Peking, is almost entirely filled with exhibits which are Swedish or American gifts.

It is most regrettable that the spirit of cooperation which has actuated the Chinese under former governments should have suddenly changed with the present régime.

ROY CHAPMAN ANDREWS

To the above report should be added the statement that, through the active interest of the Chinese minister, Dr. Chao Chu Wu, a graduate of the University

of London, and Secretary of State Henry L. Stimson, the entire American Museum fossil collection of the year 1928 was finally released by the government of China and is now on its way to the American Museum, after a prolonged and most unfortunate delay since August, 1928, when the collection was first detained in Kalgan.

A description of this and the preceding collections in vertebrate paleontology will constitute Volume V of the publications of the Central Asiatic Expeditions. Dr. Andrews has remained in Peking to write Volume I, "Narrative of the Expeditions," which have now been in the field since 1921; Volume II, "Geology of Mongolia," by Professors Charles P. Berkey and Frederick K. Morris, is in circulation; Volume III, on the "Geology of Mongolia," by Professors Berkey and Morris, is now in press; Volume IV will be "Topography of Mongolia," which will include maps by L. B. Roberts, and the volume on "The Permian of Mongolia," by Dr. Amadeus W. Grabau, formerly of Columbia University and now of the Chinese Geological Survey, is in press and will soon be ready for the printer.

It does not appear an exaggeration to say that, as a result of our exploration and survey of Mongolia, the researches in geology, paleontology and zoology mark one of the most important scientific advances of the twentieth century. The publication of these scientific researches will be of great educational as well as economic importance to China. These discoveries have not only aroused interest throughout the entire scientific world, but have spread very widely and have renewed a healthy popular interest in China and Mongolia, to offset the always disturbing and conflicting political news which we receive from these countries.

The interruption of the work of the Central Asiatic Expeditions is a misfortune. The permanent suspension of this work from any cause would be a calamity in the advance of science.

AFRICA AND SCIENCE. II

By JAN H. HOFMEYR

PRESIDENT OF THE SOUTH AFRICAN ASSOCIATION

What then can Africa give to science? In reply to that I can do no more than suggest some of the lines along which Africa seems to be called upon to make a distinctive contribution to science.

First there are the related fields of astronomy and meteorology. To astronomy I shall but make a passing reference. This continent of Africa, more especially the highlands of its interior plateau, with its clear skies and its cloudless nights, offers wonderful facilities to the astronomer. As proof of the necessity of utilizing those facilities, especially with a view to the study of the southern heavens, I need but quote the words used by Professor Kapteyn on the occasion of the 1905 visit: "In all researches bearing on the construction of the universe of stars, the investigator is hindered by our ignorance of the southern heavens. Work is accumulating in the north, which is to a great extent useless, until similar work is done in the south." Africa has to its credit considerable achievements in the past in the field of astronomical research. The increased equipment now available should make it possible to increase greatly the amount of systematic work now being done, and to offer important contributions to astronomical science.

But probably of greater importance is the work waiting to be done in meteorology. Few branches of science have a more direct effect upon the welfare of mankind—that is a lesson which we in South Africa should have learned only too well—but in few has less progress been made. And in meteorological work Africa is probably the most backward of the continents. It is not so long since Dr. Simpson, of the London Meteorological Office, declared that, save from Egypt, his office received practically no meteorological information from the great continent of Africa. Moreover, the backwardness of meteorology is in large measure due to the intricacy of the problems involved, and the necessity of having world-wide information made available. The problems of meteorology are emphatically not the problems of one country or of one region. The South African meteorologist must see his problems *sub specie Africae* (the seasonal changes in South Africa depend on the northward and southward oscillations of the great atmospheric system overlying the continent as a whole); and quite apart from what he can learn from the rest of Africa, the Antarctic regions have much to teach him. But while the development of meteorological research throughout Africa is of supreme economic importance for Africa, Africa in its turn has its contributions to make to other continents. In particular, we should not forget the close interrelation of the meteorological problems of the lands of the southern hemisphere. The central position of Africa in relation to those lands gives not only special opportunities but also special responsibilities for meteorological observation and research. For the sake both of South Africa and of science in general I