A BACKGROUND TO MUSEUM EXHIBITION

By Their Works. By H. PHELPS CLAWSON. 260 pp. 107 illustrations. Buffalo, N. Y.: Buffalo Society of Natural Sciences. 1941. $4.00.

"BY THEIR WORKS" is an interesting and important addition to the growing literature of that nascent social science, museology. The purpose of the volume is to create a historical and cultural setting for an exhibition of anonymous art, drawn from all epochs and all quarters of the globe, on view at the Buffalo Museum of Science. It provides a framework on which to hang an appreciation of the arts of the European Stone and Iron ages, Egypt, the Near East, China, Greece, Indonesia, Australia, Oceania, the Americas, Africa, Luristan, Ordos and the Syro-Hittites. The volume is copiously illustrated, an important feature, since the educated public is more used to two-dimensional visualization in terms of the printed page than to direct appreciation of an object in its three-dimensional reality.

The text is really subordinate to the pictures, or rather to the specimens which they illustrate. There is no need to cavil at Mr. Clawson for handling his material in this way, since an exhibition speaks for itself and lush verbalization is unnecessary. The examples are on the whole well-chosen and there is a feeling of balance and continuity in the quality of the display. A person who has major interests in any one art field might bawl and scream that some of his pet pieces were left out. The reason many of these finer examples are lacking is that the book is designed to cover only the material available in the Buffalo Museum. Thus "By Their Works" fully achieves its basic purpose.

Mr. Clawson has provided a point of reference to the exhibitions which can not be attained through the medium of labels. He has sketched in the social history of the makers of the objects in the display and given the serious visitor a means of preparation for what he is about to see, and a method of conserving the memory of what he has already contemplated. How many museums can claim to have done the same for their clientèle?

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REPORTS

THE PROPOSED SOCIETY FOR FREEDOM IN SCIENCE

(1) IT is generally agreed that if totalitarian dictators were successful in the present war, they would ultimately put an end to the freedom of scientific research throughout the world. Their pronouncements and their practice alike can leave no doubt upon the point. Defense of scientific freedom, equally with other freedoms, is therefore an integral part of the struggle.

(2) The threat to scientific freedom comes not only from existing dictatorships. Great social changes are inevitable after the conclusion of peace, and some of the changes now ardently advocated in democratic countries contain a definite threat to scientific freedom. There is a widespread and vigorous movement which sees the solution of social difficulties in a complete recasting of the structure of society under a system of central control. Thus there is a threat to scientific freedom, less direct though perhaps as dangerous, from some of the adherents to the doctrine of "central planning."

(3) Science has a value which is independent of the practical benefits it yields to society. The methods of science, its heritage of knowledge and the scientific habit of thought together constitute a scientific culture which must be recognized as being on a par with the artistic and literary cultures; and freedom is essential for all alike. Without freedom science can not flourish, and therefore can not serve the cultural and practical needs of society.

(4) The threat to freedom in science is believed to be real and dangerous because of the enthusiasm which can be evoked by the doctrine of central planning in the supposed interests of the community. Those who would apply this doctrine to almost every detail of social life represent a school of thought which makes a strong appeal to many of the more active-minded and socially conscious scientists. It seems to be clear that many of the adherents of planning are unaware of the decisive limitations implied by their aims to the freedom and progress of science. Others appear to minimize or to disregard these dangers in their determination to follow the aims of general social planning, whatever its consequences in the province of science.

(5) The vindication of scientific independence is not a doctrine of social indifference but is on the contrary a positive assertion of rights and duties. One of the principal social duties of the scientist is the defense of scientific freedom, for he knows how essential that freedom is for scientific discovery and for the origin of those practical benefits to society which are the natural by-products of his work. At the same time he must recognize the need for continuous reform both in the life of scientific institutions and in the fields where science impinges on society. Almost every professional scientist has some duties apart from pure research: he may undertake teaching, ad-

ministration of a research institution, medical practice, industrial consultation, etc. In fulfilling these duties the scientist should be guided by a realization of their wider social implications and should steadily help to make society more humane, juster and more efficient. Scientists who are prepared to fight for freedom in science are as eager as any one to make contributions to social progress.

(6) In order to maintain scientific freedom in the countries where it still happily exists and to assist in its reestablishment in regions where it is now suppressed, it seems necessary to organize the forces which support the ideal of free science. It is desired to clarify and formulate the ideas involved in the phrase "freedom in science" and to help to support those institutions which now maintain this freedom. If this can be done successfully, a real contribution will be made to the general advance of freedom to which military victory will open the path and which alone can make that victory effective.

(7) The aim of the existing scientific societies as reflected in their publications is almost entirely the direct promotion of research: the independence of science is taken for granted. The Society for Freedom of Science, conscious that this independence is threatened, would work to frustrate the threat.

(8) A nucleus of members has already been secured and it is now desired to build up a large body of scientists, mainly active research workers, who subscribe to the following propositions:

(i) The increase of knowledge by scientific research of all kinds and the maintenance and spread of scientific culture have an independent and primary human value.

(ii) Science can only flourish and therefore can only confer the maximum cultural and practical benefits on society when research is conducted in an atmosphere of freedom.

(iii) Scientific life should be autonomous and not subject to outside control in the appointment of personnel or in the allocation of the funds assigned by society to science.

(iv) The conditions of appointment of research workers at universities should give them freedom to choose their own problems within their subjects and to work separately or in collaboration as they may prefer. Controlled teamwork, essential for some problems, is out of place in others. Some people work best singly, others in teams, and provision should be made for both types.

(v) Scientists in countries not under dictatorial rule should cooperate to maintain the freedom necessary for effective work and to help fellow-scientists in all parts of the world to maintain or secure this freedom.

(9) Membership of the society involves nothing beyond the support—if necessary the active support—of these principles. It is not proposed, in the first instance at least, to ask for a subscription, though some of the original adherents have contributed money to defray the necessary costs of copying and postage, and such donations are welcome. There is at present a small provisional committee, but it is entirely informal and will resign when the society is sufficiently organized to permit of an election. The present statement has been drawn up by the provisional committee, which is also actively contemplating the publication of a book of essays by several members of the society dealing with various aspects of freedom in science.

(10) Dr. John R. Baker, University Museum, Oxford, to whom the society owes its inception, is acting as secretary. Notices of adherence should be sent to him with any suggestions as to the policy of the society.

SPECIAL ARTICLES

WESTERN EQUINE AND ST. LOUIS ENCEPHALITIS ANTIBODIES IN THE SERA OF MAMMALS AND BIRDS FROM AN ENDEMIC AREA[1]

THE virus of Western equine encephalomyelitis has never been isolated from naturally infected mammals or birds, except man, horses and mules, although attempted by several workers. Howitt[2] noted the presence of antibodies to this virus in a few chickens and one quail. Hammon and Howitt[3] and Hammon[4] noted the presence of antibodies in 5 of 9 chickens, 1 domestic duck and 1 of 3 pheasants in an endemic area. The virus of St. Louis encephalitis has been isolated only from man, but neutralizing antibodies were found in horses during the summer of 1940 by Philip, Cox and Fountain,[5] by Howitt and Van Herick[6] and by Hammon and Howitt,[3] and their specificity confirmed and the susceptibility of the horse demonstrated, as a sequel to these findings by Cox, Philip and Kilpatrick.[7] Howitt and Van Herick[6] also found antibodies for this virus in the blood of certain domestic fowl in California.

In the Yakima Valley, Washington, in 1940, evi-

[1] From a Cooperative Survey of Encephalitis in the Yakima Valley by the University of California, the State College of Washington, the Washington State Health Department, the Yakima City-County Health Department and the U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine. Aided by a grant from the National Foundation for Infantile Paralysis, Inc.

[2] B. F. Howitt, *Jour. Infect. Dis.*, 67: 177, 1940.

[3] W. McD. Hammon and B. F. Howitt, to be published.

[4] W. McD. Hammon, *Jour. Am. Med. Asn.*, 117: 161, 1941.

[5] C. B. Philip, H. R. Cox and J. H. Fountain, *Pub. Health Rep.*, 56: 1388, 1941.

[6] B. F. Howitt and W. Van Herick. In press.

[7] H. R. Cox, C. B. Philip and J. W. Kilpatrick, *Pub. Health Rep.*, 56: 1391, 1941.