

## PHYSICAL ANTHROPOLOGY

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The scientific study of mankind has expanded at an unprecedented tempo within the memory of living anthropologists. The latter outnumber by far those of previous generations and inevitably have become specialized in more and more diverging directions, represented by societies and journals limited to newly developed interests. Twenty years ago, when this trend of growth had clearly begun its steep rise and its accompanying diversification, the unique Viking Fund was created exclusively for helping anthropology in all its aspects. This organization, which later was renamed after its magnanimous Founder together with the clear statement of its single purpose, came most opportunely at a time when anthropological problems and aims threatened to outgrow the support which conservative universities and museums were willing or able to supply. It was also at this stage that the manifold new anthropological interests drifted most rapidly apart and were in danger of losing their mutual contact even within one and the same country.

Though the name of the Foundation emphasizes the fact that it exists solely for anthropological research, the President and Directors of the Foundation have consistently interpreted these words in a very liberal and far-sighted sense. All of the biological, cultural and social fields of anthropology have been represented as well as archaeology, prehistory and linguistics. The word *research* stands for the central and most important purpose of the Foundation, but it never implied that merely specific research projects were to be given financial support, similar to the custom of many other organizations. The Wenner-Gren Foundation has always adhered to the conviction that the advancement of any science, and particularly during a period of renaissance, depends not as much on the quantity of its research, as on the kind of its research program, which, in turn, is everywhere becoming more and more dependent upon cooperation and exchange of knowledge and ideas. Such vitally needed coordination of research is attained most directly and effectively through personal contact at meetings, besides, of course, through publication. Research, furthermore, often is impossible without bringing "the prophet to the mountain," i.e. enabling the expert to visit the objects or the scenes of his problems. With the overwhelming accumulation of anthropological publications even experienced investigators are apt to duplicate unknowingly work done in the past or at least to miss results of relevant studies by foreign colleagues. For these reasons the Foundation has wisely devoted a large share of its resources to the encouragement and aid of meetings, symposia and travel for personal contact and the exchange of ideas in discussion. In addition, it has freely supported the well-planned publication of reviews and of special bibliographies as the most effective help in the formulation of new research

programs and for the dissemination of their results. At the same time and with these same means the Foundation has succeeded in bringing about a much closer integration between the manifold anthropological interests than had prevailed formerly in most countries. With particular willingness on a great many occasions it has encouraged cooperation with other fields of science where ever these could possibly be of help for the advancement of anthropology, or whenever anthropology has had something to contribute to the solution of problems in different sciences.

Comprehensive research programs demand a continuing supply of well qualified students with specialized knowledge besides the broad vision acquired only by a thorough education. Facilities for equal training in all parts of anthropology are still sadly lacking in a majority of our institutions of higher learning, and even a properly balanced program for instruction has not yet been generally agreed upon. All of the Foundation's many-sided aid of education means ultimately far-sighted support of research. This consists not only of fellowships on a pre- and a post-doctoral level, but also of more generally useful undertakings. For instance, the Foundation has organized a symposium on museum exhibits in anthropology for visual and general education and has published another symposium on the scope of physical anthropology and its place in universities; it has been host to still another symposium on teaching anthropology in general and has given financial support to anthropological libraries. Finally, it has helped the collection and distribution of educational material, such as casts of fossils or pictures of racial and constitutional types as aids in the education of students as well as investigators.

In the *biological fields* of anthropology, including primatology and human palaeontology, the Foundation has awarded over 150 research grants during the past ten years, not counting any of its many other grants for meetings and publications devoted entirely or partly to the interests of physical anthropology in its broadest sense. Approximately one fifth of these grants has been concerned chiefly with the investigation of the *Australopithecines* and has contributed much to the deeper understanding as well as to the more general appreciation of these hominid primates, which are of the highest significance in the fascinating study of man's evolution. This concentration of grants related to work on the *Australopithecines* forms the core of the Foundation's long-term program on Early Man in Africa, initiated in 1952 at the suggestion of the late Dr. Teilhard de Chardin and after thorough consultations with many other leading experts in palaeoanthropology. This ambitious program emphasized and greatly facilitated close cooperation between not only the anthropologists and archaeologists of South Africa and their colleagues elsewhere, but also between the latter and geologists specially interested in the stratigraphy and climatic changes of the pleistocene period. The grants for this program aided directly the enormous amount of work in the field and in laboratories, and in addition supplied travel expenses to and from Africa whenever this became necessary and advantageous for pooling experience or for special investigations. Prof. R. Dart, who has played such an eminent role

in the discovery of and subsequent work on *Australopithecines*, received a Viking Fund medal and his visits to the United States on that and previous occasions were effective stimulations for exchanging ideas concerning these fossils. Directly related to all this important work in the *Australopithecines* of South Africa is the epochal discovery of *Zinjanthropus* in East Africa by Dr. L. S. B. Leakey, whose field-work has been supported by the Foundation. The Foundation also enabled him personally to demonstrate this great find to scholars in America and Europe. The rapidly accumulating literature of recent years on "early man in Africa" and the unexpected progress in the reconstruction of the evolutionary history of African hominids owe much to this manifold support by the Foundation during the past decade.

Of outstanding significance in the study of extinct higher primates is also the devoted work of Dr. J. Hürzeler on *Oreopithecus*. The Foundation had been of vital help in Dr. Hürzeler's successful efforts to secure a great series of these important fossils before the Italian coal mine, in which they occurred, was permanently closed. As in other similar cases, the Foundation also gave Dr. Hürzeler opportunities to demonstrate his famous finds to many of his colleagues assembled in New York and to others at Burg Wartenstein.

Comparative studies on recent primates also received numerous grants, of which several have helped to revive the long neglected and urgently needed investigation of the social behavior of free-ranging monkeys and apes. With these grants it has finally become possible to collect new and highly interesting observations on baboons, orang-utans and chimpanzees in their native habitats, which most likely will show wide generic differences in behavior and the consequent need for many more field-studies of this kind. Other research grants of this category are concerned with a great variety of comparative-anatomical and comparative-ontogenetic problems, all of which will ultimately advance our understanding of human nature.

Work on the skeletal remains of fossil and prehistoric man, from *Pithecanthropus* to *Homo sapiens fossilis*, was aided by grants to many scholars in America, Europe and Africa. An even larger series of individual grants supported research projects on recent man. In this category, as was to be expected, problems of human genetics and blood groups occur most frequently, but many other topics are also represented, ranging from growth and constitution to skin and hair and including Bushmen, Australians and Eskimos as well as other races.

The detailed lists of all these research grants in the last ten annual reports of the Foundation refer to practically all essential subdivisions of modern physical anthropology. If palaeoanthropology is even more frequently represented than such topics as human genetics, constitution and growth, it is merely in consequence of the fact that the latter interests can often be served at home and are adequately supported as a rule by universities, medical organizations, etc., whereas discoveries of fossils mostly call for prompt help to finance field trips and visits to other collections for comparative material or

for specialized advice and technical assistance. It may be mentioned here also that the Foundation has never granted aid for any project which would have come under the heading of eugenics. Most likely it has never received any such applications because that naive and formerly very fashionable faith in rapid eugenic perfections seems to have vanished with the belief in super-races, popular before and during the Hitler regime. Another form of applied human genetics—the lucrative determination of disputed paternity, which plays such a time-consuming part in German anthropology—has also never been supported by any research grant of the Foundation.

In order to make our treasured stock of fossil hominids more widely available for research and in education the Foundation has supplied very considerable funds to the American Institute of Human Palaeontology for the purchase of molds and the manufacture of casts of as many of the fossil originals as possible. This splendid service, located in the University Museum in Philadelphia, has already been of inestimable value to many institutions and promises to become even more useful through the Foundation's faith in supporting the development of new and more accurate casting methods, together with the publication of these methods for their unrestricted application everywhere. Of even greater significance for anthropology in general are the different attempts to develop new, or to perfect existing methods of dating prehistoric finds. Several of these studies have become possible through special grants to various investigators. A very informative review of "Chronology and Dating Processes" has been contributed by J. B. Griffin for the *Yearbook of Anthropology, 1955* and several later symposia have dealt with results of these new methods. Here it may also be recalled that at the beginning of the last decade an entire seminar of the Foundation was devoted to "New Techniques in Physical Anthropology."

A series of these "Summer Seminars in Physical Anthropology" was held at the New York headquarters and elsewhere, focussing each time at some new central topic. Their usefulness is attested by their large attendance, often including specialists from allied fields of science, ranging from archaeology to anatomy, biochemistry, dentistry, orthopedic surgery and pediatrics. In addition, the Foundation sponsored many "Supper-Conferences for Anthropologists" in various cities which formed welcome opportunities for hearing and discussing reports on current research in human biology. The International Symposium on Anthropology, organized by the Foundation in the summer of 1952, was an outstanding event in bringing together scholars from all parts of the world, among them many with particular experience and special interest in the problems of human evolution and palaeoanthropology. Their discussions have all become generally available in print in that remarkable volume *Anthropology Today*. Another international meeting of palaeoanthropologists was generously supported by the Foundation at the occasion of the *Neanderthal Centenary* at Düsseldorf in 1956. All the original papers by the 28 authors who attended this meeting, have been published by the Foundation in a highly

interesting and well illustrated volume which appeared in 1958 and is certain to remain an indispensable work of reference. Still further opportunities for personal contact between physical anthropologists of different countries have been provided by the Foundation in the last few years at its new European Conference Center, of which more will be said below.

The Foundation's support of publications in physical anthropology during the last decade has taken differing forms. The *Yearbook of Physical Anthropology*, 1951 and 1952 are the last of this highly useful series which provided reprints of outstanding papers of the year which appeared in not readily accessible journals. They also contained brief reviews of the results of current research and extensive bibliographies. Also in the form of reprints there appeared a collection of the shorter papers on physical anthropological subjects by the late F. Weidenreich, together with the biography and complete bibliography of this eminent scholar. A further highly useful collection of reprints was issued under the title of *Basic Readings on the Identification of Human Skeletons—Estimation of Age*, supplying students with ten significant reports on age changes in teeth and bones.

Of lasting service to physical anthropology are also the two extensive bibliographies published by the Foundation in recent years, namely *A Bibliography of Physical Anthropology in Latin America* by T. D. Stewart and *A Bibliography of Early Man . . . in Africa* by H. L. Movius and D. F. Jordan.

Of the many entirely new contributions to physical anthropology published with the financial support of the Foundation, there is to be mentioned first the valuable and detailed study by Hooton and Dupertuis on *Age Changes and Selective Survival in Irish Males*. Also in 1951 there appeared a collection of papers by six authors on *The Physical Anthropology of the American Indian* as the result of a previous summer seminar. Four interesting papers on *Natural Selection in Man*, given at a Wenner-Gren Foundation Supper Conference, were published with Foundation funds in 1958. In the following year the Foundation also subsidized the publication of original lectures by six scholars, who had participated in the second symposium of the newly founded British Society for the Study of Human Biology, under nearly the same title, namely *Natural Selection in Human Populations*. The first symposium of the same society consisted of lectures by 10 authors on *The Scope of Physical Anthropology and its Place in Academic Studies*. This very stimulating and original collection of essays became available in print in 1958 again with the financial support of the Foundation. Also in 1958 there appeared the full report of the first symposium held in the European Conference Center of the Foundation under the title *Beiträge Oesterreichs zur Erforschung der Vergangenheit und Kulturgeschichte der Menschheit*. Among the 14 contributions there are several of direct and great interest in physical anthropology. Finally, it is to be mentioned that several anthropological journals, confronted with the necessity of reduction in size, due to rising costs, received such generous aid from the Foundation that they could publish more research than before.

It is through the small and large, local or international symposia and other meetings and through the comprehensive publications, originated and subsidized by the Foundation with astounding frequency, that the vast and heterogeneous conglomerate of modern anthropological sciences is being constantly reminded of its common interest, and that its countless specialists remain informed of each others' aims and accomplishments. A first major step toward this ideal was undertaken by the Foundation with a carefully organized *Encyclopedic Inventory of Anthropology Today*, composed of surveys by 52 leading scholars in their respective fields. The intense discussions of these papers were also published as a supplementary volume under the challenging title *An Appraisal of Anthropology Today*. These two well-known books of 1953 were followed by an equally influential *Yearbook of Anthropology, 1955*, with which to bring up-to-date the preceding survey of the rapid progress and changing trends at every front of anthropology. This was successfully accomplished by reviews of major themes with corresponding bibliographies, as well as by reports on current anthropological work in different geographical regions. Well-known experts contributed the numerous chapters which were introduced by Julian Huxley with a thoughtful editorial on "Evolution, cultural and biological." The "Regional Round-Up" and the appended lists of professional associations helped even more than did the *International Directory of Anthropological Institutions* of 1953 to keep all anthropologists well informed of what their foreign colleagues' interests and opportunities were and together these publications greatly facilitate international contacts and exchanges. The latter purposes are now being served most successfully by the new international periodical *Current Anthropology*, which has entered its second year, is sponsored by the Foundation and is distributed under very generous terms. With a circulation of nearly 3,400 copies this unique "World Journal of the Sciences of Man" is edited by Prof. S. Tax after his initial, thorough, systematic survey of the interests, hopes and needs of professional anthropologists all over the world. Besides its prompt reports on significant news and its highly useful bibliographies every issue contains several expert reviews of major topics, including the results of the latest research, and there is always space left for individual comments, suggestions and inquiries. Nothing else could more effectively cultivate an esprit de corps among the anthropologists of the world.

One more fat volume with the famous seal of the Foundation has resulted from one of its major international symposia and was published in 1956. It is a highly original collection of essays centering on *Man's Role in Changing the Face of the Earth*. Even though this book deals with consequences, rather than causes, of human behavior and culture, its wealth of interesting data and thought-provoking ideas demonstrate convincingly the advantages of close cooperation between geography and many phases of anthropology, including the biological ones.

During its first years the Foundation had to confine its activities to the Americas on account of the war, but as soon as conditions permitted, its bene-

ficial influence expanded to Western Europe and as rapidly as possible to the remaining world, interested in, or of interest to, anthropology. This enduring program for cooperation and integration within the international family of anthropologists was greatly helped by the magnificent gift of Dr. Wenner-Gren of the huge, old Burg Wartenstein on the Semmering pass for a Conference Center of the Foundation in Europe. After this imposing castle had been completely renovated and its interiors adapted in every respect for the conduct of conferences and the comfort of the participants, its drawbridge could be lowered for the first guests in August 1958. Already it has been the scene of many important symposia; for each of which from a dozen to twenty eminent scholars have been invited for week-long discussions of some central topic, selected for its originality and promise of progress in solving problems by pooling the knowledge of different experts. The daily, informal discussions at the huge, round table in the castle's largest room have more quickly dissipated misunderstandings and more frequently led to productive ideas and new projects than could have resulted from any amount of scattered publications, written in isolation. In the scholarly atmosphere and delightful hospitality of Wartenstein every guest gains far more than he can contribute to his particular symposium. Within the formidable walls of this castle he literally cannot escape from listening to the views of his colleagues and the lively debates thereon; he is bound to learn useful new facts, methods or theories; and, best of all, he has every opportunity to become well acquainted with fellow students, sharing his professional interests.

From its very beginning the Foundation, under the wise guidance of its Director of Research and later President, Dr. Paul Fejos, has been distinguished by an exceptionally liberal attitude in supporting research and in selecting themes for meetings and publications. Invariably it has solicited suggestions and has freely accepted advice from leading authorities in shaping its course for the best general interest of the entire field of anthropology. In all the individual research projects which have been granted support, and in all the programs for small or large meetings and for one type or another of publications which have been selected from among countless proposals, the investigators, chairmen and editors respectively have enjoyed complete freedom of action and their responsibility was limited only by the size of their grant, for which no burdensome, detailed accounting was required. The only "favoritism" of the Foundation can be found in its decided preference for courageous plans, promising new discoveries or fruitful ideas, resulting from the combined efforts of different specialists.

At its twentieth anniversary the Wenner-Gren Foundation can look back with pride upon having gained in such a brief period the gratitude of countless professional anthropologists whose work it has supported, and beyond this upon its continuous, unique and highly effective help for the maturation and integration of anthropology as a modern science.