Paleoanthropology

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Paul Fejos, first Director of Research and then also President of the Wenner-Gren Foundation for Anthropological Research, set the parameters of concern and the goals of the Foundation for over two decades, from its inception as the Viking Fund in late 1941. This expatriate Hungarian, with a rigorous education in the classics, the sciences and medicine, service in the Great War in the horse and air cavalries, followed by a budding career in Budapest in theater and cinema in the war's aftermath, debarked in New York City in October, 1923, hopeful about life in an unknown but promising land. Subsequent to unemployment and a stint as a medical technician at the Rockefeller Institute, he created for himself a successful career in cinema direction for five years in Hollywood and another five years throughout Europe. He then undertook ethnographic filming in Madagascar (1936) and in various reaches of southeastern Asia (1937-1938), and finally filming and exploration in Amazonian Peru (1939-1941). His 1938 encounter in Singapore with the Swedish industrialist, Axel Wenner-Gren, led both to a life-long – if trying – relationship, funding for Fejos's pioneering cinematographic and ethnographic ventures in Asia and South America, and ultimately endowment of a foundation whose charitable purposes were at best ill-defined. The original charter stipulated the promotion of "research, educational, technical, and scientific work," and a year after its founding the Board of Directors, under its president, Richard Carley Hunt, a lawyer, made a critical decision "to render encouragement and support to field and systematic research in anthropology and allied sciences." This was prior to Fejos's year at Stanford University, where he participated in an army training program on the Far East along with anthropologists and other area and language specialists. In fact, Viking Fund disbursements from the very beginning reflect the anthropological focus that Fejos envisioned as the central, overriding concern of the new foundation.

I knew Paul Fejos over a fifteen-year period, from an initial meeting in 1948 (on the occasion of the Third Summer Seminar in Physical Anthropology, held at the Foundation's headquarters on East 71st Street) until his death in spring, 1963. Thus, my relations with the Foundation, and with him and his last wife, Lita Binns (Director of Research, 1963-1986), spanned an interval of some forty years. Both became close friends, and Fejos offered not only invaluable support but sage counsel on multiple occasions in the first decade of my own academic career. My own involvement, as well as that of many other colleagues, in human evolutionary studies (or paleoanthropology), owes much to the concerned interest and attendant support of the Foundation and its successive directors.

In September, 1946, G. H. R. von Koenigswald and his family arrived in New York, after his thirty-two months of prison-camp internment during the Japanese occupation of Java. The Viking Fund, jointly with the Rockefeller Foundation and at the urging of Franz Weidenreich, made this possible, and enabled a subsequent two-year study period at the American Museum of Natural History. It was at the museum that I first met both men, after my own discharge from the U.S. Navy, and had the unique opportunity to share lunches and to examine and discuss with them collections of Javanese hominid and Chinese ape fossils brought to the museum by von Koenigswald. The experience had a

profound impact on my own hope for a future career in paleoanthropology.

In December of that year the Viking Fund sponsored, through the encouragement of Sherwood Washburn, then secretary of the American Association of Physical Anthropologists, a symposium on "Early Man in the Far East" (W. W. Howells, ed. 1949) on the occasion of the annual meetings in Chicago of that association and the American Anthropological Association. The participants included E. H. Colbert, von Koenigswald, H. L. Movius, H. de Terra and Weidenreich. This mix of participants experienced in paleontology, paleoanthropology, geology and prehistoric archaeology in South and East Asia presaged many subsequent efforts by the Foundation to encourage cross-disciplinary discourse and communication of important scientific advances to the broader scholarly community.

In this same period the Foundation was assisting the preparation of Weidenreich's publication of the Ngandong (Solo) hominids from Java. Assistance, including office facilities for a time, had also been afforded Pierre Teilhard de Chardin since his departure from China with the war's end; his 1951 visit to Africa, under Wenner-Gren auspices, surely enhanced the conviction that Africa should be a major focus of Foundation support in paleoanthropology. This followed on Washburn's protracted study visit to South and East Africa in 1948, W. E. Le Gros Clark's stay in the United States in 1948 (after his 1947 trip to South Africa and participation in the First Pan-African Congress on Prehistory in Nairobi), and Raymond Dart's visit here the following year. These visits by overseas scientists involved in evolutionary studies of hominids and other primates were instanced by participation in the Summer Seminars in Physical Anthropology, which were supported annually between 1946 and 1953 (except for 1952) by the Foundation and usually held at its New York headquarters. The seminars were initiated and held mostly under Washburn's organizational leadership, and they had a powerful impact in both expanding and redirecting the scope, methods, and goals of this field. Other seminar participants from abroad included A. Galloway, K. P. Oakley, J. T. Robinson, and S. Zuckerman. The biological aspects of paleoanthropology, as well as other aspects of primate evolution, were consistently represented in all but one of these eight seminars. The seminars also produced the annual, Yearbook of Physical Anthropology, which was originally comprised of reprinted papers but since 1973 has published original, largely topical review papers across the broad scope of biological anthropology and related fields. Fieldwork on the Paleolithic was increasingly being supported overseas: in France at Roc-aux-Sorciers or Angles-sur-Anglin (Vienne) and at La Colombière (Aïn); in Lebanon at Ksar 'Akil, a site comprising the longest single stratified Middle and Upper Paleolithic succession known in Western Asia; in northern Morocco at Cape Ashakar; and in southern Tunisia in the Ouad Akarit.

The role of the Viking Fund and its indomitable leader in encouraging development of the radiocarbon dating method in 1947 was both timely and critical. The story is well known but bears brief mention. The basis for the method was laid down by Willard F. Libby, a chemist then working with the Nobelist Harold Urey, who was then moving from Columbia University to the University of Chicago (Institute for Nuclear Studies) with the end of the Manhattan Project. Although they were initially reluctant, Fejos, already well aware of the geochronological value that would eventuate from the research, pressed funds on them to pursue and accelerate those researches. At a Foundation seminar in January 1948, Libby's presentation of the method and its potential

applicability scarcely impacted the archaeologists present, but to Richard Foster Flint, distinguished Pleistocene geologist of Yale University, it offered a tool of immense utility for late Pleistocene stratigraphical and correlational studies. In 1951 Rockefeller Foundation support enabled the establishment of one of the first geochronometric laboratories, at Yale, due to the ardent support of the method by Flint and his colleague, E. S. Deevey. The $35,000 contributed by the Viking Fund to the radiocarbon project surely ranks as among its most insightful and innovative investments in a risky – but if successful, scientifically revolutionary – venture.

If the Foundation's first decade (half of it during a major war) was a time of testing and of seeking out ways to pursue its goals, the second decade was one of heightened and broadened activities, of program development, and of expansions in innovative directions. These activities affected paleoanthropological concerns in a variety of ways.

In the Wenner-Gren "International Symposium on Anthropology" held in 1952 under the presidency of A. L. Kroeber and published in two volumes of contributions and transcribed discussions (Anthropology Today, 1953), appropriate attention was given to human evolutionary studies, including paleoanthropology. Of the eleven participants (of a total of fifty-four) dealing with these topical areas, six were visitors from abroad. Three years later another symposium "Man's Role in Changing the Face of the Earth" (W. L. Thomas, Jr., ed. 1956), with seventy participants, offered diverse perspectives on many aspects of planetary environments and ecological systems, their impacts on and transformations under human and other agencies, and hence much of relevance to the perspectives of paleoanthropological investigations. Three other conferences, supported substantially or in part by the Foundation, were the (IIIrd) Pan African Congress on Prehistory, in Livingstone, 1953 (published 1957), "The Neandertal Centenary", in Dusseldorf, 1956 (published 1958), and "The Darwin Centennial, Evolution after Darwin", in Chicago, 1959 (published 1960, three volumes). The first two were devoted exclusively to matters paleoanthropological, and at the third (with fifty participants) aspects of hominid biological and cultural/behavioral evolution were treated extensively within the framework of the modern evolutionary synthesis. I had the good fortune to participate in the Dusseldorf and Chicago gatherings; Julian Huxley occupied an office adjacent to my own during autumn, 1959, and we had many discussions of hominid evolution in the perspective of the modern synthesis.

In fall 1952 Wenner-Gren instituted an African program within which the support of paleoanthropological researches was intended to play a significant role. An extensive, critical background report was prepared at the request of the Foundation by Robert McC. Adams and me, with the encouragement of Washburn. In February, 1953, a three-day discussion/workshop involving thirty-one participants – prehistorians, physical anthropologists and a diversity of natural scientists – was held at the University of Chicago to explore the major needs and possible trajectories and goals of such a program. In July a further meeting, including some of the earlier group as well as additional European and British Isles participants, was convened at the British Museum (Natural History) in London, under the joint organization of Oakley and Washburn. It was at this gathering that the first notions of a possible explanation of the Piltdown remains, exhibited to a group of us one day at the museum, was to come about through the insights of J. S. Weiner. As a consequence of these meetings and of discussion

resulting from the Pan African Congress on Prehistory in 1955, the Foundation developed an appropriate perspective and agenda that enabled the program to flourish for upwards of fifteen years. Study trips to Africa by Oakley (1952 - 1953), by me (1954), and by Flint (1959) – this last instrumental (along with the earlier critical evaluations by H. B. S. Cooke) in bringing about a much altered perspective and a redirection for Quaternary geological, paleoenvironmental and paleoclimatic studies throughout sub-Saharan Africa – all eventuated from Wenner-Gren's program.

Among the field projects supported substantially or in part were work at Olduvai Gorge, Singida rock-art sites, and Isimila in Tanzania; the Kalambo Falls site, Lusaka breccia fills, and the flooded Kariba lake in Zambia; and in southern Africa, the Krugersdorp and Makapansgat *Australopithecus*-breccias, the Cave of Hearths, Matjes River shelters, and Elandsfontein pan locality. My initial survey in the lower Omo basin (Ethiopia) was undertaken in the summer of 1959 after several weeks' visit in Israel, and was coincident with Mary Leakey's find of the type *Australopithecus boisei* cranium at Olduvai, which the Leakeys revealed to me one evening after dinner in their home.

In North Africa excavations were assisted at the huge Haua Fteah cave, Cyrenaican Libya. Elsewhere, researches at the Neandertal-rich cave of Shanidar (Iraq) were supported, as were dating efforts at Ksar 'Akil (Lebanon). In Britain there was support of renewed excavations at Swanscombe (Kent), where additional hominid cranial remains were recovered. In France Upper Paleolithic studies were furthered, and in Spain support for work on caves and on rock art sites was provided. A series of grants enabled a variety of field operations and associated natural scientific studies in the Latium and elsewhere in Italy, largely at the instigation of A. C. Blanc. Survey work was supported also in Spain and in the cave-bearing limestone regions of Afghanistan. Aspects of the new field projects in Iraq (Jarmo) and Israel (Mallaha) focused on early village-farming communities were also aided. In the New World Paleoindian studies (Tepexpan, Midland) were furthered, as was the study of potential Siberian/North American links in their respective late Pleistocene archaeological records. There were also significant efforts made to assist travel of a number of researchers based in the United States and overseas for study, research, and lecture programs, as well as funding to enable various publications to go forward.

Investigations on extinct hominids and other fossil primates were also pursued with Wenner-Gren support. These included studies on *Pliopithecus* and on *Oreopithecus*, the latter in conjunction with successful efforts to recover additional remains from active lignite workings in Tuscany. A reexamination and reevaluation of Fayum (Egypt) early anthropoids was assisted, which ultimately led to extensive field projects in that long neglected area, instigated by Elwyn Simons. Studies on Australopithecines, particularly in South Africa, continued, and several reexaminations of European Neandertals and their antecedents were undertaken. Laboratory-centered research on functional anatomy and structure, as well as field-oriented studies of distribution, diversity, and adaptation of cercopithecoid primates were similarly encouraged.

Of some seventy-five grants more or less directly affecting paleoanthropological and related researches during the 1950s, forty-three were to investigators or institutions outside the United States. Thus, the Foundation had already assumed a significant role in the international scientific and scholarly community.

At this time a small group of physical anthropologists and archaeologists with

interests in paleoanthropology met together periodically at the Wenner-Gren house and constituted itself as the American Institute of Human Paleontology. The group's discussions and considerations served, from time to time, to offer guidance to the Foundation on its endeavors in this area. One consequence was the opportunity to acquire, in the Institute's name, the Barlow/Damon collection of hominid fossil molds, built up over the years in Britain. These were housed for the Institute at the University Museum (Philadelphia) and replicas prepared under their auspices. At the end of the decade a plastics engineer, David Gilbert, demonstrated a method of very high resolution mold making and cast production, using newly available silicon rubber and epoxy resins. This research was encouraged by the Foundation, and its success was to lead to the establishment in 1965 of Wenner-Gren's extensive Anthrocast program for making available fossil replicas, which continued until 1976.

Current Anthropology, introduced as a world journal of the sciences of man, made its appearance in 1960, sponsored and supported by the Foundation. From its conception, the Foundation and the founding editor, Sol Tax, envisioned it as a unique resource that would reflect the broadest gamut of anthropological concerns and endeavors. Now in its thirty-second year, with a large circulation worldwide and extensive support from the anthropological community and innumerable scholars and researchers in collateral fields, it has continually presented critical reviews, with commentaries, of paleoanthropological focus and relevance, and it has provided prompt dissemination of information concerning new discoveries, the implications of ongoing researches, and the consequences of applications of new methodologies and technological advances. It has more than fully realized the aspirations of its founders and unquestionably constitutes the major forum for international anthropology.

The end of the 1950s witnessed the Foundation's acquisition of the Burg Wartenstein castle in southern Austria. It was sought out and located by Fejos and acquired as a generous gift of the founder. It was quickly renovated and designed to serve as an international conference center. An initial Austrian-focused symposium (1958) considered some matters of paleoanthropological interest, and the next year "Social Life of Early Man" (S. L. Washburn, ed., 1961) sought to expand the vistas of human evolutionary studies through considerations of behaviorally and ecologically oriented field studies of nonhuman primates. The tradition of topical, problem-centered and cross-disciplinary symposia held throughout the summer was thus established, and during the next two decades a series of landmark meetings and attendant publications would greatly impact paleoanthropology as an emergent scientific concern. These major symposia (with volume editors and dates as published) were: in 1960, "Courses toward Urban Life" (R. J. Braidwood and G. R. Willey, eds., 1962), "Early Man and Pleistocene Stratigraphy in the Circum-Mediterranean Regions" (F. C. Howell, ed., 1962), "Prehistoric Art of the Western Mediterranean and the Sahara" (L. Pericot and E. Ripoll-Perelló, eds., 1964); in 1961, "African Ecology and Human Evolution" (F. C. Howell and F. Bourlière, eds., 1963); in 1962, "Classification and Human Evolution" (S. L. Washburn, ed., 1963); and, in 1965, "Background to Evolution in Africa" (W. W. Bishop and J. D. Clark, eds., 1967, published simultaneously with Atlas of African Prehistory, J. D. Clark, ed.). This last symposium, among the largest ever held at the Burg, had a total of thirty-six participants, and spanned some twenty-six days, with a

small core group present throughout and others attending during one or two of the week-long sections into which the event was subdivided. In 1969 the first of several symposia focused on primatology, "Old World Monkeys: Evolution, Systematics and Behavior" (J. R. and P. H. Napier, eds., 1970) added substantial impetus to this rapidly burgeoning and diversifying field of study.

Two other major meetings, both held at the University of Chicago, had strong paleoanthropological components. "The Origin of Man" in 1965 (Sol Tax, coordinator; P. L. DeVore, ed. 1965) included a distinguished array of scholars in anthropology and the natural sciences. From this event was to develop the Foundation's granting program under the same title later that same year. In 1966 "Man the Hunter" (R. B. Lee and I. DeVore, eds., 1968) brought together sixty-six participants concerned with hunter-gatherer studies, primate naturalistic field studies, human evolutionary biology, and prehistoric archaeology. Its impact was massive across these somewhat disparate but in fact overlapping endeavors; it both reflected and heralded the expansion of researches in the first two areas, and it also pointed the way to seriously needed changes in the perspectives of prehistorians in the face of an emerging "new archaeology", on the one hand, and the vast gaps in knowledge concerning relevant ethnoarchaeology and taphonomy, on the other, concerns that were to be vigorously pursued in the decade ahead.

A succession of Wenner-Gren supper conferences, having a mixed audience of invited specialists appropriate to the topic, a diversity of anthropologists, and scholars of other disciplines, afforded opportunities for the announcement of new discoveries, examination of persistent scientific problems and issues, and the promulgation of innovative ideas and perspectives. These included consideration of higher primate taxonomy and evolution (1959), hominid origins in the perspective of behavior ecology and language acquisition (1963), early hominid diversity and phylogenetic relationships (1963, 1964, 1968), the nature and significance of *Ramapithecus* in hominoid (and hominid) phylogeny (1964), and origins of hominid bipedalism (1965); presentations (by L. S. B. Leakey) on new taxa of hominids (*A. boisei, H. habilis*) and other hominoids (*Kenyapithecus*) from eastern Africa (1959, 1962, 1964, 1967); a multi-participant consideration of the Spanish Acheulean occupation sites of Torralba and Ambrona (1965); and the evidence for lunar and other notations in the European Upper Paleolithic (1966). Three meetings (1960, 1962) of the American Institute of Human Paleontology group afforded opportunities for consideration of the status and progress of researches in hominid evolutionary studies.

The Foundation's granting efforts on behalf of paleoanthropology and allied endeavors increased greatly in the 1960s, totalling over 180 individual awards, forty-two of these made under the "Origins of Man" program. About sixty percent were to foreign-based investigators/institutions. There were twenty-eight grants for publications, including several Burg Wartenstein symposium volumes, monographs, and assistance to individual authors. Major institutional assistance enabled establishment of an important comparative osteology center (now part of the National Museums of Kenya, Nairobi), development of primate skeletal collections (Yale University), a primate film library (London), a program in laboratory and field studies of primates (University of California, Berkeley), continued research on relative and absolute age determination of fossil bone (British Museum National History, London), and encouragement of the fossil casting

program. A substantial grant was made to film stone-artifact manufacture and replication (by Francois Bordes, Don Crabtree, and Jacques Tixier). Fourteen grants funded a variety of study trips, half of them to foreign scholars. The (VIth) Pan African Congress on Prehistory (Dakar, 1967) was also assisted. Ethnoarchaeological researches were supported in Alaska (Nunamiut) and in Botswana (!Kung), and in each instance the effect on paleoanthropological thinking was deep and lasting. Reconnaissance activities were enabled in Pakistan, Turkey, Greece and Israel, and four grants dealt with North American Paleoindian researches. Nine grants entailed researches on early village-farming communities in Turkey, Syria, Jordan and Greece; two others focused on the skeletal biology of these peoples, and another provided programmatic support (to Cambridge University) directed at the problem of agricultural origins. Also of relevance to paleoanthropological concerns were grants for naturalistic studies of chimpanzees (Mahali mountains, Tanzania) and mountain gorillas (Rwanda).

Paleolithic researches in Europe and in Africa were about evenly supported. The twenty-one European studies dealt with the Upper Paleolithic, the Mousterian, and the Lower Paleolithic at sites throughout the continent. In Africa, nineteen Paleolithic and related projects were carried out in northern Africa (Morocco, Mauritania, Chad and the Nubian Nile), eastern Africa (Uganda, Ethiopia,and Kenya), central Africa (Zambia, Malawi, Rhodesia, and former Katanga), and southern Africa (the Transvaal, Orange Free State, and the southern Cape). Eight grants assisted investigations into the Transvaal *Australopithecus*-bearing cave infills.

Fifteen grants for fossil primate researches supported fieldwork in several areas, and other studies of early Tertiary prosimians, Miocene apes, the Fayum anthropoids, the extinct colobine *Mesopithecus*, and Malagasy subfossil lemuroids. Six other projects were analyses of primate variation, structure and functional anatomy.

Ten grants supported researches into hominid paleontology. These included work on *Australopithecus* locomotor capabilities, *Homo erectus* specimens, new hominids from Olduvai Gorge, hand and foot functional morphology of Neandertals, and an extensive program of radiographic studies of hominid fossil crania.

In this period there was also substantial increase in support of natural-science research efforts adjunct to paleoanthropological endeavors. At least nineteen such grants were made, which were often critical to realizing the goals of associated projects. Conjoint geological/paleontological efforts were carried out in the Canary Islands, Uganda, Kenya, and the southwest Cape. Paleontological and paleobiological efforts included projects on collections from the eastern Mediterranean, Sudan, and Uganda, as well as studies of ungulates from Ethiopia, Kenya, and Tanzania. Palynological researches, often related to archaeological occurrences, were supported in Chad, and central and southern Africa.

In the 1970s the Foundation continued to support international conferences at Burg Wartenstein and elsewhere. Symposia at the Burg that focused on paleoanthropology were: 1971, "Calibration of Hominoid Evolution" (W. W. Bishop and J. A. Miller, eds., 1972); 1973, "After the Australopithecines" (K. W. Butzer and G. L. Isaac, eds., 1975); 1976, "Fossils in the Making" (A. K. Behrensmeyer and A. H. Hill, eds., 1980); and 1979, "Paleoecology of Beringia" (D. M. Hopkins et al., eds., 1982). Symposia dealing with primate evolution were: 1970, "Functional and Evolutionary Biology of Primates" (R. H.

Tuttle, ed., 1972); 1974, "Phylogeny of the Primates" (W. P. Luckett and F. S. Szalay, eds., 1975) and "The Great Apes" (D. A. Hamburg and J. Goodall, eds., 1979); 1975, "Molecular Anthropology" (M. Goodman and R. Tashian, eds., 1976); 1976, "Environment, Behavior and Morphology; Dynamic Interactions in Primates" (M. E. Morebeck et al., eds., 1979); and 1977, "Primate Ecology and Human Origins" (I. S. Bernstein and E. O. Smith, eds., 1979). Another major symposium was held in September, 1973, in which a succession of meetings at the National Museums of Kenya alternated with field excursions to sites in the East Turkana and lower Omo basins (published as Earliest Man and Environments in the Lake Rudolf Basin, Y. Coppens et al., eds., 1976). This unique bimodal conference-cum-excursion structure proved remarkably effective. The following year a related conference, "Early Hominids of Africa" (C. J. Jolly, ed., 1978) was held in New York City.

Other major conferences of paleoanthropological content and relevance supported by the Foundation included: 1975, "Origins and Evolution of Language and Speech" at the New York Academy of Sciences (S. R. Harnad et al., eds., 1976); 1977, "Lithic Use-Wear Analysis" at Simon Fraser University (B. Hayden, ed., 1979); and 1978, "The Origins of Chinese Civilization" at the University of California, Berkeley (D. N. Keightley, ed., 1983). Wenner-Gren also assisted the initial two gatherings of the Africanist Archaeologists (1971, 1972), a conference on Nile prehistory (1970), a symposium on "Origin and Development of the Hominid Oral Apparatus" at the (IXth) International Congress of Anatomists in Leningrad (1970), the (VIIth) Pan African Congress on Prehistory and Quaternary Studies in Addis Ababa (1971), the (IVth) International Congress of Primatology (1972), and the very large and successful (IXth) International Congress of Prehistoric and Protohistoric Sciences in Nice (1976).

Supper conferences and other meetings dealt with a variety of topics of paleoanthropological relevance: 1970, African evidence for origins and evolution of Hominidae (a roundtable organized by this author), status and implications of hunter-gatherer field studies (R. B. Lee), and the human occupations of the Middle/Upper Paleolithic site of Cueva Morin, Spain (L. G. Freeman); 1971, new researches at the cave of Et-Tabun, Israel and their implications for west Asian prehistory (A. J. Jelinek); 1973, the Turkana basin hominid fossil record and its implications for human evolutionary studies (G. L. Isaac and R. E. Leakey); and 1979, the nature, variability and evolutionary significance of Middle Paleolithic hominids from western Asia (E. Trinkaus and B. Vandermeersch).

In the 1970s the Foundation funded 130 grants related to paleoanthropology and associated fields, a substantial decrease from the previous decade. Of these forty-one percent went to foreign-based investigators, a decline also in this category. The grants included support for research and meetings under the Origins of Man program, publications and assistance for publication preparation, and study trips (mostly for foreign scholars). One grant enabled a visit of Chinese researchers in paleoanthropology to the United States in 1979, which followed on an exchange delegation of American paleoanthropologists to China in 1975.

Research grants supported fieldwork and related projects in paleoanthropology in Europe and in Africa. Most of the ten European studies focused on the Upper Paleolithic. The preponderance of the twenty African researches centered on eastern Africa, with only one in North Africa, three in central Africa, and one in southern Africa.

The fifteen eastern Africa projects were located in Tanzania, Ethiopia, and Kenya.

There were at least sixteen grants for work on "natural sciences" aspects of paleoanthropology: projects with a largely geological focus including several field studies and a correlation project; paleontological research on collections from important sites in eastern and southern Africa; taphonomic projects involving work on fossil localities, actualistic studies, and study of hyena bone-collecting habits; and palynological projects (Ethiopia).

Substantial support was devoted to researches in hominid paleontology, including six studies on the genus *Australopithecus*, two projects on newly found skeletal remains attributed to *H. erectus*, one on the Bodo (Afar, Ethiopia) cranium, two studies of Neandertals, and two on later human evolution.

Six projects were concerned with the study of Tertiary fossil primates, focusing on body structure and locomotor capabilities of Miocene hominoids, the systematics of African Miocene hominoids, African Miocene lorisoid primates, *Oreopithecus* skeletal biology, circum-Mediterranean cercopithecoids of the late Cenozoic, and the diversity of Plio-Pleistocene cercopithecoids in sub-Saharan Africa. Eleven projects concerned recent primates: prosimian pelvic morphology and hand and foot structure, the dentitions of simian primates, locomotor adaptations in African guenon species, and seven investigations of the large extant African hominoids. These latter included studies of chimpanzee and pygmy chimpanzee cranio-facial growth, dental development and morphology, considering the potential relevance of chimpanzee structure and adaptations in modelling the proto-hominid ancestral morphotype.

At the turn of the decade the Foundation underwent wrenching changes. In 1979, its longtime New York building was sold and the offices transferred to rented space. In 1980 Burg Wartenstein was closed, and then sold. As its President (who was to resign in 1986) remarked, this "brought the Foundation full circle to where [it] was before 1945 without any 'permanent' base of operations," such that, "its markedly reduced staff, space and facilities could not provide the full range of services developed over the decades." It is clear, however, as she continues, "nonetheless, its commitment to the initial core activities of research grants and a variety of conference modes and support of publications remained." In fact, during the 1980s the support and encouragement of activities in paleoanthropology and associated endeavors scarcely wavered, but continued strong and notably effectual.

During the decade the Foundation played a substantive role in the realization of nine international and three more national conferences, almost all timely, effective and of great use to human evolutionary studies. Those most particularly paleoanthropological were: 1980, "The Transition from Lower Paleolithic to Middle Paleolithic and the Origin of Modern Man," held in Haifa (A. Ronen, ed., 1982); 1982, "Animals and Archeology," in London (J. Clutton-Brock and C. Grigson, eds., 1983-1984, published in four volumes); 1984, "Ancestors: The Hard Evidence," held in conjunction with a unique exhibit of hominid fossils from around the world at the American Museum of Natural History (E. Delson, ed., 1985); 1985, "Human Evolution: Past, Present and Future" (P. V. Tobias, ed., 1985), held in South Africa as the Taung Diamond Jubilee; 1986, "The Longest Record: The Human Career in Africa," held at the University of California, Berkeley, to honor J. D. Clark on his seventieth birthday (some of the 150 contributions

were published collectively in the Journal of Human Evolution, 1986 and 1987, and the African Archaeological Review, 1987); 1987, "Upper Pleistocene Prehistory of Western Eurasia," at the University of Pennsylvania (H. L. Dibble and A. Montet-White, eds., 1988), and "Second Symposium on Upper Paleolithic, Mesolithic and Neolithic Populations of Europe and the Mediterranean Basin," held in Israel (I. Hershkovitz, ed., 1989). Two other conferences had a strongly primate evolutionary focus: 1980, "The Lesser Apes: Evolutionary and Behavioral Biology," held in Germany (H. Preuschoft et al., eds., 1984); and 1987, "Primate Life History and Evolution," an international symposium organized by Wenner-Gren on the Burg Wartenstein model and held in Cabo San Lucas, Mexico (C. J. DeRousseau, ed., 1990). The Foundation also contributed toward the 1986 symposium sponsored by the Smithsonian Institution, "Man and Beast Revisited" (M. H. Robinson and L. Tiger, eds., 1991); assisted the historically focused jubilee celebration of the American Association of Physical Anthropologists in 1981, "American Physical Anthropology, 1930-1980" (published in the American Journal of Physical Anthropology, 1981, and F. Spencer, ed., A History of American Physical Anthropology, 1982); and sponsored a supper conference at the American Museum of Natural History in 1983, "South African Fossil Hominids and the Evolution of Man," presented by P. V. Tobias. Two workshops in which the Foundation played a significant role were: 1983, "The Evolution of Human Locomotion" (D. C. Johanson, organizer) at the University of California, Berkeley; and 1984, "Diet and Human Evolution" (M. DeNiro, A. Walker and G. L. Isaac), this last a highly successful effort to enhance communication on such researches among numerous investigators from diverse disciplines. Other related conferences assisted by Wenner-Gren included: 1988, "The International Radiocarbon Data Base" (Yale University) and "Second Advanced Seminar on Bone Chemistry and Diet" (University of Cape Town); 1989, "Eighth International Symposium on Dental Morphology" (Jerusalem), "World Summit Conference on the Peopling of the Americas" (Orono, Maine), "The Natufian Culture" (Valbonne), and "The Late Glacial of Northwest Europe" (Oxford).

Over a hundred other individual grants were made in paleoanthropology and related areas, about thirty percent of them to foreign-based investigators, a decrease in both instances compared with the previous decade. Education and training for Third World scholars were encouraged through a new program of Developing Countries Fellowships, and ten such awards were made to students in paleoanthropology from Egypt, Kenya, Tanzania, Ethiopia, Turkey, Java and China. Two grants were devoted to scientific exchanges with China, and several others assisted publications and travel to meetings.

The final steps were taken to phase out the casting program, by giving assistance to the development of facilities at the University of Pennsylvania Museum, where the Foundation's casting materials were deposited. Institutional grants also aided establishment of the International Radiocarbon Data Base (at the University of Arizona) and facilities devoted to bone chemistry and prehistoric diet studies (at the University of Wisconsin, Madison).

Support of researches on hominid paleontology continued, with eight grants for studies on the spinal column of *Australopithecus*, forelimb/elbow structure and function and tooth use in early hominid taxa, dental wear patterns in European and North African hominid fossils, comparative analysis of La Chaise (France) hominid fossils, Shanidar postcrania, and prehistoric Vien Nam skeletal samples. Five awards for studies of fossil

primates included work on Eocene omomyid postcrania, Malagasy subfossil lemuroids, higher primates from the mid-Miocene of Maboko (Kenya), and comparative researches on European *Dryopithecus* and other antecedent African hominoids. Six studies of molecular biology of lower or higher primates (including humans) were assisted. Eight grants were made for comparative, analytical studies of primate morphology and structure.

The Foundation's support of naturalistic and other studies of free-ranging primates increased greatly, with a total of twenty-seven grants over the decade. Eight projects involved prosimians, four of them on lemurs in Madagascar, and eleven studies of simian primates were supported. Six projects focused on macaque species in various areas, and there were studies of baboon populations in Botswana and Ethiopia and of vervet monkeys in Kenya. Seven projects involved lesser and great apes, including field studies of lowland and mountain gorillas, and of pygmy chimpanzees.

Fifteen grants supported analytical or fieldwork projects in Europe and western Asia. Nearly all of the ten projects in Europe were devoted to the Upper Paleolithic, including studies of art, antler/bone point manufacture and usage, continuity and change in lithic technology, and subsistence practices. Major support was afforded the renewed program of excavations at the Mousterian occupation site of La Quina (Charente).

Fifteen grants dealt with paleoanthropological researches in Africa, half of them for work in eastern Africa. Among these were studies directed at Miocene paleoecological reconstruction at Fort Ternan, site formation processes and paleoecology at Kanjera, and vertebrate taphonomy at Olorgesailie, all in Kenya, as well as research on early hominid scavenging and hunting behaviors. In other areas of Africa, the seven projects supported included excavations at Sterkfontein (Transvaal) and in Namibia, research on the Plio-Pleistocene and on Holocene settlement archaeology in Malawi, and a study of Late Pleistocene settlement archaeology in Egypt.

It has seemed to me appropriate to recount in some detail the Foundation's persistent concern with human evolutionary studies and paleoanthropology as a whole within the context of its overall anthropological focus. The extent to which it has been a consistent prime-mover in such endeavors is manifest in a record extending back over five decades. Throughout there has been reliance on the promise, qualifications and integrity of the individual researcher, whether junior or senior, and the feasibility and significance, real or envisioned, of the specific project. This approach, which deviates from the strictly programmatic, places much responsibility, coupled with flexibility, in the hands of Foundation officials and reflects in no small part their own grasp of the state of knowledge, research priorities, and the capability of individual scientists. As a relatively small foundation, forging ever closer links with scientific practitioners globally, it has used this method of operation expeditiously and effectively. Innumerable research efforts have been initiated, larger-scale and longer-term projects have received critical supplementary or complementary support, and the careers of many younger apprentices have been advanced. The several forms of fellowship, both pre- and postdoctoral, and recently those of the Developing Countries Fellowship Program, have proven their effectiveness in the development of fields within the scope of Wenner-Gren's concern with education, nationally and internationally.

The Foundation has long employed the conference format in innovative fashion and

with uncommon success. The supper conference model enabled presentation by one or several speakers, followed by structured commentary and open discussion in a participant-friendly setting. Interaction and communication were maximized under these circumstances, in contrast to the usual meeting format in which abbreviated communications are offered successively in a setting of contrived ambiance. The choice of moment, speaker and topic afforded a uniqueness and sometimes momentousness to such events, and it is fortunate that a number have been preserved by transcription for the historical record.

The topical, sometimes substantially cross-disciplinary invitational conference represented the hallmark of the Foundation's efforts, especially as realized at Burg Wartenstein over a span of two decades. These symposia had different structures and participant compositions depending upon the time and the nature and scope of the subject at hand. Time plays its tricks on us, and might lead us to downplay or even negate the impact and persistent significance of those events. However, that this would be an error is evident from the ways in which perspectives broadened and paradigms shifted in the conferences over the years, anticipating or articulating developments in paleoanthropology overall. And, in this respect, the Wenner-Gren Foundation acted as a positive force in the formation and emergence to maturity of a discipline devoted to explication of the human past and dedicated to expanded efforts to comprehend the human condition.

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