News of Science

Australopithecines Contemporaneous with Man?

J. T. Robinson [*Nature* **180**, 521 (14 Sept. 1957)] reports the discovery of 58 stone artifacts in the red-brown breccia at Sterkfontein, Union of South Africa. This discovery is of great interest because this particular breccia also contains remains of Australopithecines, the early Pleistocene "man-apes" of South Africa. Some of these artifacts are unquestionably worked, and all but one are composed of material foreign to the site and the immediate vicinity—an indication that they represent a true lithic culture. The stratigraphy seems to make it clear that the artifacts are of the same age as the red-brown breccia, and not intrusions. The industry is not of the most primitive character, the most advanced artifacts representing a late Olduvaian or very early Chelles-Acheul stage in the South African Stone Age sequence (see below).

Robinson concludes that the advanced character of this stone industry makes its attribution to the Australopithecines dubious; moreover, there are no artifacts in the type Sterkfontein site, although australopithecine remains are common. He believes that the most reasonable hypothesis at the present time is to attribute the industry to a "euhominid" (true man) that invaded the Sterkfontein area before the time that this particular red-brown breccia was formed; and he is strongly inclined to the belief that this "euhominid" was *Telanthropus*, a genus erected on some fragments of jaws recovered at Swartkrans, less than a mile away from the Sterkfontein site. Robinson regards the *Telanthropus* fossils as those of an Australopithecine which had attained "euhominid" status. It may be noted, however, that the zoological status of *Telanthropus*—whether "euhominid" or australopithecine or otherwise—is far from clear. Hence it seems quite unnecessary to bring this ambiguous creature into the picture; to do so is only to becloud the issue.

The stone artifacts have been described by R. J. Mason [*Nature* **180**, 523 (14 Sept. 1957)]. Twenty-four are plain pebbles (4 diabase, 5 quartz, 14 quartzite, and 1 chert), 23 are fractured or damaged pebbles (12 quartz, 10 quartzite, and 1 chert, none of which, however, shows traces of deliberate flake detachment), one is a diabase prepared hammerstone, one is a quartzite endstruck flake, one is a broken quartzite endstruck flake suggesting a hand-axe-like form, and eight are quartzite cores. The more complex, flaking techniques exhibit marked similarities to those of the African Chelles-Acheul stage 1 type series, with some similarities to the Olduvai Bed 1 industry. That future excavations may reveal more advanced types of tools is suggested by the hand-axe-like flake. Mason thinks that tool-making of the complexity shown in the Sterkfontein industry was probably beyond the ability of the Australopithecines and that it must be ascribed to some more advanced hominid whose remains are not necessarily preserved in the breccia. In this he agrees with Robinson.

It seems of interest to note that the discovery of this Sterkfontein lithic industry supports the earlier suggestion of Oakley [*Roy. Inst. Gt. Brit. Weekly Evening Meeting* (20 Nov. 1953); *Am. J. Phys. Anthropol.* n.s. **12**, 9 (1954)] that Australopithecines were living contemporaneously with more advanced hominids who made primitive stone tools.

—W. L. S. Jr.

NEA Survey of College Teaching

Change in the amount of preparation of college teaching staffs, with science one of the major areas affected, was reported in a study released recently by the National Education Association. Fewer and fewer of the recent graduates holding Ph.D.'s have been joining the teaching ranks in colleges and universities during the past 4 years, according to a nationwide study made by the NEA Research Division. During the past year (1956–57) only 23.5 percent of all new full-time teachers held the Ph.D. degree. Four years ago, 31.4 percent were Ph.D.'s. The production of Ph.D.'s is four times greater than it was 10 years ago, but a greater proportion of these new graduates are accepting jobs in business and industry rather than in teaching.

Science teaching is the most affected. Three out of four new Ph.D.'s in chemistry who take new jobs upon graduation are employed outside the field of education. Three of every five new Ph.D.'s in physics and the other physical sciences follow the same pattern. In all fields, one out of three new Ph.D.'s selects a nonteaching career.

The number of new full-time college faculty members without a master's degree is also increasing. Four years ago this group comprised 18 percent of the total. By 1956–57 the figure had risen to more than 23 percent. Every one of the 22 fields studied except one showed an increase in the percentage of new teachers without advanced degrees. More than half (54.7 percent) of new teachers of engineering started their teaching careers in 1956–57 with less than a master's degree. The other science fields also report new teachers who have not reached the master's degree level.

Anticoagulants for Strokes

The nation's first cooperative study specifically concerned with evaluating the effectiveness of anticoagulant drugs in preventing strokes has been announced by the U.S. Public Health Service. Strokes and cerebral vascular diseases, which rank after heart disease and cancer as killers, take an estimated 172,000 lives annually in this country. The new research program was made possible by grants totaling about $58,000 to an initial group of six medical research centers.

Scheduled to be completed within 3 years, the study is being conducted under the auspices of the National Institute of Neurological Diseases and Blindness, Bethesda, Md. The new program is companion to a nationwide cerebrovascular research project launched last April by the institute to collect and evaluate data on the nature and causes of cerebral strokes as well as on methods of treatment. The new study is concerned with prevention of cerebral stroke rather than with treatment. Also, it is exclusively concerned with anticoagulants as preventives.

First Intercontinental Bridge

An engineering contract for the design and construction of a $50-million suspension bridge to be built across the Bosporus at Istanbul, Turkey, has been awarded to an American firm, D. B. Steinman, New York. The main span will be 2214 feet, the longest in the world outside the United States.

Joining Europe and Asia, this will be the first intercontinental bridge. The

project is 2½ miles long, including the suspension bridge, approach highways, and five interchange structures. A vertical clearance of 164 feet under the main span will provide for the passage of ships.

U. S. and Canada Modify Basis for Roentgen Calibrations

In a joint statement, the National Bureau of Standards in Washington, D.C., and the National Research Council of Canada have announced a change in the basis for instrument calibrations in roentgens in the energy region from 0.5 to 3 Mev. The change, which is to go into effect on 1 January 1958, is due to a revised estimate, based on improved data, of the "stopping-power" corrections that must be applied to the materials involved in the calibration procedure.

Affecting instruments that measure radiation exposure dose, the new calibration base results in a small change in the calibration factor for radiation in the indicated higher-energy range. Thus, to conform to the new basis, instruments calibrated in roentgens with cobalt-60 gamma rays prior to 1 January 1958 should have their calibration factors reduced by 1.8 percent; and those whose scales were calibrated prior to that date should have their scale readings changed in the same way—that is, multiplied by 0.982.

NSF Social Science Awards

The next closing date for receipt of proposals in the Social Science Research Program of the National Science Foundation is *1 February 1958*. Proposals received by that date will be evaluated in the spring. Approved grants will be announced in time for work to begin in the summer or fall of 1958.

The Social Science Research Program supports basic research in anthropology, archeology, demography, human ecology, social geography, economics, social psychology, sociology, and the history and philosophy of science. Inquiries should be addressed to National Science Foundation, Washington 25, D.C.

Retired Professors Registry

The Association of American Colleges and the American Association of University Professors have announced that, with the aid of a grant from the Ford Foundation, they will cosponsor the establishment of the Retired Professors Registry. Retired college teachers constitute a significant manpower resource badly needed to meet mounting student enrollments. Utilization of this group of highly trained individuals will be a contribution to the general welfare of the United States.

A recent study conducted by New York University indicated that more than half of a group of retired professors had obtained employment—the majority of them full-time. Many professors in good health at retirement age are interested in continuing their work in higher education at other colleges and universities, and many institutions of higher learning are glad to avail themselves of the services of these well-qualified teachers. The registry will establish liaison between retired faculty members and colleges in need of additional staff.

After supplying factual information and references, the registry will leave the negotiations up to the candidates and the institutions concerned. Louis D. Corson, dean of men at the University of Alabama, is resigning on 1 January 1958 to accept the directorship of the new registry, which has offices at 1785 Massachusetts Ave., N.W., Washington 6, D.C.

News Briefs

The Maine Heart Association has announced two fellowships in basic research tenable at the Cardiology Laboratory, Maine Medical Center. The fellowships, which carry an annual stipend of from $4000 to $6000, are open to investigators having a Ph.D., M.D., M.S., or M.A. degree. For information, write to Eugene H. Drake, M.D., Cardiology Department, Maine Medical Center, Portland, Me.

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The British *Journal of Applied Bacteriology,* which is ordinarily published biannually, will this month issue an extra number that will contain the papers read last July at a symposium on bacterial spores. Orders for the special issue should be sent to Mr. A. H. Walters, Milton-Deosan Research Laboratory, 64 Wimpole St., London, W.1., England.

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Pergamon Press has announced that, following the death of Professor M. S. Kharasch and pending the appointment of a new United States editor, manuscripts for publication in *Tetrahedron* should be sent to the joint chairman of the honorary editorial advisory board, Professor R. B. Woodward, Department of Chemistry, Harvard University, Cambridge, Mass.

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A balloon inflation tower is being built at the University of Chicago's Stagg Field. It will enable physicists of the Enrico Fermi Institute for Nuclear Studies to launch special balloons the year round for International Geophysical Year studies. Of the 35 balloons used each year, most are now released in the summer when there is little wind. The new structure will permit balloons to be inflated and launched in winds as high as 20 miles per hour.

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Yale University will start construction this January on a $575,000 laboratory for its School of Forestry. The new building, the William B. Greeley Memorial Laboratory, will be occupied by next September.

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The Oak Ridge Institute of Nuclear Studies has announced that a special 2-week course in veterinary radiological health will be conducted in Oak Ridge, Tenn., 10–21 March, by the ORINS Special Training Division, with the cooperation of the University of Tennessee–AEC Agricultural Research Program and the U.S. Armed Forces Veterinary Corps.

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A recent survey of New York City publishers, book stores, and libraries indicates that the launching of the Soviet satellites caused increased sales of science-fiction books and magazines and a marked increase in the library use of nonfiction science books, especially those on rockets and missiles. Some publishers reported that science-fiction books and magazines are now selling better than westerns and detective stories.

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No less than 18 countries were infected with smallpox by international travelers last year, and, as a result, eight of them suffered epidemics of this quarantinable disease, according to the World Health Organization Committee on International Quarantine. At a recent meeting in Geneva, the committee warned against any relaxation of vaccination measures against smallpox.

Scientists in the News

HAROLD C. UREY, Martin A. Ryerson distinguished service professor of chemistry at the Institute for Nuclear Studies, University of Chicago, has accepted an appointment of professor-at-large of chemistry with the University of California, effective 1 June 1958. Urey, who won the Nobel Prize in 1934, will be available for service on any of the eight campuses of the University of California, but is to be in residence on the campus of his choice.

He has selected as his headquarters the La Jolla campus, where an expanded program stressing the sciences and technology is under way. At La Jolla, Urey will construct a 12-inch mass spectrom-