

# 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 Olduvai 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 Bosphorus 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