

Laurence McKinley Gould, President-Elect

Hugh Odishaw

Chiseled in oak above the main desk of the library of Carleton College are the following words: "The history of the human race is a continuous struggle from darkness toward light. It is therefore of no purpose to discuss the use of knowledge: man wants to know and when he ceases to do so he is no longer man." These words, a quotation from Fridtjof Nansen, say much about the new president-elect of the American Association for the Advancement of Science, who chose them. They suggest the meaning that Laurence McKinley Gould ascribes to man as a sentient, ever-struggling pursuer of knowledge and they reveal something of the nature of Gould himself because his great esteem of Nansen goes back to his own undergraduate years.

Nansen was a great Norwegian, distinguished as a scientist and scholar, an explorer of the North, and in his later years a statesman. Gould's interests have much in parallel: his scientific specialty is geology; he has been one of the leaders in Antarctic and Arctic field investigations; he has served the scientific community at home and abroad; and he has had a distinguished career as an educator and administrator.

At the age of 17, he left the Michigan farm where he was born and went to Boca Raton, Florida, to teach in a one-room country school; his province ranged from kindergarten through the eighth grade. After 2 years, he went to the University of Michigan—not to study science but to take a pre-law curriculum, for he started out to be a lawyer. One of the amenities that came his way, while working as a freshman, was living in the house of the chairman

of the geology department, whose lawn he tended. Law lost out to geology as the chance association aroused his curiosity about the earth sciences. He received his B.S. (magna cum laude) in 1921, M.A. in 1923, and Sc.D. in 1925 from the University of Michigan.

He taught at the University of Michigan, starting in 1921, until he left for Carleton in 1932, where he served as professor of geology and geography until 1945. These years at Michigan were also marked by his polar explorations and research. His polar field work began in 1926; during the summer of that year he was the assistant director and geologist for the University of Michigan expedition to Greenland. The following year saw him off to the Arctic again as geographer and topographer for the Putnam Baffin Island Expedition. His initial investigations of Antarctic geology and glaciology began in 1928 when he served as geologist, geographer, and second-in-command of the 1928–30 Byrd Antarctic Expedition. Almost 30 years later, in 1957—and again in 1958 and 1962—he returned to Antarctica to review the research activities of the International Geophysical Year and post-IGY Antarctic programs of the United States.

His research work has concerned itself largely with the nature of the earth in the polar latitudes: in the north, the geology of Baffin Island and Greenland; in the south, the geology and glaciology of Antarctica. He has also, on occasion, turned to warmer regions, specifically in his studies of the Pleistocene of the upper Mississippi Valley.

Perhaps the most memorable expedition in his polar career was the 1500-mile dog-sled journey into the interior of Antarctica during the Byrd Expedition of 1928–30. On this journey, Gould

and two companions explored hitherto unknown areas of the Queen Maud Mountains. The story of this trip is told in his exciting polar book, *Cold—The Record of an Antarctic Sledge Journey*.

His nostalgia for the polar regions naturally follows his long, distinguished career as polar explorer and scientist, which spans an era that saw technological advances revolutionize polar exploration. Comfortable surface vehicles and huge ski-equipped aircraft have replaced dog teams and man-hauled sleds; reinforced steel icebreakers penetrate into regions inaccessible to wooden sailing ships; and the isolated, austere camps of old have given way to prefabricated buildings, nuclear power, and modern communications.

In the planning of the IGY Antarctic effort, which was begun intensively in 1954 and marked most vividly the application of modern technology to polar investigations, Gould guided the development of the U.S. Antarctic effort. This work brought him into international deliberations with the leaders of the other 11 nations who shared in the IGY investigations of Antarctica. The results were not only of scientific but also of political interest. It is generally conceded that the remarkable cooperation which characterized the IGY was basic to the conception and realization of the 12-nation Antarctic Treaty, which devotes this region to peaceful pursuits, "recognizing that it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord." Thus it was that Gould could once observe, while testifying before the Senate Committee on Foreign Relations, "it was in the coldest of all of the continents that there was the first memorable thaw in the cold war."

Gould's polar explorations have brought him repeated honors. He was the 20th man to be awarded the Explorers Club Medal; he also holds the Congressional Gold Medal, the Gold Medal of the Chicago Geographical Society, the David Livingstone Gold Medal of the American Geographical Society, and the Cross of St. Olaf, which was awarded to him in 1949 by the late King Haakon of Norway. For his work in directing the U.S. Antarctic program during the IGY the U.S. Navy bestowed its highest civilian honor, the Navy's Distinguished Public Service Medal.

Aside from his own teaching career,

The author is executive director of the Space Science Board, National Academy of Sciences—National Research Council.

Gould's major contribution to education has been in his capacity as president of Carleton College from 1945 to 1962. His approach has been characterized by his wide-ranging and interdisciplinary interests not only in the sciences but also in the humanities. This is suggested even in the title of his inaugural address on assuming the presidency of Carleton College on 16 October 1945, "Science and the Other Humanities." In this address, as in almost every one since then (and speaking often is the common lot of college presidents), his thoughts reflect his commitment to the humanities as well as the sciences, and his words echo not only the discoveries of scientists and explorers but also the discoveries of poets and philosophers.

At Carleton he felt that his primary task was a commitment to excellence, and that excellence in college education stemmed from the quality of the faculty. To this end, he devoted his efforts to attracting dedicated faculty members whose competence and passion were fully engaged in their role as teachers and scholars. His concept of the role of research in the independent liberal arts college is of general interest, unfair though a single brief quotation may be:

I am not suggesting that research could or should have the same status in an undergraduate liberal arts college as it does in a graduate school. A liberal arts college is not something which has not become large enough to be a university; the basic difference is not one of size. A liberal arts college is primarily a society of teachers. The emphasis should be at this point, and the major reasons for recognition and promotion should be based upon the quality of teaching. I hasten to add that for me it is axiomatic that whereas there are research scientists who may not be good teachers, I have not known a good teacher whose competence was not increased by participation in some kind of productive scholarship. I consider scholarship man's most rewarding occupation. Likewise, I believe it needs constant renewal through some kind of research activity; otherwise it dries up its own creative sources ["Symposium on Basic Research," *AAAS Publ. No. 56* (Washington, D.C., 1959)].

Gould has also had his fair share of practical, administrative problems that fall to the lot of leading scientists and educators. His work on behalf of the National Science Foundation and of the IGY enterprise is representative of his contributions to the development and support of research. His work at Carleton recently included the successful completion of Carleton's \$12 million development program.



Laurence M. Gould

His contributions to education are rooted in his own qualities as a teacher. Those who know Gould in other contexts are familiar with the perceptive and rich, the wise and good-humored play of his mind. Those who studied under him have experienced even more fully these qualities. Although geology was his subject, students with diverse interests sought out his classes, and at Carleton they became a "must." Whatever goes into the making of a great teacher, it must embrace an abiding dedication to the intellectual growth of students. This dedication not only marked Gould as a teacher but also was the touchstone for his decisions in education as a college president. It is pertinent here because the educational responsibilities of the American Association for the Advancement of Science have been steadily growing.

There are some individuals whose activities can be summarized reasonably well by a recital of their external accomplishments—their positions, their writings, their honors, and so on. These are only a part of the Gould story because the man himself encompasses far more. An anecdote touching on the affection he evokes is perhaps suggestive. While he was teaching geology at Carleton, a period marked sartorially by dark ties, he began to wear maroon ties. When he was inaugurated as Carleton's president, all the male students turned out in red ties. Such reactions to the man are generalized in the following observation made by a distinguished scientist: "To me, Larry Gould simply cannot be adequately described by

words alone. One has to know him and work with him. It is necessary to have seen him in his Carleton setting and to have seen the way in which the man and the campus reflect each other. I know of no one who has worked with Larry who has not in some way been affected by the association."

His interest in excellence has also shown itself within Phi Beta Kappa. He was elected to the Phi Beta Kappa Senate in 1946 and is now in his third 6-year term. As vice president, 1955 to 1958, and then president, 1958 to 1961, of the United Chapters, he has held the most important posts of trust that Phi Beta Kappa can bestow. One of his suggestions led to the establishment of the \$1000 Phi Beta Kappa Award in Science, offered annually for books in the literature of science. The award is noted here because it sheds so specific a light on Gould's philosophy. The purpose of this award, which goes to the author, is to honor scientists whose scholarly and literary interpretations of their work demonstrate that the sciences and the humanities are not "two cultures" and that the search for wisdom is still a single enterprise.

His scientific competence, his administrative ability, and his large fund of common sense have involved him in many committee activities. From 1951 to the present, he has served the National Academy of Sciences and the scientific community as a member of the United States National Committee for the International Geophysical Year, as a member of its executive committee, and as chairman of its Antarctic Committee. In the post-IGY period, the Academy appointed Gould chairman of the Committee on Polar Research, which deals with research problems in both polar regions. More broadly, Gould has served the scientific community and the nation as a member of the National Science Board of the National Science Foundation. He is also trustee of the Ford Foundation and is a member of its executive committee; in 1961 Gould made a 2-month trip around the world reviewing programs supported by the Ford Foundation in Indonesia, Burma, India, and Greece.

A score of honorary degrees have come his way from such institutions as Columbia University, the University of Notre Dame, University of Minnesota, University of Michigan, and Harvard University. Carleton College itself surprised him with his 20th honorary de-

gree on his retirement in 1962; one sentence from the citation reads: "Larry Gould is a warm and humane person as well as an educator and administrator of great breadth."

His retirement from Carleton does not imply that he has abandoned an active life. On the contrary, his commitments promise to keep him busier than ever. Following a short summer vacation in 1962, which included breaking

in a new jeep presented by the Carleton faculty, and trout fishing in the rugged Wyoming mountains, he participated in the Boulder sessions of the international Scientific Committee for Antarctic Research, toured the Antarctic, and moved with his wife to Tucson, where he has agreed to teach at the University of Arizona as professor of geology.

His warmth and humanity affect everything that he does. He is innately

sensitive to people and their problems and has a keen feeling for the dignity of man, a deep sense of history, and a keen sense of humor. The sum of these personal qualities and the scope of his competence and experience in science, education, administration, and exploration augur well for his presidency, and bring distinguished leadership to the American Association for the Advancement of Science.

AAAS Council Meeting, 1962

Dael Wolfe

With President Paul M. Gross presiding, the AAAS Council held two sessions during the Association's annual meeting in Philadelphia. Both were held at the Sheraton Hotel—the first at 4:00 P.M. on 27 December, with 195 members present; the second at 9:00 A.M. on 30 December, with 125 members present.

Thomas Park gave the annual report of the chairman of the Board of Directors in the form of a "simple, and quite personal statement about the essential health and future promise of our Association as seen through the rather experienced eyes of one member."

Elections and Officers

The Committee on Nominations and Elections reported that the Council, by mail ballot, had elected Laurence M. Gould as president-elect; had reelected H. Bentley Glass and elected Walter Orr Roberts as members of the Board of Directors; and had elected Theodore C. Byerly, Martin A. Pomerantz, and Kenneth C. Spengler as members of the Committee on Council Affairs.

Council elected vice presidents and chairmen of sections for a number of the Association's sections and voted authority to the Board of Directors to elect vice presidents and chairmen for those sections that had not yet presented their nominations. The officers so elected are listed on page 617.

The Board of Directors announced the appointment of Ithiel de Sola Pool (Massachusetts Institute of Technology) as secretary of the Section on Social and Economic Sciences, and S. J. Kreshover (National Institute of Dental Research) as secretary of the Section on Dentistry.

The Council elected Wallace Givens and Marsh W. White as members of the Committee on Nominations and Elections.

Council Organization

Alan T. Waterman, chairman, reported on behalf of the Committee on Council Affairs, describing the work of the committee during 1962, its plans for 1963, the handling of resolutions and recommendations considered at the 1961 annual meeting, and the work of the Council study committees.

The Committee on Council Affairs met once during 1962 to make plans for the annual meeting of Council. It plans to meet more frequently during 1963, for it wishes to consider adopting a more active policy of selecting topics and problems which, in the committee's judgment, can usefully and effectively be handled by study committees, instead of relying solely on the previous practice of establishing only such study committees as have been requested by a number of Council members.

At the 1961 meeting of Council, the Study Committee on International Scientific Communication recommended that the Association explore the possibility of publishing an International Science Register. Waterman reported that the AAAS staff had explored this possibility with UNESCO, the National Academy of Sciences, and the publisher of *American Men of Science*. While there is general agreement that such a directory would be useful, the costs and problems of producing it are great, and there seems no feasible way of handling these problems at present.

The Study Committee on International Scientific Communication had also recommended that the AAAS take the initiative in encouraging the organization of other symposia similar to the one on Chinese science presented at the 1960 annual meeting. Waterman reported that arrangements were going forward, in cooperation with the Science Council of Japan, for a symposium on Japanese science to be presented at the 1963 meeting in Cleveland.

At the 1961 meeting, the Council received three resolutions from the American Association of Scientific Workers. One proposed convening an international conference of scientific societies to develop proposals for worldwide disarmament and the abolition of

The author is executive officer of the AAAS.