

Memorial to Howard Augustus Meyerhoff

1899–1982

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Howard Augustus Meyerhoff, who died in Tulsa, Oklahoma, on March 24, 1982, at the age of 82, was a man of extraordinary vision and achievement. He was born in New York City on May 27, 1899. His education was standard: Bachelor of Science in geology from the University of Illinois in 1920, graduating as a Phi Beta Kappa; Master's degree at Columbia University in 1922, where he later received his Ph.D. in 1935.

His unusual career spanned six decades of service to academe, industry, and government, where he faced a gamut of widely diverging responsibilities of a kind rarely matched by members of a later generation. He began his professional life as curator of paleontology at Columbia University and in 1924, at the age of 25, was appointed professor of geology at Smith College, North-

ampton, Massachusetts. Despite his ever-increasing load of outside responsibilities, he retained this professorship, and also the chairmanship of the department, until 1949, when he took on the position of administrative secretary and chairman of the editorial board of the American Association for the Advancement of Science. The quarter century from 1924 until 1949 was filled with enough activities and achievements to satisfy the lifetime ambitions of ordinary men. Only some highlights can be presented.

These are some of the activities in which Meyerhoff was engaged during his tenure as professor of geology, later as department chairman: From 1924 until 1938 he was field geologist with the Scientific Survey of Puerto Rico and the Virgin Islands, an assignment which led to a long involvement in Puerto Rican geology. In 1931 he was visiting professor at the University of Puerto Rico; from 1932 to 1935 he was geologist with the Commission on Mineral Resources of Puerto Rico; and from 1935 to 1942 he was consulting geologist to the Insular Bureau of Mines, Puerto Rico. As early as 1933, he published the first *Geology of Porto Rico* (as Americans spelled Puerto Rico then). Meanwhile, he had also been assistant state geologist of Vermont, 1927–28; visiting professor at Yale University, 1943–44; consultant on mineral deposits to the Dominican Republic, 1943–51; and advisor to a subsurface survey of the City of Springfield, Massachusetts, 1940–42. In 1938, at the request of Governor (later Senator) Saltonstall of Massachusetts, he averted a major hosiery strike in Northampton, Massachusetts, and directed this hosiery mill, one of the largest in the country, for several years.

World War II brought new and entirely different responsibilities. From 1941 until 1943 Meyerhoff was director of civil defense, Massachusetts Committee on Public Safety, Region II, and from 1942 to 1945 he was chief hearings officer of the War Labor Board; in this capacity he arbitrated many industrial disputes that were threatening the war effort, including threatened shutdowns in the coal industry, such as the Maryland-Drydock case, which threatened to shut down vital ocean cargo vessel construction, and the Allis-Chalmers case, in which he successfully brought union and industry representa-

tives together, thus preventing the shutdown of a major army tank supplier. After the war he was chief geologist of the Argentine survey of the Vanadium Corporation of America.

In 1949 Meyerhoff became administrative secretary of the American Association for the Advancement of Science and chairman of its editorial board, positions he held until 1953, during which time he was editor of both *Science* and *Scientific Monthly*. During this time he also represented the American Association of Petroleum Geologists on the AAAS council and helped to steer both societies through a difficult period of clouded relationships.

In 1953 Meyerhoff became executive director of the Scientific Manpower Commission, in which capacity he served until 1962, but he also continued to serve on the AAAS council until 1966. The Scientific Manpower Commission was a private corporation, founded in 1953, to deal with general problems affecting proper use of scientific manpower; it consisted of representatives of many scientific organizations (including the American Geological Institute). Its activities became increasingly important during the critical years of the Korean War and in the post-Sputnik era with the excitement following the release of the first artificial earth satellite by the Soviet Union in October 1957. From 1956 until 1964 Meyerhoff contributed monthly articles to *Geotimes*, about 100 in all, under the heading "Manpower in a Column," where he presented penetrating analyses of the scientific manpower problems in this country, of course with special reference to the earth sciences. He ceaselessly urged the authorities to make better use of geologists, and again and again he pleaded for improved teaching of earth sciences at the high school level. These columns were always informative, sometimes humorous, such as when he described a politician as a "biped who can sit on a fence and keep both ears to the ground," wondering "whether the mining and geological professions aren't trying it—with indifferent success." During this time he also served as a member of the Committee on Specialized Personnel of the Office of Defense Mobilization.

In 1962 Meyerhoff returned to full-time work in geology when the University of Pennsylvania asked him to build up a new geology department in Philadelphia, of which he was made chairman. He was the principal organizer and first chairman of the Northeastern Section of the Geological Society of America, which held its first meeting at his invitation in Philadelphia in February 1966. He remained in his position at the University of Pennsylvania until 1967, at which time he considered the job as completed and retired to Tulsa, Oklahoma, where he continued to work as head of a consulting firm known as GeoSurveys, which he had founded in the early 1960s. His favorite trick, as his son Arthur tells it, was "to find three or four mines in one area which had been closed down because they were uneconomical. He would try to see how he could combine the mines into a single mine by using a single conveyor belt system, et cetera. By doing so he could reduce costs enormously and thereby brought many small mines in Colorado back into operation." Quite obviously Meyerhoff always had to have many irons in the fire in order to provide outlets for his great physical and inexhaustible mental energies.

A comprehensive assessment of Howard Meyerhoff's impact on contemporary earth sciences is made difficult by the fact that no complete list of his publications exists and that, in view of his widely diverse interests and activities, the task of compiling one would be staggering. Quite early in his career he made fundamental contributions to geomorphology through his studies of erosional landforms in Vermont on which he published (with Marion Hubbell) in 1929, placing himself in opposition to weighty contemporary authorities such as W. M. Davis. He later extended his interpretation to other parts of the Appalachians and found himself in essential agreement with fundamental concepts developed by Walther Penck, first published in the latter's classical *Die*

Morphologische Analyse in 1924. In 1942 Meyerhoff published (with George W. Bain) a semipopular introduction and guide to the geology and geomorphology of the Connecticut Valley, which still makes delightful reading. By that time Meyerhoff's interests had extended south to the Caribbean, where he had published physiographic studies of the Virgin Islands and other areas as early as 1927.

All the while he maintained interest in a variety of subjects, which include Antillean tectonics, karst topography in Puerto Rico and Cuba, solid bitumens in Argentina, glass sands in Puerto Rico, and mineral deposits in the Caribbean islands. He also prepared field guides to the Black Hills of Montana.

After World War II Meyerhoff became increasingly concerned about the natural resources situation, both domestic and worldwide, a subject to which he made many contributions in scientific periodicals and symposia. As early as the 1950s he saw clearly the changing role of the United States in mineral resources development, and in the 1940s he correctly predicted the future importance of the Arabian countries for the world oil supply. Later, he also wrote about the oil prospects and geopolitics of the Arctic regions as well as of Antarctica. His last published work in 1982, the year of his death, was on the mineral resources of the Arctic.

As editor of *Science* he had gained insight into the workings of the publication process which, in his usual holistic approach, he analyzed not only from the viewpoint of an editor, but also from the viewpoint of a publisher, an author, and a reader. In a priceless piece entitled "Useless Publication," first published in 1955, republished several times in other journals, he castigates, but also defends, the unhappy author who is driven to the limit by his administration's publish-or-perish policy. From 1968 until 1974 he was editorial adviser to the *AAPG Bulletin*, editing over 400 manuscripts during this period; from 1974 until 1977 he was associate editor of the same publication.

Meyerhoff, as is not widely known and appreciated, played an important role in the formulation of the present copyright law. His experience as author, editor, publisher, and user of scientific publications made him uniquely qualified to understand and mediate between conflicting interests. In the mid-1960s he gave important testimony at Congressional committee hearings and had a hand in the drafting of the final legislation.

Meyerhoff never succumbed to the lure of plate tectonics and the drifting continents, which he believed to be based on unsound physics. In several papers he posed numerous probing questions that have never been answered. He also kept up his interest in Puerto Rico, his first geologic love, until the end, when he, together with G. A. Seiglie and M. Mousa, was writing a monograph *Outline of the Formations of the Oligocene-Pliocene Rock Sequence of Northwestern Puerto Rico*. This monograph is now almost completed. When the news of his death reached Puerto Rico, two prominent San Juan newspapers wrote front-page eulogies to him as "Mr. Puerto Rican Geology."

Howard Meyerhoff was a man of great modesty and high intellectual integrity. He was also a master of English prose, and through all of his writings we are impressed by an all-pervasive spirit of humaneness, tempered by the cautious pessimism of the worldly-wise. In 1949 he concluded a massive survey of the natural resources situation of the world with the observation that "the most serious problems are not with nature's gifts but with man's mentality." The world would be immeasurably poorer spiritually without men of the caliber of Howard Augustus Meyerhoff.

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