

Memorial to William Walden Rubey

1898—1974

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In the death of William Walden Rubey, all American science has lost one of the most versatile, imaginative, and, above all, judicious scientists of his generation. He was not only an outstanding leader in geology—he was sought after as counselor in many fields of American science, often by organizations only peripherally interested in geology.

William W. Rubey—Bill to literally hundreds of friends—was born in the small town of Moberly, Missouri, where his father had a store. Bill grew up in this semi-rural atmosphere, never far from the trees, birds, and brooks he loved and came to know so well. At the University of Missouri he began as a student of forestry but soon changed to geology, graduating with highest honors in 1920.

After a few months with a consulting firm in Pittsburgh, Bill joined the U.S. Geological Survey as a geologic aid, the lowest professional grade. He served in this organization for more than forty years, advancing through all intervening grades to the highest available in the Civil Service, Research Scientist. During these many years, Bill had a brief administrative assignment as Assistant Chief Geologist for Areal Geology and Basic Science, but for most of his brilliant career he was nominally a rank-and-file research geologist. Nevertheless, he was consulted by each successive director and chief geologist on virtually every major policy problem confronting the organization through the years.

Bill's first assignment, under the Section of Geology of Oil and Gas, was to assist the dynamic K. C. Heald in studying the Geology of the Eldorado oil field, Arkansas. A year or so later he was assigned to the Black Hills Rim in South Dakota and Wyoming.

In the fall of 1922 Bill entered Yale University as a part-time instructor and graduate student. In the late spring of 1924 about a month before the term was to end, he was called back to the Geological Survey for a special cooperative assignment with the Kansas State Geological Survey. With typical modesty, Bill declined to take the qualifying examination for advancement to the doctorate, saying that he was not at all prepared for it, even though several of the faculty and fellow graduate students urged him to try. We other students knew that he was far better prepared than we were, yet nearly all of us passed a few weeks later. Bill was always a perfectionist and couldn't tolerate the possibility that he might fail a single question. Thus, he never did acquire the doctorate "in course," but in time he was awarded doctorates, not only by Yale, but by three other universities.

After working in northeastern Wyoming, South Dakota, Montana, and Kansas, Bill was assigned to Illinois for a cooperative program on the Hardin and Brussels quadrangles. These two are among the very few in the state whose strata have been enough disturbed that dips can be read with a clinometer. Thus, when new topographic maps became available, Dr. M. M. Leighton, Chief of the Illinois State Geological Survey, came under heavy

pressure from nearly every university in the state for the contract to map the area. To escape this embarrassing pressure, Leighton turned to a cooperative arrangement with the Federal Survey. Bill was assigned this plum of midcontinental geology. He devoted two field seasons to the task and produced the classic but long-delayed Professional Paper 218 with its profound critical analysis of stream dynamics.

This great monograph was misplaced in the files of the Illinois State Survey for more than twenty years before it was fortunately found and turned over to the Federal Survey for publication.

After completion of the Illinois work, Bill was transferred to the Section of General Geology in which he spent the remainder of his Survey career, except for short emergency assignments to the Boulder Dam area in 1933 and to the search for uranium sources during World War II. His field area for the rest of his Survey career was the thrust country of southwestern Wyoming, where he eventually mapped four thirty-minute quadrangles, an area of more than 3,300 square miles. During this work, the topographic maps of the area were upgraded to the scale of 1:62,500, so that it became necessary to revise the smaller scale mapping of the early years of the project. This delayed publication. With the enthusiastic assistance of S. S. Oriol and Joshua Tracey, this work has lately been completed. Several of the maps have been published and the last two are finally in press, nearly forty years after the inception of the project.

Although Bill's major reports were thus long delayed, he was always at work on what he considered by-products, producing a series of germinal papers that most geologists would be proud to consider their primary products: twelve papers on stream dynamics, sixteen on various aspects of structural geology, eight on sedimentation and diagenesis, three on the origin of the atmosphere and ocean, as well as many reports of committees and agencies of which he was secretary or chairman. He was a true scholar, generous of his time in putting his wisdom at the service of his colleagues. Like that genius, Arthur Spencer, of the preceding Survey generation, he always kept his door open for consultation. It is fair to say that a goodly share of ideas published under other names could be traced back to a suggestion from Rubey.

As a close office neighbor, I can testify to Bill's tact and patience during the eventually successful struggle to keep the first joint committee on stratigraphic nomenclature from filing a plethora of minority reports. Bill was youngest man on the committee, and its secretary. He spent literally months working toward a concensus within a large group of men not noted for mental flexibility. His efforts were finally successful and the code was completed—a far-from-perfect document, but a first step away from chaos. The tact evidenced here was typical of his lifelong consideration of his fellow man, demonstrating his ability to see the other fellow's point of view and to reconcile divergent views.

Bill served as Chairman of the Division of Geology and Geography of the National Research Council (1943–1946) and of the entire Research Council (1951–1954); he was also a member of the ill-starred AMSOC Committee promoting the Mohole Project (1957–1963). All were time-consuming undertakings.

In 1960 Bill accepted a position as professor at the University of California at Los Angeles in the Department of Geology and the Institute of Geophysics, posts he occupied long after the normal age of retirement. While at UCLA, Bill continued his services to other organizations: the Committee on Science and Public Policy of the National Academy of Sciences, the Council of the American Association for the Advancement of Science, and the U.S. National Committee of the International Union of Geological Sciences. He was a trustee of the Woods Hole Oceanographic Institution and the Carnegie Institution of Washington, a member of the National Science Board, a trustee of

Science Service, a visiting professor at Harvard and Rice Universities, and a member of the visiting committees of the departments of geology at both Massachusetts Institute of Technology and Johns Hopkins.

Bill was President of the Geological Society of America in 1950, when he delivered a most original and stimulating address on the geologic history of sea water (with the typically modest tag phrase, "an attempt to state the problem"). It seemed to many that he not only succeeded in "stating the problem," he went far toward its solution. It reminded some of his former classmates at Yale of the paper Bill had long ago presented before the Dana Club. One of the faculty at the seminar remarked after Bill's talk, "Mr. Rubey has not only given us an excellent presentation, he has also thoroughly discussed it."

Bill served as Vice President of the American Geological Institute in 1958 and 1959. He was active in the Geochemical Society and served on its Council. He was the first Director of the Lunar Science Institute of the National Aeronautics and Space Administration, commuting to Houston from his continuing half-time professorship at Los Angeles.

While still in college, Bill and Susan E. Manovill were married. Three daughters were born to them. Of these, the eldest tragically predeceased Bill; the two younger and Sue survive. For the nearly two years Bill was Director of the Lunar Science Institute in Houston, and traveling between Los Angeles and Houston, Sue was ever at his side looking after his never-robust health and his well-being, typical of her solicitude throughout their fifty-five year marriage.

Among his many honors, Bill was a member of Phi Beta Kappa and Sigma Xi; he was awarded the Award of Excellence (1943) and the Distinguished Service Medal (1958) of the Department of the Interior; he was a member of the American Academy of Arts and Sciences, the National Academy of Sciences, and the American Philosophical Society; and he served as Councilor of the last two organizations. He was awarded the Penrose Medal of the Geological Society of America (1963), the honorary doctorates of science by Villanova, Missouri, and Yale Universities, and the Doctorate of Laws by the University of California. His highest award was that of the Presidential Medal of Science (1965).

Innumerable lesser honors came his way to show the esteem of the scientific community. But Bill was far more than an accomplished scientist—he was one of the most considerate of men, attentive to every suggestion of others and tolerant of disagreement—ever a truly gentle man.

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In addition, Rubey also wrote a score of abstracts, two medal citations, two memorials, several scholarly book reviews, and at least a dozen reports of the National Research Council. He also contributed two articles to the Audubon Society on his bird observations.