

Memorial to Herbert Harold Read 1889–1970

JAMES GILLULY

975 Estes Street, Lakewood, Colorado



Herbert Harold Read, destined to become one of the leading field geologists and synthesizers of plutonic geology of his time, was born on a farm near Whitstable, Kent, England, on December 17, 1889. Here he spent his youth and this was the beginning of his lifelong affection for rural life. His academic career began at Simon Langton School, whence he entered the Royal College of Science, planning on a career in physics. The inspiring lectures of W. W. Watts diverted his interest to geology, in which he graduated in 1911. For three years he served on the junior staff of the College, but in the spring of 1914 he transferred to the Geological Survey of Great

Britain and was assigned to the Scottish Office.

With the outbreak of World War I, he interrupted his field work to join the Royal Fusiliers, in whose ranks he served in Malta, in the little known Senussi campaign in Egypt, in the bloody fiasco of Gallipoli, and on the Somme, where he was one of a very small number of his battalion to survive the first day of that great battle. He was invalided home in 1917 with the rank of corporal. He then returned to the Geological Survey and his field area in Banffshire.

Read made a distinguished study of the contaminated gabbros and norites of Banffshire, on which he contributed several papers. He demonstrated clearly that some, at least, of the norites were formed by the assimilation of aluminous schists by the gabbroic magma. He also worked on the Moor of Rannoch granite and recognized the strike slip of three or four miles on the Erich-Laidon fault — a fault lying east of and parallel to the Great Glen fault, where Kennedy was later to show a much greater strike-slip displacement. He followed this by many field campaigns in the Moines and Dalradians of the northeastern Highlands, where he discovered the metamorphic sequence that has become known as the “Buchan type,” in distinction from the “Barrovian” zoning in the Dalradians farther south.

From the northeastern Highlands he was transferred to Unst, in the Shetlands, where he found extremely complex examples of superposed metamorphisms and block tectonics.

In 1931 Read was appointed to the chair of Geology at Liverpool, in succession to P. G. H. Boswell. Here he continued his work on the Shetland rocks and the elucidation of their polymetamorphism, referring especially to such matters as metamorphic differentiation and granitization.

In 1939 he was appointed to the chair of Geology at Imperial College of Science and Technology. In the same year he also became chairman of Section C of the British Association for the Advancement of Science, but his presidential address, prepared for the Dundee meeting, was not delivered because of the outbreak of World War II. The address was published later and launched Read on a most influential course, in which he showed the intimate relation of plutonic metamorphism to processes of granitization. He pursued this topic through a whole series of presidential addresses: to the Geological Association (1943, 1944), to the Geological Society of London (1948, 1949), and in invited lectures to The Geological Society of America (1948), to the Geological Society of South Africa (1951), and to the Bicentenary Convocation of Columbia University (1954). There can be little doubt that this series of scholarly papers brought about a profound change in the outlook of most geologists and made numerous converts to the theory of metasomatic origin of many granites. These papers were badly needed as the dogma of magmatism had gone too far; yet many felt that his advocacy, almost exclusively of palingenesis and the metasomatic origin of granite, partook of special pleading. One who has seen ash-flow tuffs thousands of feet thick and covering hundreds of square miles is reluctant to believe that all granites are of metasomatic origin. True, Read readily admitted that there were "granites and granites," but his emphasis on the metasomatic variety was so strong as almost to ignore the obviously molten granitic magmas responsible for the rhyolites. Characteristically, he admitted his own bias, as too many of us are loath to do.

During World War II Read was barred from field work for several years. His *Meditations on Granite* were largely the product of his unwanted leisure from the field. He spent many hours as a fire watcher on the roof of the Royal School of Mines during the London blitz, and served as a fire warden throughout the war, "meditating the while on plutonism." He was also distracted from study and research because of his selection as President of the International Geological Congress in 1948, for which, of course, long months of planning were required.

At the age of 57 Read began his most comprehensive field campaign among the plutonic rocks of Donegal. Here he was joined by Professors Shackleton and Pitcher and a few students, writing a series of important papers in which they demonstrated the coexistence of kyanite and sillimanite over a wide area. He continued this work until his health failed in 1963. From then until his death, Read busied himself with writing and revising his several textbooks.

Read was widely recognized for his profound geological contributions. At various times he was President of the Geological Societies of Edinburgh, Liverpool, and London; of the Geologists' Association, and of the 18th International Geological Congress. He was elected to the Royal Society in 1939. He was awarded the Bixby (1935) and Wollaston (1952) Medals of the Geological

Society of London, a Royal Medal of the Royal Society, the André Dumont Medal (1950) of the Belgian Geological Society, the Steinmann Medal (1960) of the German Geological Society, the Prix Paul Fourmarier of Belgium (1960), and our own Penrose Medal (1967). He held honorary doctorates from Columbia (1954) and Dublin (1956) Universities, and honorary memberships in ten foreign geological societies, including The Geological Society of America. In 1949 he was Walker-Ames Professor at the University of Washington, and in 1951 Nuffield Visiting Lecturer in South Africa and du Toit Memorial Lecturer to the Geological Society of South Africa. He was unquestionably one of the most influential geologists of his day.

Read was a truly extraordinary lecturer, full of wit and vivacity. Eskola said of him that every sentence contained a witticism but also contained profound insight into the problem under discussion. Having been snowbound with him for three days in the Geological Society House in New York in 1947, I can testify to his great charm, tremendous learning and warm companionship. He is survived by his wife of more than half a century and by a daughter.

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