

HERBERT BASIL SUTTON COOKE

Herbert Basil Sutton Cooke was born in Johannesburg in 1915, and attended King Edward VII School. He began his university career in chemical engineering at the University of the Witwatersrand, but this was interrupted when the opportunity arose to take an honours degree in geology at the University of Cambridge.

After his return to South Africa to take up a position as field geologist with the Central Mining and Investment Corporation, he accepted an appointment at Wits in 1938 to teach 'hard rock' geology, but at the same time his interest in Quaternary geology expanded. He was one of the first geologists to undertake a study of rocks of the Sterkfontein caves where two years earlier Dr Robert Broom had discovered the first fossils of an adult australopithecine. Later, in collaboration with Lawrence Wells, Cooke undertook a pioneering study of the geology, stratigraphy and palaeontology of the Makapansgat hominid site.

In 1939 Cooke and Hamilton produced their famous textbook entitled *Geology for South African Students*; used by thousands of geology students in South Africa, the book has been through several editions. In 1947 Basil Cooke went as principal geologist on the University of California African expedition to the Oligocene fossil beds of the Faiyum in Egypt, and in the Miocene deposits in western Turkana in Kenya. On his return to Johannesburg he worked as a consulting geologist, specialising in base metals. He was awarded a Doctor of Science degree by the University of the Witwatersrand. At that time he played a major role in starting the journal *South African Science* as a monthly periodical, but, after two years, it assumed the old name of its predecessor, *South African Journal of Science*, and Cooke continued to edit it for ten years.

Basil Cooke was the first person to undertake the ambitious and visionary task of reconstructing the changing palaeogeography and palaeoenvironments of South Africa through successive geological ages and he also set about applying radiometric age determinations to the stratigraphic succession.

He returned to academia and to Wits in 1953, when he was appointed senior lecturer in the Geology Department. Two years later he was awarded a Royal Society/Nuffield Foundation bursary to study fossil material in England, followed by a year at the Museum of Palaeontology at the University of California, Berkeley. In 1958 he became Reader in Stratigraphic Geology at Wits in recognition of his outstanding academic contributions, not only in the field of geology, but also in palaeontology and Quaternary palaeoenvironments.

The Cooke family emigrated to Canada in 1961 when Cooke was offered an Associate Professorship in Geology at Dalhousie University. It was there that he worked at dating the hominid-bearing cave deposits of South Africa by faunal comparisons with the rich and better dated record of East Africa, since radiometric dating of the dolomitic cave deposits of South Africa had proved successful.

Cooke's fossil work proved to be useful for inter-site correlation, and for long provided one of the most reliable methods of age determination of the early South African hominid-bearing

the most reliable methods of age determination of the early South African hominid-bearing deposits. This research resulted in the publication of a benchmark volume, *The Evolution of African Mammals*, which was edited and partly authored by Cooke in collaboration with Vincent Maglio in 1978 . He also undertook geological and palaeontological fieldwork in numerous countries including Australia, the USA, Russia, France, Spain, Italy, India and China.

Basil Cooke retired to British Columbia in 1981 where he continues to write up his many and varied research projects. He has published two books and more than one hundred scientific papers and monographs. His work has received international acclaim and he is regarded as the world's leading authority on the evolution of mammals over the past five million years.

In recognition of his outstanding accomplishments as a geologist and palaeontologist, it is with great pleasure that the University confers the degree of Doctor of Science *honoris causa* on Herbert Basil Sutton Cooke.