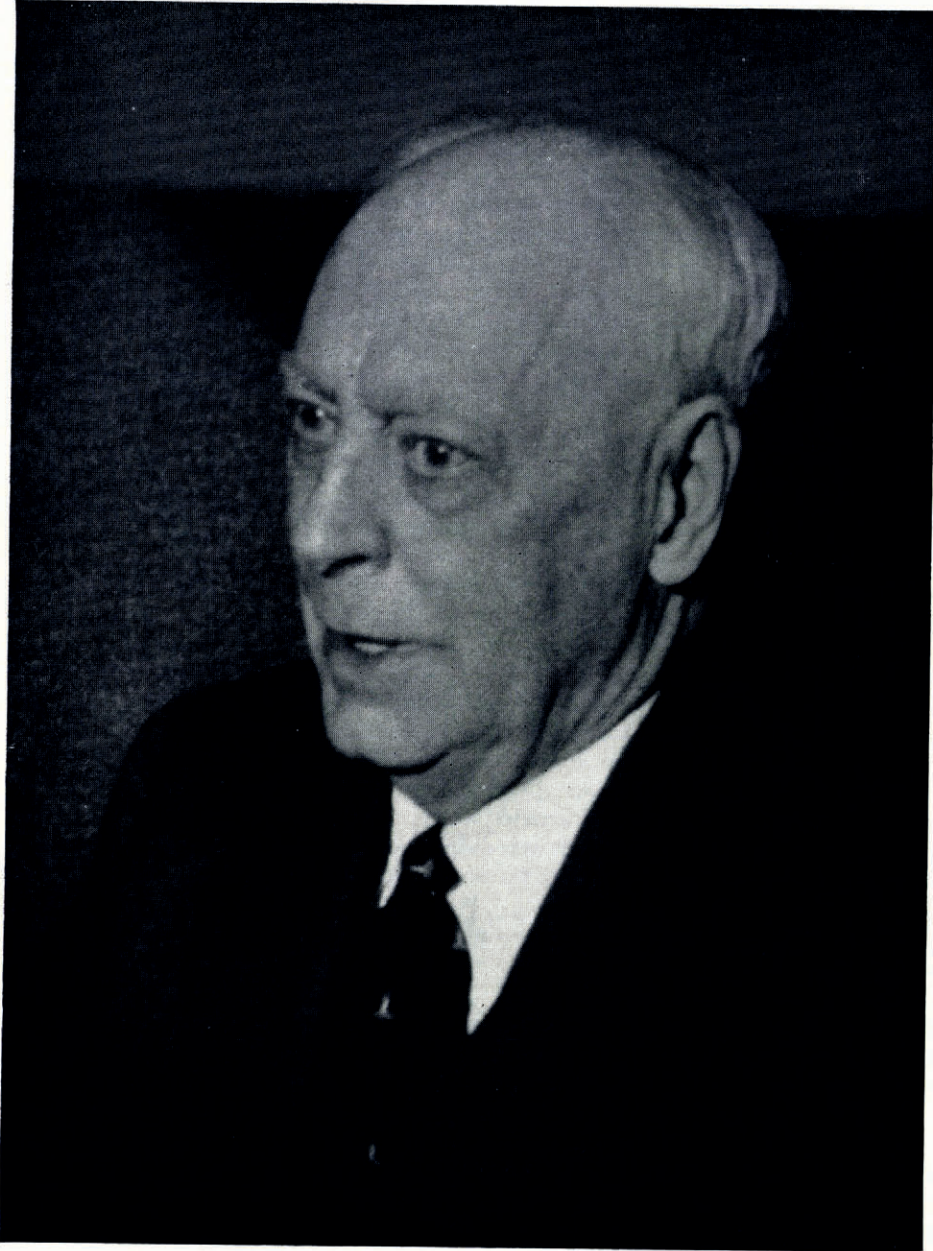


OBITUARIES



FRANK DEBENHAM—1883—1965

FRANK DEBENHAM, from 1931 to his retirement in 1949, was the first holder of the Chair of Geography in the University of Cambridge. Like so many of the pioneers in that subject, he was a man of exceptional breadth of accomplishment. His death in Cambridge on 23 November 1965 at the age of 81 will be mourned not only by the multitude of those who, at one time or another, were among his students, whether as undergraduates, as service cadets or as Colonial probationers; but also by a wide circle of friends, explorers and fellow scientists who knew of his achievements and the lively warmth of his personality. To glaciologists he is known as one of that remarkably active scientific party who returned from Scott's last great Antarctic expedition in 1913.

Born in Bowral, New South Wales, Australia, on 26 December 1883, he was a son of the rector and a King's Scholar of Parramatta. As a graduate of Sydney, successively in arts and in science, he joined Scott to work as a geologist. Returning to Cambridge to work up the physical and geological results, he went almost immediately to war and served on the Salonika Front where he was seriously wounded. After demobilization, with the rank of Major, he settled down, as a Fellow of Caius and Lecturer in Cartography, to enliven the newly-founded department. How many of us recall those early days in the attics of the Sedgwick Museum where we learnt the art of survey surrounded by Antarctic equipment, and enjoyed some remarkable privileges. There was the day when one re-worked from the original sheet, that beautifully figured set of latitude sights taken by Bowers at the South Pole.

In 1925 he founded the Scott Polar Research Institute, in which the Glaciological Society now finds its home, and in 1928 when the International Geographical Congress met in Cambridge, his organizing ability did much to make this meeting a great success. His vigorously active, essentially aristocratic and creative temperament and cheerfully practical bent set a standard. Approval was gained, in his department, no matter what you did, so long as something was measured and plotted. He was prolific in simple but effective ideas and fond of experiment; he was one of the first to set up a hydrological laboratory for the study of wave and current action; some years later those model-making activities of his began to provide for wartime needs. He wrote clearly and rapidly without affectation, with a notable fondness for quotation from *Alice in Wonderland*. His abounding sense of style, attractive warmth of character and straightforward sentiments can be appreciated in those simple but charming stories of the Antarctic that were in part written for his children. It was characteristic of his vigour and zest that, when times were hard round 1930, he drove 540 miles in a Baby Austin to carry out an engagement as external examiner. As he said, with a hint of his Australian upbringing, "I just mosey along". It was characteristic of him that he retained an abiding regard for the history of exploration and for the educative value of practice with the armillary sphere. The achievement of establishing position with one's own instruments was something that he liked us to learn.

His contribution to glaciology lies not only in the extensive survey work and subsequent cartography that he carried out round McMurdo Sound, and his ingenious theories, based on field evidence and those headless fish, of the growth of the Ross Ice Shelf. How many polar travellers of many nations have enjoyed the welcome that he, with Mrs. Debenham, gave them in their Cambridge home. After his retirement they travelled widely through Africa and for the Colonial Office he wrote a valuable report on water resources. He continued to write and his vigour of mind enabled him to see, in the year when he was 76, three books appearing under his name, in spite of increasing difficulties stemming from his early ear injury which largely confined him to the house during the colder months. The stimulus that he gave so many younger men, whether through his department, through the Scott Polar Research Institute or, as time went on, through his many pupils who carried an enthusiasm for polar work and the beauties of ice into other universities, has been immeasurable.

Of his six children, one son was killed in the second World War and a second son is a university lecturer in Australia; while two of his daughters are in Africa. To his practical

exploratory temperament and creative energy Cambridge owes much; he set for us all an outstanding example of individual accomplishment; and glaciologists have lost one who through his own surveys made a lively contribution to the growth of their science.

GORDON MANLEY

FRANK DEBENHAM's interests were so numerous and widespread that it is difficult to select special aspects for comment. As one of the many who owe him a great debt of gratitude, I would like these brief notes to recall a few memories which must be uppermost in the minds of some of his students. He was always approachable by everyone, however junior, and he was always a source of encouragement and inspiration to young people who wanted to become polar explorers. In this, he stood out during the period between the two World Wars—with Tom Longstaff and Raymond Priestley. Each in their different ways, these three seniors could always be relied upon to give sound advice and none of them ever poured cold water on youthful aspirations.

As founder and first Director of the Scott Polar Research Institute, Debenham created a centre which grew from small beginnings in an attic of the Sedgwick Museum to an organization which later provided a pattern for many similar organizations in other countries. Under his guidance, the S.P.R.I. became a place where polar enthusiasts from all nations could be assured of a cordial welcome. This established a tradition which the Institute has tried to continue. He founded the S.P.R.I. because he believed that such centres were essential to preserve continuity, to provide recognized centres where the original records and experience of polar endeavours could be collected and made available to those engaged in later enterprises. This was one of the seeds which later germinated into World Data Centres, but at an early date Debenham began to emphasize a fundamental principle which has too often been forgotten: these national or international data centres cannot flourish if they aim at no more than efficient filing and cataloguing of collected records. Debenham appreciated that the real need was to provide centres which would be attractive enough to bring the right men together and to stimulate personal contacts between scientists and others with common interests in polar exploration and research. He was, I am sure, correct in this assessment. He knew that personal contacts were much more important than any systems for the rapid retrieval of factual information, but he was not always so clear about the basic reasons for collecting and digesting information, and hence about what kinds of information should be collected. After 1939 some may think that he under-estimated the changes and the rapidly increasing interest of governments in the polar regions. He did not welcome the sudden transition from private enterprise to sustained government interest in polar research, for he had come to regard the adventurous and character-building aspects of polar exploration as paramount. He feared the loss of independence and of the friendly, informal atmosphere. It was easy to agree with this view, but it became increasingly difficult to reconcile such a detached attitude with the political and strategic realities of a world war which had spread into the polar regions and with a university which regarded teaching and research as the chief objectives of a university department. These different approaches could only be resolved by a major re-appraisal of the constitution of the S.P.R.I., which was eventually reorganized in 1957 to meet the new situation. During this difficult period, Debenham never failed in his original objective to supply information and advice to all who asked for help. He had retired from the Directorship in 1946, but retained a lively interest in polar affairs until his last illness.

Any assessment of Debenham's influence on geographical studies must always return to his impact on successive generations of students passing through the Department of Geography at Cambridge. One result of his enthusiasm for field studies can be traced to his participation in the annual Easter "camps" of the Cambridge Geography Club at Austwick and Patterdale

in the early 1930's. All who were privileged to take part in these excursions will never forget their initiation into the interpretation of mountain land-forms, Cambridgeshire itself being depressingly uninteresting in this respect. Debenham's exposition of the limestone country around Ingleborough and of the glacial features of Grisedale were an unforgettable part of the education of all who were fortunate enough to follow him from lecture theatre to mountains and valleys. This journal should carry some record that, from 1932 onwards, Debenham gave a course of lectures on glaciology to Part II Geography students. These certainly constituted the first formal course of specialized study on this subject in Great Britain. Debenham's lectures on glaciers were based primarily on his Antarctic experiences in 1910-12. With Priestley, he laid the foundations which later enabled Cambridge to become a centre for glaciological research.

BRIAN ROBERTS

I WAS fortunate enough to go up to Cambridge in 1941 when Frank Debenham was Professor of Geography. To me he was the absolute personification of a professor, both from the human and the academic point of view. His vitality and enthusiasm affected all who came in contact with him and every member of the Department was stimulated by his ideas. He always had time to devote to any student and give encouragement and advice on all matters.

One of his particular interests was mapping. It was with pride that he informed the Ouse Catchment Board he and his women students could undertake, during the war years, the checking of the numerous levels in the Fens. The weeks spent "fenning" (as we termed it) were the most memorable as they gave us our first opportunity to appreciate fully some of "Deb's" fine qualities as a leader. It was at this time that I realized what a great capacity he had for original thought, be it the design of a new instrument or a contribution to some academic discussion.

In 1946 "Deb" undertook to direct a research programme to investigate and determine a method for the development of low relief models of high accuracy. His continual stream of ideas and his great ability to delve deeply into many aspects of different techniques outside the particular field of geography were an invaluable contribution to the success of the programme. Not only did he present his ideas with clarity, he also outlined the procedure for the most detailed researches and at every juncture suggested methods of approach.

At this time I was living in the Debenham household and soon discovered "Deb's" ability to work at all hours of the day and night. Creeping into the house in the early hours of the morning, after a dance, I would see the light on in his study and "Deb" sitting at his table surrounded by reference books and pages of concise notes and diagrams. His mind would be so active, his enthusiasm so infectious, I would forget the lateness of the hour as he developed some new theory in an attempt to answer the problems encountered the previous day.

"Deb" continued to guide and advise on the production of shadow relief maps and atlases after the work was taken over by a commercial firm. He had a great desire to see maps produced which would enable every user to appreciate fully the physiography of the Earth's surface and relate the various factors, natural and man-made. His hope was to edit an atlas in which all these ideas were incorporated. If this hope is fulfilled in the future it will be due entirely to "Deb's" foresight and wisdom.

SHIRLEY HEWITT

AFTER the second World War, Frank Debenham became absorbed for a time with the geography of central Africa. The same open, enquiring mind and down-to-earth, practical common sense which were so characteristic of him were brought brilliantly to bear on

problems of conservation, water resources and ecology of desert regions very different from those Antarctic wastes he had known in his youth.

The complete geographer, "Deb" occupied himself with a typically wide range of African subjects, from the water resources of vast desert regions to the detailed construction of small earth dams; from the ecology of the Kalahari to the life and travels of David Livingstone.

In much of this work, and notably in his survey of the Bangweulu Swamps, he was, as ever, the leader and inspiration of a happy group of Cambridge students. One such undergraduate sought last-minute instructions from his Professor just before departing for Africa on a survey mission. "Just fly the flag high", said "Deb", eyes twinkling. For him, one had to.

ERIC RICHARDSON

"DEB" wrote easily and well on many subjects. He had that rare gift of being able to instruct as well as to entertain his reader. Most of his early writing was devoted to the geology of the McMurdo Sound area in the Antarctic, but he also published two papers on the future of polar exploration, a theme to which he returned many times in the next thirty years.

The genesis of the ice shelf in McMurdo Sound was one of his favourite topics, and he kept up a lively correspondence with people who had visited the area in which he had discovered headless fish during Scott's last expedition. The last article he ever wrote was on this subject and it was published in the *Journal of Glaciology* in October 1965 (Vol. 5, No. 42, p. 829-32), a month before he died.

During the time that he was Professor of Geography at Cambridge he wrote over fifty books or articles on field geology, mapping and surveying, astrographics, laboratory studies for physiographers, polar history and transport problems in the Antarctic. Some of these were for scientists, some for students, some for the general reader and some for children; all showed his warm personality and charm. He had the facility for lucid explanations of complicated subjects.

From 1947 he was occupied by the changing physical environment of Africa, and his writings in this period ranged from studies of David Livingstone's journeys to surveys of the water problems of central Africa. The International Geophysical Year, 1957-58, produced much new knowledge, and "Deb" was once again closely involved with Antarctic research, through personal correspondence and through articles that he continued to write.

HILDA RICHARDSON