

*In memoriam**Donald Broadbent, CBE 1926-1993*

THE RECENT death of Donald Broadbent has deprived Britain of one of its most distinguished psychologists. He not only had a profound influence on the subject, but was also immensely popular. His contribution can best be seen in terms of his development and consistent championing over the years of an approach to psychology that blends sophisticated theorising with careful experimentation and a commitment to tackling real world problems.

Donald Broadbent was born in Birmingham in 1926. He normally identified himself as Welsh, however, partly on the grounds of ancestry and partly because his home was in Wales throughout adolescence. He was educated at Winchester College and then, following a three-year spell in the Royal Air Force, at Pembroke College, Cambridge. He graduated in 1949 and joined the Medical Research Council Applied Psychology Unit in Cambridge.

From the start of his career, Donald firmly believed that psychologists should not only develop sound theories, but should also have applicable skills that could be used in the public interest. He repeatedly demonstrated how attempts to solve practical problems can give rise to major theoretical advances. His early work focussed on investigating the effects of noise on performance. This was partly to improve the intelligibility of electronic communications, but also to look at the effects of noise nuisance as a cause of stress. He is probably best known, however, for his classic work on attention. His studies in this area grew out of a need to improve communications between squadron planes and control centres. On the basis of these studies, he developed a major theory of attention and showed that it is possible to investigate attention rigorously and explain it using information-processing concepts. His first book *Perception and Communication*, which was published in 1958, has been one of the most influential books in British, if not worldwide, psychology. It was seminal in presenting the information-processing approach to theorising about attention to the psychological community, an approach which has remained dominant for more than 30 years.

In 1958 Donald was appointed as director of the Applied Psychology Unit in Cambridge. Between then and 1974 he continued to expand on his personal research, as well as building up the Cambridge unit into one of the most important and influential applied psychology units in the world. During this period he was made a Fellow of the



Royal Society and received a CBE. He was also President of The British Psychological Society (1965) and President of the Psychology Section of the British Association for the Advancement of Science (1967).

In 1974 he moved, as a member of MRC external staff, to the Department of Experimental Psychology in Oxford so that he could devote more time to his research activities. There he continued with his ongoing research projects, and also turned his attention to some new and important problems. One of these was to look at cognitive strategies in relation to work. As part of this, he developed a widely used measure of absent-mindedness - The Cognitive Failures Questionnaire. Together with his wife Margaret, he carried out a long programme of studies which investigated the effects of stress in industry, particularly whether differences in medical symptoms could be found as a result of different jobs. He also carried out an extensive series of laboratory experiments on attention and memory, and started work on investigating the distinction between implicit and explicit learning in the control of complex systems. Although, to some, Donald's wide-ranging research interests during this period may have appeared unconnected, he showed an impressive facility for identifying and understanding the underlying relationships between a large number of disparate areas.

Donald's contribution to psychology

has been made not only through his own research efforts, but also through supervision of numerous research students, many of whom have gone on to become important figures in all areas of psychology throughout the world. He has also had a huge and positive influence on British psychology through his service on a large number of national committees. These include the Medical Research Council, the Social Science Research Council, the Science and Engineering Research Council, and the Ergonomics Research Society. In later years he set up and chaired the Joint Research Council Committee on cognitive science/human-computer interaction, and chaired the Advisory Committee on the Safety of Nuclear Installations Study Group on Operator-Plant Interface. In recognition of his achievements, Donald was awarded the Distinguished Scientific Contribution Award by the American Psychological Association (an award that has only ever been given to two other scientists outside of North America) and the Distinguished Foreign Colleague Award by the Human Factors Society. He was also awarded nine honorary doctorates.

As well as *Perception and Communication*, Donald published three other books - *Behaviour* (1961), *Decision and Stress* (1971) and *In Defence of Empirical Psychology* (1973). He also published more than 200 papers in major psychological journals. His achievements, however, should be seen not simply in terms of the many excellent books and papers that he wrote, but perhaps more by his personal example. He was greatly liked and respected, and noted for his approachability, fairness, insight, and ability to explain the most complex concepts in simple terms. Cognitive psychology in general, and British psychology in particular, would have been immeasurably poorer without him.

*Dianne Berry*

*Department of Psychology  
University of Surrey*