



## **Brian Shackel 1927 - 2007**

Emeritus Professor Brian Shackel, died on May 9th at the age of 80. He was a world leader in establishing the field of Human-Computer Interaction as a scientific discipline, integral to the study of computers and information technology, and, within IFIP, developing a new IFIP Technical Committee on Human-Computer Interaction (IFIP TC.13) of which he was the foundation Chair.

Born in Kent, England, he served as a RAF navigator in the armed forces towards the end of World War II, from whence he won a scholarship to Cambridge University, graduating in Classics. His next three years were spent in the national service as a naval instructor, playing cricket, refereeing rugby and learning how to teach. Following further study at Cambridge, reading Psychology, he joined the Medical

Research Council's Applied Psychology Research Unit in 1952. This led to his lifetime work in ergonomics and human factors, and especially their relationship with computers and information technology.

In 1954, he founded and built up the Ergonomics Department at EMI Electronics (later becoming part of Qintec). He first became involved with computers there, redesigning the operating consoles of the EMLac analog computer and the EMIdex digital computer, amongst other projects. In 1969, Brian was appointed as Professor of Ergonomics at Loughborough University where he remained until retirement. For ten years, he was Head of the Department of Human Sciences (1972-82), and Dean of the School of Human and Environmental Studies (1978-81). His most far-reaching and influential initiative was establishing HUSAT (the Human Sciences and Advanced Technology) Research Centre in 1970, which, within 20 years, became the largest research and consultancy institute in Europe in the field of Human-Computer Interaction with a total staff of 60. It celebrated its 30th anniversary in 2000.

Of the many projects that Brian led, relating to the emerging areas of usability and user-centred design, BLEND was one of the most important projects researched (1984 - 1990), its objective being to evaluate the promise of electronic journals. The breadth of his publications can be found by undertaking a Google search.

Five years ago, when questioned about when the first usability test was done, Brian replied that, in 1959, he researched a study "of several possible layouts for an interface panel of an analogue computer during the design process", (Shackel B, 1959, A note on panel layout for numbers of identical items, *Ergonomics*, 2, 247-253), which he thought was perhaps the very first published paper embodying this type of evaluation. He then added "in those days we just got on with doing our best to assess what were the problems and how to improve things;" a philosophy he maintained throughout his life.

His association with IFIP covered more than 30 years, beginning in the late 1970's in Working Group 6.3 (Man-Machine Communication). WG6.3 was reconstituted in 1981 under his chairmanship, and transformed into a Task Group on Human-Computer Interaction a year later. It was at this time, that he launched the IFIP INTERACT Newsletter of the Human-Computer Information Group 'in response to popular request'. More than 300 people around the world replied to his survey questionnaire and wanted to receive the newsletter (at a subscription cost of £7 / \$US 20). By 1983, the newsletter was advertising the Call for Papers of the first IFIP conference on Human -Computer Interaction, which was staged in London, 1984.

The first IFIP INTERACT conference was a great success, with 282 synopses being received, from which 180 authors were invited to write papers, and 152 papers were accepted (after the full

papers had been reviewed by a committee of international referees). The scope and balance of the papers presented at the conference strongly suggested the pathway that was needed to progress HCI research in the years to come. In the INTERACT'84 proceedings preface, Brian Shackel wrote that there were four general aspects to be noted:

- a. hardware ergonomics: "present scale of work does not need to be enlarged";
- b. software human factors and cognitive ergonomics: "one of the most important areas needing considerable growth"
- c. human cognitive characteristics and performance when interacting with computing and IT systems: "about which we know far too little and for which we have few theoretical bases", and
- d. the inter-relationship of computing and IT systems with job structure and functioning: which likewise "comprises a gap equally as large and complex; again there is still relatively little attention to this important aspect."

This then provided a sound scientific basis on which to develop the new IFIP Technical Committee (TC.13), encouraging international co-operation and fostering the development of work on human-computer interaction around the world. Brian was the TC.13 Chairman from 1989 to 1995, and TC.13 Secretary for the next six years (whilst I was TC.13 Chair). The scope of the committee was set wide, as he recognised that progress would only be achieved through both general studies to advance theoretical understanding and specific studies on practical issues.

In 1990, the third INTERACT conference was held in Cambridge, UK, the first to be hosted formally with an IFIP Member society, the British Computer Society, and the BCS HCI Group. It firmly established human-computer interaction as an international discipline and as a regular feature of the international calendar. The INTERACT series (now held biennially) has continued to be held in different countries and hosted by IFIP member Societies in Europe, Australia (1997), Japan (2001) and this year in Brazil. Brian was involved in a variety of ways with all the IFIP TC.13 INTERACT conferences from 1984 to 2003.

In 1998, IFIP TC.13 honoured Brian Shackel by creating an Award commemorating his immense contribution to IFIP, as TC.13 inaugural Chairman and more generally over a period of more than two decades. The Brian Shackel Award (a plaque and a certificate) is presented at each conference in the INTERACT series and recognises the most outstanding contribution in the form of a refereed paper submitted to and delivered at the conference. Its purpose is to draw attention to the need for a comprehensive, human-centred approach in the design and use of information technology, in which human and social implications have been taken into account. Brian was delighted with this honour and was enthusiastically involved in writing the terms of the Award, which in essence mirror his lifetime dedication to, and achievements in, this broad field. It was especially fitting that he was able to present the first Brian Shackel Award at the 1999 INTERACT conference in Edinburgh.

Brian served in many capacities in professional societies, and was a Fellow of several - the British Psychological Society, the Ergonomics Society and the Human Factors Society (USA). He received many awards, including the IFIP Silver Core Award in 1992.

He was a great mentor, supporter and friend to the many who were fortunate enough to know him. He travelled the world from Saudi Arabia to Sydney, Hong Kong to London, North America and throughout Europe, lecturing on HCI and inspiring young people to take up the challenges that HCI posed. The full extent of Brian's contribution will continue to be felt for many years.

Brian enjoyed life and was a cricket enthusiast throughout, playing regularly at school, Cambridge, in the Navy and for the Incogniti (a touring team) for many years, in his usual modest way saying he played "not all that well but with much enjoyment". Many an email communication between us about serious matters of strategy and planning for TC.13 ended with an observation about the state of the English cricket team's fortunes, with great glee when England was winning, especially when playing Australia in test matches and for the Ashes.

He was devoted to his family, and is survived by his beloved wife, Penni, and their three children.

Judy Hammond,  
Australian TC.13 representative  
formerly IFIP TC.13 Chair (1995 - 2001)