



**Human
Factors
and
Ergonomics
Society**

FELLOW PROFILE

Name: Neville Moray

Degrees, certifications, etc.: BA, MA, D.Phil. (Oxon.)
FHFES, FIEHF, FIEA.
CHP

Current status: Retired.
Professor Emeritus, University
of Surrey, UK



Home page: <http://www.MoraysatMagagnosc.com>

Biography (How you got involved in the field, your major career activities and milestones):

In 1953 I began to study medicine at Worcester College, Oxford, with a view to a career in virology, and completed all the preclinical courses. At Oxford one has to have a BA before the BM-BCh, and for my BA I read PPP, i.e. Philosophy, Psychology and Physiology. I found the subject so interesting that I went on to read for a D.Phil (known elsewhere as a Ph.D.) in experimental psychology, during which I worked on the "cocktail party problem" of dichotic attention. I never returned to medicine, but went on to an academic career in Psychology. For about 20 years I worked in "pure" experimental psychology, always working on attention and related problems of information processing, and taught first physiological psychology and then various aspects of experimental psychology and what would now be called cognitive psychology. I was responsible for introducing the first on-line computer for experimental control in a UK psychology department in 1968. (In 1959 as a graduate student at Oxford I took the second course on computer programming that was ever given in the university!) During a sabbatical year at MIT in 1968 I met engineers working on human-machine systems, and through an informal mentoring by John W. Senders became interested in applied problems. This led eventually to my drifting into the human factors area. My interest in HF was confirmed and encouraged by being made the UK representative to the NATO Science Committee Special Panel on Human Factors in the 1970s, which gave me the chance to visit many locations where HF was practiced, and to see very wide range of HF problems. I think this experience was the accident which led me definitively away from "pure" psychology and into human factors. A later year at MIT with Tom Sheridan led to my getting involved more deeply with human factors work and in particular with the nuclear industry. This period ended when I was invited in 1980 to join the Industrial Engineering Department of the University of Toronto to teach human factors. From then until the last four years of my career I worked in engineering departments rather than psychology departments. I was a founding member of Human Factors North, a consulting company, in Toronto. I had the good fortune to develop contacts with colleagues in Japan, and also once to teach in China. A particular pleasure during my years at the University of Illinois was the time I spent on the human factors panel of the US National Research Council, which gave me the chance to meet many extremely talented people.

A major non-academic achievement was to sail the Atlantic in my 31-foot yacht in 1983.

In 2001 I retired, and now live on the Riviera in the south of France, married to Angela Rhodes

James. I have taken up painting, working every day in my studio in a neo-Pop Art style. I also manage to go back to my early school-days and read some classical Latin and Greek from time to time. My human factors and psychological research seem distant, but provide plenty of nostalgic satisfaction, as do visits from old colleagues, who are always welcome.

Employment History (List top 5 positions):

1. DERA Professor of Applied Cognitive Psychology, University of Surrey, 1997-2001
2. Professor, Departments of Mechanical and Industrial Engineering, Psychology and Institute of Aviation, University of Illinois at Urbana-Champaign, 1988-1995
3. Professor of Industrial Engineering, University of Toronto, 1981-88; Professor of Psychology, 1970-74
4. Professor of Psychology, University of Stirling, 1974-81
5. Lecturer and Senior Lecturer in Psychology, University of Sheffield, 1960-70

What were your significant contributions to the field?

My major basic research was on auditory attention, the "cocktail party problem", on which I worked for the first 20 years of my professional career. My very first paper, about hearing one's own name, still seems to give pleasure to those writing introductory textbooks, which is gratifying, as is the fact that the experiment has been repeated twice by others at 20-year intervals, with almost exactly the same quantitative, let alone qualitative results! (Is this a record?)

In human factors I have worked on mental workload measurement, human-machine interaction, and trust between humans and automation, an area of research that I initiated. Through my work on the NATO Human Factors Panel I was able to contribute to the development of applied psychology and human factors in several NATO countries. Among the consulting activities of which I am most proud are my work on the human factors of safety in the nuclear industry, and for the US army on human factors issues in the commissioning of factories to destroy stocks of chemical weapons.

I edited a 4-volume collection of "the most significant papers in human factors", *Ergonomics: major writings. Vols 1-4*. London: Routledge. 2005.

I would claim, however, that my most important contribution has been to launch on their careers a series of outstanding graduates, with whom it was an honour to work.

Did you receive any notable awards or recognition during your career?

Fellow of the Human Factors and ergonomics Society.

Fellow of the Institute of Ergonomics and Human Factors.

Fellow of the International Ergonomics Association.

International Ergonomics Association Ergonomics Development Award.

International Ergonomics Association President's Award.

Arnold M. Small resident's Distinguished Service Award 2001

Which articles in the journal *Human Factors* would you say were the most influential to you and your research or practice?

I can't answer this question, because over the years what I would have cited has changed as my research and practice has changed direction. Perhaps the contents of *Ergonomics: major writings* will give a feel for my favourites.

Please provide any links to your online articles, essays, blogs, Wikipedia pages, etc., that pertain to your research, publications or practice.

1. MoraysAtMagagnosc.com (Go to items #4, #5 and #7 of the "Contents" page)
2. Morayart.com (for current activities – non-HFES).

What advice would you give someone considering HF/E as a profession?

Whether a person begins in a psychology department, in a human factors programme, or in an engineering department, the most important thing is to make sure that you get as much training in all three areas as possible. In addition to psychology, learn as much mathematics and computing as you can. It is most important to be familiar with engineering as well as behavioural science, even if you only know enough to ask for help when you cannot carry out the techniques yourself. If the chance arises, learn some physiology. The richer and wider your knowledge of other disciplines, the better human factors practitioner you will be. Take every chance to take part in international activities. Learn at least one foreign language (preferably Chinese). *The world is not bounded by your own country of origin, nor solutions to problems by your own discipline.*

Enjoy your work. If you are not finding it enjoyable, change the topic and work on something else!