A Conversation with Henry Daniels

Peter Whittle

Abstract. Henry Ellis Daniels was born in London on the second of October, 1912, but his family soon moved to Edinburgh. It was at the University of Edinburgh that he graduated; then he went on to continue studies at the University of Cambridge. He later took an external Ph.D. from the University of Edinburgh, but his periods of employment, 1935–42 and 1945–46, as a statistician at the Wool Industries Research Association, Leeds, provided him with what was probably the most formative experience of his career. During the intervening period, 1942–45, he was Scientific Officer at the Ministry of Aircraft Production, working particularly on position finding.

He returned to Cambridge in 1947 as a Lecturer in Mathematics; the Statistical Laboratory came into being during his time there. In 1957 Henry became the first Professor of Mathematical Statistics at the University of Birmingham, in which post he continued until his retirement in 1978. Since retirement he has settled in Cambridge, where he has an honoured place in the Statistical Laboratory.

Professor Daniels was President of the Royal Statistical Society for 1974–75 and was awarded the Guy Medal of the Society, in silver in 1947 and in gold in 1984. He was elected a Fellow of the Royal Society of London in 1980.

He probably values equally the honour of being created a Liveryman of the Royal Company of Clockmakers in 1984: a recognition of his contribution to watch design. His principal hobbies are indeed the repair of watches and the playing of chamber music on the English concertina.

The following conversation took place in his office at the Statistical Laboratory in Cambridge.

EARLY DAYS

Whittle: Something biographical to begin with, Henry: I believe you were born in London?

Daniels: In London, yes.

Whittle: But then moved quite early to Edinburgh? Daniels: Yes, when I was perhaps two or three years old. To avoid the Zeppelins in the First World War, I understand.

Whittle: Really, that serious?

Daniels: Yes.

Whittle: You had your schooling in Edinburgh?

Daniels: Yes, first at Sciennes School, which is one of those excellent Scottish elementary schools. Then to George Heriot's School, Edinburgh, another very good school.

Whittle: I believe that you developed some interest

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in probability and such things already at this stage. Didn't you win a school prize?

Daniels: Well, yes, in a way, I suppose. I am basically an applied mathematician at heart. I became interested in probability because we did things like combinations and permutations. Not statistics as we know it, but related in a sense.

Whittle: So you enjoyed combinatorics?

Daniels: Well, I was never much good at them. You know that some people have a flair for them, and I don't think I had. But I rather liked the idea of probability itself, though I didn't quite understand what it was. I was also intrigued by the idea of experimental error. This arose from my attempts at doing experiments in practical classes, one of which I described in my R.S.S. Presidential Address. A classmate of mine called Harry Cowan, who was keen on biology, mentioned Fisher's book to me, and I tracked it down in the local library.

Whittle: He must have been knowledgeable for a schoolboy.

Daniels: Yes. He was actually a nephew of Hyman