## A Conversation with Oscar Kempthorne

## J. Leroy Folks

Abstract. Oscar Kempthorne was born on January 13, 1919, in St. Tudy, Cornwall, England. His schooling was in Cornwall. He received a B.A. with Honors from Cambridge University in 1940, an M.A. from Cambridge in 1943, and was awarded an Sc.D. degree from Cambridge in 1960. He worked at Rothamsted Experiment Station from 1941 to 1946 and joined the Statistics Department at Iowa State College as Associate Professor in 1947. He was promoted to Professor in 1951, and was named Distinguished Professor of Science and Humanities in 1964. He was President of the Biometric Society, ENAR, in 1961 and President of the Institute of Mathematical Statistics from 1984 to 1985. He is a Fellow of the American Statistical Association, the Institute of Mathematical Statistics, the American Association for the Advancement of Science and an Honorary Fellow of the Royal Statistical Society. He was awarded an honorary Ph.D. degree from the University of Ioannina in Greece.

This conversation took place at Dr. Kempthorne's home in Ames, Iowa on March 7, 1994.

Folks: Kemp, I have enjoyed watching your ASA videotape "From Observation to Inference" (ASA archives) and I know about the videotape of your lecture "The Adventures of a Cornish Farm Boy in Search of Statistics" (Kempthorne personal copy). I am very interested in your university days.

## **CAMBRIDGE**

**Folks:** I have an old snapshot (Figure 1) of Clare College at Cambridge. Do you recognize the college from this picture?

**Kempthorne:** Yes, my room was that one—the third room from the corner on the third floor.

**Folks:** Tell me a little about your university background.

Kempthorne: I am to tell you about my university background. However, to do this, I should revert to earlier things; that is, how I got to the university and what my education was before that. I was born into a farm family in Cornwall. I think I grew to dislike the hard work in farming immensely. I went to a village school which had a headmaster who put me on my path. Then to a high school where I discovered that I liked mathematics.

J. Leroy Folks is a Professor in the Department of Statistics, Oklahoma State University Stillwater, Oklahoma. I found that the teacher of mathematics wasn't very good, so I learned mathematics myself. I wanted to go to Cambridge, so I took scholarship exams and various other exams and was awarded scholarships to go to Cambridge.

I had hoped to recapture at Cambridge some of the joy that I had received when I learned beginning mathematics in high school. It didn't really happen because I found most of the lectures at Cambridge were not at all inspiring. In fact, there was a curious thing. It seemed as though the most creative people were the worst lecturers. I have wondered about that ever since. I did a lot of mathematics-real variable and analysis. In the first two years I took courses on mathematics only. I have notebooks of the courses and I see from these that I had real analysis, measure theory, complex analysis, differential equations, linear algebra, theory of numbers, analytical dynamics, mathematical physics, hydrodynamics, electricity and magnetism, quantum mechanics and mathematical statistics. I didn't really cover the Lebesgue integration in great detail. There were several excellent lecturers: Cunningham, Ingham, Burkill and Goldstein. And a few very poor ones. I got turned off from pure mathematics because it didn't seem to be going anywhere, and then I stumbled into mathematical physics, but I didn't really dig that because I hadn't yet done much physics. Then I had a first course in statistics from John Wishart during my second year that seemed to lead somewhere.