A Brief History
by
Elliot A. Tanis


I arrived at Hope College in the fall of 1965. During my first year at Hope I taught Mathematical Probability and Statistics using the textbook *Introduction to Mathematical Statistics* by Robert V. Hogg and Allen T. Craig. This is an excellent textbook for upper level undergraduates and beginning graduate students. However the mathematical maturity assumed by this book was too great for many of our students.

The second time that I taught this statistics course was during the 1967-68 academic year. For a textbook I selected *Mathematical Statistics* by John E. Freund. The mathematical level of this textbook was good. However during the second semester I felt that something additional was needed so I began supplementing the textbook with dittoed handouts. Before the semester was over we were using only my handouts.

The reaction of the students to what I had written was encouraging. So during the 1968-69 academic year I taught the statistics course using materials that I wrote during the year plus reference books in the library.

The writing and typing of this first draft was accomplished in large part in the evenings because I was teaching 13 hours at the time. Our home had an unused coal bin with a plastered ceiling. I replaced the coal bin door with a window, painted the room, bought a large used desk, and an electric heater. When I planned to type ditto masters at home, I brought the department's standard typewriter home with me. For a change of pace I would work at the dining room table drawing figures.
In addition to my own typing and that of the departmental secretary, I paid Elizabeth Mehnert $1.20 to $1.30 per hour for approximately 90 hours of typing.

A sales representative from Addison-Wesley Publishing Company was the first to express interest in having my materials reviewed for possible publication. Their first letter was written on March 27, 1968. At that time I did not have sufficient materials written.

During the spring of 1969 I began correspondence with several textbook companies that were interested in considering these materials for possible publication. In addition to further correspondence with Addison-Wesley, I corresponded with Blaisdell Publishing Company, Academic Press, Inc., Prentice-Hall, Inc., and Worth Publishers, Inc.

Realizing that the 1968-69 manuscript was only a first draft, I knew that a revision was necessary. I requested two things from Dean Rider, a reduced teaching load and approximately $240 to pay a student to help with the typing. My teaching load for the year was three courses each semester, two of Introductory Statistics and the Mathematical Probability and Statistics course. Funds were not available for a typist so the typing was done by our departmental secretary, myself, and I paid Shirley Curtis $1.40 per hour for approximately 50 hours of typing.

Correspondence was begun with two additional textbook companies, Cummings Publishing Company, Inc. and International Textbook Company, the Publishing Division of Intext.

The first review of my materials was received in June of 1970 and it was not very favorable. However several later reviews were encouraging and the project continued. Although some of the textbook companies received favorable reviews, they dropped out of the picture because they were currently publishing a competing book.

During the 1970-71 academic year I used Probability and Statistics by Meyer Dwass. My manuscript lay dormant waiting for definite word from textbook publishers. I decided that before I made an additional revision, I wanted some advice from a textbook editor and I wanted to incorporate suggestions from reviewers into the revision.
On November 18, 1970, a contract offer was made by International Textbook Company. In October of 1970 Professor Robert V. Hogg from the University of Iowa was giving some lectures at Western Michigan University. Realizing that the contract offer from International was coming, I decided to talk to Professor Hogg about the book and ask him for advice concerning whether I should sign with International. Professor Hogg was my major professor at the University of Iowa and had a successful textbook on the market. His advice was to let him see a copy of the manuscript and also to send a copy to Iowa State University Press. I ended up sending a copy to Professor Hogg asking him if he thought additional work on the manuscript would result in a marketable book.

Following additional correspondence with Professor Hogg, we agreed that working together we could write a good statistics book for undergraduates that would fill a void that we both felt was there. Since Professor Hogg would be using some of his past efforts, and Macmillan had published his first book, we decided that Macmillan should be given the first opportunity to publish the book.

Professor Hogg was finishing another book during the first part of 1971. We had a meeting in Iowa City in the summer of 1971 to determine our strategy. When Professor Hogg wrote his first book with Professor Craig, they were in the same building. We would be almost 400 miles apart so the planning and scheduling was critical.

During the 1971-72 academic year Professor Hogg took my last manuscript, made a major revision, and sent his revision to me. I had purchased an IBM Selectric II typewriter so that symbols could be typed using a special ball. Linda Davis came to our home to type this version of the manuscript. She typed for approximately 100 hours at $1.80 to $2.00 per hour.

On May 9, 1972, Everett Smethurst, Mathematics Editor for Macmillan, sent us a contract and the first of three reviews.

During the 1972-73 academic year the 1971-72 revision of the manuscript was used as our textbook. Both Professor Hogg and I were quite pleased with our efforts. However we both felt that some minor revisions plus some additional materials would result in a superior
product. A minor obstacle was the fact that I planned on a sabbatical leave during the spring of 1974 and Professor Hogg planned on a research appointment during that same semester. Thus, during the 1973-74 academic year no major work was done on the book. Dr. Folkert taught our statistics course that year using Introduction to Mathematical Statistics by Paul G. Hoel.

I spent my sabbatical at the University of Lancaster in England. During that time I was able to write four or five sections for the textbook.

During the 1974-75 academic year we were back at the textbook, writing the final revision. During that year Mary Vlieger DeYoung was the typist. She spent approximately 180 hours at our home and was paid from $2 up to $2.50 per hour.

On July 1, 1975, I sent the first 11 chapters of the completed manuscript to Everett Smethurst at Macmillan. One additional chapter was written later.

At this point we entered a new stage in the process. Bruce Bumby, Managing Editor at Macmillan assigned Mrs. Elizabeth Belfer to work with us as Production Editor, beginning in September 1975. During the next several months, Mrs. Belfer and I exchanged a great deal of correspondence. She and others at Macmillan "marked" our manuscript. They marked headings, examples, exercises, etc. for the typesetter and compositor. They made some grammatical changes and minor rewriting suggestions. All examples and exercises were either rewritten in the neuter or as "he or she". At one point I objected. Dr. Allen Brady had provided some data so I didn't like him referred to as he or she. Thus I suggested that I would like to see the biologist referred to as he and in a previous golfing example, refer to the golfer as she and not he or she. The following note was sent in response to my suggestion "Au: If you're going to let this woman intimidate you, you should give the higher status role (biologist) to a girl and the frivolous golfing role to a man. I have no use for golf. (Change the name to Ellen)"

I should add that they did accept my suggestion.
In addition to the written material in the text, Macmillan also had an artist draw the figures for the text. Getting the figures drawn accurately gave me new appreciation for figures in textbooks.

I completed going over the marked manuscript around the end of January, 1976. Christmas vacation was spent on correcting the manuscript, figures, and preparing answers for the back of the book.

On February 6, 1976, a set of sample pages were sent illustrating the style that Macmillan's chief designer was suggesting for the book. After our approval the text was ready for the typesetters. This was done by a small company in Salisbury, England. We were fortunate this past summer to have the opportunity to visit them.

Beginning in April, 1976, the galleys started to arrive. These had to be read very carefully to find all the errors. Professor Hogg sent me a list of errors he discovered and I then marked all of these errors on the galleys and returned them to Macmillan for correction. This phase was completed by the end of May.

In June and the early part of July, page proofs arrived. This would be our last chance to make any changes before the book was printed. Thus Professor Hogg read the page proofs very carefully and he suggested that I should read them twice. Hopefully this will pay off. This year's class has discovered 7 errors in the first 6 chapters. I hope that is all of them.

In September, 1976, we received word from Bruce Bumby at Macmillan that Probability and Statistical Inference had been released for printing and binding.

On December 22 I received my first copy of the book. It was truly a joyous occasion. It is still a little hard to believe that the book is really finished.

We certainly want to thank all of you who participated in this project. In order to express our appreciation in a more tangible way, we have decided to contribute a share of our royalties to Hope College. In particular we have established a fund to support research in mathematics by students at Hope College. My dream is that this fund could be large enough so that the interest could support a mathematics major during the summer. Clearly royalties from the textbook will not be
sufficient to accomplish this. Thus I would like to invite any of you who would like to participate in this venture to send your gifts to Hope College to support this effort. (I do not want gifts for this fund to be made in lieu of gifts to the annual fund). Either send your gifts to the Development Office directly or send them to me with checks made out to Hope College. Temporarily the fund is named "The Tanis Mathematics Research Fund ".

In addition to contributing a share of all royalties to Hope College, I would like to contribute the entire royalty that I receive for books purchased by Hope College students and alumni. If you purchase a copy of the book at the Hope-Geneva Bookstore, I will automatically make this contribution. If you purchase the book at some other store, let me know so that I can make a contribution for that book.