An Interview with Jean Dickinson Gibbons

by Alan Vaughn

Jean Dickinson Gibbons was born and raised in St. Petersburg, Florida. She attended public schools there, graduating from St. Petersburg High School in 1954. Math and chemistry were her favorite subjects in high school, but she added “I also had an interest in writing, and was editor of the high school weekly newspaper during my junior and senior years.” After graduation, Jean attended Duke University in Durham, NC for her undergraduate degree and majored in mathematics. This decision, however, was without much support from her family or teachers. “No one ever suggested I major in math, which is surprising since my primary math teacher in high school was a female.” When Jean told her parents she wanted to be either a mathematician or an engineer, they responded, “No way.” She further clarified, “Unfortunately, they felt a math major was not suitable for a girl. Even though they themselves were highly educated, they didn't approve of a career other than teaching, nursing, or being a librarian.” Jean’s mother had a master's degree in library science and worked as a librarian, and her father was a lawyer and later a circuit judge.

Jean did not have much exposure to statistics as an undergraduate other than, as part of her economics minor, taking a course in business statistics which included time series and index numbers. Also as part of her economics minor, Jean took a course in business law from Gerald Gibbons, and ended up marrying him in her senior year. After receiving her bachelor's degree in 1958, Gibbons continued her study of mathematics at Duke at the master's level. Although her parents supported her financially through her undergraduate degree, she and her husband were unable to pay for both of their graduate training at this time, so Gibbons taught courses in the math department at Mercer University in Macon, GA while her husband taught in the law school there. It was here that she saw a flyer for a National Science Foundation grant to attend a summer study program in statistics at North Carolina State University sponsored by the Southern Regional Education Board (SREB). Gibbons explained, “It offered not only tuition, but also travel and living expenses, and the credits would count toward completing my master's degree in math at Duke.” Gibbons was awarded the grant, spending the summer in Raleigh, NC, and taking the basic theory and methods courses out of the original editions of the books by Mood and Snedecor. About this experience Gibbons says, “I fell in love with statistics that first summer, and continued to attend those SREB summer programs for two more years, first at the University of Florida and then Virginia Polytechnic Institute.” When asked about what encouragement Gibbons received to pursue a Ph.D. in statistics, she responded, “My teachers in these SREB summer programs were wonderful and they offered all sorts of encouragement.”

After two years of teaching at Mercer University in 1958-60, Gibbons received her master's degree from Duke and was awarded a scholarship from the Southern Fellowships Fund to study for the Ph.D. degree in statistics at any U.S. university. The only condition of the award was to have an intention to teach at a university in the southeastern region of the U.S. Her husband had been awarded a scholarship at Columbia
University to work toward a Doctor of Juridical Science degree. Only four universities offered this research degree in law at the time, so there were not many options as to where they could go. Gibbons explained, “I got married in January 1958 as an undergraduate, and at that time the wife went where the husband went.” In reference to her year at Columbia, Gibbons stated, “I got a good education, but I disliked Columbia tremendously. I had only been at southern universities before, and was not used to an urban campus where professors had other jobs. All the statistics professors there were researchers at Bell Laboratories in New Jersey, so we never saw them except when they taught class from five to seven in the evening. Living in New York City for nine months was a wonderful experience, however.” Two of Gibbons’ classmates at Columbia were Joe Gastwirth, later on the faculty at Johns Hopkins and George Washington, and Dick Krutchkoff, later on the faculty at Virginia Tech.

After the academic year 1960-61 at Columbia, Gibbons spent a summer at Virginia Tech where she began working on her dissertation with Professor Herbert A. David as adviser. The next two years, however, were spent teaching math at the University of Cincinnati, where her husband had taken a job teaching in the law school. During this time she continued working on her dissertation by mail and did some consulting in biostatistics at the medical school of the University of Cincinnati. In response to being asked what were some particular aspects of statistical research that interested or excited her, Gibbons responded, “Every aspect excited me, but my dissertation was in the field of nonparametric statistics; a relatively new field at the time with lots of research opportunities.” Boyd Harshbarger, the department chair at Virginia Tech at the time, waived the residency requirement, and Gibbons received her Ph.D. degree in December 1962, having spent only summers at Virginia Tech. In regard to the experience of writing her dissertation, Gibbons says, “I had only the one copy of the notes and drafts for my dissertation since this was before the days of a Xerox machine. As a result, I never let the materials out of my sight. I carried them around with me wherever I went. The dissertation was a very important document, and none of the pages could be replaced without hours and hours of additional work.”

In early 1963, Gibbons' husband completed his dissertation and accepted a teaching position at a law school in the Philadelphia area, so Gibbons applied for a position on the faculty at both the University of Pennsylvania and Drexel University. Gibbons related this experience, “The University of Pennsylvania did not respond to my application, but Drexel asked me to come for an interview. They met me at the airport and invited me to stay at the Dean’s home since proper young ladies didn't stay alone in hotels in those days. I interviewed, and the chairman told me they would offer me a job. Afterward I told them I wanted to walk around the neighborhood; I had decided to drop in at the University of Pennsylvania without an appointment. The statistics department head told me he didn't answer my letter since it never occurred to him to hire a female. I had a very pleasant interview and received an offer from the University of Pennsylvania a few weeks later.”

Gibbons started on the faculty of the Statistics Department in the fall of 1963 at the Wharton School of the University of Pennsylvania. She shared an experience illustrating
the rarity of her being a young female faculty member at this time. "On my first day of teaching at the Wharton School, I walked into this classroom full of young men. There were no women in the room and one of the men looked at me and commented, 'Here comes the curve breaker.' They were really surprised when I walked up to the podium at the front of the room and introduced myself as their professor. I was only 25 and looked quite young, so it was easy for the male students to think I was also a student." Gibbons explained that the student who receives the highest score in the class was often called a 'curve breaker,' since this grade sets the curve and in many classes these students were frequently girls.

Gibbons taught at the University of Pennsylvania from 1963-70, was promoted to associate professor and awarded tenure. Of this time Gibbons said, “While I was on the faculty there I was encouraged very much to publish and to become involved in the American Statistical Association (ASA). I was also frequently the “token” female on many committees and dissertations.” It was during this time that Gibbons started working on her first book, Nonparametric Statistical Inference. In the spring of 1970 both Gibbons and her husband took a sabbatical; her husband was a visiting professor at the University of Alabama law school, while Gibbons spent most of her time in Alabama completing her book and reading the page proofs. At the end of the sabbatical, Gibbons' husband decided to accept a permanent position as Director of the Alabama Law Institute at the University of Alabama, forcing Gibbons to resign her job at the Wharton School of the University of Pennsylvania. She commented, “Again I felt I had to go where my husband went.” She was able to adapt to this situation as she said, “My book came out, was well received and I took a position as an associate professor at the University of Alabama.”

Two years later, Gibbons divorced her husband and planned to leave the University of Alabama as soon as possible. However, fate intervened when she was a member of the Search Committee for a new Dean of the Business School at Alabama. She explains, “Dr. John Fielden, Dean of the School of Management at Boston University, interviewed for the position and was hired. We worked together, fell in love, and ended up getting married in 1973. Then we were both stuck at the University of Alabama since finding two very high-level positions at the same university is always quite difficult.” Speaking of the new situation, Gibbons said, “When I really had no choice but to stay at Alabama, I figured I had an opportunity to become a big fish in a little pond, since Alabama had no prior reputation in statistics.” Gibbons was given the resources to start an interdisciplinary Ph.D. program at Alabama; this allowed Ph.D. students in statistics to take appropriate courses from the Colleges of Arts and Sciences, Business, Engineering, and Education. The program consisted of an interdisciplinary faculty, of which she was the chairman for 20 years. During this time Gibbons says that they had “some very fine graduates.”

Gibbons was very active in the American Statistical Association (ASA), being elected a Fellow in 1972. She first served on the Board of Directors when elected to be Representative at Large for 1972-75, and would go on to serve three more terms on that Board. She was the first Chair of the Committee on Women in Statistics in 1972 and
served on numerous ASA committees, including program chair for the Joint Statistical Meetings in Boston in 1976. She said, “These experiences were among the most valuable in making contacts, meeting people, finding colleagues for coauthoring, and adding a lot of great opportunities to do professional things nationally and internationally.” Gibbons would recommend to all young statisticians that they volunteer to serve on committees in the ASA.

She was a member of the Committee on National Statistics of the National Research Council for 1980-83. She served on several advisory committees to the government, testified before a Congressional committee and in some legal cases as an expert in statistics, and taught four short courses on nonparametric statistics for the Department of Defense at the U.S. Army Logistics Management Center in Fort Lee, VA. She was very active on the Southern Regional Education Board Committee on Statistics (now the Southern Regional Committee on Statistics), serving as Treasurer in 1978-80 and Chair in 1980-82.

Gibbons also participated in a lot of international activities. She was a senior Fulbright-Hays research scholar at the Indian Statistical Institute in Calcutta in 1973. She was a delegate to a NATO Statistical Conference in Athens, Greece in 1972 and the VIth International Biometric Congress in Sydney, Australia in 1963. She was co-editor of the annual Proceedings of the International Insurance Seminar and attended their conferences in France, the Philippines, Egypt and Mexico.

Gibbons was very active in research and writing, with ten books on statistics and many articles in professional journals and chapters in books. She served on the editorial boards of several journals and was awarded the Burlington-Northern Faculty Achievement Award at the University of Alabama in 1985. She has co-authored books and articles with many highly distinguished colleagues such as Ingram Olkin of Stanford, Milton Sobel of the University of Minnesota and the University California at Santa Barbara, John Pratt of Harvard, and Sir Maurice Kendall of the London School of Economics. Since her retirement in 1995 she has published several entries in encyclopedias and the fifth edition of her original book Nonparametric Statistical Inference appeared in 2011. She has also co-authored two books with her husband John Fielden, both published by the Pioneer River Press. One is a novel entitled Two Lives, One Love, which received the President’s Book Award as the best adult fiction in 2008 by the Florida Publishers Association, and the other a how-to book called Throw Me the Bottom Line – I’m Drowning in e-Mail.

Gibbons and her husband retired in 1995 and moved to their beach house on the Gulf of Mexico in Pensacola Beach, FL. They remodeled their beach house for permanent residency during the summer, but then fate intervened again with Hurricane Opal in October 1995. Their newly remodeled home was completely washed away along with treasured books and other publications, family photographs and career and travel mementos. They moved to Vero Beach, FL in 1998, where they became active in the Lifelong Learning Institute of Indian River State College. Dr. John Fielden died of Alzheimer’s disease in the summer of 2010.
When asked if she thought the challenges she faced were still prevalent today, Gibbons commented, “I was always the only female in my department, but I did my best to be a role model and encourage young women to enter this previously male-dominated field. I think the situation has changed dramatically, thank goodness. It’s no longer a rare occurrence to have a woman attain success in the statistics field.”

Gibbons offered the following advice for graduate students in statistics at Virginia Tech and elsewhere. “It’s a wonderful field for both males and females, particularly if you go into academia, because then you have opportunities to do publishing, consulting and testifying as an expert witness, as I did. But mostly my career has been writing, research, and publications; that is what I love to do. My advice is to work hard, give everything you’ve got to every project, especially if you’re a co-author or a member of a committee; be generous with your time.”

When asked about what she’d like to see happen in the field of statistics, she said, “My primary regret is that there are still so few people who understand what the field of statistics is all about. When I tell people I’m a statistician, many still think I do things like figure out RBI’s for a baseball team. Improving the image of statistics as a profession and the status of statisticians is something I have always hoped for.”

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