

REMEMBERING PAT BILLINGSLEY

Some of the best things in life are down to pure luck (very thematic for probabilists!). Pat Billingsley and his family were visiting Cambridge in 1968. I was a second-year research student, working under David Kendall, and that spring I fell irreversibly in love with limit theorems in probability theory. There was Pat to talk to, and he had the text of his now classic 1968 book on convergence of probability measures, of which he gave me a copy. I was able to devour it before publication.

That July, Pat was an invited lecturer at the St Andrew Mathematical Colloquium. He gave an excellent mini-course on weak convergence. Two memories stand out. One was Pat getting hopelessly muddled once (on the Daniell-Kolmogorov consistency conditions), and hearing him say in the gents afterwards that that had never happened to him before in all his years of lecturing. It was reassuring to me before I had even started my own career to realise that even big shots are human. Then at the end, when the speakers were (very graciously) thanked, the master of ceremonies said that although Pat was from the University of Chicago, he was really a Texan lecturer. He paused to heighten the dramatic tension (which the actor in Pat would have appreciated, although he looked amiably perplexed). He continued that Pat was the only lecturer he knew who lectured pulling six-guns out of his pocket – and then gave a brilliant take-off of a trick Pat had, of turning to the audience to make a point, pulling his hand out of his pocket, and pointing his fingers at the audience. This brought the house down – and Pat loved it.

I next saw Pat when he invited me to U of C to give a seminar when I was spending 1975-6 at Illinois. I remember what a gracious host he was, and how interesting I found his reminiscences about the US Navy, his acting career, and raising his kids close to both the U of C campus and Hyde Park, which I had felt uneasy even driving through.

For years, whenever I needed an academic reference, I would name Pat as a referee. He was unfailingly helpful.

I got to know Pat's later book, on probability and measure, well: I reviewed it for Mathematical Reviews. I remember saying it was 'a fascinating, important and highly individual book, from which any serious student or teacher of probability will profit'. I stand by that, even more for the second and third editions. I remember one thing that struck me was his treatment of the Dubins-Savage theorem (on optimality of bold play in an unfavourable game - bet everything in one go). I always thought highly of Pat's mathe-

matical taste – particularly when, later on, I got interested in probabilistic number theory myself.

I'm fond of thrillers, as are my two sons. Whenever we watch 'The Untouchables', they know that when the trial scene comes, and the judge tells the bailiff to switch juries as Al Capone's trial for tax evasion is starting, Dad will get very excited and start yelling 'That's Pat Billingsley'.

I was very sad to hear that Pat's wife Ruth had died, in 2000. I have fond memories of her.

I needed to look Pat up a few years ago, to ask him a technical question (about the role of finite additivity versus countable additivity in the Dubins-Savage theorem). I was surprised not to find an e-mail address for him on the website of the University of Chicago Statistics Department. Eventually I e-mailed them and asked for one, and was kindly contacted by his companion Florence Weissblatt. I replied with my question for Pat. Florence eventually replied, telling me that Pat was suffering from Alzheimer's disease. Despite this, he had tried to engage with my question, but been unable to do so. I apologized profusely, and thanked them both. I was of course mortified for having put him through this – but I was proud of him.

Dr Samuel Johnson famously said that every man should strive to be an ornament to his profession. Pat Billingsley was exactly that – an ornament to his profession. He was also a wonderful human being, and a very well rounded one. He was a loving husband and father, an officer in the US Navy, and an accomplished actor. He had the good fortune to study under William Feller, and he returned this good fortune to his own students (including Dick Gundy, from whom I heard of his death). He was an excellent teacher, an excellent writer of books, and a fine research mathematician. He was a good friend, and enriched the lives of all lucky enough to have known him. Our hearts go out to his loved ones; we will all miss him.

Professor Patrick Billingsley, probability theorist and actor, 3 May 1925, Sioux Falls SD – 22 April 2011, Chicago IL.