

BOB WILSON, MY THESIS ADVISOR

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I have a strong claim, thus far undisputed, to being Bob Wilson's first Ph.D. student. Bob and I came to Stanford at roughly the same time — Bob as a young assistant professor and I as an (almost as young) Ph.D. student.

The first time that I heard about Bob was when Howard Raiffa, then on an extended visit to Stanford, gave a talk on utility theory. He concluded his presentation by saying that if any of us (referring to faculty as well as students) wanted to learn more about the subject then we could ask Bob Wilson, who “knows all about it.” I suppose no one had reason to doubt this statement, not at that time and not since then.

Eventually it was time to start working on my thesis. In today's terminology, one could say that it modelled incomplete capital markets with asymmetric information. It was only natural to seek the advice of Arrow, then, as today, the person we all looked up to. Arrow was planning a sabbatical leave at MIT, and he agreed to act only as co-adviser, provided that another co-adviser does the day-to-day supervision. To my surprise, he suggested Bob Wilson — a choice that I attributed at the time only to the fact that I started at Stanford as an OR student. With some hesitation, I asked Arrow if he thought Bob was interested in capital market theory (!). To this Arrow answered “why not ask him.” How glad I am that I did (ask), and how glad I am that he was (interested).

Months later, when I got to know Bob better, I recalled these initial doubts and told him about it. In response, Bob intimated (Oh, am I being indiscrete here?) that some of the finance people then at Stanford were far from enthusiastic about what an “OR person” had to say about capital markets. As I vaguely recall, he might even have said something about their doubting such a person's qualifications.

It is a pity that I did not keep the first draft of my work that I submitted to Bob for review. When I got it back from him I literally saw red. Bob's red question marks were all over the place, on every page, almost every line. It was from him, practically then and there, that I learned what it meant to “prove” a proposition.

The “market weights” in my paper, “The Structure of the Cost of Capital,” which is part of this volume, appeared for the first time in my doctoral dissertation. Since in some contexts they looked formally like probability, I sometimes tended to use that word. Bob was working at the time on his “Theory of Syndicates,” and thus was especially sensitive to the use of this term in a multi-agent

framework. At one point he almost chastised me: “do you know what it takes for group probabilities to exist?!” Consequently, I carefully refrained from using the word ‘probability’ in any way connected with these weights. In retrospect, this was perhaps unfortunate, because the “market weights” are essentially identical to the notion that years later became almost a household word: “risk-neutral probabilities.”

My last story may be somewhat amusing to those who know something about Bob’s career. As I was about to graduate, Bob wondered why I did not seek a tenure-track position in the USA. When I explained that I did not want to live outside Israel on a permanent basis, he insisted that nothing in the American academia was permanent. “Look at me,” said Bob, “my appointment at Stanford is only for three years. No one knows what will happen after that.” This was in 1966.

And one last word, this one directly to Bob: Thanks!