

First Encounters
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First encounters not only shape our perceptions, but they can also influence one's destiny. Learning experimental physical chemistry as a Princeton undergraduate hardly prepared me for my eventual life's work. While realizing that I would not be happy following in my father's footsteps in medical research, Donald Spencer fortuitously encouraged my changing direction to study mathematics, and Charles Coulston Gillespie connected me with Clare College.

Only in Cambridge did I discover Arthur Wightman's wonderful papers. At the time I was struggling, with continual frustration, to learn mathematical physics. What a striking difference Arthur's clarity provided! Compared with papers where the physics ideas seemed to be hidden—intentionally or not—under layers of jargon, his were magic. Naturally, I developed an intense desire to return to Princeton, in spite of the temptation to remain in charming and stimulating Cambridge, England. Two years earlier, a trajectory back there would have seemed unimaginable; but my long-distance exposure to Arthur Wightman made my motto, "Princeton or bust."

The focal point for Princeton graduate students interested in physics and mathematics was the (Old) Fine Hall Common Room. Everyone needed to pass that space to go between the two departments, to read notices of seminars thumbtacked to the cork bulletin board in the hallway, to access the stairs to the famous library on the floor above, to ask a mathematical question, or to visit the local mailroom. One September afternoon, I happened to be reading in a comfortable easy chair in the Common Room, opposite to the door. Wightman was on leave at the IAS, and I had not yet met with him.

My perch had a clear view down the wood-paneled hallway lined by mathematics faculty offices. Suddenly the familiar, animated voice of Donald Spencer rang down the corridor. Shortly he came into view, walking rapidly beside a tall, good-looking man who was casually dressed in a sports jacket, without a tie, and carrying a large, well worn, brown-leather briefcase brimming with papers. The pair stopped in the hallway, not far from where I sat. Both men were compulsive talkers; they seemed completely engaged in their conversation, unaware that they were being observed.

Arthur Wightman appeared pleasant, and even approachable, but formidable nonetheless. Spencer began to tell Wightman about a newly arrived student who planned to study mathematical physics, a student who sounded exactly like me. How extremely awkward to be the subject of a conversation you unintentionally overhear! Coming from an academic family, my father had often explained to me that professors have a human side too, which helped me understand that I had been derelict in my duty by not seeking out Arthur Wightman as soon as I arrived in Princeton. I soon did.

Eventually I became quite familiar with that omnipresent briefcase, with Arthur Wightman's modest Volkswagen bug, and with Anna Greta's Mercedes. Two years later, at the IHES, someone coined the names "Big Arthur" and "Little Arthur" to distinguish us in conversation. Those adjectives not only described our relative ages and physiques, but also the way I felt at that moment in Fine Hall, when I tried to disappear inconspicuously into the woodwork.

¹ To read more about my interactions with Arthur Wightman, see the *Bulletin of the International Association of Mathematical Physics*: "Arthur Strong Wightman (1922—2013)," with Barry Simon, published January 2013, and "Nine Lessons of my Teacher, Arthur Strong Wightman," published April 2013. See <http://www.iamp.org> and <http://www.arthurjaffe.net>