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I am, therefore I think

by [Robert Pollack](#)

I grew up in Sea Gate, a small enclave at the tip of Coney Island. I had never been north of 23rd Street in Manhattan until the fall of 1956, when I stepped out of the subway kiosk that used to sit on the median at 116th Street and found my way to Hamilton Hall for my interview with the admissions office. I had an overwhelming sense that I had come to Oz. The streets were of red, not yellow, brick but however you followed them, they led from one building to another—not a car in sight—all dedicated, sanctified, to the notion of teaching, learning, and converting what was unknown to all into what could be understood by the likes of me.

My English teacher at Abraham Lincoln High School had convinced my parents that I could and should go to Columbia because I had the goods—boxcar college boards, loved to read, loved to write, and was good in science. Dropouts from high school obliged to help support their families in the Great Depression, my parents had no idea what my teacher was saying, but respected her enough to let her help me to apply. The interview was at once nerve-wracking and perfunctory—and I got the fat letter.

The cost of Columbia College tuition looked to be a tremendous hardship for my parents, but I arrived at Columbia at a propitious time—the fall of 1957. When Sputnik 1 was launched in that October, the New York State Board of Regents responded by doubling their Regents scholarship in exchange for a promise to study engineering or physics. I chose physics, and so my parents had that much less of a loan to take out to cover the semester cost of sending me to Columbia which was—I still have the receipt—\$312.

After four years of physics and math, the Core Curriculum, and not much else, I met my future wife, an artist who also read books. By graduation we knew we'd be getting married and I knew that physics was not for me; the science with the most literary quality, biology, was going to be my field. Brandeis University had admitted me to their graduate Biology program with a fellowship we could almost live on, with only one proviso, that I get at least a B in organic chemistry—and orgo lab—the summer after graduating. That was 50 years ago.

I had never taken a chem course. The summer of 1961 was especially hot if you had to live in a single room with a shared bathroom in a local SRO (look it up). The orgo class was not so bad, but the lab was grim. WWII-era equipment, stuffy room, and exercises mired in tradition to the point that their very pointlessness was their merit. The capstone of these was synthesizing a solid—acetylsalicylic acid—from liquid starting materials.

I turned in a brown sludge, in a thin glass tube so its melting temperature could be taken as a measure of its purity. I got a B and here I am.

All around me pre-meds in a hurry were handing in glass tubes with sparkling white powder. We all knew we were synthesizing aspirin; they had figured to buy some, grind it up, and hand it in. After all, aspirin is aspirin, and they needed their A's as much as I needed my B; maybe even more. But why would they so demean their own work as to fake it, just because they could?

None of us knew that our TAs had handed us a carbon-14 radioactive starting material. Nor did we imagine that when a TA would place our glass tube in front of a ticking Geiger counter, an unexpected silence would be a CSI-level proof of cheating. If you handed in a non-radioactive (and therefore fake) result, you failed and had to take the course again.

So orgo was not only the beginning of my career as a molecular biologist, but also a critical confirmation of the importance of having boundaries and standards as well as knowledge, of not taking every advantage before me, of meaning what I say, of not cutting corners. Only then did I see what the Core was really about: First you are a person with moral boundaries or you are not; only when you are, does knowing facts matter. As my teacher today, Rabbi Adin Steinsaltz, put it in a recent interview, "I am, therefore I think."

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