Episode 5: Origin Story

That stirring movie music can mean only one thing ... Origin Episode!

Welcome to Grad-Post! I'm your host, Brian S. Mitchell, and we're here to talk about life before, during, and after graduate school, and whether an advanced degree is right for you.

Almost every series has an origin episode. Who can forget "The Way We Was" from The Simpson's second season?

[Audio clip]

It's almost obligatory. But what if those origins were completely uninteresting and make for one of the worst episodes in history? As I said in Episode 0 – my personal story is actually kind of boring. Others had and have it much harder than I did. However, I think there are some universal truths to my journey, so I tell the salient parts of it with the hope that at least one of my struggles or triumphs will hit home to you and serve as an example as you consider graduate school and to persevere when times are tough.

The first thing to know is that my family home burnt to the ground when I was just three months old. I don't remember that event, of course, and all I really know for sure is that I survived it. My parents, my siblings and I all escaped physically unharmed, dressed only in our bedclothes as fire spread from the adjacent garage to our two-story farmhouse. Legend has it that my oldest sister was charged with carrying me out and holding me while we watched our lives change from green-trimmed white to orange to black. Our dog apparently wasn't so lucky.

Fast forward eighteen years through six years of playing outside in snow and sun, beating on my younger brother, eight years of grade school in the same eight room rural schoolhouse with only one student of color, glasses, bullying, baseball, then four years at a much larger but competent high school, braces, again one student of color, band, burgeoning interests in science and music, bad hair, bad clothes, and little need for reading or schoolwork.

What is now a foregone conclusion for many graduating high school today but was not an option for most of my classmates was going to college. I definitely wanted to go, but my parents basically told me I could go anywhere I wanted to as long as it was the University of Illinois - kind of like <u>Tom Cruise in that scene from *Risky Business*</u> for you film buffs.

[Audio clip]

They were under the misconception that as lower middle-class farmers they couldn't afford to send me anywhere else. I didn't even apply anywhere else. So, I went. More bad hair, bad clothes, band, but now with engineering books and a Hewlett Packard calculator in tow – but not on my belt. When college graduation rolled around I looked for jobs but the economy was in a deep recession. With no offers in hand, I opted for grad school as a delaying tactic. Every degree counts, right? Since I was coming out mid-year, I had only one real viable option. I had applied to the University of Wisconsin on the recommendation of an undergraduate career advisor. Turns out a faculty member at UW – Jim Koutsky needed a researcher right away for a newly funded project - but only for a master's student. I agreed to go, eventually worked my way into a PhD project, graduated, and found myself staring at another recession. I did a one-year postdoc instead as a delaying tactic, came back to the same recession, and with no industrial offers looked at academic positions as a plan B. I had one job offer as an assistant professor and took it. The rest of the journey is a story for another day.

[Background music]

The first lesson from that quick-edit flashback is this: **sometimes decisions are made for you**. That truth may fly in the face of our fierce individualism and desire for self-determination, but it can be freeing in a way. It's a corollary to the <u>Yogi Berra-ism</u> "When you come to a fork in the road, take it." Sometimes there's only one option. You can always choose not to decide, but as Shakespeare and Rush have said, you still have made a choice. There can be comfort in a singular choice because when it comes to a career, there are multiple pathways to get you to where you want to be. The single choice is just taking you to the next option.

There are some details from that flashback montage that are worth exploring – flashback flashback if you will. The first is my freshman chemistry class at Illinois. It **KICKED. MY. ASS**. Like many of you, I didn't have to work that hard in high school to get good grades, so when I was placed in accelerated chemistry as a chemical engineering major, I found myself surrounded by some really smart people. The pace was furious and by the time the first hourly exam came around, I was fully unprepared. I got a "C" on it and went into panic mode. Was I in the right major? Was I going to wash out of college? My house was on fire. But instead of panicking, I got mad at myself. The next section of the course was acid-base chemistry which is notorious in general chemistry for its mathematical rigor. I studied day and night, worked extra problems, went to see my TA almost daily, and ended up with an "A" on the next hourly exam – one of the highest scores in the class. I went on to do well enough in the third hourly exam, quizzes, homework, and the final exam to be solidly on the A-B borderline for a final grade. I was shocked to see that I got an "A" for the course. A lower grade would have been just fine, but I was curious why I got a higher grade than what the curve showed. I went to the course instructor – Steve Zumdahl who all Illinois advanced chemistry students from the 80's and 90's will remember fondly – and asked him how it is that I got an "A." He said "I consider each borderline case individually. You did so well on the hardest exam in the course that you earned the higher grade." I hated the fact that someone seemingly had done a favor for me. How was I supposed to thank him?

I fully recognize that these favors people did for me as an undergrad and getting into grad school smack of white male privilege. I was given opportunities and breaks that others may not have received. But there's an aspect of personal responsibility and work ethic that started to develop in me that helped me open my own doors and rely less on the kindness of strangers. I hope you can appreciate that part of it.

Fast forward in this flashback flashback to that first year in grad school when I was working on my master's project. I recently looked through my old research notebooks from that time. Yes – I still have them. I'm not a hoarder, I just had the whole intellectual property best practices engrained in me early on. There's one page where I was having particular difficulty getting an experiment to work and I angrily scribble in big, huge letters "Totally Wasted!!" diagonally across a single page. I was talking about the data, not me. I recall angrily slamming doors, leaving the lab early, and giving up... temporarily. I returned the next day, started the experiments over with renewed care and concentration, and hammered out some publishable results by the end of the summer.

[Background Music]

The lesson of my freshman chemistry and master's work vignettes is that hard work will see you through the difficult times. You may get breaks, but you have to take advantage of them. As I became a faculty member and research advisor, I tried to see abilities in advisees that others had seen in me.

I had occasion to take on graduate student advisees that colleagues in my program had let go. Sometimes it was early on, sometimes it was a year or two into the program. I couldn't always accommodate such students; either I didn't have the research funds, or taking in more would jeopardize the progress of those already in the group. And I didn't always take them on as a PhD student. There was more than one that I simply agreed to mentor to a terminal master's degree while they looked for their next career move. But I had one student in particular that I took on as a PhD advisee who had been let go by a notoriously cut-throat research advisor. He hadn't performed well in his first year classwork nor on his qualifying exam, and he was privileged in ways that even I hadn't been, even though he was an ethnic minority. But I saw something in him that others didn't. He had enough talent and desire to succeed that I thought he could make it. So, I took him on. It wasn't easy. I had more than one colleague tell me he didn't have what it took and that I should mentor him out of the program. But, he completed - and in a timely manner. He now makes more money than I ever did and has been more places than I ever will. And the company he works for is delighted to have him. I had other advisees – yes, women, too – and I love them as I do my own children. But the one I describe here is a reflection of myself: the struggles I had faced and the salvation others had offered. That's the real origin story here.

I feel like there are some truths that are universal, regardless of race, class, or station in life, the most important of which is this:

[Background Music]

sometimes you just need someone to carry you out of a burning building. None of these things would have happened if my sister hadn't swiped me up and rescued me from a house fire. Sure, it could have been a complete stranger, but it wasn't. The more people you meet, the more people you know, the more people you work hard for, and the more times you can put yourself out there, the better the chances you have of finding that person who just might save you from your metaphorical house fire. Just be sure to thank them.

[Audio clip]

Thanks Trudy. Thanks, Steve. Thanks, Jim.

Links

The Way We Was, The Simpsons, 1991, https://en.wikipedia.org/wiki/The_Way_We_Was

 $\label{lem:linear_risky_business} Risky \textit{Business} \ excerpt, \ \underline{\text{https://www.google.com/search?client=firefox-b-1-}} \\ \underline{\text{d\&q=tom+cruise+risky+business+university+of+illinois\#fpstate=ive\&vld=cid:70e86e1e,vid:iFabpS3gAr8,st:0}} \\ \\ \text{deg=tom+cruise+risky+business+university+of+illinois\#fpstate=ive\&vld=cid:70e86e1e,vid:iFabpS3gAr8,st:0} \\ \\ \text{deg=tom+cruise+risky+business+university+of+illinois\#fpstate=ive\&vld=cid:iFabpS3gAr8,st:0} \\ \\ \text{deg=tom+cruise+risky+busines+risky+busines+risky+busines+risky+bus$

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