

WHY I TEACH...

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“Do not answer a fool according to his folly or you will be like him yourself. Answer a fool according to his folly, or he will be wise in his own eyes.”

Taken at face value, the ancient Hebrew proverbs above appear to be a classic example of a silly contradiction; however, this could not be further from the truth. The sages who wrote the ancient Hebrew proverbs were not stupid men. The reason they put these proverbs together is because they wanted them read together. Together, the proverbs give a true picture of reality on how to discern a situation and to know when to correct a fool. In writing proverbs such as these, the ancient sages were grappling with the immense complexity of the world and urging their readers to engage in the same exercise of thinking deeply about the world and living well therein.

The perspective of the ancients often goes unappreciated by our modern sensibilities. We tend to believe in a random universe governed by random forces that can be perfectly explained by the laws of science. There is an unfortunate kind of utilitarianism to the way we live. The ancients, on the other hand, had a beautifully nuanced view of the world. They believed that the world had an underlying structure, and yet was mysterious in many ways. To them there was a deeper meaning, beauty and truth to the universe, along with a complexity and mystery that sometimes cannot be explained. They placed immense value on the idea of wisdom and urged each other to engage in the task of pursuing wisdom. That is, a wise person was on a quest to discover the underlying structure in the world, and to learn how to navigate through the complexity and mystery that he would encounter in life. Though much can be said about how to gain wisdom, one key way to become a wise person is to be in a community of learners, with older, wiser mentors.

As I reflect on my own (short) journey through life, I have found a lot of truth in the perspective of the sages of old. To be successful in the world one has to be able to live “paradoxically.” That is, there are times when one has to embrace structure; and there are times when one has to embrace mystery. There are times when one has to be just; and there are times when one has to be compassionate. There are times when one has to speak; and there are times when one has to listen. There are times for undistracted work; and there are times for unhindered rest. There are times to be idealistic; and there are times to be pragmatic. To navigate the world well, one has to learn to live in the tension of what at first appear to be competing values, but in the end, complement and balance each other in lovely ways. Though there are many sources that have taught me these values and have influenced my growth in these areas, among the most important has been the education I received in my mid-teenage years. In particular, there were four teachers of mine (two mathematics teachers and two english teachers) whose lives,

teaching and mentorship transformed me profoundly and made me a wiser and more balanced person. I am deeply grateful to Bob Arrigo, who showed me the beauty of deep thinking; to Monica Palekar, who instilled in me the discipline of work; to Natalie Farina, who taught me how to listen carefully; and to Sue Silver, who showed me how to speak and communicate clearly. I owe each of them a debt that cannot be repaid.

Of the many inspiring moments in Bob Arrigo's class, there is one that stands out in particular. Bob's most well-known lesson of the year was his presentation of the proof of Euler's formula:

$$e^{i\pi} + 1 = 0$$

This formula is considered by many mathematicians to be the most beautiful formula in mathematics, combining the five most famous numbers in all of mathematics in one succinct statement. Moreover, Euler's formula has deep connections to many branches of pure and applied mathematics and its implications are far-reaching. Bob's engaging presentation of the technical details of the proof was masterful; but what stays embedded in my mind was the moment when he had finished the proof and put down the chalk. At that moment there was a silence in the room. And suddenly the room burst into applause. But the applause wasn't for Bob - it was self-evident that he was the most outstanding teacher we had ever had. The applause was because we had seen something absolutely wondrous, delightful and true. Bob had managed to get himself out of the way and allowed us to see a beautiful and deep reality in mathematics. In that moment, he had shown us the reward for asking big questions. He had opened all of our minds to something we never thought could exist. For me personally, this was a life-changing moment. It felt for those few minutes that everything was right in the world - that there was a wonder, beauty, freedom, truth and elegance in mathematics that was immensely satisfying and that I needed to explore more. What I learned that day was the importance of being free to ask deep questions that require deep thought, and the potential reward one can receive in that pursuit.

But having a sense of wonder and wanting to explore cannot be the sole way to be successful in mathematics (or in life!). This is where Monica Palekar's teaching affected me deeply. It was in her class that I learned the importance of proof, rigor and organization. It was through her careful teaching that I learned about the laws of logic, how to make a coherent argument and how to write a mathematical proof. It was through her guidance that I learned to present my ideas in a meaningful and logical way. But the way in which Monica impacted me the most was not just through her teaching but through her life and example. What is so wonderful about Monica is that she lives in the same way that she teaches - with integrity, generosity, commitment, patience and discipline. She works hard and with excellence in all she does. It was in her classroom and through our relationship that I learned the importance of being diligent and disciplined in all my pursuits, and to hold these qualities in tension with the wonder and freedom I had learned from Bob.

Though my natural academic inclinations were in mathematics and science, it was two of my high school English teachers that had arguably the biggest impact on my growth as a person. In Natalie's Farina classroom, I found a place that completely transformed the way that I looked at the world. Any joy and delight I find in reading books today I owe to her teaching because she helped me to look beyond words on a page to see profound ideas about the world in those pages.

It was in her classroom that I learned the importance of hearing what an author was communicating. I learned to resist the temptation of superimposing my own thoughts or interpretations on the text; but instead to listen well, to pause and reflect on what I was hearing before doing anything else. In Sue Silver's classroom, I found a teacher who gave me the confidence to move past my introversion and insecurities and learn to communicate in an effective way. If Natalie showed me the importance of listening well, it was Sue who showed me the importance of being able to speak well. She had an uncanny ability to make me uncomfortable; but she always had a way to push me and help me to move past the discomfort and really develop myself in ways I had never explored before. What I remember most fondly about being a student of theirs was the way in which they made themselves available to me outside of the classroom. I can recall many hours spent in their offices discussing literature, ideas and the world. In many ways, Natalie and Sue complemented each other perfectly. For instance, from Natalie I learned the importance of being pragmatic and realistic about life. And from Sue, I learned the importance of holding to idealism and convictions throughout life. In both teachers, I found more than educators - they were conversation partners, mentors and friends.

The few words I have written above cannot do justice to the many ways in which these individuals have impacted me. It would be an understatement to say that they each changed the course of my life in very profound ways. I am immensely grateful for the skillsets that they gave me; in fact, these have been tremendously useful to me in both my academic and working career before I came into teaching. However, I am even more grateful that they were the kind of educators who were not content with just passing on specific skills or knowledge. They saw education as a means to develop the entire person - to make him a wiser and well-balanced citizen of the world. They each taught me to look at the deeper structures and beauties of the world and gave me the values and skills I needed to navigate the complexity of what I would face when I left school.

It is only after years of teaching on my own that I have really been able to see the profound difference Bob, Monica, Natalie and Sue have made in my life. Through feedback from students and conversations with colleagues, it is clear to me that in many ways, Bob, Monica, Natalie and Sue are perpetually with me in the classroom. In my teaching career up to this point, I have striven to create the kind of community and relationship with my students both inside and outside the classroom that I enjoyed with my own teachers. And just as my teachers helped me to develop into a wise person who is ready to face the world, I have striven to do the same for my own students. So why do I teach? Such is my respect and admiration for the teachers that I had, that I can find no better way to honor them and carry on their legacy than to attempt a feeble impression of them by following in their footsteps. Bob, Monica, Natalie and Sue were so generous to me and served me so well as teachers that I feel a sense of obligation to do the same for others. It would be immensely selfish of me to not give back to others the kinds of opportunities that I had as a student. Teaching gives me the perfect way to assume that responsibility and carry on the legacy and community of learning that my teachers passed on to me. But more than out of obligation to my teachers, or out of service to my students, I teach because in teaching I find a unique sense of joy. When one truly enjoys something, it is not enough to hold on to it. True

delight in a subject compels one to tell others about it. It is virtually impossible to find a person who loves a piece of music or a movie or a piece of literature who then refuses but tell others about it. The delight in the subject is not just about understanding, but about sharing that understanding with others. And this is also why I teach - because Bob, Monica, Natalie and Sue gave me a unique joy and love for mathematics, english and education. Eduation is so compelling and delightful to me that I cannot but share that with others. And therefore, I teach out of duty and delight - because I ought to, but also because I want to. And therein lies another wonderful paradox worth thinking about.