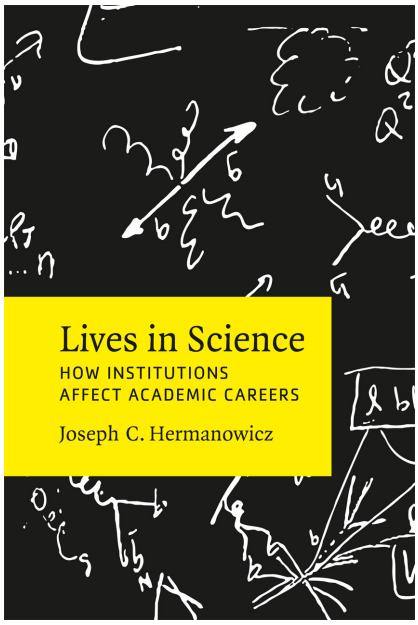
Book Review: Lives in Science: How Institutions Affect Academic Careers

Blog Admin

What can we learn when we study people across the course of their professional lives? ***Joseph C. Hermanowicz*** *asks this question specifically about scientists, and in* ***Lives in Science*** *he tracks fifty-five physicists through different stages of their careers at a variety of universities across the country. He explores these scientists' shifting perceptions of their jobs to uncover the meanings they invest in their work, when and where they find satisfaction, how they succeed and fail, and how the rhythms of their work change as they age.* ***Jennifer Miller*** *believes the book deserves the attention of anyone interested in the sociology of science.*

Lives in Science: How Institutions Affect Academic Careers. Joseph C. Hermanowicz. University of Chicago Press. February 2013.



Find this book:

Joseph C. Hermanowicz, a sociologist at the University of Georgia, returns to the academic physicists of his foundational study *The Stars Are Not Enough: Scientists—Their Passions and Professions* with a new book *Lives in Science: How Institutions Affect Academic Careers*. We might also ask, what kind of institutions could give rise to the distinguished career of physicist Paul Frampton and his recent misadventure?

By all accounts, Frampton is highly successful as a physicist, with a *curriculum vitae* listing over 400 publications–three co-authored with Nobel Prize winners—and an endowed chair at the University of North Carolina at Chapel Hill. Yet, as chronicled in a recent *New York Times Magazine* feature, at age 68 he is now under house arrest in Argentina. Frampton appears to be the victim of a cocaine-smuggling operation in which he believed he would soon be romantically united with a Czech bikini model he met over the internet. As a researcher of scientific careers and a recent UNC graduate, I wondered if Hermanowicz's study would offer any explanation.

In his Introduction to the study, Hermanowicz describes the unique place physics and physicists hold in the popular imagination. Because physics strives to answer many of the same questions as religion, but with empirical methods, its practitioners may be seen as priestly, or even "god-like" (p. 17). He shares with us the titles of several popular works of physics to illustrate the sublime nature of the questions to which physicists devote their lives: *God and the New Physics* (Paul Davies), *The Road to Reality: A Complete Guide to the Laws of the Universe* (Roger Penrose), and the memorably titled *Doubt and Certainty: The Celebrated Academy, Debates on Science, Mysticism, Reality in General on the Knowledge and Unknowable, with Particular Forays into Such Esoteric Matters as the Mind Fluid, the Behavior of the Stock Market, and the Disposition of a Quantum Mechanical Sphinx, to Name a Few* (Tony Rothman & George Sudarshan). Hermanowicz thus establishes his subjects the physicists as both unique and archetypal scientists.

The introduction also lays out the three theoretical perspectives employed throughout the study. First, the sociology of occupations gives rise to the construct of careers, including an objective sequence of stages and an individual's subjective perception of passing through them. Second, the life course perspective considers how individuals' roles and transitions coincide with aging, taking into account that cohorts may age differently based on the social context. Third, theories of the stratification of science introduce the reward structure and the role of cumulative advantage, in which early access to resources leads to recognition and more resources in a virtuous cycle. Throughout the study, Hermanowicz also employs a typology of academic institutions derived from his foundational study in which universities are characterized as elite, pluralist, and communitarian.

Chapter One "Following the Scientists" describes the study's methodology and is supplemented with a substantial appendix that includes the interview protocol. Chapters two, three, and four present his findings for early- to mid-, mid- to late-, and late- to post-career passages, respectively. Each of these chapters includes interview excerpts and professional profiles with qualitative and quantitative data for each of the three types of institutions.

What does Hermanowicz find that might explain the case of Frampton? First, he finds ample evidence of cumulative advantage, in which early success determines the arc of the career. Second, he finds that many physicists never plan to stop working. As one subject put it "I might retire. But only if I can still come in and work" (p. 148). Third, the study reaffirms the scarcity of women in academic physics. Hermanowicz's sample of 55 physicists included only 4 women, and that was an oversampling. Perhaps working more regularly with women would provide a reality check against the illusions of an internet fantasy. While these findings hint at a rationale, there may be a more substantive connection.

In his Conclusion, Hermanowicz references Goffman's (1952) concept of "cooling out the mark," employing the metaphor of confidence games to relinquishing career ambitions. Goffman describes the practice of maintaining contact with the victim of a con to guide the mark toward a point of view that accepts the loss while salvaging self-image. Hermanowicz observes that scientists typically play this cooling role for themselves, at the point where they must acknowledge that some ambitions will remain unfulfilled. This process may take place early on for those who find themselves locked out of the elite sphere, but affects even the elites at the post-career stage. The cooling out process in academia is described as particularly ineffective due to a structural resistance to acknowledge failure. With respect to cooling out, Hermanowicz concludes "Under these conditions, it becomes even more logical to turn away from the profession and turn instead to family, friends, and others, in order to seek the terms of a new identity" (p. 252). Perhaps Frampton's misadventure exemplifies this pattern.

The Introduction and Conclusion, in which Hermanowicz articulates 30 propositions derived from the study, deserve the attention of anyone interested in the sociology of science. The middle chapters are more academic in tone, but also contain the first-person accounts that will be most valuable to readers looking for answers related to their own personal lives in science.

Jennifer Miller is an Assistant Teaching Professor at the University of Southern California's Sol Price School of Public Policy. She received her doctorate in public policy from the University of North Carolina at Chapel Hill. Her research interests focus on the scientific workforce. She has also written about collaboration among universities, industry, and government in university research centres. Before pursuing her doctorate, she worked for IBM in human resources. Read more reviews by Jennifer.