

Title: Eminent Behavioral and Brain Scientists Share Insights

Review of: Robert J. Sternberg, Susan J. Fiske, and Donald J. Foss, *Scientists Making a Difference: One Hundred Eminent Behavioral and Brain Scientists Talk about Their Most Important Contributions*, New York: Cambridge University Press, 2016.

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In 2003, *Rolling Stone Magazine* published a special issue titled "The 500 Greatest Albums of All Time" (it came out as a book in 2005). The rankings were determined by the compiled votes made by 273 rock musicians, rock critics, and industry figures (mostly white men). The list generated extensive and heated debates (the Beach Boys' "Pet Sounds" is #3 and Paul Simon's "Graceland" is #71??!!). Whether or not an album was on the list, and where it was placed on the list, was quite subjective.

So, too, do sports fans debate, interminably, the "best" games ever (was the Cubs' victory in game seven of the 2016 World Series the best game ever? What about Mazeroski's walk-off home run for the Pittsburgh Pirates in game seven of the 1960 World Series?). These debates are fun, but never resolved.

Psychologists, too, love lists, and they, too, have come up with ways to evaluate the most eminent contributions and contributors in the discipline. In 2014, using a set of criteria that included the number of major awards, the total number of citations, and the number of pages devoted to their work in a sample of textbooks, Ed Diener, Shigehiro Oishi, and Jung Yeun Park published an article in the *Archives of Scientific Psychology*

titled “An incomplete list of eminent psychologists of the modern era.” Their list included 200 psychologists (the top 100 were identified as “extremely eminent psychologists,” and #101-#200 as “very eminent psychologists”). When Robert J. Sternberg, Susan T. Fiske and Donald J. Foss, the editors of the volume discussed in this review, invited those 200 eminent psychologists who were still alive to write essays about their most important contributions, and most of those for whom they were able to find contact information agreed to write. The result is this hefty volume of 101 chapters.

Like those who determined the albums on the *Rolling Stone* list, and those who produced the music on those albums, most of the psychologists who wrote essays for this volume are white men. The editors, quite aware of this, point out in a footnote in their preface that “you will not find many women, or members of minority groups, writing for this collection.” Importantly, they go on to say, with a hint of Dylan’s “The Times They Are A-Changin” (#59 on the *Rolling Stone* list), “Times are readily changing, however, and we hope this book inspires all kind of students to consider a career in our stimulating field” (p. xxvi).

This earnest encouragement to young psychology students is fine, though the editors might have developed it a bit more. They might have noted that if Diener, Shigehiro and Park had disqualified all of those over a certain age (who came of age as researchers when the field was mostly white and mostly male), then the data – based on mid-career awards, the ever-present h-index, and visibility in psychology textbooks -- would demonstrate that the next generation of eminent psychological scientists includes far more women, and more people of color, and presumably that the generation after that will include even more from each group. That is, the book might indeed inspire all

kinds of students to consider careers in our stimulating field, but so too would a data-driven analysis of those who are already in the pipeline, midway into their careers.

But, back to these extremely and very eminent psychologists. Their 100 essays are brief (about three or four pages), fun to read, varied, insightful, and provide a fascinating way to look at the field. The editors gave the authors five important prompts that contributors were asked to take up in their essays: 1. What do you consider to be your most important scientific contribution? 2. Why do you consider it to be your most important contribution? 3. How did you get the idea for the contribution? 4. How does the idea matter for psychological science and also for the world beyond academia? and 5. What would you like to see as next steps in theory and/or research? All contributors, from our perspective, typically managed to address at least two to three of these queries to produce informative essays. But it turns out that those whose essays addressed all five themes were more likely to produce informative *and* insightful essays, especially for the target graduate and undergraduate audience. Essays, for example, that offered a glimpse into what inspired outstanding scientific achievement, what challenges and obstacles were encountered, and reflections on the role of serendipity and collaboration in their research careers were more engaging and more useful to younger scholars whether or not they aspire to eminence in psychological science.

Several interesting themes cut across the collection of essays and have broad appeal. As they reflect on their most important contributions, for example, many contributors focus on their willingness to challenge the assumed wisdom at the time. Roy Baumeister speaks for many when he asserts that, “The habit of looking where no one else is looking has stuck with me for much of my career” (p. 279). Others, in one

way or another, assert that the habit of challenging the dominant views of the day has been the hallmark of their work.

Other contributors highlighted their willingness to consider counter-intuitive explanations for the phenomena they studied. For example, this led Carol Dweck, to conclude, that, “ironically, telling kids they’re smart can sap their intellectual vigor” (p. 294), and it led Timothy Wilson to suggest that “an effective (but counterintuitive) way to change our self-views is to change our behavior first” (p. 271).

Many of the contributors stress the importance of mentors over the course of their careers. Richard Petty says of his “initial” advisor, Robert Cialdini, “his influence was monumental,” and goes on to give mentor shout outs to Tim Brock, Tony Greenwald, Tom Ostrom, and Bib Latane (p. 373-4). Elliot Aronson refers to his “great good fortune” to be at Stanford when Leon Festinger was on the faculty (p. 351).

And, an issue near and dear to our hearts, given the volume that we recently edited (see the accompanying review), many of the contributors emphasize the importance of collaboration and acknowledge various of their collaborators. Shelley Taylor gets at the issue most globally when she asserts that “all science is collaborative” (p. 481). Early in her essay, Carol Dweck writes that “from now on I will say ‘our’ and ‘we,’ because all of the research is collaborative” (p. 293). Ellen Berscheid gives some collaboration advice to “aspiring researchers:” “A useful piece of advice to a young aspiring researcher might be: ‘Always try to work with those who have more relevant knowledge than you do and, preferably, people smarter than you are’” (p. 379). The list could go on and on, and would include Daniel Kahneman, on his work with Amos

Tversky (“We sketched an idea...and decided to collaborate,” p. 171), and Charles Carver (“I certainly didn’t do it alone” p. 283).

The third prompt provided to the authors by the editors (“How did you get the idea?”) elicited some fascinating origin stories. One of our favorites was Mihaly Csikszentmihalyi’s explanation of the precursor to his work on flow. As a ten-year old living in the chaos of World War Two, he saw two older brothers disappear (one to a Soviet prison camp, the other drafted into the military and then killed). Looking back, he realizes that playing chess provided “an island of rationality.” As he explains: “Once I made the opening moves in a game, the ‘real’ world seemed to disappear, and you could plan the future without having to fear irrational violence. In retrospect, I realize that losing myself in the game constituted a denial of the larger reality of my surroundings; yet the experience of order within chaos that playing chess provided left a lasting – albeit almost entirely unconscious – impression” (pp. 341-342).

Another compelling origin story was Stephen Ceci’s explanation of how he came to study children’s recollections. As a young faculty member with expertise in children’s memory, he received a phone call from a judge who had a question about a gruesome case in which a woman had disappeared; her husband had moved away, leaving a young son with an aunt and uncle, and the house he and his deceased wife had lived in was sold. Four years later, when the new owners of the house were adding an extension, the skeleton of the mother’s body was found, with evidence that she had been killed with blunt force trauma by a rounded object. The judge wanted to know about the reliability of the son’s memory of a scene in which the father had hit the mother with a baseball bat -- a memory that the child did not originally have, but had

emerged over time as he was repeatedly questioned. Ceci writes that, "Despite thinking I knew a great deal about children's memory, I had no idea how to advise the judge. And this bothered me a lot." (p. 195). Within weeks of the judge's call, Ceci embarked upon thirty-five years of experimental research on remembering in pre-school children.

This volume will be a valuable addition to various psychology courses, for these first-person accounts provide rich insights into a range of topics not always addressed directly in textbooks. Almost all of the essays would be quite accessible to undergraduates, and of interest to graduate students, though a few unfortunately get too far into the local weeds. Some of the writers are quite conversational (Howard Gardner writes, for example, about his critics: "This has led some critics to declare that my theory is not empirical. That charge is baloney!" p. 169). A few, however, are highly technical.

The essays also provide some fascinating revelations about how the field has changed over time. Young faculty members and graduate students alike know how daunting the job market is these days. For some it used to be much easier, but for others it was much harder. Not surprisingly, it was easier in the bad old days for men, and harder for women. Consider first Harry Triandis' account of how, in 1958, having just finished his Ph. D. at Cornell, he landed his first academic job: "When I completed my degree in 1958 Osgood went to Lyle Lanier, the Head of the Psychology Department at the University of Illinois, and told them that I would be a good person to hire. Lanier hired me without meeting me." (p.413)

In striking contrast, consider Elaine Hatfield's recollection of her first job out of Stanford, five years later in 1963. Although her advisor, Leon Festinger, had assured

her that she could go anywhere she wanted to, that turned out not to be the case: “In 1963 I graduated with a PhD from Stanford University. My advisor, Leon Festinger, casually opined that he could get me a job anywhere I liked. ‘Choose,’ he said. I chose Harvard, Yale, or Bell Labs...Leon was supremely egalitarian, but the academic world was not. After a fistful of rejections – almost all saying that a woman wouldn’t fit in at their premiere university – Leon began to fret. Then (as my aspirations declined) came similar rejections from junior colleges, and finally from all-boys’ prep schools. Leon was just about to give up on finding me an academic job. Finally, in desperation, he called his long-time friend, Dean E. G. Williamson, at the University of Minnesota, who offered me a job at the Student Activities Bureau. It would be my task to arrange activities for incoming freshmen” (p. 389).

At the end of the day, this is a unique volume meant to instruct and inspire graduate and undergraduate students. Most of the graduate students with whom we shared this collection of essays, for example, were less drawn to “eminence’ as the gold standard toward which young scholars should strive. Instead, our small, non-random sample of graduate students were far more drawn to those essays (across sub-fields of psychological science) that offered concrete advice and strategies for surviving and being successful in their respective fields of inquiry. The students wanted to know, for example, how to pursue collaboration successfully when not all psychology departments value collaborative work. They also really wanted to know strategies for taking on the hardships and challenges (e.g., failure, rejection) that even top scientists have encountered and overcome. On a broader level, they were drawn to those essays that helped them think about making a difference in the world. While some indeed aspire to

a career that one day will be regarded as eminent, some wondered whether a career that anchored on a commitment to teaching would be gratifying.

What is so wonderful about this collection of essays is that the take-home message is so appealing to students: Control what you can control – intellectual curiosity, willingness to challenge orthodoxy, an ability to combine seemingly competing perspectives, and the capacity to seize opportunities, among others individual attributes – but realize that external factors like luck and serendipity also will play a huge role as you move along in the field. From our perch, *Scientists Making a Difference* achieves both of its stated goals – being informative *and* inspirational.

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