

In Appreciation: Paul E. Meehl

July 22, 2003

Paul Meehl, retired Regents Professor of Psychology at the University of Minnesota, died February 14, 2003 at the age of 83. Meehl was a clinical psychologist internationally known for his work on the reliability of predicting human behavior and for his 1962 theory of the genetic basis of schizophrenia. He received his PhD in psychology from the University of Minnesota in 1945.

The author of many scholarly works, Meehl's reputation spread with his 1954 book *Clinical and Statistical Prediction: A Theoretical Analysis and Review of the Evidence*, in which he showed that statistical formulas were better than, or at least equal to, clinicians at predicting such things as what sort of treatment would best benefit a mentally ill person. Meehl received many honors for his work, including election to the National Academy of Sciences and the American Academy of Arts and Sciences, as well as APS's James McKeen Cattell Fellow Award.

Commemorating the Life and Work of Paul E. Meehl

William M. Grove

I met Paul Everett Meehl in the fall of 1980, when I came to take my Ph.D. in the University of Minnesota's clinical psychology training program. It was no coincidence, because I had picked Minnesota to attend, based on his (and one other faculty member's) presence there. I had gotten acquainted with his work in Abnormal Psychology lectures by Jacob O. Sines, at the University of Iowa. In particular, I was fascinated by his Schizotypy Checklist (circulating "underground" in photocopy); his 1962 APA Presidential address on a dominant gene model for an hypothesized pervasive neural integrative defect in schizophrenia; and his broadside, "Why I do not attend case conferences" (likewise circulating in photocopy).

After first being told by Paul that he wasn't taking advisees, I later was graciously granted this privilege. He didn't have any research for me to work on, and the whole time I was in graduate school we never wrote anything together. We did meet frequently and discussed (in no particular order): the nosology of psychopathology in general and taxometric methods in particular; mathematics and statistics; behavior genetics; schizophrenia and affective disorders; psychodynamics and psychoanalysis; assessment and prediction (including clinical vs. statistical prediction, which he and his second wife, Leslie J. Yonce, taught me to pronounce "clin-stix"); the MMPI (pronounced "Mult"); philosophy of science; political science; and innumerable other topics.

His range of erudition, and the volume of his reading, was staggering. He would from time to time mention in passing that he was re-reading all of Freud (which he did about once per decade), an obscure and multi-volume French novelist (in French, of course), challenges to the theory of evolution, ESP experiments, a book on political economy (he used to put libertarian tracts in students' boxes from time to time), and so on—perhaps all of these in a single month. He spent more time enlarging his knowledge than anybody else I ever met. I kept all his notes (and, later, e-mails) to me. I think I got an average of several per week, kept up over nearly 25 years. In these, he asked math and statistical questions, requested citations to psychological or psychiatric articles on various topics, and posed a myriad of other questions. Over time I learned that he was sending a similar volume of queries to other professors on campus, ex-students around the country, colleagues all over the world in psychology, psychiatry, philosophy, political science, and other fields. When I stopped by his house I would see perhaps 10 books he was currently reading; if I stopped back a few days later, there would be little or no overlap in the books being read. How he did this while maintaining a steady nine hours' per night of sleep, I never did learn.

On the output side, Paul valued quality over quantity. He would labor over manuscripts through many drafts with his wife (and, much more seldom, co-authors), and was very loath to let anyone see a paper until it was sent to its target journal. It was practically as if these papers appeared by magic, to everyone but his wife and the occasional co-author. The array of topics addressed paralleled the breadth of his interests and his erudition.

The biggest mis-impression I had of him from his writings, was that he would not tolerate fools gladly, if indeed he would tolerate them at all. In reality, he was unfailingly polite in debate, and while he wasn't afraid to call a dumb idea dumb, he never suggested by word or manner that he thought the author of the idea was stupid. He had a charming habit, called by his friend and colleague Bill Schofield the "Meehl error," of reconstruing dumb remarks by others into really intelligent, related but often quite different, notions—and then attributing the spruced-up version to the original speaker. I benefited from this error many times.

I found the most useful way to get help with a problem was to ask him about it, but not to expect him to give a direct reply. Instead, his associations in response would generate useful ideas. I never met anyone who showed nearly as high a probability as Paul did, of saying something very smart *and* new to me. I shall miss Paul terribly. Clinical psychology has lost, in my opinion and that of many others, its most certain claim to genius.

Four Things that Paul Meehl Taught Me

Scott O. Lilienfeld

Paul Meehl had an enormous influence on me intellectually and personally. In this essay, I'll outline four things that Paul Meehl taught me.

First, Paul taught me the importance of healthy skepticism. When I arrived at the University of Minnesota in 1982 as a clinical psychology graduate student, I was brimming with intellectual curiosity but sadly lacking in critical thinking skills. Perhaps more than anyone else, Paul helped me to think

clearly. In particular, he instilled in me an appreciation of the need to subject logical arguments to incisive scrutiny. I came to understand from Paul that the essence of science is the incessant struggle to counteract confirmatory bias. In addition, Paul emphasized the necessity of parsing logical arguments into their constituent components. I have found this largely unappreciated skill to be immensely useful, because many intractable controversies in psychology, such as the ontological status of the “mental illness” concept, have been bedeviled by the conflation of several logically distinct arguments.

Second, Paul taught me to appreciate the value of intellectual breath. In an era of increasing specialization in academia, Paul was an unrepentant generalist. His intellectual curiosity was boundless. Conversations with him ranged from the merits of differing approaches to factor analysis, the shortcomings of statistical significance testing, the differences between early and late Freud, the genetics of schizophrenia, the compatibility between free will and determinism, the psychological make-up of Adolph Hitler (Paul was convinced that he was a schizotype), the writings of Thomas Aquinas, the presidency of Lincoln, and innumerable other topics. In all of these discussions, Paul was remarkably insightful and unerringly brilliant.

Third, Paul taught me the virtue of humility in science. This fact may surprise some readers, because Paul did not suffer fools gladly or tolerate intellectually sloppy arguments. Nevertheless, Paul was refreshingly candid and nondefensive about lacunae in his knowledge and was more than willing to change his mind in response to compelling counterarguments. He was also gracious in acknowledging valid criticisms. For example, I recall him telling me how much he enjoyed Jane Loevinger’s 1957 monograph on construct validity, particularly her constructive criticisms of Cronbach and Meehl’s classic exposition of this concept. In this respect, Paul was a role model for me, because he helped me to realize that scientists should not take substantive criticisms personally.

Paul embodied the paradoxical combination of attitudes that Carl Sagan described as the stamp of the ideal scientist: an openmindedness to virtually all new ideas, on the one hand, and an uncompromising rigor in testing these ideas, on the other. Paul was fond of Reichenbach’s distinction between the contexts of discovery and justification in science, and this distinction infused much of his thinking. In the former context, one should speculate freely; in the latter context, one must subject speculations to grave theoretical risk. Paul’s openness to unconventional ideas probably helps to explain what some regard as an anomaly in his thinking: his fondness for certain psychoanalytic propositions. Paul believed that Freud unearthed a number of fundamental truths regarding human nature, although he was keenly aware of the formidable difficulties of subjecting Freud’s ideas to stringent tests. He once told me that he had occasionally entertained thoughts of conducting psychodynamic research, but that he simply couldn’t figure out how to do so satisfactorily.

Fourth, Paul taught me that brilliance and kindness are not mutually exclusive. I always found Paul to be a warm and caring individual. My initial interaction with him occurred only minutes after our student orientation at Minnesota. Following the meeting, I proceeded to the vending room on the first floor of Elliott Hall in desperate search of a soda. As so often occurs, however, I was short of change. I asked my new graduate student classmates for a quarter, but came up empty-handed. Within seconds, I heard a voice down the hall booming “Do you need a quarter?” It was Paul, and he cheerfully bounded down the hallway to hand me a quarter (I honestly don’t recall whether I ever paid him back). Moreover, my first year of graduate school was marked by intense soul-searching. For various reasons, I was experiencing serious misgivings about my choice of profession. I spoke to Paul about my doubts, and he was patient

and understanding. His support and wisdom encouraged me to stick things out during a period of existential angst.

I have often said that Paul Meehl was the smartest psychologist I have ever met. He was also one of the most human.

Thursdays with Paul

Niels G. Waller

Paul Meehl was a legend at the University of Minnesota and elsewhere for his razor sharp intellect and prodigious accomplishments. He was a brilliant academician-and a clear-headed gadfly-who produced citation classics from both the armchair and the lab. He was a dedicated psychotherapist with thousands of hours behind the couch. Paul was also a highly esteemed adviser who mentored such notable Minnesota products as Harrison Gough (Paul's first PhD student), George Welsh, Len Rorer, Richard Darlington, Robert Golden, William Grove, Dante Cichetti, Judy Garber (Paul's last PhD student) and scores of other clinical psychology graduate students. Paul was a renowned intellectual polyglot with academic appointments (concurrently) in the departments of Psychology, Psychiatry, Philosophy, and Law. Lastly, Paul was a stimulating teacher who attracted students from diverse departments across campus (e.g., psychology, psychiatry, philosophy, political science, education, law, child development, and statistics).

When I was a graduate student at the University of Minnesota during the eighties, I had the good fortune to listen to Paul Meehl lecture on Philosophical Psychology. Actually, like many students, I participated in this class for several years. Philosophical Psychology was a class like no other in my experience. We had no tests, no written assignments, and only one requirement. To wit, students were expected to think seriously and deeply about some of the thorniest issues in the philosophy of science and that branch of knowledge known as theory testing. During my stint, other students in the class included Steve Gangestad, Yossi Ben-Porath, Scott Lilienfeld, and many others who have since made notable contributions to our field.

It has been fifteen years since I opened my philosophical psychology notebook. Sitting here with a head full of grey hair, I am awed by the diversity of topics that were covered in a single class. Mostly, however, I am in awe of the phenomenal brilliance of a teacher and friend who changed my life.

Meehl began his class with a short intellectual autobiography. He characterized himself as an "eclectic" with an adherence to no formal school. I can think of no better descriptor for this complex man. Paul was unique in his openness to ideas regardless of origin, a trait that is well captured in a sentence from one of his final articles: "We adhere to no philosophical school, holding that a scientist should treat philosophical writings cafeteria style, taking what is useful in thinking about a scientific problem and bypassing the rest" (Waller & Meehl, 2002, p. 334). Only by holding such an open mind could a single person esteem such unlikely bedfellows as Skinner, Freud, Ellis, Thurstone, and Popper (Meehl once described himself as a "hemi-demi-semi-neo-Popperian").

Paul challenged his students and readers (some would say provoked) to examine their unexamined

assumptions, prejudices, and biases. We were encouraged to think clearly about psychology. To help us achieve that laudable aim, Paul introduced us to the ideas of Carnap, Reichenbach, Feigl, Hempel, Popper, Feyerabend, and Lakatos. Fisbee, and Omniscient Jones were also mentioned frequently. As a psychologist, Paul had a unique capacity to pepper these lectures with anecdotes and fascinating stories because he knew many of these intellectual giants first hand (Paul was a founding member of the Minnesota Center for the Philosophy of Science).

We were eager to learn from our own intellectual giant, and learn we did. Paul delivered spellbinding lectures on a) theories versus metatheories, b) testability versus confirmability, c) corroboration and verisimilitude, d) orders of dispositions, e) taxometrics, and f) open concepts. Classes were organized around a leitmotif that Paul described as g) things that make good theories look bad and things that make bad theories look good. Many of these themes are summarized in two of my favorite Paul Meehl articles: Philosophy of science: Help or hindrance? (1993), and Why summaries of research on psychological theories are often uninterpretable (Meehl, 1990).

During the past eighteen years Paul Meehl was my teacher, mentor, coauthor, confidant and friend. In each of these roles Paul had a profound influence on my life. Needless to say, I feel extremely fortunate to have known such a remarkable person. After Paul died I received email from several friends wishing to convey words of condolence. The following passages are apt summaries of my feelings toward Paul.

“You don’t come across people like Paul Meehl more than about once every century”; “Paul Meehl was one of my heroes”; “I’ve never enjoyed teaching so much as when I teach what I learned from Meehl”; “He is irreplaceable-I have told people for years that he had the greatest mind I’ve ever encountered”; [Paul was] “an unparalleled giant whose intelligence covered the full spectrum of psychology and philosophy of science.”

Philosophical psychology was held during Thursday afternoons during winter quarter. Although memories of a Minnesota winter can still produce shivers down my spine, my memories of Thursdays with Paul will always occupy a warm spot in my heart.

REFERENCES

- Meehl, P. E. (1993). Philosophy of science: Help or hindrance? *Psychological Reports*, 72, 707-733.
- Meehl, P. E. (1990). Why summaries of research on psychological theories are often uninterpretable. *Psychological Reports*, 66, 195-244. Also in R. E. Snow & D. Wiley (Eds.), *Improving Inquiry in social science: A volume in honor of Lee J. Cronbach* (pp. 13-59). Hillsdale, NJ: Lawrence Erlbaum Associates, 1991
- Waller, N. G., & Meehl, P. E. (2002) Risky tests, verisimilitude, and path analysis. *Psychological Methods*, 7, 323-337