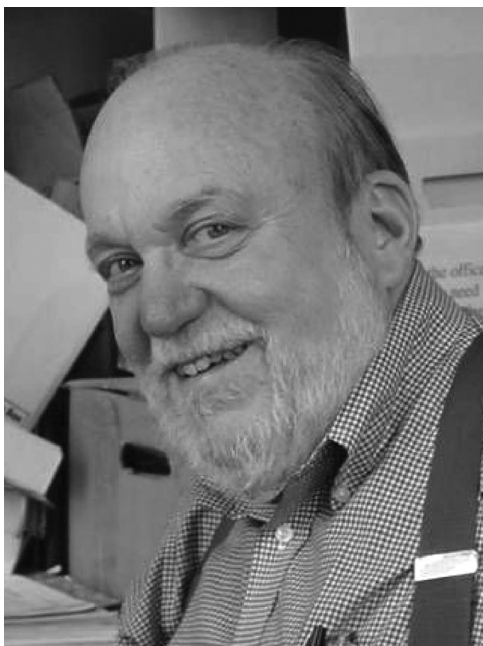# Robyn Mason Dawes (1936–2010)

Robyn Mason Dawes was born on July 23, 1936, in Pittsburgh, Pennsylvania, where his father Norman was a faculty member in the history department at Carnegie Institute of Technology and his mother Zita was a homemaker and active community volunteer. His family often summered in the ancestral haunt of Chocorua, New Hampshire, even during World War II, when gas rationing led to practices like turning off the engine while coasting downhill. He attended the Falk School of the University of Pittsburgh and the Middlesex School in Concord, Massachusetts, before going to Harvard College, where he majored in philosophy.

Robyn went on to study clinical psychology at the University of Michigan at a time when its faculty, led by Clyde Coombs, Ward Edwards, Anatol Rapoport, and Leonard (Jimmie) Savage, among others, were creating innovative ways to apply analytical methods to the social sciences. Eventually, Robyn shifted to the mathematical psychology program, where his graduate school contemporaries included David Krantz, Sarah Lichtenstein, Larry Phillips, Paul Slovic, and Amos Tversky.

Within this exciting environment, Robyn found a natural combination of his interests: examining clinical judgment from an analytical perspective. On the one hand, he drew on Edwards's introduction of Bayesian reasoning to the social sciences, which assigned a central role to disciplined judgment. On the other hand, he drew on the statistical analyses of Don Fiske, Paul Meehl, and others regarding the determinants and accuracy of clinical judgments.

On both scores, Robyn's work was distinguished by its elegance. At meetings, he would often work on mathematical derivations—without missing a beat in the proceedings. Few things gave him as much satisfaction as simple demonstrations of fundamental relationships. His earliest publication took three pages to show how base rates (e.g., the relative frequency of psychological conditions) constrained the efficacy of clinical prediction, such that strong diagnostic evidence was needed before predicting rare conditions, especially when false positives are costly. His second publication took four pages to explain the logic of stimulus–response matrices. His third took six pages to introduce the logic of multicriteria decision making.

Robyn's ability to identify nonintuitive properties of fundamental data structures foretold his future research in judgmental biases while also setting a high standard for claims of bias. In an influential analysis, he challenged the false consensus effect, whereby individuals are alleged to exaggerate how widely their views are shared. Robyn observed that people often have no direct evidence regarding others' beliefs (especially on the unusual questions that researchers can pose). He created an elegant model showing the conditions under which it made sense to infer agreement and the evidence that researchers need, but often lack, if they want to claim that others' judgments are biased.

The interplay between evidence and analysis typified Robyn's work, as can be seen in his dissection of the central puzzle in studies of clinical judgments. Research had found that simple computational models often produced better predictions than did dedicated experts. Indeed, simple models often predicted the experts' predictions. Robyn wondered how simple the models could be and still be superior. With help from Bernie Corrigan, Robyn ran ever-simpler models, eventually finding success with the simplest of models: Subtract the number of factors opposing a prediction from the number supporting it, and then predict according to the resulting sign (roughly speaking). One of his favorite examples was John Howard's finding that the fate of couples could be predicted by subtracting how often they fought from how often they had sex.

Robyn drew on his psychological knowledge to explain why experts think that their judgments are much more complicated than the models indicate: They are. However, those complicated judgments are also so unreliable that few predictors are used consistently enough to allow simple models to mimic them. Robyn drew on his statistical knowledge to understand when simple models work best: when the predictors are correlated (roughly speaking). In the process, he discovered that the statistician S. S. Wilks had formally established some of the relationships that he had uncovered empirically.

Recognizing the practical and ethical implications of these results, Robyn worked to replace expert judgment with simple models, maintaining that anything less afforded experts greater power over others' lives. With David Faust, John Swets, and others, he sustained a mostly unsuccessful battle for an appropriate division of labor between experts (identifying potential predictors) and models (evaluating the value of their predictors, then adding up their message). His summary

article "The Robust Beauty of Improper Linear Models in Decision Making" (*American Psychologist,* 1979, *34,* 571–582) is one of psychology's most cited papers.

Robyn saw psychology as a servant of society, obligated to pursue the ethical implications of its results (as with clinical judgment) and to let social concerns shape its research agenda. Environmental concerns led Robyn to ponder the rational individualism that produced the "tragedy of the commons" (in Garrett Hardin's term). Believing that people were better than that, Robyn studied how the salience of social values affected behavior in multiperson experimental games. Presaging later work in experimental economics, Robyn and colleagues (including Bill Chaplin, Jeannie McTavish, John Orbell, and Alphons van de Kragt) identified conditions under which people did, in fact, act cooperatively, including the finding that sometimes "moralizing helps."

Robyn was also early to apply psychological science to limiting HIV/AIDS. When models demonstrated the potential effectiveness of needle exchange programs, he enlisted in the fight for their adoption, including offering his services to Prevention Point Pittsburgh. He did the mundane work of fund-raising, the political work of countering prejudice, and the intellectual work of explaining how the dissemination of clean needles could dampen transmission.

Moral concerns drove Robyn's professional life as well as his research. He took on demanding administrative positions because someone needed to do them. Those included being vice-president of the Oregon Research Institute during a tumultuous period, heading the University of Oregon's Department of Psychology, and leading Carnegie Mellon University's Department of Social and Decision Sciences during its transition from a multidisciplinary department to an interdisciplinary center for decision-making research, with faculty from psychology (Wändi Bruine de Bruin, Julie Downs, Jennifer Lerner), economics (Steven Klepper, George Loewenstein, Roberto Weber), operations research (Paul Fischbeck), and political science (Kiron Skinner). He chaired Carnegie Mellon's Institutional Review Board with his customary diligence and insight. In one instance, he insisted that interviews with young women regarding sexual decisions mention no partners, lest the transcripts include the names of young men who might be accused of statutory rape under a conceivable future interpretation of "legal age."

Although he had no hunger for publicity, Robyn assumed the role of public intellectual when he thought that scientists bore an obligation to create policies consistent with their results. His unique vantage point on the efficacy of clinical psychology led to *House of Cards: Psychology and Psychotherapy Built on Myth* (Free Press, 1996). As the title suggests, it maddened him to see professionals intervene in others' lives on the basis of unsupported claims. For example, he could not countenance expert testimony in custody or incarceration decisions that implied unwarranted diagnostic ability. If we can do no better than relying on simple model or base rate predictions, then so be it. Similar concerns drew him into the controversies over false (or recovered) memories, where again, he stressed the costs of claiming knowledge that we lack.

Robyn's mastery of diverse analytical perspectives, along with his insatiable curiosity, made him an invaluable, if somewhat intimidating, research seminar participant. Whatever the topic, Robyn had something unique and useful to say. Visiting speakers were sometimes warned about the moment when Robyn would close his eyes and tilt back his head, having identified the key unresolved issue in their work. They were also reassured that Robyn's criticism was never personal, but only about the work, and that if they had difficulty following his comments, they were probably in good company. Robyn's natural respect for others included assuming that they were as smart as he was, which often led him to jump into the middle of an argument without feeling the need to spell out all his assumptions.

When he sat down to write, though, Robyn was a master at clarifying and illustrating complex topics. His contributions to *Mathematical Psychology: An Elementary Introduction* (Prentice-Hall, 1970, written with Clyde Coombs and Amos Tversky) bear reading 40 years hence. His *Fundamentals of Attitude Measurement* (Wiley, 1972) was translated into Spanish and German. His *Rational Choice in an Uncertain World* (Harcourt Brace, 1988), for which he received the American Psychological Association's William James Award, was ably revised with Reid Hastie. His last book, *Judging Merit* (Psychology Press, 2008, with Margaret Foddy and Warren Thorngate), is an exemplary integration of empirical, analytical, and ethical perspectives on attempts to allocate resources on the basis of merit—an integration that typifies Robyn's approach to life and science.

Robyn's contributions were recognized in many ways. He was elected president of the Society for Judgment and Decision Making and of the Oregon Psychological Association. He was a fellow of the American Psychological Association, the Association for Psychological Science, the American Association for the Advancement of Science, the American Academy of Arts and Sciences, the American Statistical Association, the Center for Rationality and Interactive Decision Making of the Hebrew University of Jerusalem, and the Center for Advanced Study in the Behavioral Sciences at Stanford University. He received an honorary doctorate from the University of Göteborg in Göteborg, Sweden.

Robyn died on December 14, 2010, in Pittsburgh. At his death, he was Charles J. Queenan Jr. University Professor at Carnegie Mellon. He is survived by his wife Mary Schafer, his daughters Jennifer and Molly, and his grandchildren Kaylynn and Avery. His graduate students included Jason Dana, Eric Gold, Joachim Krueger, Andy Parker, Harriet Shaklee, and Brian Zikmund-Fisher. Other close colleagues included Hal Arkes, Maya Bar Hillel, Cristina Bicchieri, Marilynn Brewer, Linnda Caporael, David Messick, and Myron Rothbart. His influence extends to his many collaborators, the legions of recipients of his incisive comments, and participants in the fields that he shaped. A frequent refrain among his colleagues is "What would Robyn say?" On scientific matters, Robynisms include "Why run the study, if you were so sure how it would turn out?" "Will the work do anyone any good—beyond the researchers?" and "Are research participants being treated respectfully?" His substantive insights, though, are lost without his unique intellect. On moral matters, Robyn left a clear legacy: "Be fearless."

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