recruit African-American soldiers, though, in Davis's case, the war ended before the policy could be implemented.

At the conclusion of the war, Davis was among a number of Confederate leaders and generals who were imprisoned for treason. President Andrew Johnson eventually ordered all of them released except for Davis, whose case became entangled in impeachment politics. After Davis had been in military custody for two years, he finally appeared in civil court and was granted bail. The federal government eventually decided not to prosecute him. During the last twenty years of his life, Davis experienced financial difficulties and continuing ill health but his popularity in the former Confederate states never waned. By the time of his death, he had come to personify the South's "lost cause."

SEE ALSO Confederate States of America; Cotton Industry; Lee, Robert E.; Lincoln, Abraham; Mexican-American War; Plantation; Selective Service; Slavery; Slavery Industry; U.S. Civil War

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David F. Ericson

# DAVIS, KINGSLEY

SEE Demographic Transition.

# DAWES, ROBYN 1936-

Robyn Mason Dawes is the Charles J. Queenan Professor and former chair at the department of Social and Decision Sciences at Carnegie Mellon University. He received his PhD in mathematical psychology from the University of Michigan in 1963. Dawes's work on human judgment and decision-making has influenced theory, research, and practice in diverse areas of psychology, including cognition, social behavior, and clinical assessment.

Inspired by Paul Meehl's demonstration that simple statistical models outperform clinical judgment, Dawes showed that improper (i.e., unit-weight or even random-weight) regression models perform better than individual clinicians do as long as each predictor variable has some validity. Application of a linear combination formula

yields reliable predictions, assuming the model's user "knows how to add." In contrast, intuitive judgments remain vulnerable to random errors and systematic biases. Although statistical prediction models promise to make judgments about people easy, efficient, and accountable, many practitioners continue to reject them, a resistance that has led Dawes to explore human irrationality more broadly.

Dawes's analysis of human (ir)rationality is informed by Daniel Kahneman and Amos Tversky's work on heuristics and biases. Although judgmental heuristics often yield correct predictions, they guarantee that some contradictions will also occur. One such contradiction involves a structural availability bias that seduces people to make frequency judgments about events they could not have observed. For example, clinical psychologists sometimes claim that certain problem behaviors never stop on their own without therapy, when they have no information about behavior outside of the therapeutic context.

Dawes's focus on internal consistency as a criterion of rationality is narrower, but also more precise than competing definitions of rationality in terms of evolutionary or ecological adaptiveness. Dawes identifies the failure to make appropriate comparative judgments as a hallmark of irrationality. Often, people seek to understand surprising or distressing events retrospectively. For example, an airplane crash tends to stimulate reviews of other crashes in hopes that a cause can be found. To reach a valid conclusion, however, flights ending in crashes need to be compared with successful flights. The former analysis can only reveal what the flights of interest have in common, but it obscures crucial information about whether the rate of these common features is actually higher (or perhaps lower) than their rate in uneventful flights.

In Bayesian statistics, comparisons are expressed as likelihood ratios. For example, the probability of a plane crash given fog in the landing area is divided by the probability of a crash given the absence of fog. When multiplied with an event's base rate, the likelihood ratio yields coherent predictions. Although base rate neglect is also a facet of irrationality, Dawes is mainly concerned with the human tendency to neglect the ratio's denominator.

Nonetheless, Dawes is optimistic about people's capacity to think rationally. His analogy is learning how to swim. Novices try to keep their heads above water at all times, which makes drowning more likely. Once they learn to keep their faces in the water, and to come up for air only intermittently, they "get it."

Coherent judgments reduce the number of prediction errors, but they do not guarantee that outcomes will be desirable. Evil can be rational and banal, as a reading of the autobiography of Rudolf Höss, commandant at Auschwitz, suggests. If the premises are loathsome,

rational deductions are sure to be loathsome too. After rejecting the classic view that irrationality stems necessarily from the intrusion of emotions, Dawes concludes, like Bertrand Russell had done before him, that sensitivity to affect can benefit social judgment.

The inability of pure rationality to provide socially desirable outcomes is most evident in social dilemmas. Here, freedom-from-contradiction rationality dictates that each individual defect from the group (e.g., by choosing to pollute) because no matter what others do, the individual is better off. Garrett Hardin famously derided appeals to conscience as a way of increasing social cooperation. Dawes and colleagues, however, showed that allowing people to form a sense of a shared group identity makes them more likely to exchange and honor promises of cooperation. However, identity-based cooperation is still irrational. In a group of promise-makers, an individual who believes that others will be true to their word may be even more tempted to defect.

Dawes's rigorous analyses have some surprising implications. He argues, for example, that when proper comparisons cannot be made, the only rational conclusion is to conclude nothing. In research, randomized trials provide the only rational basis for causal conclusions, which means that causal inferences from post-hoc statistical controls have no defensible basis, and that it would therefore be better not to conduct such studies. Like researchers, ordinary individuals must find out when to give up. People who fail to acknowledge uncertainties that cannot be overcome, end up overpredicting their future and persisting in costly behaviors that have no demonstrable benefits.

The impact of Dawes's work within psychology and across disciplinary boundaries is noteworthy because Dawes did not establish an academic school of thought. His legacy is a firm rejection of academic tribalism and grand theorizing. Instead, he champions rigorous research, careful analysis, and acceptance of the limits of that which can be known.

SEE ALSO Bayesian Statistics; Cognition; Rationality; Social Cognition; Social Cognitive Map; Social Psychology

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## **DAY CARE**

Day care is a term that is commonly used in English-speaking North America. It refers to the care of young children by persons other than parents, guardians, or other close relatives (grandparents, for example) during a period when the children's parents are not able to provide care. Typically, day care is associated with care for a child while the parent(s) are employed or participating in an educational program away from the home. (Programs such as preschools, nurseries, and kindergartens are typically part-time and less commonly associated with employment-related care.)

Day care takes a wide variety of forms, from what are termed "informal" arrangements (such as care in the home of a neighbor or friend, with no regulation by government), to more "formal" arrangements (such as care in a purpose-built facility with licensing by one or more levels of government). In most parts of North America informal care is more common than formal care. The numbers of children in care settings, the ages of those children, the number of adults present, the nature of activities provided in these settings, and the training of care providers vary significantly.

The care of children while their parents are employed outside the home has a lengthy history in Europe and North America. One of the very first programs to develop as a specific response to parental employment was the Infant Schools established in New Lanark, Scotland, in 1816. Robert Owen's "Institution for the Formation of Character" was envisioned as much more than caregiving—it was an experiment in individual and broader societal development (Owen 1816). Infant schools moved beyond Scotland, and by the late 1820s similar programs could be found in North America, from Prince Edward Island to the Carolinas. However, by the late 1830s the infant school movement had died out in North America, an early victim of a complex interplay of ideologies, laborforce dynamics, class structures, immigration, social movements, and political positions that persist to the present. The public face of this dynamic was that "the mother's place is in the home with her children"—an argument heard from the pulpit in the 1830s and a continuing force in day care debates today (Pence 1989).

As the labor force expanded in the late twentieth century to include an ever higher proportion of women,