

1955

## Bounded Rationality

Herbert A. Simon (1916–2001)

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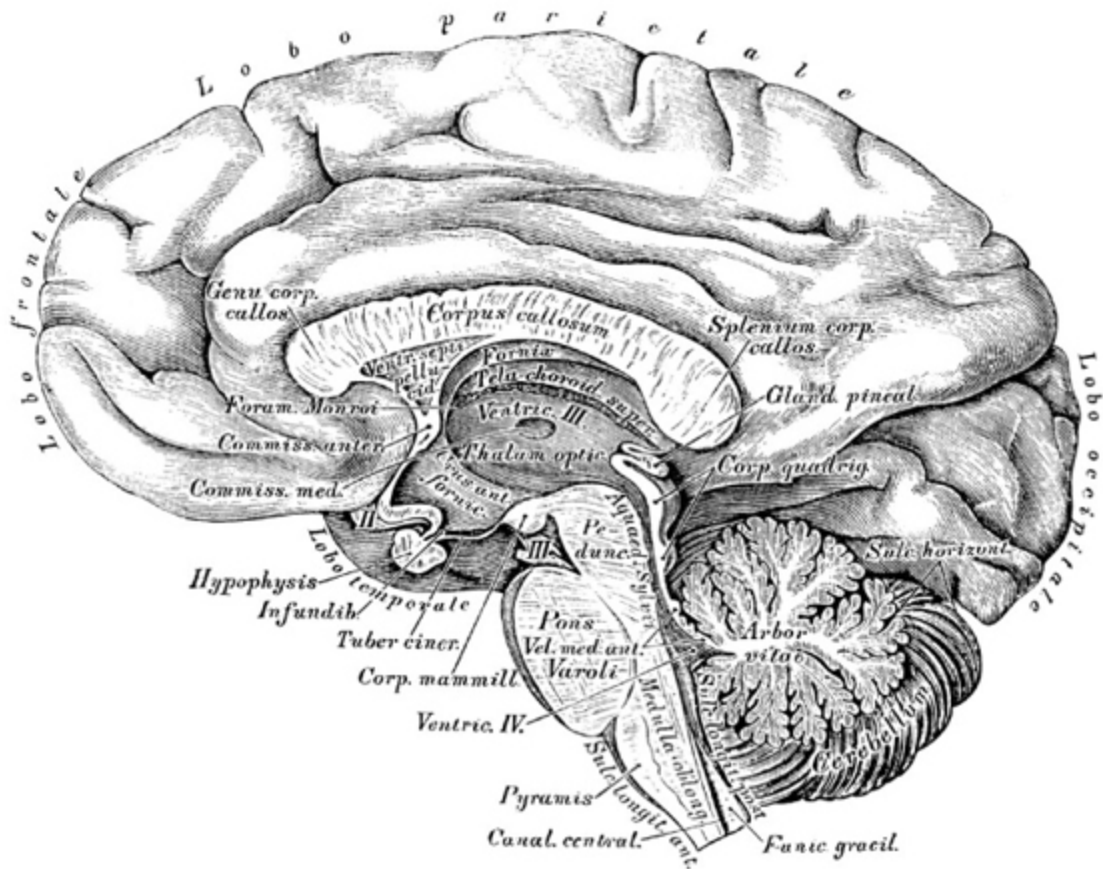
Herbert Simon became known as one of the twentieth century's most influential scholars for his analysis of individual and group decision-making and contributions to fields including economics, artificial intelligence, political science, psychology, and computer science. Though Simon studied political science at the University of Chicago, he wanted to become a "mathematical social scientist." He spent time with the economists at the Cowles Commission in the years between the completion of his graduate studies and his move to Carnegie Mellon University in 1949, which greatly enhanced his exposure to economics and its advanced mathematical methods.

Simon soon became interested in the limits of rational decision-making. For Simon, the idea that individuals could evaluate a wide array of possible alternatives, account for all the probabilities and contingencies associated with them, and then select the best option was completely unrealistic. His 1955 article, "A Behavioral Model of Rational Choice," and a series of subsequent writings argued that limits on available information, the computational capacity of the human mind, and the timeframe for making decisions posed the biggest obstacles to the type of rational decision-making that economic agents were assumed to employ. Instead, individuals create simplified models of the real world—shortcuts, or rules of thumb—to inform their decisions. This "bounded rationality," Simon suggested, leads to "satisficing" behavior, where agents settle for an acceptable solution that meets or exceeds certain criteria, rather than maximizing in the sense suggested by rational choice theory. For example, if one brand of jam meets a shopper's standards, she may purchase that jam every month rather than exploring the numerous options on the shelves. Managers, meanwhile, may

shoot for meeting just the basic profit expectations of the company's owners to maintain a more pleasant work environment.

Simon's work on decision theory and the analysis of organizations earned him the 1978 Nobel Prize and eventually set off an explosion of research in organization theory and behavioral economics. This work has shed new light on how owners can structure contracts with managers to prioritize profit maximization and the various ways in which individual decision-making departs from the predictions of rational choice theory.

**SEE ALSO** [Homo Economicus \(1836\)](#), [Jevons's Theory of Political Economy \(1871\)](#), [The Cowles Commission \(1932\)](#), [The Modern Corporation and Private Property \(1932\)](#), [RAND and the Cold War \(1948\)](#), [The Efficient Markets Hypothesis \(1965\)](#), [Behavioral Economics \(1979\)](#), [The Experimental Turn \(1986\)](#)



*This medical illustration shows the different lobes of the brain—including the frontal lobe, which plays an important role in decision-making. For Herbert Simon, limits on the brain’s decision-making capacity cast doubt on how rational it is possible for real-life economic agents to truly be.*