The Friday Minerva Workshop Series

Minerva Workshop on Decisions from Experience

October 29, Room 216 Cooper building, Faculty of Industrial Engineering, Technion

Program:

9:00-10:00. Bernoulli Goes Cognitive,

Ralph Hertwig, University of Basel, Switzerland

When people have access to information sources such as newspaper weather forecasts, drug-package inserts, and mutual-fund brochures, all of which provide convenient descriptions of risky prospects, they can make *decisions* from description. When people must decide whether to back up their computer's hard drive, cross a busy street, or go out on a date, however, they typically do not have any summary description of the possible outcomes of their likelihoods. For such decisions, people can call only on their own encounters with such prospects, making decisions from experience. Decisions from experience and decisions from description can lead to dramatically different choices. In the case of decisions from description, people make choices as if they overweight the probability of rare events, as described by prospect theory. In the case of decision from experience, in contrast, people make choices as if they underweight the probability of rare events. In this talk, I will refrain from explaining decisions from experiences by proposing another repair program of the Bernoulli framework. Instead, I will turn to cognitive processes such as information search and stopping rules and to robust phenomena of human cognition such as the recency effect. In this sense I am suggesting that the research on risk and uncertainty go cognitive.

10:30-11:00. Risk Attitude in Small Timesaving Decisions,

Nira Munichor, Ido Erev, and Arnon Lotem Technion and Tel-Aviv University

Three experiments are presented that explore situations in which decision makers have to rely on personal experience in an attempt to minimize delays. Experiment 1 shows that when the decision makers receive complete feedback concerning obtained and forgone outcomes, repeated decisions among time loss distributions are similar to repeated decisions among money loss distributions. In both cases decision makers exhibit a tendency to prefer the option that leads to a better perceived-outcome most of the time. This tendency can be captured as a product of a recency effect. Experiment 2 demonstrates that the similarity between time-related and money-related decisions is eliminated in the absence of complete feedback. Behavior in this setting can be described with the assertion that perceptual noise interferes with the recency effect. Experiment 3 gives additional support to the role of the preference of the option that leads to a better perceived-outcome most of the time in risk-attitude, contradicting alternative interpretations. The relationship of these results to the study of non-human time-related decisions, human money-related decisions and human time perception is discussed.

11:00-12:00. On the (potential for stronger) mutual relations between decision-making and basic cognitive research. An open discussion moderated by

Morre Goldsmith, University of Haifa

Decision-making and basic cognitive research (e.g., perception, attention, memory) have a long history of partial overlap and cross fertilization; for example, the adaptation of signal-detection theory to perception and memory, and the incorporation of fundamental cognitive limitations and abilities into prospect theory and models of bounded rationality. Yet, the full potential for cross-talk and integration has hardly been realized in either direction—or has it? Please come prepared to discuss the preceding talks and/or this issue in light of your own work or areas of interest.