

George Loewenstein

Mémoires from a Psychological Economist



Born in 1955 in Boston, USA. Ph.D., 1985, in Economics from Yale University. Assistant, then Associate Professor at the University of Chicago Graduate School of Business, then Professor of Economics at Carnegie Mellon University. Assistant, Institute for Advanced Study in Princeton, 1985/86, and Fellow at Russell Sage Foundation in New York, 1988/89. Main research topics: experimental and psychological economics, intertemporal choice, bargaining, curiosity, medical ethics, psychology and law. — Address: Department of Social and Decision Sciences, College of Humanities and Social Sciences, Carnegie Mellon University, Pittsburgh, PA 15213-3890, USA.

This was a transitional year for me. I had been planning to spend much of the year extending earlier research and writing on the psychology of curiosity, but was distracted from this task early in the year. Shortly after arriving at the Wissenschaftskolleg in September, I attended a small conference on drug addiction held in the South of France. One of the participants there — a neuropharmacologist — gave a brilliant full-day talk that introduced me to a field of study and set off research findings which seemed to have profound implications for my own fields of decision theory and psychological economics. Rather than pursuing the curiosity project, with the superb help of the Wissenschaftskolleg's library service I spent much of the year reading in the areas of neuropsychology, neuropharmacology, and drug addiction. This reading resulted in three papers: "Out of control: visceral influences on behavior", "A visceral account of addiction", and "Impassioned economics". Each of these papers shows how neuropsychological research challenges central premises of the rational choice paradigm — most importantly, the idea that behavior is the direct product of deliberative decisions, and the assumption that people have complete volitional control over their own behavior. The first paper ("Out of control") provides a general critique of rational choice theory, then proposes an alternative framework for understanding behavior; the second examines the implications of the theoretical framework proposed for addiction in "Out of control", and

the third discusses the history of the passions in economics and shows how many of the insights emerging from the neuropsychology literature were an integral part of economics prior to the neoclassical revolution.

Besides this main body of work, I pursued a number of secondary projects with various collaborators in the USA. A psychologist at Carnegie Mellon University and I completed a study of and paper on women's breast self-examination behavior. We found that whether a particular woman does breast self-exam depends strongly on the anxiety she experiences as a function of thinking about breast cancer, breast self-exam, etc., and is almost completely unrelated to traditional rational choice variables — namely the perceived costs and benefits of doing breast self-exam. A medical ethicist at the University of Pennsylvania and I conducted several surveys with jurors in Pittsburgh and Philadelphia and wrote three papers on topics relating to medical ethics: how to allocate scarce transplant organs, the relationship between decision analysis and informed consent, and certain technical problems relating to health care rationing. A law professor colleague at the University of Texas and I finished a paper tracing the likely negative consequences of "mandatory disclosure" — a recently-implemented legal reform in the United States. A marketing professor colleague at Massachusetts Institute of Technology and I completed a paper titled "The red and the black" which discusses hedonic interactions between paying for consumer goods and consuming them — basically the idea that paying for a good (e.g., a restaurant dinner) decreases one's pleasure in consuming it, and that consuming a good sometimes mutes the pain of paying for it (the story is more complicated, of course).

Colleagues at the California Institute of Technology and the University of Chicago and I also wrote the first draft of a paper looking at the labor supply behavior of New York City taxi drivers, which I discussed briefly in my Tuesday colloquium. We were able to obtain a large amount of data concerning how long taxi drivers ("hacks") drive on different days. Hacks have bad days and good days. Good days for hacks are when it rains and there are numerous people on the street desperate for rides. Bad days are sunny, when there are few people looking for rides. Standard economic theory has a strong prediction: Hacks should drive long hours on good days and quit early on bad days so as to earn more money, work fewer total hours, and spend more of their leisure in the sun. However, cabbies do the opposite; they drive long on bad days and quit early on good days. My colleagues and I have been seeking to demonstrate this anomaly empirically and to use our data to test alternative theoretical accounts. Despite resolutions to the contrary, I also succumbed to an addiction for running experiments. One of several

experiments conducted with Professor Jungermann at the Technische Universität Berlin and his students examines the phenomenon of flipping a coin to make a decision. When people have a difficult time making a decision, they sometimes flip a coin to make the decision for them but then, as often as not, reject the coin flip. Somehow, flipping the coin seems to help them figure out what they want. Based on a theory proposed by neuropsychologist Antonio Damasio, we reasoned that flipping the coin may help people to "read" their own gut-reaction to the alternatives. Our study compares decisions people make either without the help of a coin, with the help of a coin-flip, or with the help of a (computerized) coin that is flipped but stopped in mid-air. Another study conducted with collaborators at Princeton and the University of Illinois examined how much people value objects as a function of how long they possess of them. We find that duration of ownership — 10 minutes versus one hour — has a major impact on people's valuation of objects.

I also collaborated on two other studies with a different researcher at the University of Illinois. The first compares what we call sequential and simultaneous choices. We prepared a list of 20 movie videos at a shop in Urbana/Champagne — 10 of them high-brow (e.g., *Schindler's List*) and 10 low-brow (e.g., *Robocop*) — and told subjects that we would pay for three film rentals in exchange for their participation. Half of the subjects decided immediately on all three films they would view; the other half chose a film each time they wanted to watch one. Those in the first (simultaneous choice) condition almost invariably chose a low-brow film for the first viewing and a high-brow film for the last (the second viewing was in-between). Those in the "sequential choice" condition tended to choose low-brow films on each occasion. The second study examines the accuracy of memory for pain. There were five experimental conditions, but two of them provide the gist of the idea. In one experimental condition, subjects put their hand in ice-cold water for 15 seconds, then were immediately asked whether they will do so again on the following day for 3 minutes in exchange for \$5.00. In the other condition, subjects put their hand in ice-cold water for 15 seconds then departed until the next day at which time they are asked whether they would submerge their hand in ice water on the following day for 3 minutes in exchange for \$5.00. Our prediction was that subjects who had just experienced the pain of the ice water would be more willing to decline the money-making opportunity than those who had done so the day before.

I also had some productive interactions with other fellows at the Wissenschaftskolleg. Fritz Oser and I have begun to plan some experiments

on learning from mistakes, Kazimierz Laski suggested some very useful ideas concerning a new research project on psychological impediments to economic transition, and I enjoyed many stimulating discussions about decision-making and medical ethics with Bettina Schöne-Seifert.