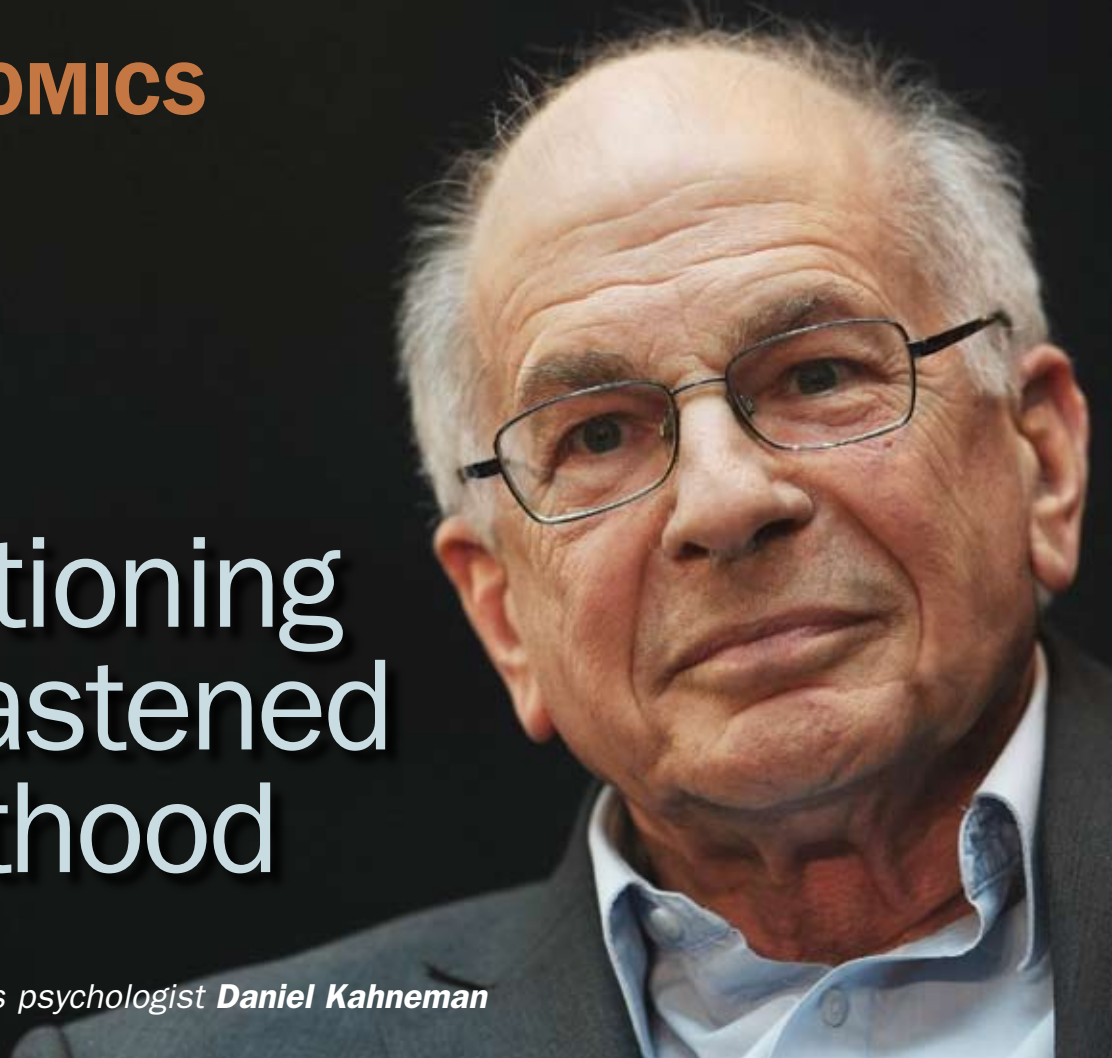


# Questioning a Chastened Priesthood

*Jeremy Clift profiles psychologist Daniel Kahneman*



**F**OR Daniel Kahneman, one of the most moving episodes in the current global economic crisis took place when a humbled Alan Greenspan, the former chairman of the U.S. Federal Reserve, confessed before a congressional committee that he had put too much faith in the self-correcting power of free markets.

“He basically said that the framework within which we had been operating was false, and coming from Greenspan, that was impressive,” said Kahneman, who was awarded the Nobel Prize in Economics in 2002 for his pioneering work integrating aspects of psychological research into economic science.

But more to the point for Kahneman was how Greenspan, in his testimony, treated not only individuals but also financial institutions as rational agents. “That seemed to me to be ignoring not only psychology but also economics. He appeared to have a belief in the magic power of the market to discipline itself and yield good outcomes.”

Kahneman goes to great pains to stress that, as a psychologist, he is an outsider in the field of economics. But he helped lay the foundation for a new field of research, called *behavioral economics*, that challenged standard economic rational-choice theory to inject more realistic assumptions about human judgment and decision making.

Standard economic models assume that individuals will rationally try to maximize their benefits and minimize their costs. But, overturning some of the traditional tenets, behavioral economists show that people often make decisions based on guesses, emotion, intuition, and rules of thumb, rather than on cost-benefit analyses; that markets are plagued by herding behavior and groupthink; and that individual choices can frequently be affected by how prospective decisions are framed.

## **Overconfidence drives capitalism**

The global economic crisis, which had its roots in the decisions of individuals and financial institutions to invest in subprime mortgages, has put behavioral economics and the way humans make decisions in the spotlight.

“The people who took on subprime mortgages were thoroughly deluded,” says Kahneman during an interview with *F&D* at his house in the spectacular Berkeley hills overlooking San Francisco. “One of the main ideas in behavioral economics that is borrowed from psychology is the prevalence of overconfidence. People do things they have no business doing because they believe they’ll be successful.” Kahneman calls this “delusional optimism.”

Delusional optimism, he says, is one of the forces that drive capitalism. Many people don't understand the risks they are taking, says Kahneman—a theme echoed in a book by Nassim Taleb called *The Black Swan* (2007), which points out that people fail to take into adequate consideration the possible impact of rare but earth-shattering events that prove wrong their assumptions about the future.

“Entrepreneurs are people who take risks and, by and large, don't know they are taking them,” he argues. “This happens with mergers and acquisitions, but it also happens at the level of small-scale entrepreneurs. In the United States, a third of small businesses fail within five years, but when you interview those people, they individually think they have between 80 percent and 100 percent chance of success. They just don't know.”

### Two sides or more

Kahneman, who was raised initially in Paris and later in Palestine, was born in Tel Aviv in 1934. He says he is unsure if his vocation as a psychologist was a result of an early exposure to interesting gossip, or whether his interest in gossip was an indication of a budding vocation.

“Like many other Jews, I suppose, I grew up in a world that consisted exclusively of people and words, and most of the words were about people. Nature barely existed, and I never learned to identify flowers or to appreciate animals,” he said in his autobiography. “But the people my mother liked to talk about with her friends and with my father were fascinating in their complexity. Some people were better than others, but the best were far from perfect and no one was simply bad.” Most of her stories were touched by irony, he says, and they all had two sides or more.

An early event in Nazi-occupied Paris that he remembers vividly left a lasting impression because of varied shades of meaning and implications about human nature. “It must have been late 1941 or early 1942. Jews were required to wear the Star of David and to obey a 6 p.m. curfew. I had gone to play with a Christian friend and had stayed too late. I turned my brown sweater inside out to walk the few blocks home. As I was walking down an empty street, I saw a German soldier approaching. He was wearing the black uniform that I had been told to fear more than others—the one worn by specially recruited SS soldiers. As I came closer to him, trying to walk fast, I noticed that he was looking at me intently. Then he beckoned me over, picked me up, and hugged me. I was terrified that he would notice the star inside my sweater. He was speaking to me with great emotion, in German. When he put me down, he opened his wallet, showed me a picture of a boy, and gave me some money. I went home more certain than ever that my mother was right: people were endlessly complicated and interesting.”

His family moved to Palestine in 1946 and he got his first degree in psychology, with a minor in mathematics, from the Hebrew University in Jerusalem. He was drafted into the Israeli military in 1954 and, after a year as a platoon leader, he was asked to evaluate combat troops and their potential for leadership. A groundbreaking interview system for assigning

new soldiers to appropriate posts that he devised is still in use today, with only minor modifications.

He graduated from the University of California, Berkeley in 1961, becoming a faculty member of the Hebrew University from 1961 to 1978, spending sabbaticals abroad at Harvard and Cambridge, among others. It was while working in Jerusalem that he fostered a partnership that was to lead to the Nobel Prize in a field that he had not studied—economics.

### New field of research

Kahneman, now Professor of Psychology and Public Affairs Emeritus at the Woodrow Wilson School at Princeton, was awarded the prize in 2002 for work he had done with fellow psychologist Amos Tversky. Tversky, with whom he collaborated for more than a decade, died in 1996 and the prize is not granted posthumously. “Amos and I shared the wonder of together owning a goose that could lay golden eggs—a joint mind that was better than our separate minds,” Kahneman said of their joint work.

In presenting the prize, the Nobel Committee said Kahneman had integrated insights from psychology into economics, thereby laying the foundation for a new field of research. The prize was awarded jointly with Vernon Smith, who laid the foundation for the separate field of experimental economics (see *F&D* March 2003).

Kahneman's main findings focus on decision making in situations where things are uncertain. He demonstrated how human decisions may systematically depart from those predicted by standard economic theory. With Tversky, he formulated “prospect theory” as an alternative that better accounts for observed behavior. Kahneman also discovered how human judgment may take intuitive shortcuts that systematically depart from basic principles of probability. “His work has inspired a new generation of researchers in economics and finance to enrich economic theory using insights from cognitive psychology into intrinsic human motivation,” the Nobel citation said.

*Prospect theory* helps to illuminate experimental results that show individuals often make divergent choices in situations that are substantially identical but framed in a different way. Their paper became the second-most-cited article to appear in *Econometrica*, the prestigious academic journal of economics, during 1979–2000 (Kahneman and Tversky, 1979). The research has had an influence across a range of disciplines, including marketing, finance, and consumer choice.

Kahneman says little should be read into the theory's name. “When we were ready to submit the work for publication, we deliberately chose a meaningless name for our theory: ‘prospect theory.’ We reasoned that if the theory ever became well known, having a distinctive label would be an advantage. This was probably wise.”

Through their collaboration, Kahneman and Tversky examined why an individual's response to loss is much more intense than one's response to gain, leading to the notion of loss aversion, one of the main fields of study in behavioral economics.

The two psychologists also found empirically that people underweight outcomes that are merely probable in comparison with outcomes that are obtained with certainty. This tendency contributes to risk aversion in choices involving sure gains and to risk seeking in choices involving sure losses—helping explain why a gambler on a losing streak refuses to accept the sure loss and gambles on, hoping to break even.

“People [are] willing to gamble on in the hope of recovering their losses,” Kahneman said in a broadcast interview at Berkeley in 2007. This led him to worry that national leaders who have led a country close to defeat in a war are more likely to put more at risk than to settle.

They also found that people have inconsistent preferences when the same choice is presented in different forms, helping explain irrational economic behaviors such as why people will drive to a distant store for a discount on a low-cost item but not for the same discount on something expensive.

### Building a discipline

How prospect theory became applied to economics seems almost an accident of publishing. Kahneman and Tversky chose to publish in *Econometrica* rather than the *Psychological Review* because *Econometrica* had published earlier work on decision making—thus bringing their research to the attention of economists.

Kahneman points to his collaboration with longtime research partner and friend Richard Thaler, professor of economics and behavioral science at the University of Chicago, as contributing to the development of the field of behavioral economics.

“Although I do not wish to renounce any credit for my contribution, I should say that in my view the work of integration was actually done mostly by Thaler and the group of young economists that quickly began to form around him, starting with Colin Camerer and George Loewenstein, and followed by the likes of Matthew Rabin, David Laibson, Terry Odean, and Sendhil Mullainathan.”

Kahneman says that he and Tversky provided “quite a few of the initial ideas that were eventually integrated into the thinking of some economists, and prospect theory undoubtedly afforded some legitimacy to the enterprise of drawing on psychology as a source of realistic assumptions about economic agents.”

Thaler, who wrote the “Anomalies” column in the *Journal of Economic Perspectives* from 1987 to 1990, with occasional contributions since, says Kahneman’s work with Tversky is the reason today’s thriving field of behavioral economics exists. “Their work provided the conceptual framework that made our field possible.”

### Boosted by the crisis

The buzz created by the award of the Nobel Prize, plus the introspection among chastened economists triggered by the global economic crisis, has given a big boost to behavioral economics, so much so that it has begun to seep into the current White House through books such as *Nudge* (Thaler and

Sunstein) and *Predictably Irrational* by Duke University professor Dan Ariely.

*Nudge* examines how people make choices and how they can be nudged into making better decisions for themselves on a range of issues, such as buying more healthy food or opting to save more.

“It’s very clear that this is a good time for behavioral economics,” says Kahneman with a smile.

Not everyone agrees that behavioral economics is the thing of the future, seeing it as something of a passing and intrusive fad. “Certainly behavioral economics is all the rage these days. The casual reader might have the impression that the rational *homo economicus* has died a sad death and the economics profession has moved on to recognize the true irrationality of humankind. Nothing could be further from the truth,” says David Levine of the Washington University in St. Louis.

“Behavioral economists are right to point to the limitations of human cognition,” said Richard Posner of the Chicago University Law School. “But if they have the same cognitive limitations as consumers, should they be designing systems of consumer protection?”

“Perhaps the greatest challenge facing behavioral economics is demonstrating its applicability in the real world,” said Steven Levitt and John List in an article in *Science* magazine (2008). “In nearly every instance, the strongest empirical evidence in favor of behavioral anomalies emerges from the lab. Yet, there are many reasons to suspect that these laboratory findings might fail to generalize to real markets.”

### Place in economics

Although behavioral economics has now reached the status of an established discipline taught at leading universities, “it remains a discipline that is organized around the failures of standard economics,” says Wolfgang Pesendorfer, Professor of Economics at Princeton.

But it is proving difficult to integrate it fully—although Wall Street and investment analysts do take account of cognitive factors and emotional issues that impact the decision-making process of individuals, groups, and organizations. “There are too many behavioral theories, most of which have too few applications,” says Drew Fudenberg of Harvard (2006).

Even prospect theory remains handicapped in the eyes of some by the lack of an accepted model for how reference points are set. “The key difference between psychologists and economists is that psychologists are interested in individual behavior while economists are interested in explaining the results of groups of people interacting,” said Levine in a 2009 lecture titled “Is Behavioral Economics Doomed?” at the European University Institute.

### Lending credence

Nevertheless, the turmoil created by the subprime debacle and subsequent global crisis has given credence to the need to be more aware of human nature in regulation and economic policy.

Kahneman has a number of takeaways from the current crisis.

- **Need for stronger protection for consumers and individual investors.** “There’s always been an issue of whether, and how much, protection people need against their own choices,” he argues. “But I think it’s now just become very, very difficult to say that people don’t require protection.”

- **Failure of markets has much wider consequences.** “Interestingly enough, it turns out that when uninformed individuals lose their money, it ruins the global economy—so the irrational actions of individuals have much wider effects when combined with the rationality of corrupt agents within the financial system, and very lax regulation and supervision.”

- **Limits of forecasting.** “The tremendous volatility in the stock markets and financial system tells us something about the amount of uncertainty in the system and the limits of forecasting.”

Greenspan now seems to agree about problems with the forecasting and risk assessment models. In an article in the *Financial Times* in March last year, Greenspan saw human nature as a missing piece of the puzzle of why the burgeoning subprime crisis was not spotted earlier through risk management or econometric forecasting models.

“These models do not fully capture what I believe has been, to date, only a peripheral addendum to business-cycle and financial modeling—the innate human responses that result

in swings between euphoria and fear that repeat themselves generation after generation with little evidence of a learning curve,” Greenspan wrote. “Asset-price bubbles build and burst today as they have since the early 18th century, when modern competitive markets evolved. To be sure, we tend to label such behavioral responses as non-rational. But forecasters’ concerns should be not whether human response is rational or irrational, only that it is observable and systematic.

“This, to me, is the large missing ‘explanatory variable’ in both risk-management and macroeconomic models.”

### Thinking about thinking

In addition to his Nobel Prize in Economics, Kahneman has received recognition as a towering figure from the psychological profession. “Kahneman and his colleagues and students have changed the way we think about the way people think,” said then American Psychological Association President Sharon Stephens Brehm, when selecting Kahneman in 2007 for the profession’s highest award for Outstanding Lifetime Contributions to Psychology.

Kahneman keeps an inquisitive eye on developments in behavioral economics, but has long since moved on.

Today his work has shifted to the study of well-being, collaborating with Gallup on a world poll to measure global issues and attitudes in more than 150 countries (see box).

### Studying well-being

Continuing to tackle issues in human decision making, Kahneman now focuses on the study of hedonics—what makes experiences pleasant or unpleasant—and the development of a scientific measure of well-being. In one recent study examining money’s effect on happiness, Kahneman, and others, have found that people with a relatively high income, although more satisfied with their lives, are barely happier at any given moment than those with a significantly lower income. The age-old myth that money buys happiness needs to be refined, as does the competing myth that wealth does not matter.

What he’s found in comparative studies of nations is that both the level of corruption and the degree of trust in society are important predictors of well-being. “Corruption is a measure of trust in society, and trust, it turns out, should be essential to well-being.”

Countries where the level of trust in society is very low have a lot of difficulty thriving economically—so you need a certain level of trust to get moving.

“But even when you look at the Western world where GDP is more or less constant, you find large effects of trust, and that’s why Northern Europe always emerges as the best place to be in the world in terms of well-being research.”

Can this be applied in developing countries? “If there is a way of encouraging increasing trust in society—and that should probably start with trust in institutions—that is going to make a contribution to GDP through the rule of law, respect for property, and so on. It will have an extra contribution to human welfare because happier societies are ones where people trust each other and spend a fair amount of time catering to social needs.”

### Challenging the priesthood

Kahneman has in the past likened the economics profession to a priesthood to which heretics have difficulty getting access. But he recognizes how far economics has advanced in the past three decades in embracing psychological research and elements of other social sciences.

“We published our article in *Econometrica* in 1979, so that was 30 years ago. In 2002, I was honored in Stockholm, so it is not a very rigid church, considering that during the first years economists largely ignored us.

“Yes, I have spoken of a church, but it is not a church where you get burned at the stake for being a heretic, because otherwise a lot of people wouldn’t be around!” ■

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