

Experiment 1

- Which option is better A or B:
- Option A: Lose \$3200 with certainty
- Option B: 80% chance of losing \$4000, and 20% chance of losing nothing.



Experiment 1

- Which option is better C or D:
- Option C: Win \$3200 with certainty
- Option D: 80% chance of winning \$4000, and 20% chance of winning nothing.





Daniel Kahneman and Vernon L Smith

Sam Zelter



Background

- Kahneman born in Tel Aviv, 1934
- Smith in Wichita, Kansas, 1927
- Both still living
- Shared Nobel Prize in 2002



Background

Kahneman: Grew up in Paris, father was captured in the first major roundup of French Jews, later released, Family moved to Israel (Palestine) in 1946.

Graduated Hebrew University in Jerusalem with a major in psychology and a minor in mathematics

Served in psychology dept of Israeli army. Designed tests for officers judgment and decision-making. Thought this work was stupid.

Emigrated to USA 1958, Received Ph.D in Psychology from Berkeley in 1961

Background

Smith: Grew up in Kansas, Family were subsistence farmers during great depression until farm lost to foreclosure.

Had wartime work for boeing, which he enjoyed

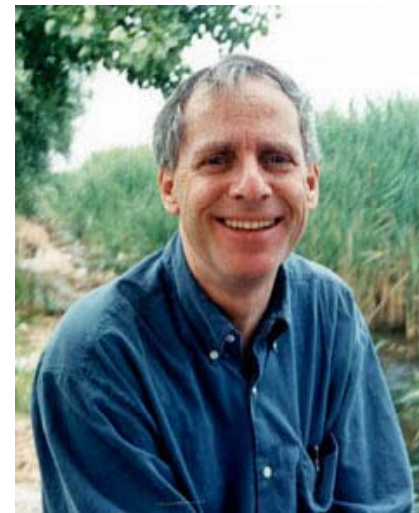
Received degree in electrical engineering from Caltech, 1949. Returned to work for Boeing In Kansas. Received M.A. in Economics from U of Kansas, 1952.

Ph.D in 1955 from Harvard

Both taught at many schools

Influences

- Smith's decision to pursue Economics came after reading Samuelson's "Foundation of Economic Analysis"
- Kahneman's longtime collaborator was Amos Tversky, who would've shared the prize Nobel prize with Kahneman but died before their work was recognized



Influences

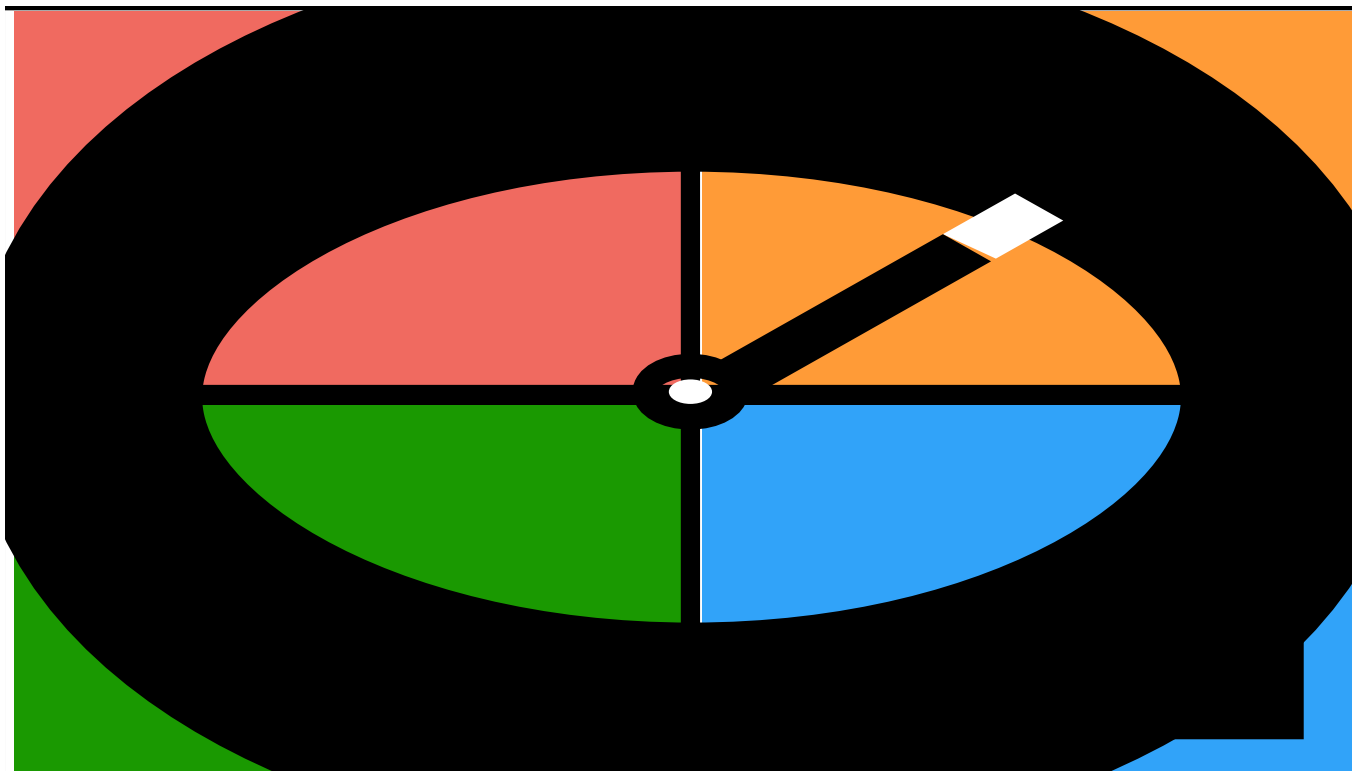
- Smith on his studies: “At KU I took classes from Dick Howey ...[most] significantly, a full year course in the Development of Economic Thought. Howey was... a History of Economic Thought scholar”
- Kahneman appears to have no other strong economic influences
- Both had strong influences from their parents and from the era in which they lived

Contributions:

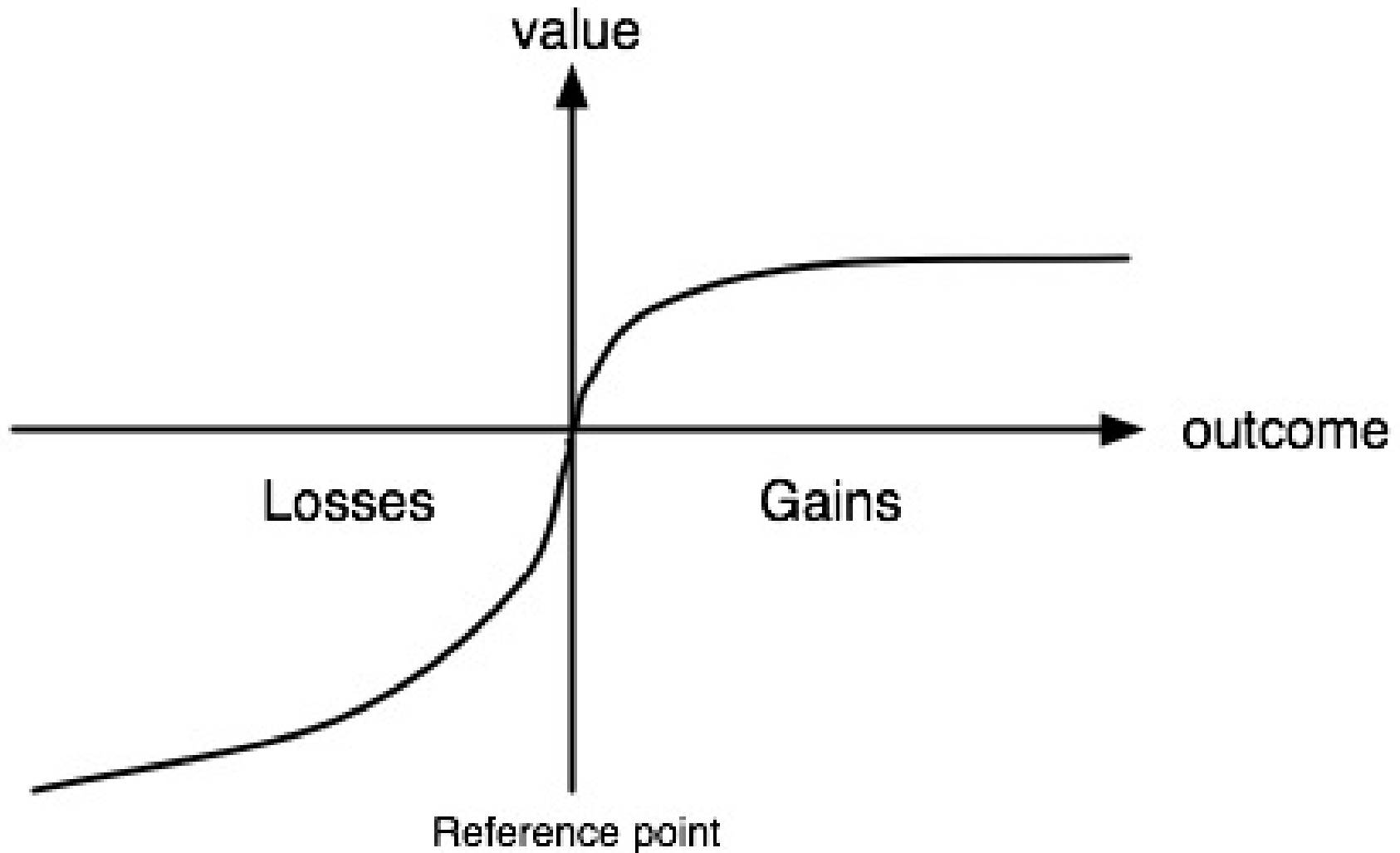
Nobel Prize

- *“for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty”*
- *“for having established laboratory experiments as a tool in empirical economic analysis, especially in the study of alternative market mechanisms.”*
- *Experiments enable the researcher to obtain data, which is unavailable in real world.*

Vernon Smith's Contribution: Experimental Economics



Kahneman's Contribution: Prospect Theory



Impact:

- *Smith: Established an entirely new field of economics (**Experimental Economics**)*
- *Experimentation allows for the integration of other disciplines into economics (Kahneman and Tversky's work would probably not be accepted if not for Smith)*
- *A scientific method for economics*
- *Provides a standard of scrutiny for new economic theory (probably)*

Impact:

- *Kahneman: Was the first to have a recognized contribution to economics from another field of study.*
- *Prospect theory is more refined and accurate than expected utility theory.*
- *Explains observed behaviors and reconciles some economic inconsistencies*
- *Implies that utility may be reference based*
- *Better explains how things are but does not suggest anything about how things should be (positive)*

Critique



- Kahneman's work is limited somewhat by the extent to which he understands the foundations of economics
- Prospect theory is hard to apply.
- Smith did not do very much with experimental economics after inventing it.
- Experiments can be manipulated to show the results desired by the researcher.

Questions



- Is it possible to conduct a macro economic experiment?
- An economic experiment places people in an environment desired by the experimenter, who then records the time paths of their economic behavior. Performing experiments using actual people at the level of national economies is obviously impractical but constructing a model economy and computing the economic behavior of the model's people is. Such experiments are termed 'computational' because economic behavior of the model's people is computed. This essay specifies the steps in designing a computational experiment to address some well-posed quantitative question. The computational experiment is an econometric tool used in the task of deriving the quantitative implications of theory.