Lecture 3: Predictably Irrational Decision Making

Political Psychology

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January 31, 2012
pop quiz!

A bat and ball cost $1.10.
The bat costs one dollar more than the ball.

*How much does the ball cost?*
Alternatives...
Rational Choice

Rationality Assumption

1. Individuals form (on average) correct beliefs about events and other people’s behavior.

2. Given these beliefs, individuals choose the action that best satisfies their preferences.
Kahneman and Tversky v Classical Economics

(Kahneman, 2003)
What if we don’t choose?

Rationality Assumption

1. Individuals form (on average) correct beliefs about events and other people’s behavior.
2. Given these beliefs, individuals choose the action that best satisfies their preferences.
## Two System Model

<table>
<thead>
<tr>
<th>System 1 (Intuition)</th>
<th>System 2 (Reasoning)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast</td>
<td>Slow</td>
</tr>
<tr>
<td>Parallel</td>
<td>Serial</td>
</tr>
<tr>
<td>Automatic</td>
<td>Controlled</td>
</tr>
<tr>
<td>Effortless</td>
<td>Effortful</td>
</tr>
<tr>
<td>Associative</td>
<td>Rule-governed</td>
</tr>
<tr>
<td>Slow-learning</td>
<td>Flexible</td>
</tr>
<tr>
<td>Emotional</td>
<td>Neutral</td>
</tr>
</tbody>
</table>
System 1 and System 2 and alternatives?

Should I enroll in this course?

**System 1**

**System 2**
System 1 and System 2 and alternatives?

Should I enroll in this course?

System 1

- suit (stuffy)
- does/does not look like me (comforting/discomforting)
- tall (intelligent/authoritative)

System 2

- enroll = interesting + important - reading - assignments - far - early
System 1 and System 2 and alternatives?

Should I enroll in this course?

System 1
- suit (stuffy)
- does/does not look like me (comforting/discomforting)
- tall (intelligent/authoritative)

System 2

\[ U_{\text{enroll}}^{\text{You}} = \text{interesting} + \text{important} - \text{reading} - \text{assignments} - \text{far} - \text{early} \]
System 2 has (at least) two “choices” for monitoring:
- endorse system 1
- correct system 1
System 2

(System 2 is the “lazy controller” (Kahneman, 2011))

(Kahneman, 2003)
pop quiz!

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*How much does the ball cost?*
pop quiz!

A bat and ball cost $1.10.
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*How much does the ball cost?*

*answer = $.05*
System 2

System 2 is the “lazy controller” (Kahneman, 2011)

(Kahneman, 2003)
System 2

- System 2 is the “lazy controller” (Kahneman, 2011)
- System 2 is the “gluttonous controller” (Enos, 2012)

(Kahneman, 2003)
System 2

- System 2 is the “lazy controller” (Kahneman, 2011)
- System 2 is the “gluttonous controller” (Enos, 2012)
The lazy (and gluttonous) controller

System 2

1 has to be lazy
The lazy (and gluttonous) controller

System 2

1 has to be lazy
   1 energy conservation
The lazy (and gluttonous) controller

System 2

1. has to be lazy
   1. energy conservation
   2. efficiency
The lazy (and gluttonous) controller

1. System 2
   - has to be lazy
     1. energy conservation
     2. efficiency
   2. can afford to be lazy (system 1 usually makes very good decisions)
Which system rules in politics?
System 1 v system 2 in a democracy?
What if we decide, but we’re bad at it?

Rationality Assumption

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What if we decide, but we’re bad at it?

**Rationality Assumption**

1. Individuals form (on average) correct beliefs about events and other people’s behavior.

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Accessibility of alternatives
(Kahneman, 2003)
accessibility – recency (bias)

Figure 4.1 Cumulative Income Growth and Presidential Election Outcomes, 1952–2004

Figure 4.2 Election-Year Income Growth and Presidential Election Outcomes, 1952–2004

(Bartels, 2008)
Is recency bias a bias?
accessibility and comparable dimensions

Figure 4.2: Election-Year Income Growth and Presidential Election Outcomes, 1952–2004

(Bartels, 2008)
Many properties of accessibility are likely a result of *heuristic* cognitive processes.
system 1, system 2, and accessibility in a republic?
Prospect Theory

Lecture 3: Predictably Irrational Decision Making
Prospect Theory

The keys of Prospect Theory

- Values are reference dependent
- In domain of gains, we are Risk-averse
- In the domain of losses, we are Risk-seeking
- Importantly: losses loom larger than gains
Prospect Theory

reference dependence

utility

losses

0

reference point

gains

Enos

Lecture 3: Predictably Irrational Decision Making
Reference dependence

<table>
<thead>
<tr>
<th></th>
<th>time 1</th>
<th>time 2</th>
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<tbody>
<tr>
<td>Person A</td>
<td>$50</td>
<td>$30</td>
</tr>
<tr>
<td>Person B</td>
<td>$10</td>
<td>$30</td>
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Are person A and B equally satisfied?

- Classical Rational Choice says YES!
- Prospect Theory says NO!
Reference dependence

**Figure 4.2** Election-Year Income Growth and Presidential Election Outcomes, 1952–2004
Prospect Theory

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Lecture 3: Predictably Irrational Decision Making
Prospect Theory

Enos Lecture 3: Predictably Irrational Decision Making
Prospect Theory

You are faced with two alternatives:
1. One has a positive payoff and is (more) certain.
2. The other has an even greater payoff, but is more uncertain.

The utility of the greater payoff is not worth the risk of gaining nothing. Examples: job seeking, public infrastructure...
Prospect Theory

“risk averse”

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Examples: job seeking, public infrastructure . . .
Prospect Theory – gains and risk aversion

HIGH-SPEED RAIL CORRIDOR DESIGNATIONS

(USDOT)
Prospect Theory

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Prospect Theory

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Prospect Theory

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Lecture 3: Predictably Irrational Decision Making
Prospect Theory

You are faced with two alternatives:

1. One has a negative payoff and is (more) certain.
2. The other has an even more negative payoff, but is more uncertain.

The utility of not losing anything is worth the risk. Examples: medicine, Iraq . . .
You are faced with two alternatives:

- You are more willing to accept risk when facing losses than when facing gains.
- This is because the utility of not losing anything is worth the risk.

Examples: medicine, Iraq surges...
You are faced with two alternatives:

1. One has a negative payoff and is (more) certain.

Examples: medicine, Iraq...
Prospect Theory

“risk accepting”

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- Examples: medicine, Iraq surge . . .
Prospect Theory – losses and risk seeking

SURGE
Prospect Theory

the keys of Prospect Theory

- Values are reference dependent
- in domain of **gains**, we are **Risk-averse**
- in the domain of **losses**, we are **Risk-seeking**
- IMPORTANTLY: losses loom larger than gains
Prospect Theory

the keys of Prospect Theory

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- in the domain of losses, we are Risk-seeking
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Prospect Theory

“kinked” at the reference point

losses

gains

Enos Lecture 3: Predictably Irrational Decision Making
Prospect Theory

- loss aversion
  - status quo bias
  - incumbency bias
unless, A is an incumbent...

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<th>party differential = $U_t^A - E(U_{t+1}^B)$</th>
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unless, A is an incumbent...

party differential = $U_t^A - E(U_{t+1}^B)$
if party differential > 0, vote for Party A
if party differential < 0, vote for Party B

because of loss aversion

The potential losses associated with a change loom larger than the potential gains.
Kahneman and Tversky (1979)

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- 3 and 3’, etc are experiments (subjects see one or the other)
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- 3 and 3’, etc are experiments (subjects see one or the other)
- “Given a choice of a 80% of winning (losing) $4000 or winning (losing) $3,000 with certainty, which would you choose?”
Prospect Theory: how do they know this?

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- 3 and 3’, etc are experiments (subjects see one or the other)
- “Given a choice of a 80% of winning (losing) $4000 or winning (losing) $3,000 with certainty, which would you choose?”
- [20] and [80] are the percent of subjects choosing each
“Imagine that the United States is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:”
“Imagine that the United States is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:"

- If Program A is adopted, 200 people will be saved.
- If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability that no people will be saved."
Framing Effects

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- “If Program A is adopted, 400 people will die.”
- “If Program B is adopted, there is a one-third probability that nobody will die and a two-thirds probability that 600 people will die.”
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**Program A:** 65% (N = 52)

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  - If Program A is adopted, 200 people will be saved.
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- **Program B:** 22% (N = 59)
  - If Program A is adopted, 400 people will die.
  - If Program B is adopted, there is a one-third probability that nobody will die and a two-thirds probability that 600 people will die.
Prospect Theory

NASA

Enos
Lecture 3: Predictably Irrational Decision Making
Framing effects and ObamaCare?
risk aversion, status quo bias, and regime change
Causal Proximity

1 Situational
2 Social
3 Biological