How Much Relevance does Reality Imply?  
(Re)Considering the Endowment Effect

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*Very preliminary; comments greatly appreciated.
Outline

• Why the endowment effect is plausible?
  o Preferences come from somewhere
  o Examples of anchoring

• Shouldn’t be lumped with behavioral economics
  o Endowment effect consistent with neoclassical utility
  o Anchored preferences not the same as cognitive bias

• Clarifying its meaning
  o Not the same as “loss aversion”
  o Instantaneous switching
  o Kinked indifference curves

• WTP vs WTA?
  o Endowment effect not enough, need kink
  o Moral argument? What should the endowment be?
Giving the endowment effect its due

- Defining it, casually, as that willingness to pay to increase the amount of a good one has depends on how much of the good one has to start with
- Preferences based on an “anchor”
- Without a theory of preference formation, standard economics can’t say that there isn’t an endowment effect
- Without a theory of preference formation, one can’t say that anchoring doesn’t matter
What makes it interesting to a non-psychologist

• An economist, that is …

• Nothing about anchoring, that is, the endowment effect implies a departure from neoclassical utility
  o In and of itself, that is!!
  o Other challenges will be discussed
  o Risk preference for losses; malleability

• The implicit comparison of willingness to pay with different anchors is about different utility functions
  o Within the same person with different anchors?

• But—important!!—it does not imply consumer error arising from biases
  o No inherent “private benefits” or paternalism challenges
Examples from opposite ends of the spectrum

"What you call 'love' was invented by guys like me. To sell Nylons." –Don Draper
Illuminate the malleability problem

• For both advertising and Buddhism, changing preference is not easy
• Advertising: expensive repetition (assuming the advertising is not directly or indirectly informative)
• Buddhism: long-term mindfulness meditation discipline
• How to reconcile failure to trade coffee mugs or tokens in student experiments?
  o Well, maybe they’re students!
• Important point is that one can get endowment dependent \( WTA > WTP \) with different endowments—in policy relevant settings (health care, environment)
But first, confessing a personal example

- If you keep doing it after it’s understood, is it still a bias? Real options?
About time for a rough definition

• I hope not too sloppy; but inherently sloppy about “all else equal” regarding preferences, income/wealth

• Let $WTP(a; b)$ be the willingness to pay for $a$ units of a good with $b$ units of that good as the anchoring parameter

• The endowment effect is that $b$ matters

• Notation: If $j > i$,
  
  $WTP(i \rightarrow j; k) = WTP(j; k) - WTP(i; k)$

• Suppose $b > a$. The endowment effect is:

  $WTP(a \rightarrow b; b) > WTP(a \rightarrow b; a)$

• One would pay more to go from $a$ to $b$ if $b$ is part of one’s endowment than if the endowment is only $a$
WTP vs. WTA: A first look

• Maybe it’s the endowment, not a difference

• Write the WTA to accept a loss from \( j \) to \( i \) given anchor/endowment \( k \) as \( \text{WTA}(j \rightarrow i; k) \)

• Suppose that regardless of the endowment, the utility function looks neoclassical, that is, \( \text{WTA} \approx \text{WTP} \)
  
  o That is, suppose WTA to go down from \( b \) to \( a \) is just about the same as the WTP to go from \( a \) to \( b \), but is endowment dependent (as is WTP)

• \( \text{WTA}(b \rightarrow a; b) \approx \text{WTP}(a \rightarrow b; b) \)

• The endowment effect implies \( \text{WTA} > \text{WTP} \) with varied endowments, but consistent with \( \text{WTA} \approx \text{WTP} \) holding the endowment fixed
Surveys and framing

• Accept that people give implausibly larger answers to WTA than to WTP in surveys

• Just mention responses
  o WTA unconstrained by budget
  o Ethical interpretation of the frame
  o Lack of substitutes if public good taken away

• Add how people approach a question
  o WTA interpreted as “suppose this were your endowment, then…?"
  o WTP interpreted as “suppose this weren’t your endowment, then …?"
  o Implicit implication from how question is framed

• Policy implications at end
Does “loss aversion” fit?

- Neo-classical “risk aversion” implies that “losses outweigh gains”
- Need above endowment effect definition to be clear about the effect of the endowment on the difference between “losses” and “gains”
- Level of money not an endowment by that definition: money includes everything, so nothing left to vary WTP
  - What’s left in the Buddhist “no endowment” conception?
- The insurance counterexample
Something to the “kink”

- Mahasuweerachai and Knetsch, SBCA 2015
- How to get WTA > WTP within a preference structure holding the endowment fixed
- Imagine indifference curve with a “kink” at the endowment at some value of $x$, call it $x^*$
- Implies WTA losses from $x^* > WTP$ for gains beyond $x^*$ (where one “pays” by giving up endowment of other goods)
- Nothing theoretically implausible here
- Does have other testable implication: Inelastic demand over some price range at the endowment amount: What advertising does?
Maybe this is “just” ethics?

• It’s all ethics, in the end, even saying one should choose only policies that pass neoclassical BCA

• Not the first time ethical discussions disguised as methodological discussions: Multiple utility

• **PERHAPS**: pick as starting point endowments that people should have
  - Health care
  - Environmental quality

• Think of WTA as asking what people would pay as if those were part of their endowment

• Still need to deal with “money where mouth is” problem

• And, of course, justify “should have” endowments
Ending observations

• The endowment effect should not be threatening
  o Preferences come from somewhere
  o They can be parameterized
  o Examples: advertising, Buddhism
  o Not about error

• Policy assessment should recognize possibility of endowment effect
  o Verification, especially if endowment not ex ante allocation
  o Health, environment
  o Status quo bias if ex ante allocation parameterizes preferences

• Could the debate be about what should be in one’s endowment?