

# The Varieties of Psychological Experience Underlying Preference Inconsistency

(esp. as regards behavioral economics, well being, policy)

People often endorse the normative view upon reflection.

But the (effortless, automatic, intuitive, heuristic) processing of information is often not privy to, nor governed by, the normative requirements.

Instead: *construal* -- attitudes, impulses, proclivities, sensitivities, lack of sensitivity, in short: human nature... -- leads to other behaviors; incl. predictable “errors.”

And all this is often not available to introspection...  
and with potentially serious consequences

A simple but profound fact:

Decisions are not about objective (extensional) states of the world, but about our mental (intensional) representations of those states.

“Construal” processes, influence of context, perception, heuristics, attitudes, etc.  
in survey responses, judgments, decisions, language, perception, social life, ...

# Psychologies of inconsistency

- risk attitudes
- “psychophysical” weighing of dimensions
- decisional conflict aversion
- reliance on compelling reasons (accountability, justification)
- separate versus comparative evaluation
- over-reliance on salient features, e.g., new information
- current mood effects
- familiarity; accessibility; attachment
- salient self-conception
- ...

In reporting, outcomes, consumption...



Please estimate the average number of hours you watch television per week:

$\overline{1-4}$      $\overline{5-8}$      $\overline{9-12}$      $\overline{13-16}$      $\overline{17-20}$      $\overline{\text{More than 20}}$

Please estimate the average number of hours you watch television per week:

$\overline{1-2}$      $\overline{3-4}$      $\overline{5-6}$      $\overline{7-8}$      $\overline{9-10}$      $\overline{\text{More than 10}}$



Correlation:

How happy are you?

How many dates did you have last week?

Happiness

$\overline{1-2}$   
first

$\overline{6-6}$   
first



+



How people usually feel driving their car X?  
(reported feelings align with value; and predicted by students)

How they felt when drove to work earlier that day?  
(reported feelings entirely unrelated to value)



(Schwarz, 1987 ; Schwarz & Clore, 1983; Schwarz & Xu, 2011)

**Rate the degree to which the aphorism is “an accurate description of human behavior”:**

**Rhyming aphorisms**

**Woes unite foes**

**What sobriety conceals,  
alcohol reveals**

**When good cheer is lacking,  
friends will go packing**

**Non-Rhyming Aphorisms**

**Woes unite enemies**

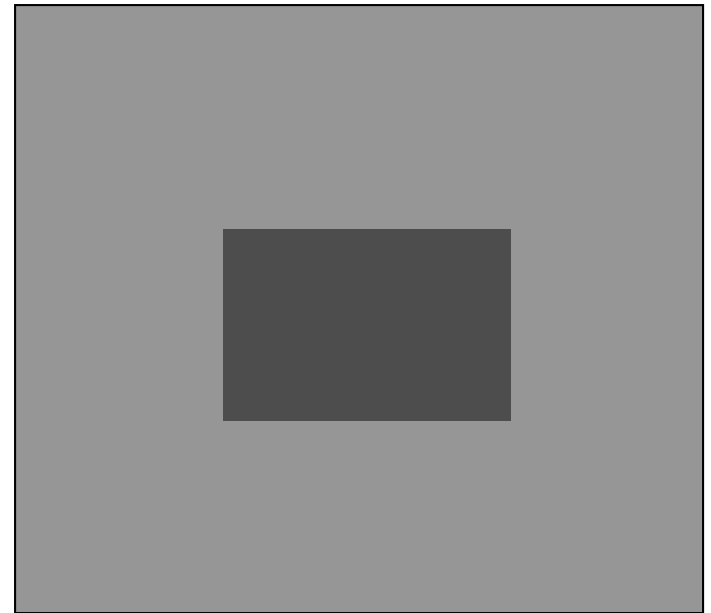
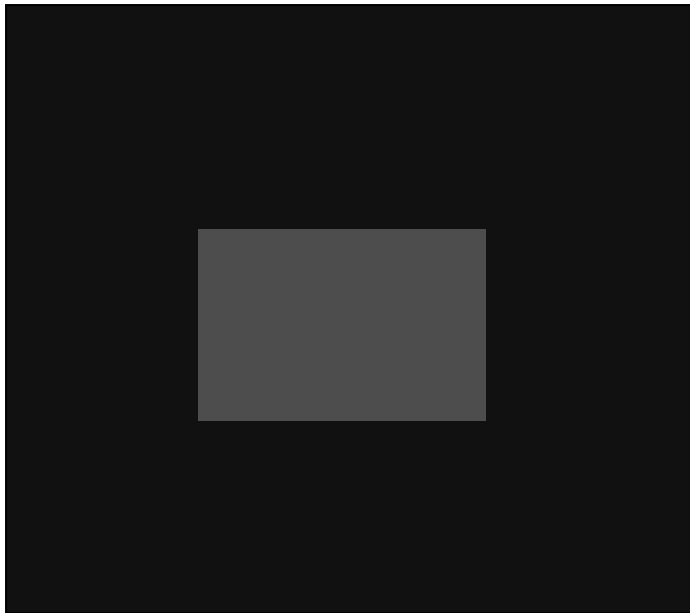
**What sobriety conceals,  
alcohol unmasks**

**When good cheer is lacking,  
friends will go elsewhere**



( $p < .01$ ; McGlone & Tofighbakhsh, *Psychological Science*, 2000)

## The role of context: contrast effects









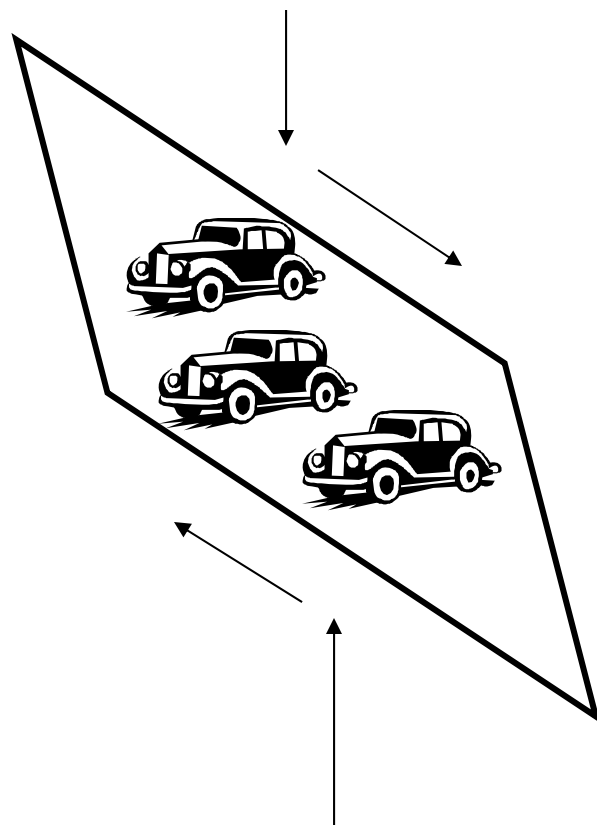
# Framing

(Psychophysics of perception & evaluation)

- Assume yourself \$300 richer than you are today:
  - \$100 sure gain \*
  - 50% chance to win \$200; otherwise nothing
- Assume yourself \$500 richer than you are today:
  - \$100 sure loss
  - 50% chance to lose \$200; otherwise nothing \*

(Kahneman & Tversky, 1979)

Lack of canonical representation...





## Good Samaritan study

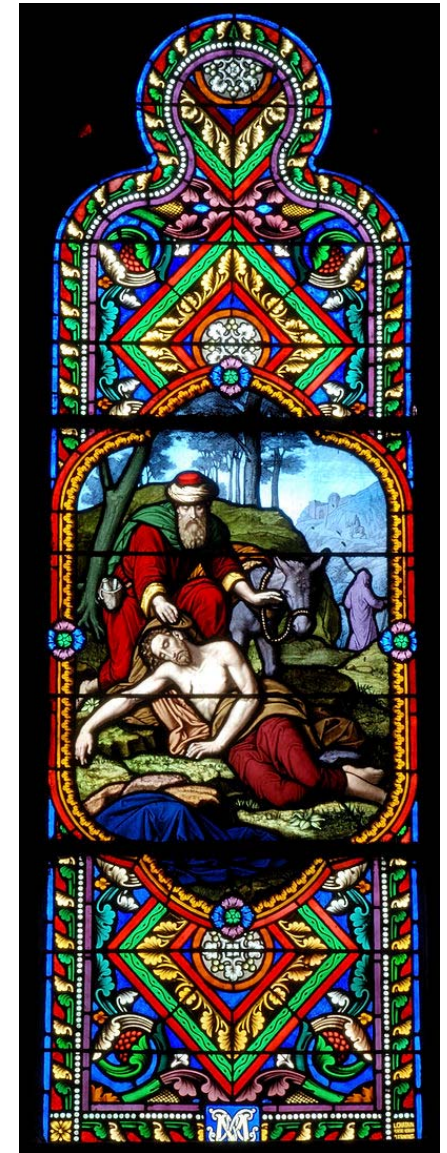
Theological seminarians go deliver a sermon on the Parable of the Good Samaritan.

Half running ahead of schedule; others believe they were running late.

An ostensibly injured man slumped, coughing and groaning.

Majority of those with time to spare stopped to help.

Among those who were running late: 10% stopped – remaining 90% simply step over victim and rush along.



(Darley and Batson, 1973)

## An important contextual factor: Decisional Conflict

### **Conflict:**

- x) 65% chance to win \$15
- y) 30% chance to win \$35

### **Dominance:**

- x) 65% chance to win \$15
- x') 65% chance to win \$14

Percentage paying for an additional  
alternative?:

**55%**

**30%**

(Tversky & Shafir, 1992)

# On the proliferation of options

## *Conflict and the status quo*

Shoppers in upscale grocery store encounter tasting booths for jams:

**6 jams:** (40% stopped); **30%** bought

vs.

**24 jams:** (60% stopped); **3%** bought

(Iyenger & Lepper, 2000; B. Schwarz, 2000)



401(k) options: For every 10-option increase, individuals' participation probability declines by about 2%

(Iyengar & Jiang, 2005)

Patients are scheduled for carotid endarterectomy, but OR slots are taken by emergency cases. Who has higher priority?

Patient M.S. is a 52 year old [employed journalist with TIA's experienced as transient aphasia...]

Patient P.K. is a 55 year old [employed bartender with TIA's experienced as transient monocular blindness...]

Patient A.R. is a 72 year old [retired policeman with TIA's experienced as left hand paralysis...]

If asked for your opinion, on which patient would you operate first?


2 patients:      Patient M.S.  
                         Patient A.R.      **38%**

3 patients:      Patient M.S.  
                         Patient P.K.  
                         Patient A.R.      **58%**



(Redelmeier & Shafir, JAMA, 1995)



Row	Company Name (Cobrand Name)	Plan Name	% Top 100 Drugs Covered	% Top 200 Drugs Covered	Mail Order	Monthly Drug Premium	Annual Deductible	Cost Sharing	Gap Coverage
1	Humana Inc.	Humana PDP Standard S5884-069	0.97	0.95	X	\$10.35	250	25%	No gap coverage
2	WellCare	WellCare Signature	0.87	0.81	X	\$18.70	0	\$0 - \$66	No gap coverage
3									
4									
5		Humana PDP Enhanced S5884-010	0.97	0.95	X	\$20.12	0	\$0 - \$60	No gap coverage
6		AmeriHealth Advantage Rx Option 1							No gap coverage
7		Medicare RX Rewards							No gap coverage
8		AARP Medicare Rx Plan							No gap coverage
9		United Medicare MedAdvance							No gap coverage
10	Coventry AdvantraRx	AdvantraRx Premier							No gap coverage
11	SilverScript	SilverScript							No gap coverage
12	Pennsylvania Life Insurance Company	Prescription Pathway Bronze Plan Reg 11	0.89	0.85	X	\$30.94	250	25%	No gap coverage
13	MEMBERHEALTH	Community Care Rx BASIC	0.90	0.87		\$31.53	250	0	No gap coverage
14	Medco Health Solutions, Inc.	YOUR Rx PLAN	0.94	0.9	X	\$31.81	250	\$4 - \$17	No gap coverage
15	Aetna Medicare	Aetna Medicare Rx Essentials	0.85	0.79	X	\$31.91	250	\$5 - \$25	No gap coverage
16	PacifiCare Life and Health Insurance Company	PacifiCare Select Plan	0.86	0.82	X	\$32.35	0	\$7.50 - \$64.95	No gap coverage
17	United American Insurance Company	UAC Medicare Part D Prescription Drug Cov	0.94	0.9	X	\$33.43	0	\$9 - \$60	No gap coverage
18	Unicare	Medicare RX Rewards (Unicare)	0.88	0.85	X	\$33.87	0	\$10 - \$30	No gap coverage
19	CIGNA HealthCare	CIGNATURE Rx Value Plan	0.99	0.96	X	\$34.86	250	\$4 - \$40	No gap coverage
20	PacifiCare Life and Health Insurance Company	PacifiCare Comprehensive Plan	0.77	0.73	X	\$36.60	0	\$7.50 - \$52.60	Generic Only
21	WellCare	WellCare Complete	0.84	0.79	X	\$38.44	0	\$0 - \$50	No gap coverage
22	MEMBERHEALTH	Community Care Rx CHOICE	0.90	0.87		\$39.61	250	\$4 - \$40	No gap coverage
23	CIGNA HealthCare	CIGNATURE Rx Plus Plan	0.99	0.96	X	\$39.99	0	\$5 - \$50	No gap coverage
24	Pennsylvania Life Insurance Company	Prescription Pathway Silver Plan Reg 11	0.89	0.85	X	\$40.29	250	\$5 - \$28	No gap coverage
25	Marquette National Life Insurance Company	Prescription Pathway Silver Plan Reg 11	0.89	0.85	X	\$40.37	250	\$4 - \$29	No gap coverage
26	WellCare	WellCare Premier	0.84	0.78	X	\$41.41	0	\$0 - \$60	No gap coverage
27	Aetna Medicare	Aetna Medicare Rx Plus	0.85	0.79	X	\$42.37	0	\$7 - \$35	Generic Only
28	Coventry AdvantraRx	AdvantraRx Premier Plus	0.98	0.95	X	\$42.54	0	\$0 - \$60	No gap coverage
29	MEMBERHEALTH	Community Care Rx GOLD	0.90	0.87		\$43.52	100	\$4 - \$50	No gap coverage
30	Unicare								
31	Blue Cross								
32	Universal								
33	CIGNA								
34	America								
35	Pennsylv								
36	Marquet								
37	Sterling								
38	Blue Cross and Blue Shield of Florida, Inc.	BlueScript for Medicare Part D Option 2	0.97	0.94	X	\$57.71	100	\$5 - \$30	Generic Only
39	Aetna Medicare	Aetna Medicare Rx Premier	0.97	0.94	X	\$57.85	0	\$2 - \$40	Generic Only
40	SilverScript	SilverScript Plus	0.95	0.89	X	\$59.15	100	\$8 - \$60	No gap coverage
41	Kling, Mullainathan, Shafir, Vermeulen, & Wrobel, 2012. The Quarterly Journal of Economics.								
42									
43	Universal Health Care, Inc.	Masterpiece Rx Choice	0.77	0.74	X	\$104.89	0	\$0 - \$25	Generic and Brand

43 different plans

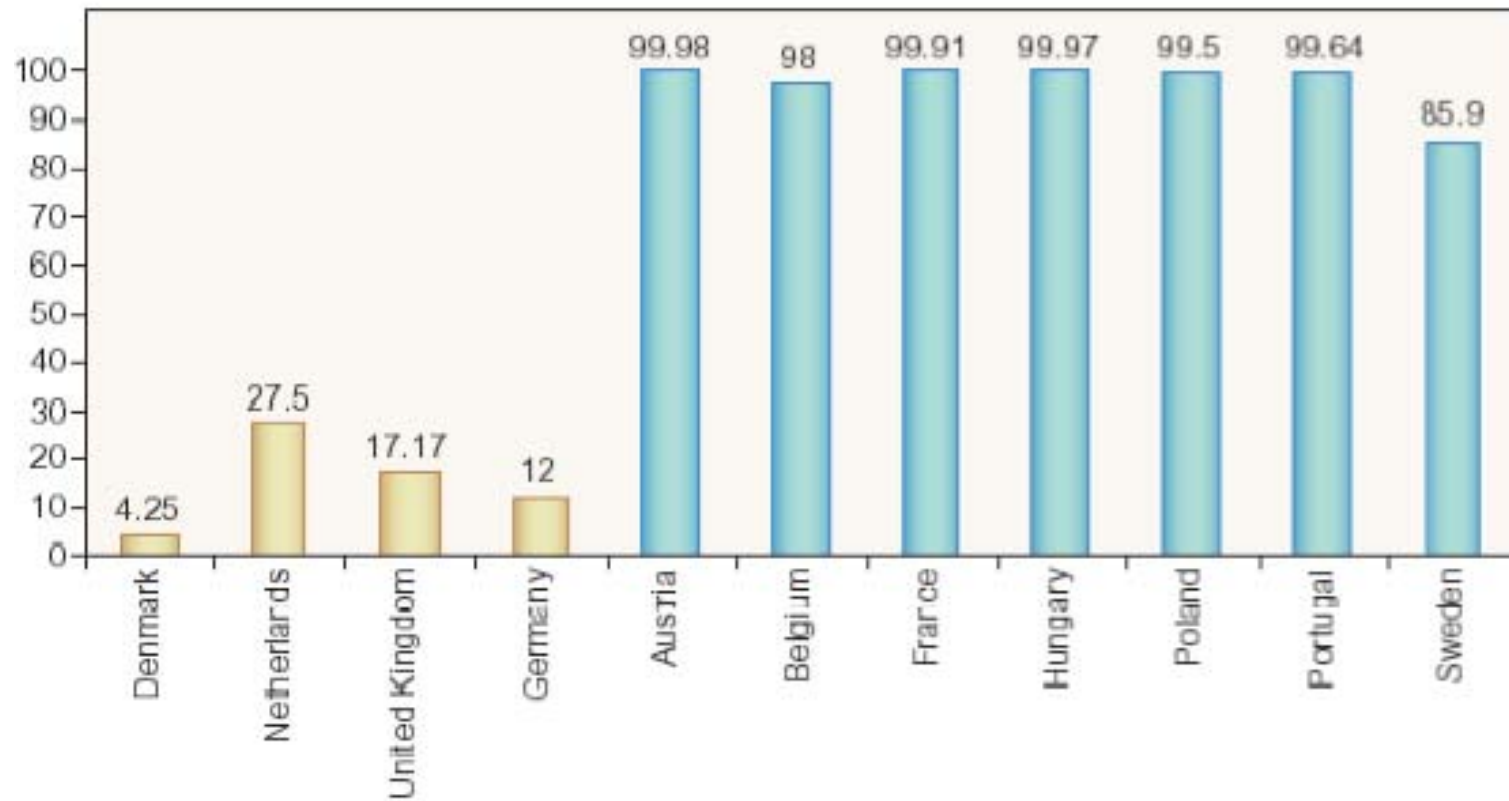
Monthly premiums: \$10.35 to \$104.89

Deductibles: 0 - \$250

Etc., etc...

**Massively “bad” choices (incl. among healthy people)**  
**Are there plans uniformly better than those the consumers chose? YES!!**

## Willing organ donors



Johnson & Goldstein, *Science*, 2003

## Conflict (in contrast with value)

Standard account does not deny conflict. Nor, however, does it assume any direct influence on choice.

(In a sense, might expect little conflict...)

Instead:

- When conflicted (even if options are good): more prone to keep on searching
- When conflicted between a subset of the options: competitors likely to benefit
- When conflicted between “new options”: default (SQ) is likely to benefit

## The weighting of dimensions

Heavily depends on where attention is directed...

Imagine that you serve on the jury of an only-child sole-custody case following a relatively messy divorce..., and you decide to base your decision entirely on the following few observations. [To which parent would you award sole-custody of the child? / Which parent would you deny sole-custody of the child?]

	<u>Award</u>	<u>Deny</u>
<i>Parent A:</i>		
average income		
average health		
average working hours	36%	45%
reasonable rapport with the child		
relatively stable social life		
<i>Parent B:</i>		
above-average income	<b>64%</b>	<b>55%</b>
very close relationship with the child		
extremely active social life		
lots of work-related travel		
minor health problems		

(Shafir, 1993; N=170,  $p < .02$ )

## Search for information can increase its weight...

Highly experienced nurses (N=171) affiliated with kidney dialysis centers in Toronto:

### Simple Version:

Suppose that a 68 year old relative of yours needed a kidney as a result of renal failure. Suppose that you were a suitable match. Would you donate?

**44% willing to donate**

### Search Version:

... Suppose that it was not known whether you were a suitable match. You could be tested to determine if you are suitable. Would you choose to be tested?

**69% willing to test**

If.. willing to be tested, suppose.. had undergone the test ... showed that you were a suitable match. Would you donate?

**93% willing to donate**

Total: **65% willing to donate**

## Weights in direct comparisons versus separate evaluations

### Evaluability

Music Dictionary A:  
10,000 entries  
Condition is like new

Music Dictionary B:  
20,000 entries  
Cover is torn

Amount willing to pay when evaluated in isolation:

**A › B**

Amount willing to pay when evaluated jointly:

**B › A**

## Counterfactuals and emotional reaction

A male victim who lost the use of his right arm as a result of a gunshot wound suffered during a robbery at a convenience store.

R: the robbery happened at the victim's regular store.

U: the victim was shot at a store he rarely frequented, which he happened to go to because his regular store was closed.

Compensation assigned when evaluated separately:

$$U > R \quad (\sim \$100,000.00)$$

Compensation assigned when evaluated comparatively:

$$U = R$$

(Miller & McFarland, 1986)