



Studying Deliberated Judgments

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Context and goal of this poster

Context

- Deliberation facing a decision problem
- Considering an individual i

Goal

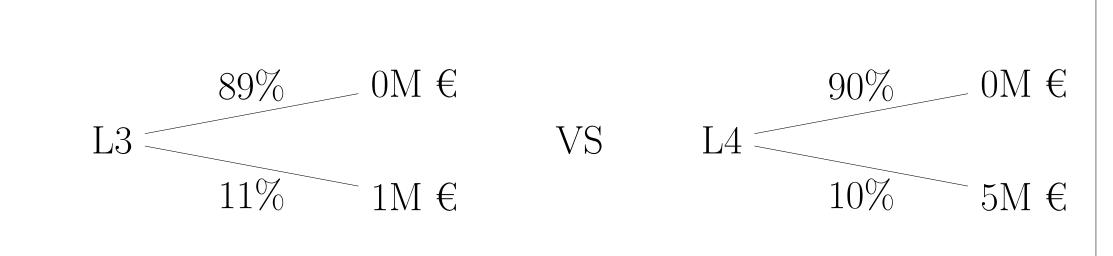
- Introduce the notion of Deliberated Judgment
- Motivate studying it
- Sketch how

Deliberated judgment: a missing conception of "preference"

- Descriptive approach
- -Observe people's epistemic position / choice without interference
- Normative approach
- -How you ought to reason / choose
- -Can't be validated through observation of individuals
- Deliberated judgment (or preference)
 - -i's position after having considered all arguments

Deliberation sometimes change decisions

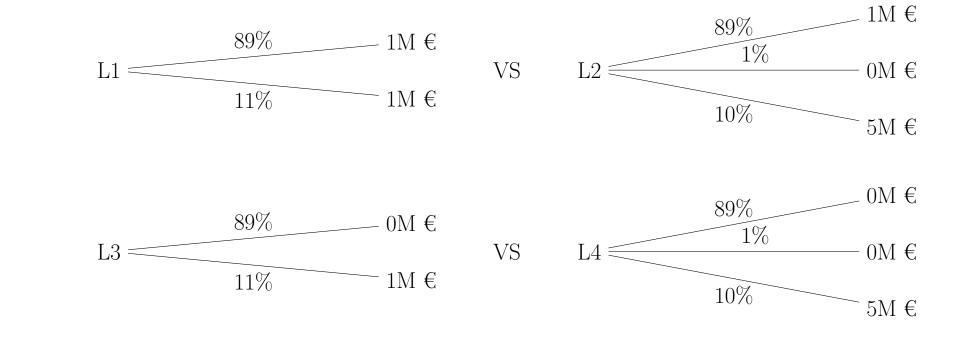
Choose between L1 and L2, and choose between L3 and L4. Are you sure? 0M ∈ 100% 1M ∈ VS L2 = 100% 1M ∈ L3 = 11% 1M ∈ L3



- First observation (Bernouilli): don't be content with maximizing (untransformed) expected revenue!
- Second observation: i could be intuitively attracted by L1 \succ L2 and L3 \succ L4 (Allais's problem)
- Including Savage
- And might change her mind when given a reasoning pro expected utility
- "There is, of course, an important sense in which preferences, being entirely subjective, cannot be in error"

5M €

- ... "but in a different, more subtle sense they can be." (Savage, The Foundations of Statistics)
- ⇒ Systematic decision principles might help deliberate



Study deliberated judgment

The proposed research program aims at the following.

- 1. Define Deliberated Judgment (DJ) of i formally
- Given a set of arguments
- ⇒ The position that is stable facing counter-arguments
- 2. Define the concept of a model of i's DJ
- \Rightarrow A model articulates claims concerning i's DJ and argues for its claim
- 3. Define validity of a model
- \Rightarrow Correctly captures *i*'s DJ
- 4. Study conditions for falsifying models using observable data only
- \Rightarrow Let models debate, use i as a judge

We obtain a theorem of the following form.

If the decision situation $(T, S, \leadsto, \triangleright_{\exists}, \not\triangleright_{\exists})$ satisfies conditions 1 to 4: an operationally valid model exists; and any operationally valid model is valid.

Example of a situation and a model of it

Notation	Here	Description
\overline{T}	$\{t\}$	The topic, containing propositions about which i deliberates
S	$\{s,s_1,s_2,s_3\}$	The arguments
$\leadsto \subseteq S \times T$	$\{({\color{red} s},{\color{blue} t}),({\color{red} s}_1,{\color{blue} t})\}$	Support as considered by i
$\triangleright_\exists \subseteq S \times S$	$\{(\boldsymbol{s}_2,\boldsymbol{s}_1)\}$	$s_2 >_{\exists} s_1$ iff i sometimes considers that s_2 trumps s_1
$\triangleright_{\eta} \subseteq S \times S$	$\{(\boldsymbol{s}_3,\boldsymbol{s}_2)\}$	Trump situations as considered by the model η
	weather f. predi	icts so $(s_1) \rightsquigarrow \text{rain tomorrow } (t) \rightsquigarrow \text{complex arg. } (s)$
$\triangleright_{\exists}, \not \triangleright_{\exists}$		
WE	eather forecast is o	often wrong (s_2)
	↑ <u>~</u>	

Application: test axioms of decision theory

- Axioms considered appropriate normatively?
- -But some (Allais, Ellsberg) disagree
- Proposal: build models resting on those axioms
- Test models: their convincing power will give us indications about the reasonableness of the axioms for "normal" people (meaning, not scientists studying decision theory)

Application: test conceptions of justice

- Philosophers have proposed sophisticated conceptions of justice (Rawls, Nozick, ...)
- Individual's shallow intuitions about justice are observed and used to confront Rawls or others (Experimental Social Choice)
- Proposal: study reactions of individuals to arguments of philosophers rather than just shallow intuitions
- Move towards Reflective equilibrium (Goodman, Rawls)

 $hildrapsize \exists,
hildrapsize_{\eta}$

weather forecast is more often right (s_3)