# Studying Deliberated Judgements

Olivier Cailloux
LAMSADE, Université Paris-Dauphine

## Context and goal of this poster

**Context**

- Internal deliberation facing a decision problem
- Considering an individual $i$

**Goal**

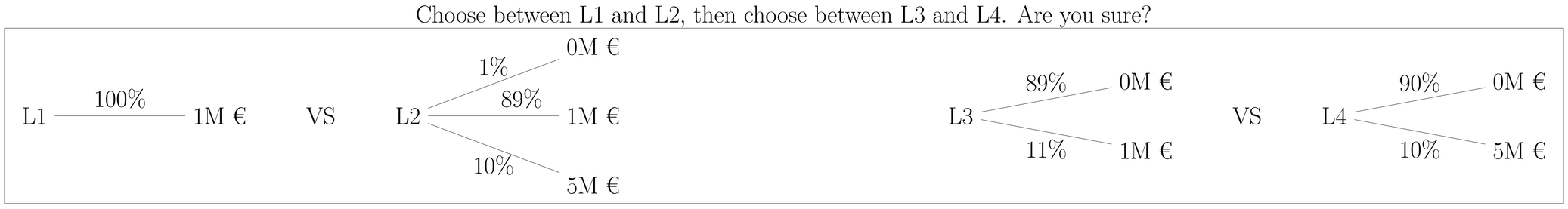
- Introduce the notion of Deliberated Judgement
- Motivate studying it
- Sketch how

## Deliberated judgement: 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* judgement (or preference)
  - $i$'s position after having considered all arguments

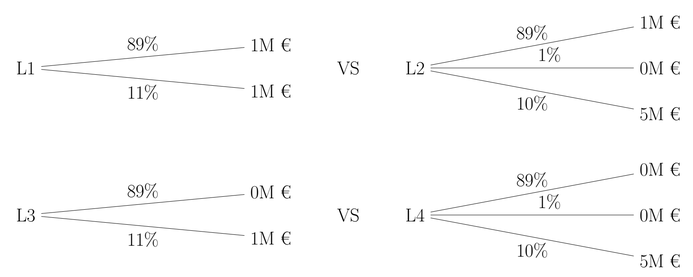
## Deliberation can change your mind

Choose between L1 and L2, then choose between L3 and L4. Are you sure?




- 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"
- ... "but in a different, more subtle sense they can be." (Savage, *The Foundations of Statistics*)

$\Rightarrow$ Systematic decision principles might help deliberate




## Study deliberated judgement

The proposed research program aims at the following.

1. Define Deliberated Judgment (DJ) formally
   - Given a set of arguments
   - Of an individual $i$

   $\Rightarrow$ The position that is stable facing counter-arguments
2. Define the concept of a model of someone's DJ

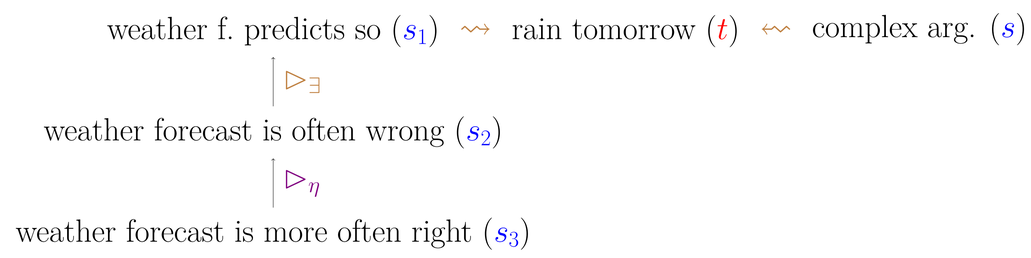
   $\Rightarrow$ A model articulates claims concerning $i$'s DJ and argues for its claim
3. Define validity of a model

   $\Rightarrow$ Correctly captures $i$'s DJ
4. Study conditions for falsifying models using observable data only

   $\Rightarrow$ Let models debate, use $i$ as a judge

## Example of a situation and a model of it

| Notation | Here | Description |
|---|---|---|
| $T$ | $\{t\}$ | The topic, containing propositions about which $i$ deliberates |
| $S$ | $\{s, s_1, s_2, s_3\}$ | The arguments |
| $\rightsquigarrow \subseteq S \times T$ | $\{(s,t),(s_1,t)\}$ | Support as considered by $i$ |
| $\rhd_\exists \subseteq S \times S$ | $\{(s_2,s_1)\}$ | Attacks as considered by $i$ in some perspective |
| $\rhd_\eta \subseteq S \times S$ | $\{(s_3,s_2)\}$ | Attacks as considered by the model $\eta$ |




## 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)

Olivier Cailloux and Yves Meinard. *A formal framework for deliberated judgment.* Under revision at Theory and Decision.