

## STUDYING DELIBERATED JUDGMENTS

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## Context and goal of this poster

## Context

- Deliberation facing a decision problem
- Considering an individual  $i$

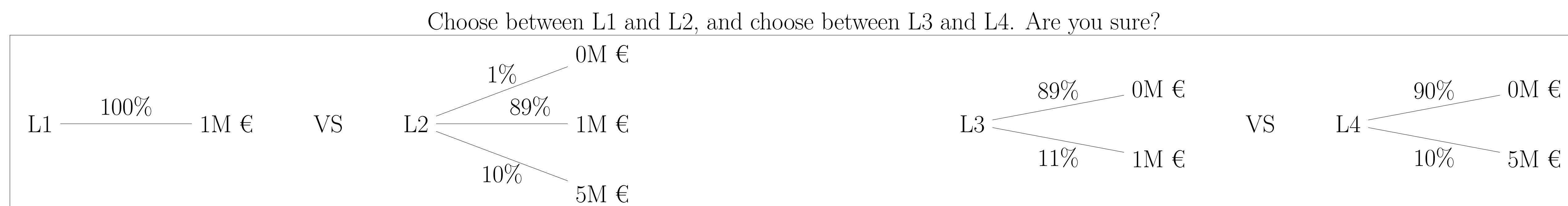
## Goal

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

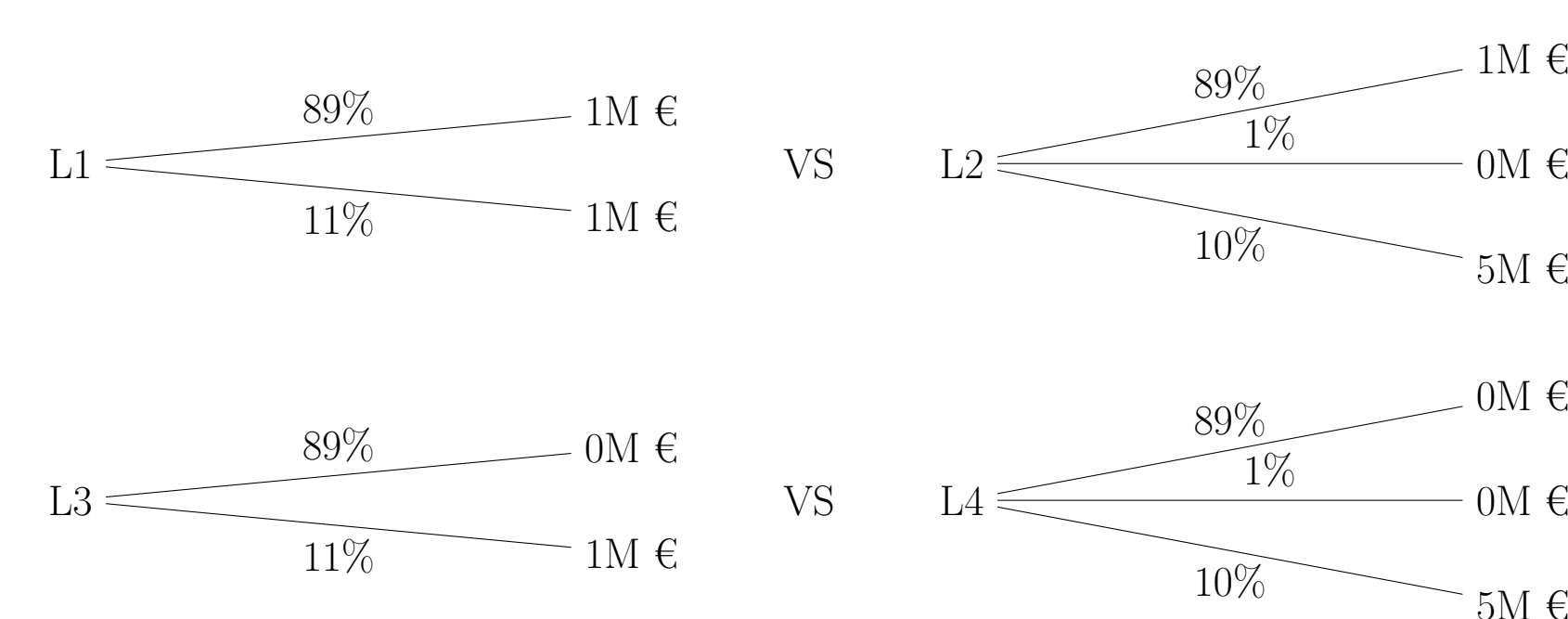
## Deliberated judgment: a missing conception of “preference”

- 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



- First observation (Bernoulli): 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*)
- ⇒ Systematic decision principles might help deliberate



## Study deliberated judgment

Our article has the following goals.

1. Define Deliberated Judgment (DJ) of  $i$  formally
  - Given a set of arguments
  - $\Rightarrow$  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  $(T, S, \rightsquigarrow, \triangleright_{\exists}, \nabla_{\exists})$  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
$\mathcal{T}$	$\{t\}$	The topic, containing propositions about which $i$ deliberates
$\mathcal{S}$	$\{s, s_1, s_2, s_3\}$	The arguments
$\rightsquigarrow \subseteq \mathcal{S} \times \mathcal{T}$	$\{(s, t), (s_1, t)\}$	Support as considered by $i$
$\triangleright_{\exists} \subseteq \mathcal{S} \times \mathcal{S}$	$\{(s_2, s_1)\}$	$s_2 \triangleright_{\exists} s_1$ iff $i$ sometimes considers that $s_2$ trumps $s_1$
$\triangleright_{\eta} \subseteq \mathcal{S} \times \mathcal{S}$	$\{(s_3, s_2)\}$	Trump situations as considered by the model $\eta$

weather f. predicts so (s<sub>1</sub>)  $\rightsquigarrow$  rain tomorrow (t)  $\Leftarrow$  complex arg. (s)

$\triangleright \exists$ ,  ~~$\triangleright \exists$~~

weather forecast is often wrong ( $s_2$ )

 $\triangleright \exists, \triangleright \eta$ 

weather forecast is more often right ( $s_3$ )

## 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)