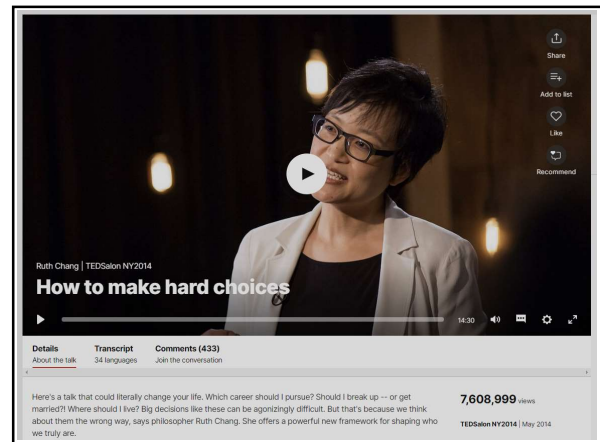


## What makes decisions hard?

- What differentiates easy from hard?
- What is a general characteristic that makes decisions hard?
- What does this tell you about decision making in general?

1



2

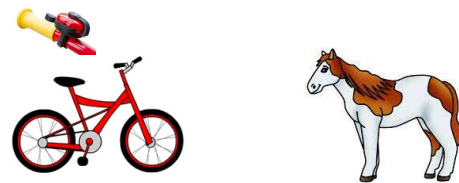
## What makes decisions hard?

Ruth Chang's answer

- Neither option is better than the other, but they are also not equally good (on a par)
  - Banker vs. artist
  - Banker + 500 vs. artist

3

On a par  $\neq$  equally good



4

## What other factors make decisions hard?

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## 3 types of decision research

- Normative analysis
- Descriptive studies
- Prescriptive interventions

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## Normative Analysis

- Gold standard of rationality
  - “Identifying the best possible choice, given the state of the world and decision makers’ values” (Fischhoff, 2010)
  - The best or most rational way to solve a problem

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## What are some normative theories?

(There are many)

- Deductive reasoning:
  - logic
- Inductive reasoning:
  - statistical principles, probability theory
- Probability judgment:
  - probability theory
- Decision Making:
  - Subjective expected utility theory

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## Descriptive Studies

- Reveal what people actually do
- Suggest psychological theories of the cognitive mechanisms used to solve problems.
- *Heuristics* = simple strategies

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## Prescriptive Interventions

- Methods to improve decision making
- More targeted than just “follow the normative principle”
- Examples:
  - Decision aids
  - Nudges
  - Choice architecture

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## Biases

- Bias = way in which actual behavior deviates systematically from normative principle.
- Why are biases important?
  - Highlights areas where reasoning is in need of improvement
  - Sheds light on the cognitive mechanisms underlying reasoning; informs the descriptive theories.

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