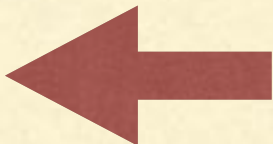
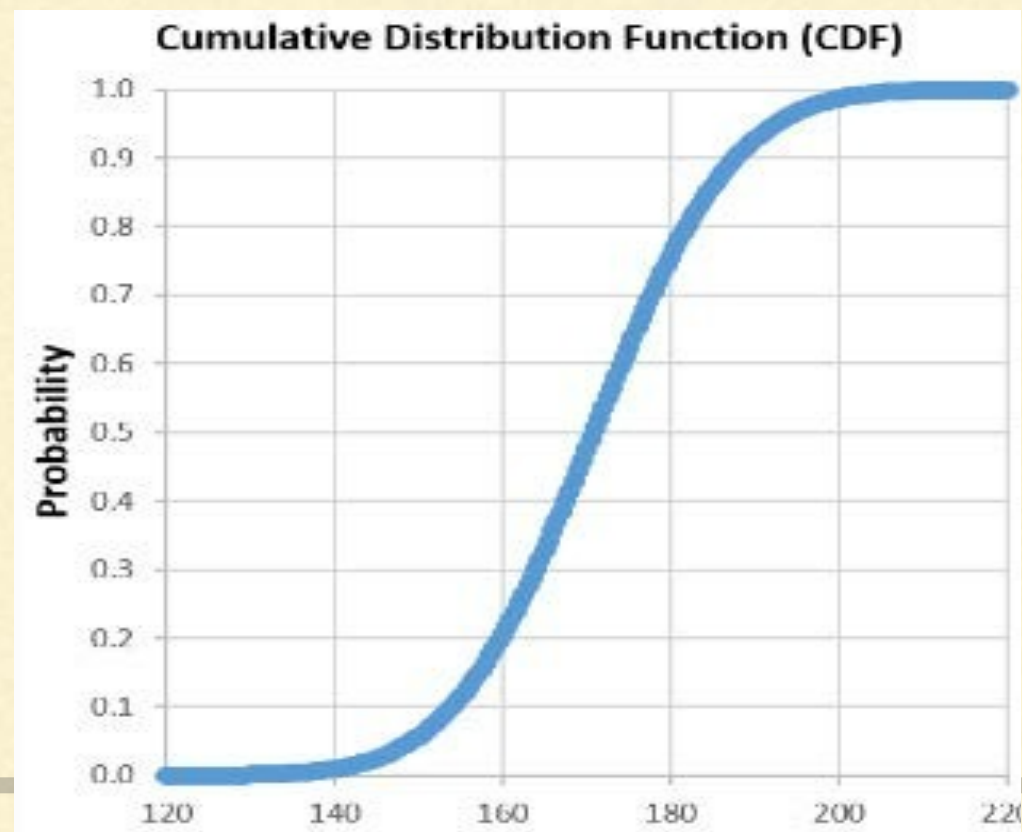
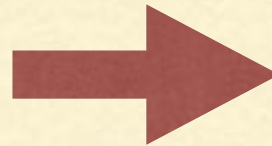

EXPERT ELICITATION

Expert Judgement

- Can play a key role in science and decision making, especially for hard-to-quantify problems
- Time-consuming if rigorous, not a substitute for collecting data
- Bayesian Priors 
- Model structure
- Scenario development
- Evaluating and weighting forecasts
- Utility and Risk

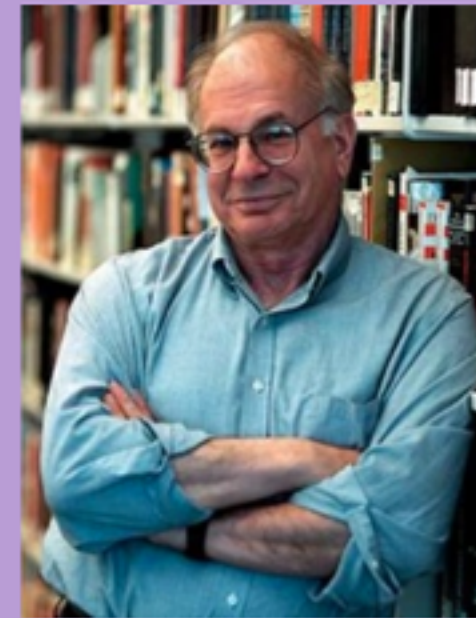


Expert Elicitation



Biases & Heuristics

- Humans are not innate statisticians
- Rely on mental short cuts (heuristics)
- Systematic patterns to error (biases)
- Challenge of elicitation is to ask experts questions in a way that produces unbiased answers



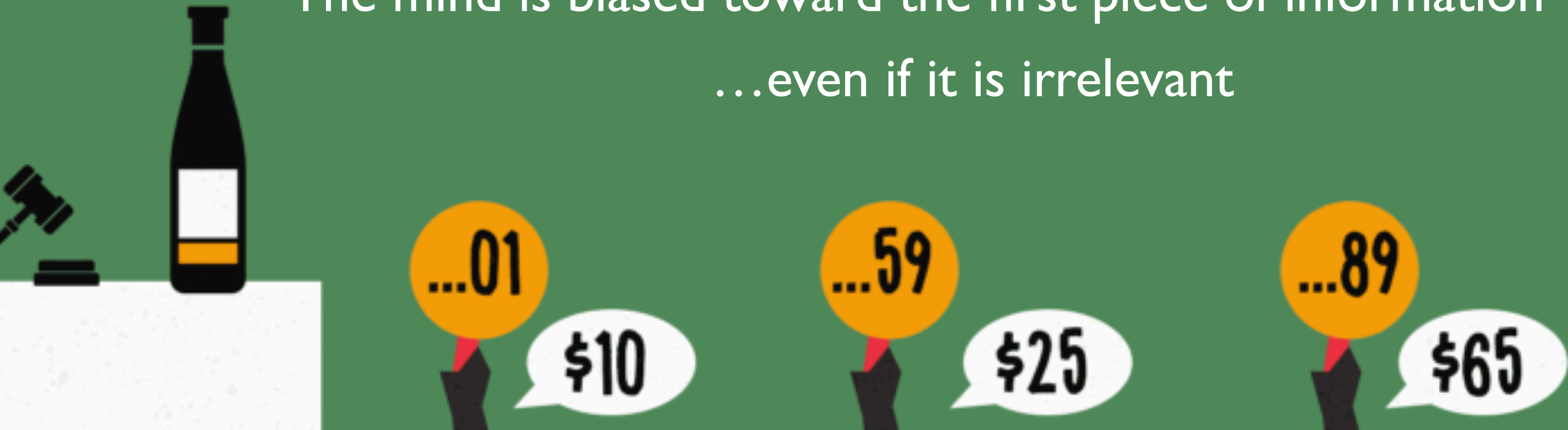
**Daniel
Kahneman**



**Amos
Tversky**

Anchoring

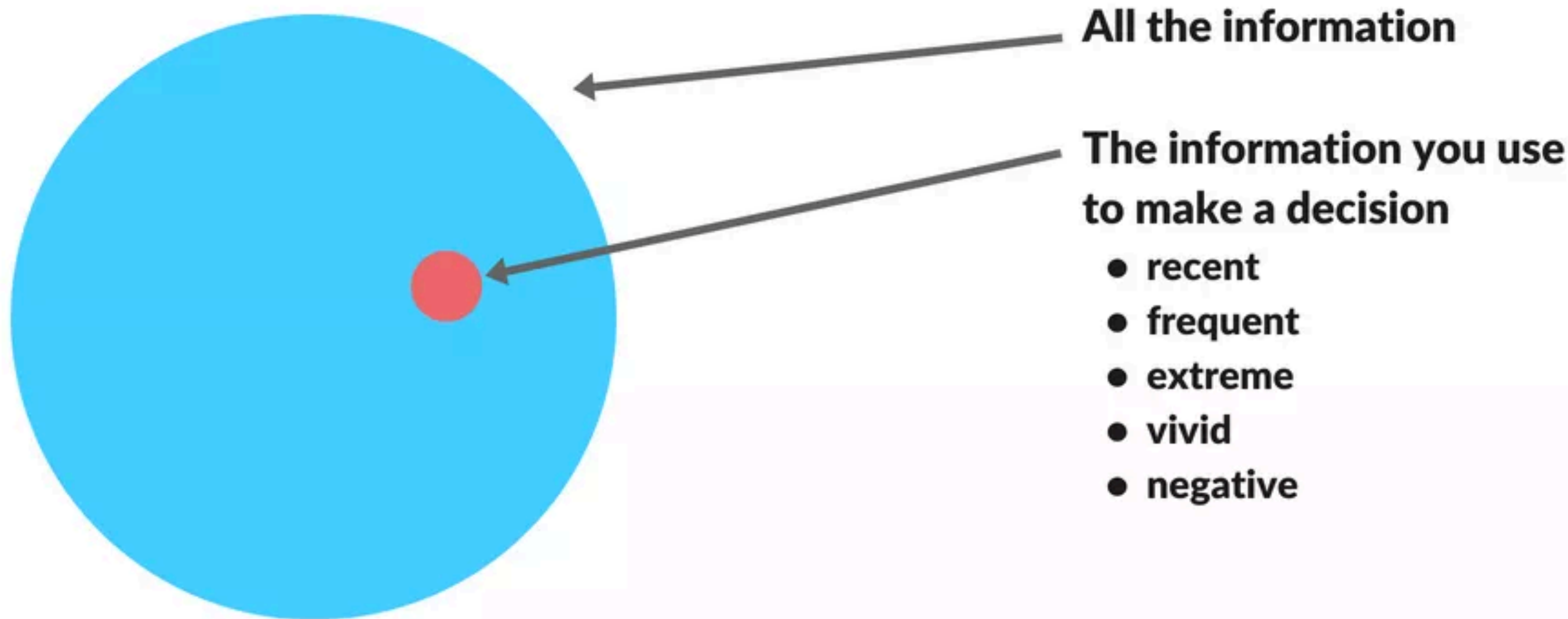
The mind is biased toward the first piece of information
...even if it is irrelevant



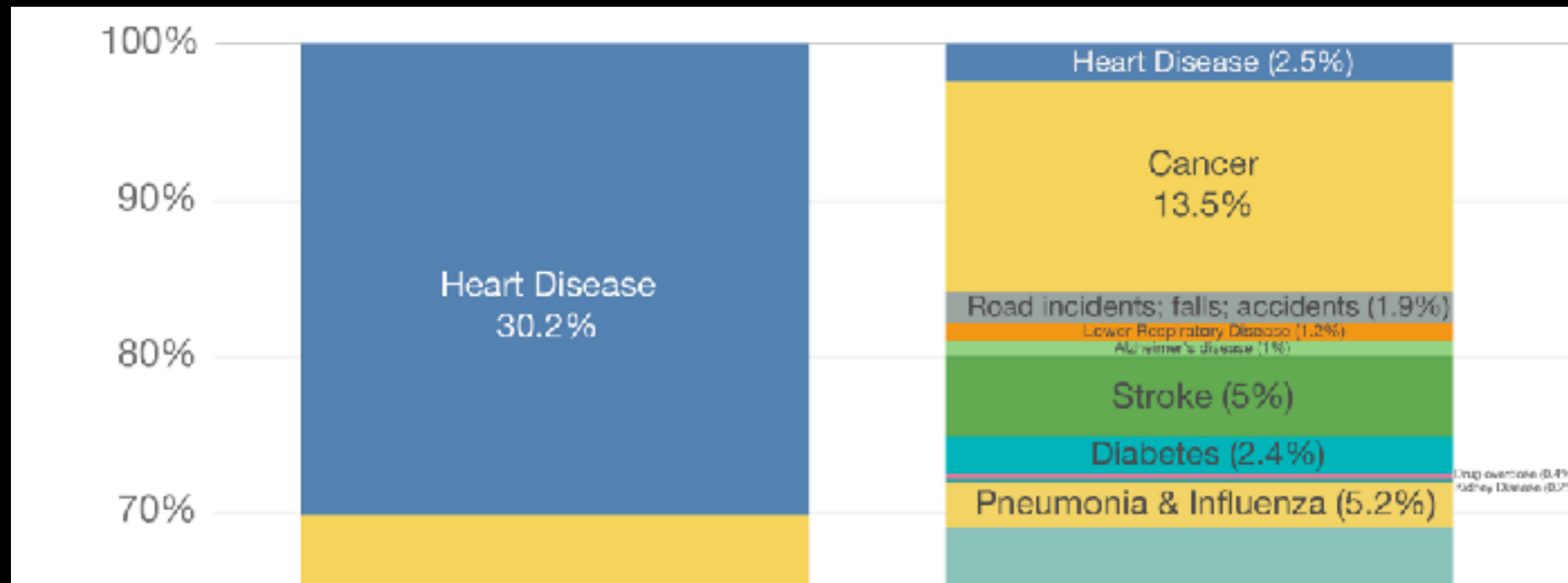
Don't start with
the mean / default

last 2 digits of gov identity number predicts bid on wine

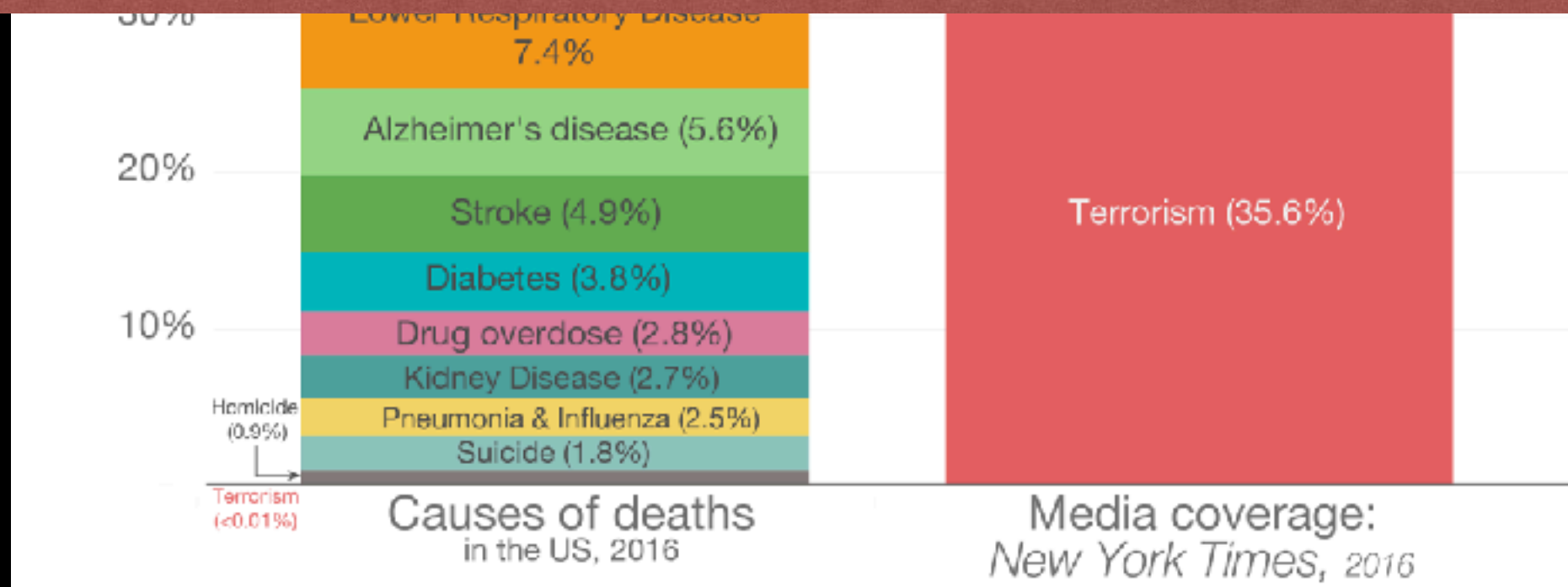
The availability heuristic



Substitutes ease of recall for frequency



Help expert consider additional evidence



THE CONFIRMATION BIAS

Help expert consider
disconfirming evidence

UNDervalUED

OVERVALUED

FOOLISH

Longest possible time?



Imagine a time 10% longer,
can you offer an explanation?



