Trust in Signals and the Origins of Disagreement

Ing-Haw Cheng and Alice Hsiaw

Discussion by Savitar Sundaresan
Imperial College

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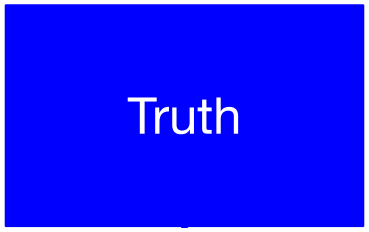
Big Picture

- Question: Why do agents interpret the same information differently?
- Theoretical Innovation: 'Pre-screening'
  - Agents assess source-credibility first.
  - Only update beliefs afterwards.
- Findings: Sensitivity to data depending on order
  - Can generate excessive speculative trade, bubbles and crashes

Outline

1. Visualization of mechanism
2. Comparison to two other mechanisms in the literature
3. A discussion of applicability

Bayesian Story



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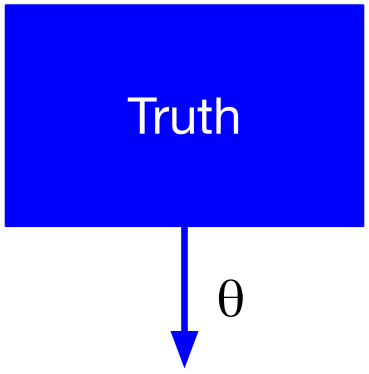

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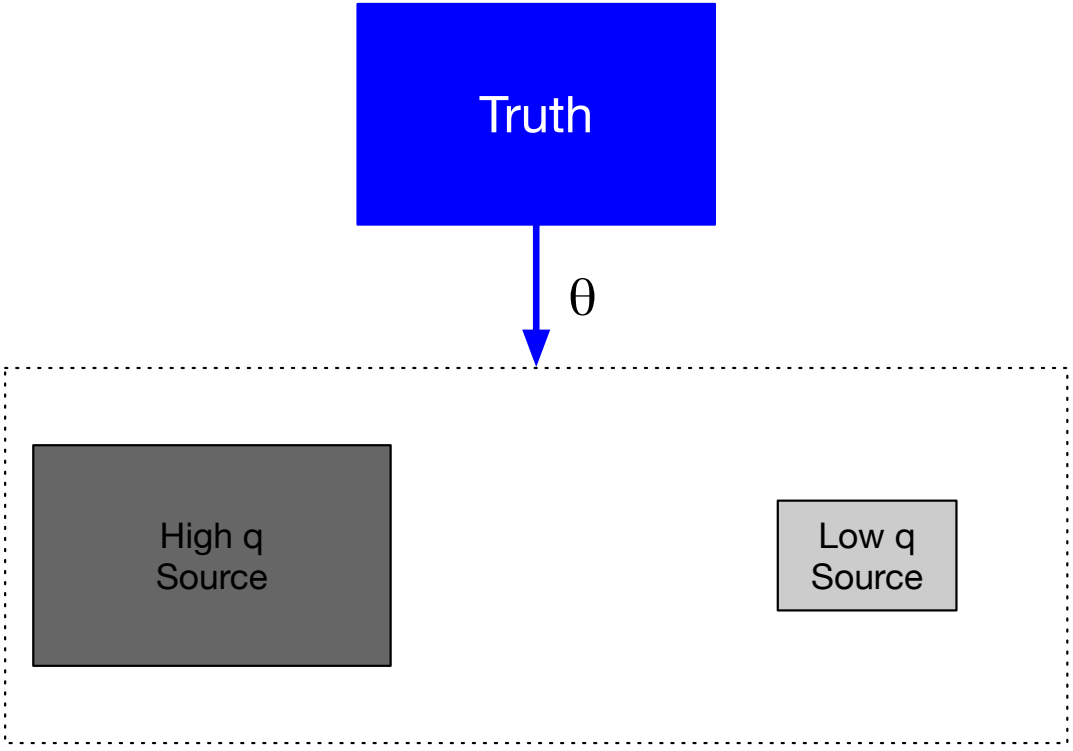

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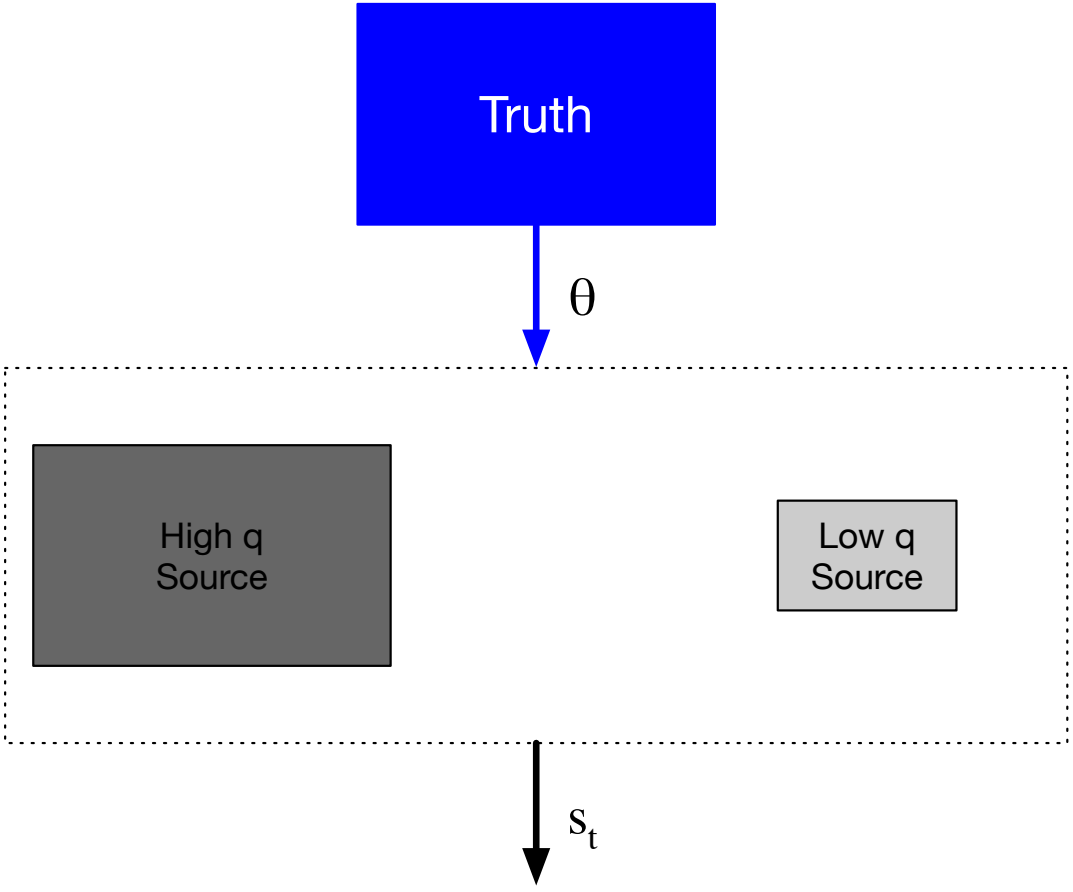

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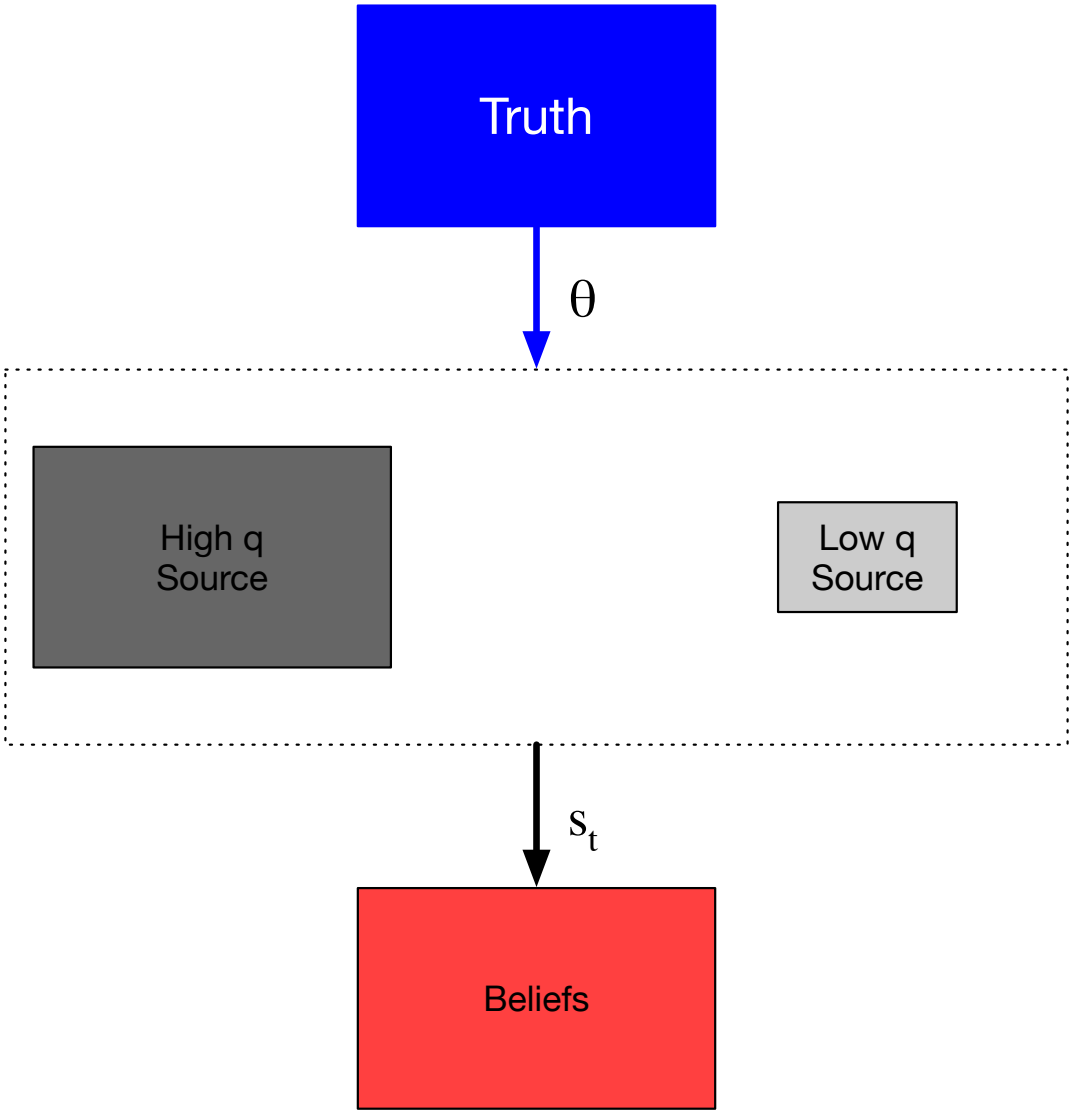

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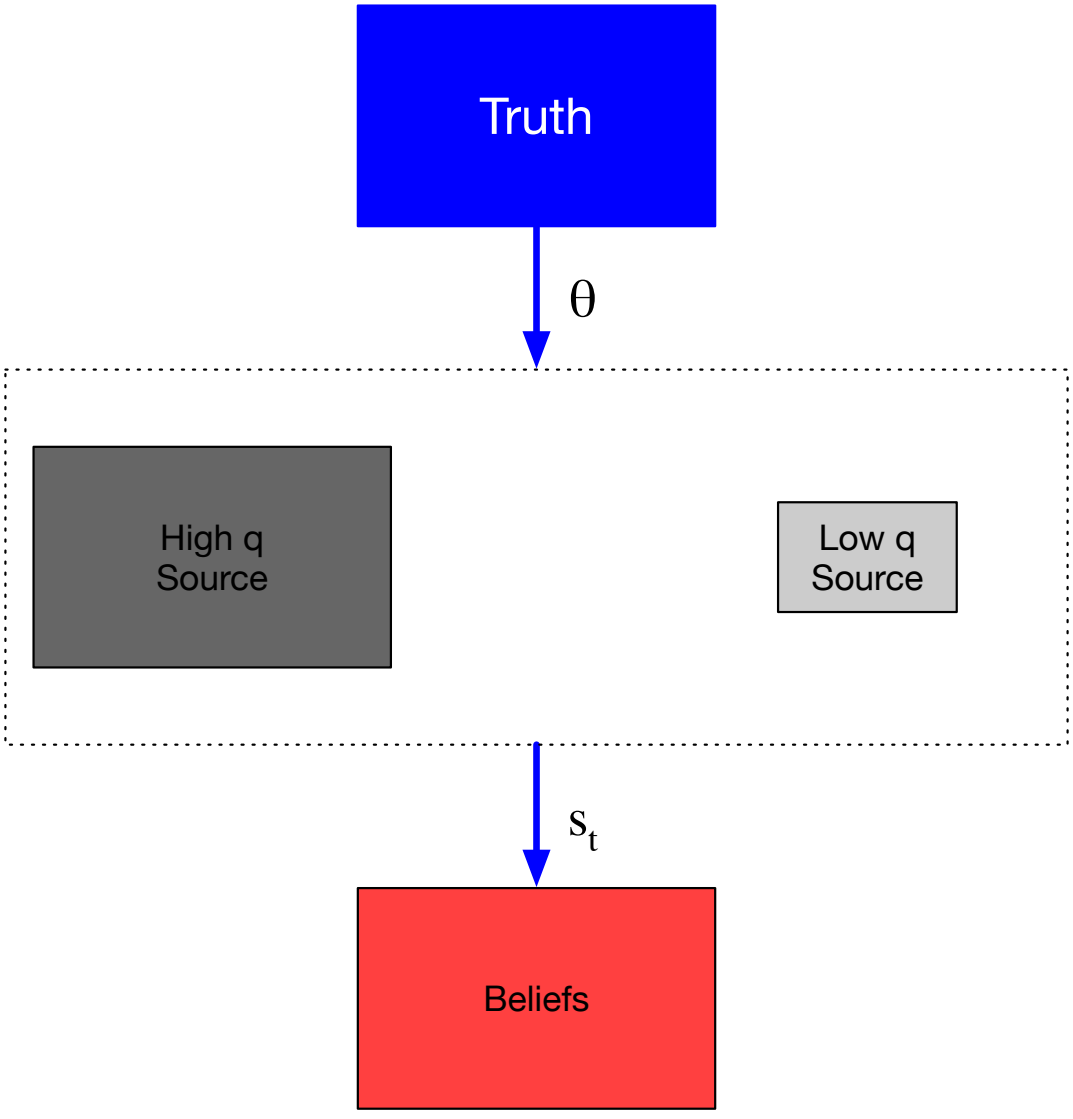

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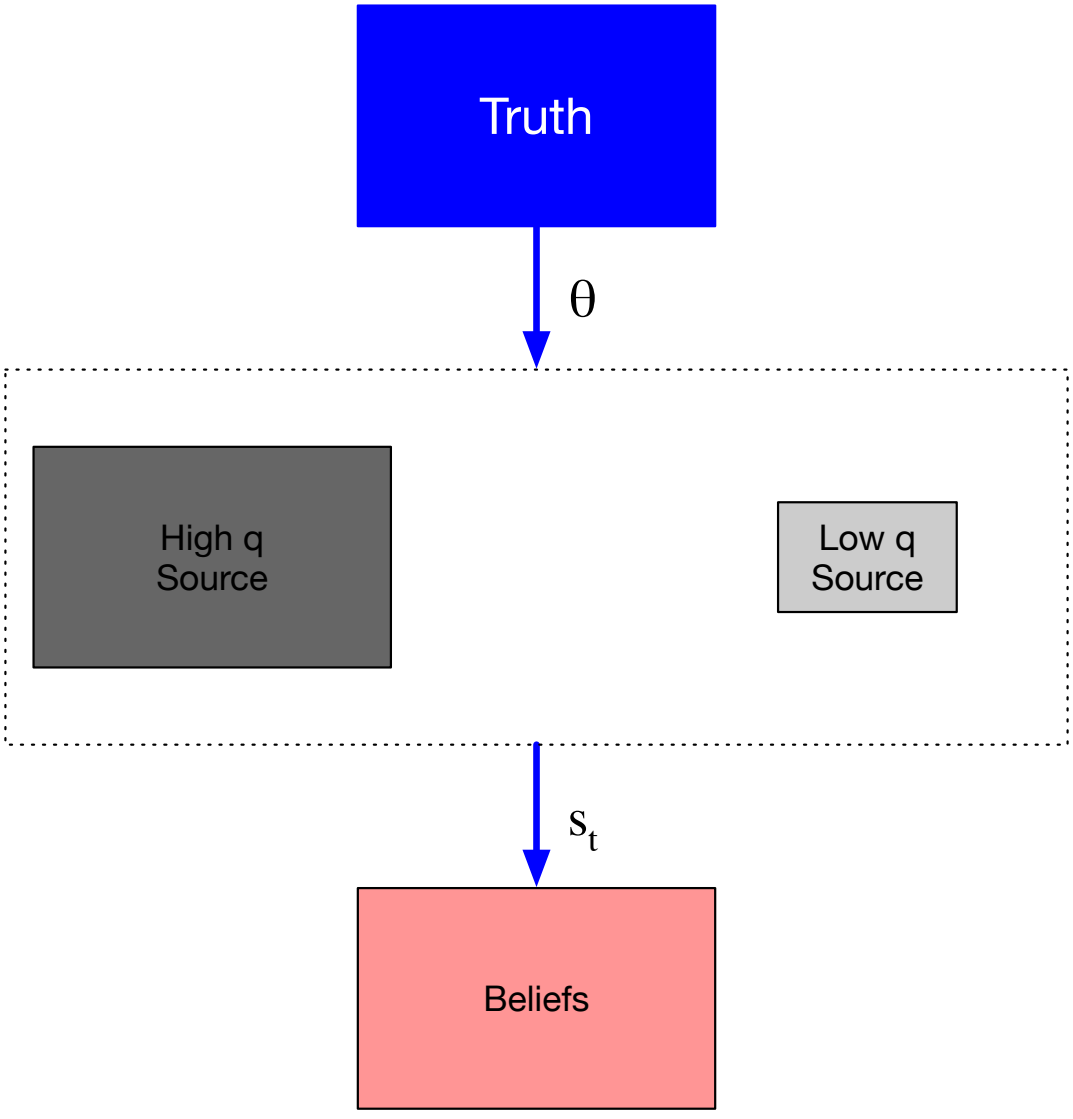

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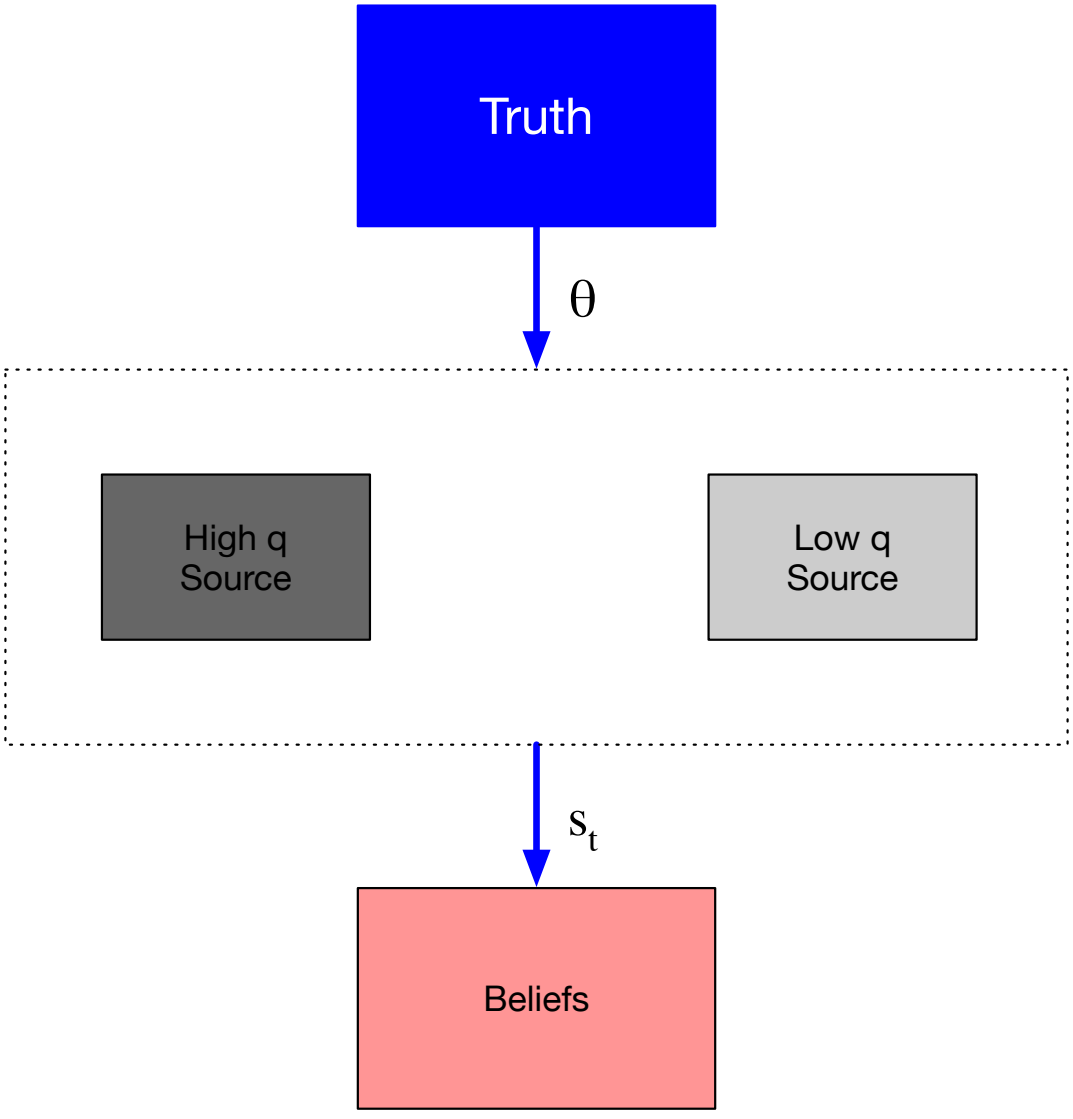

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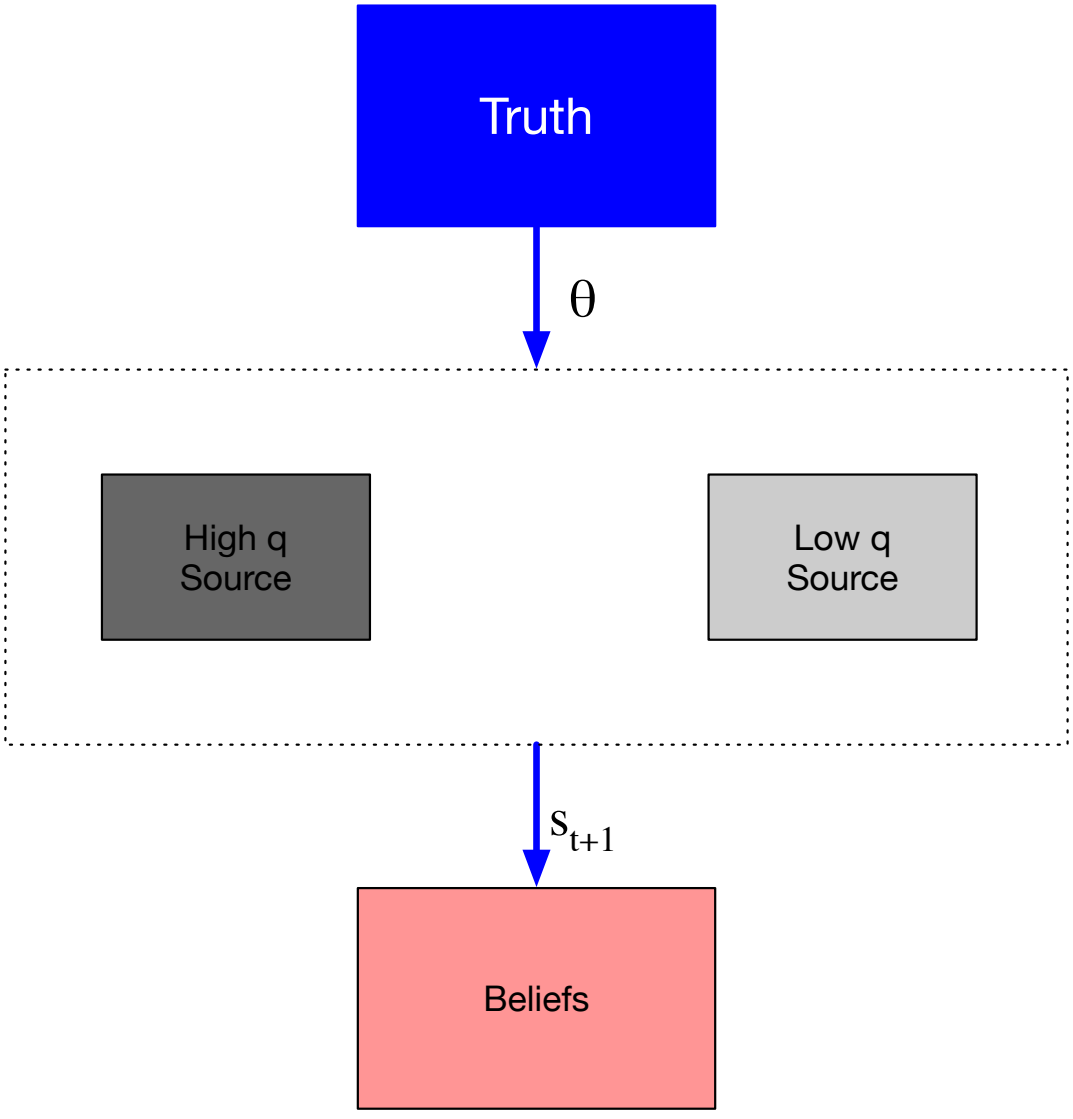

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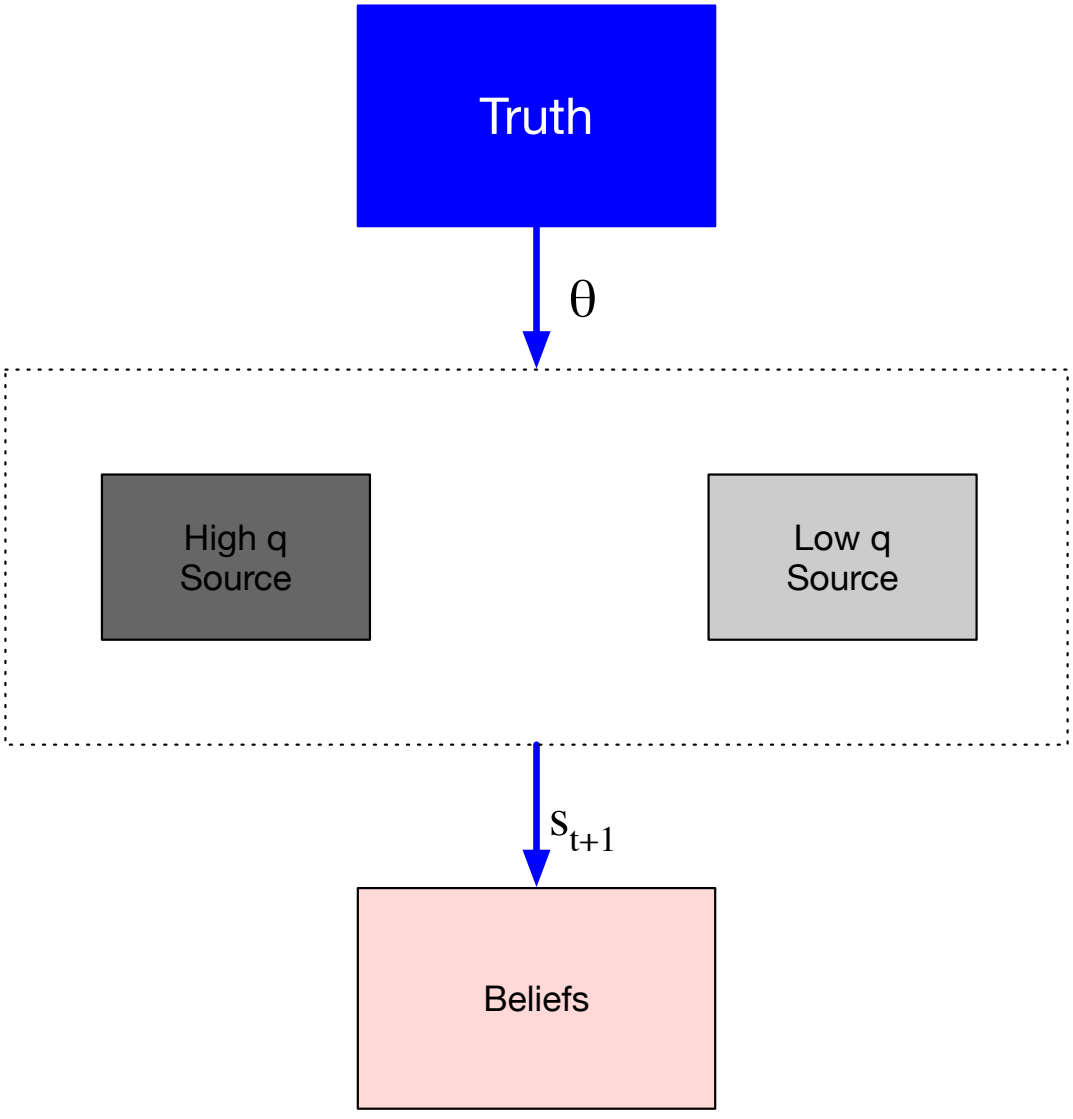

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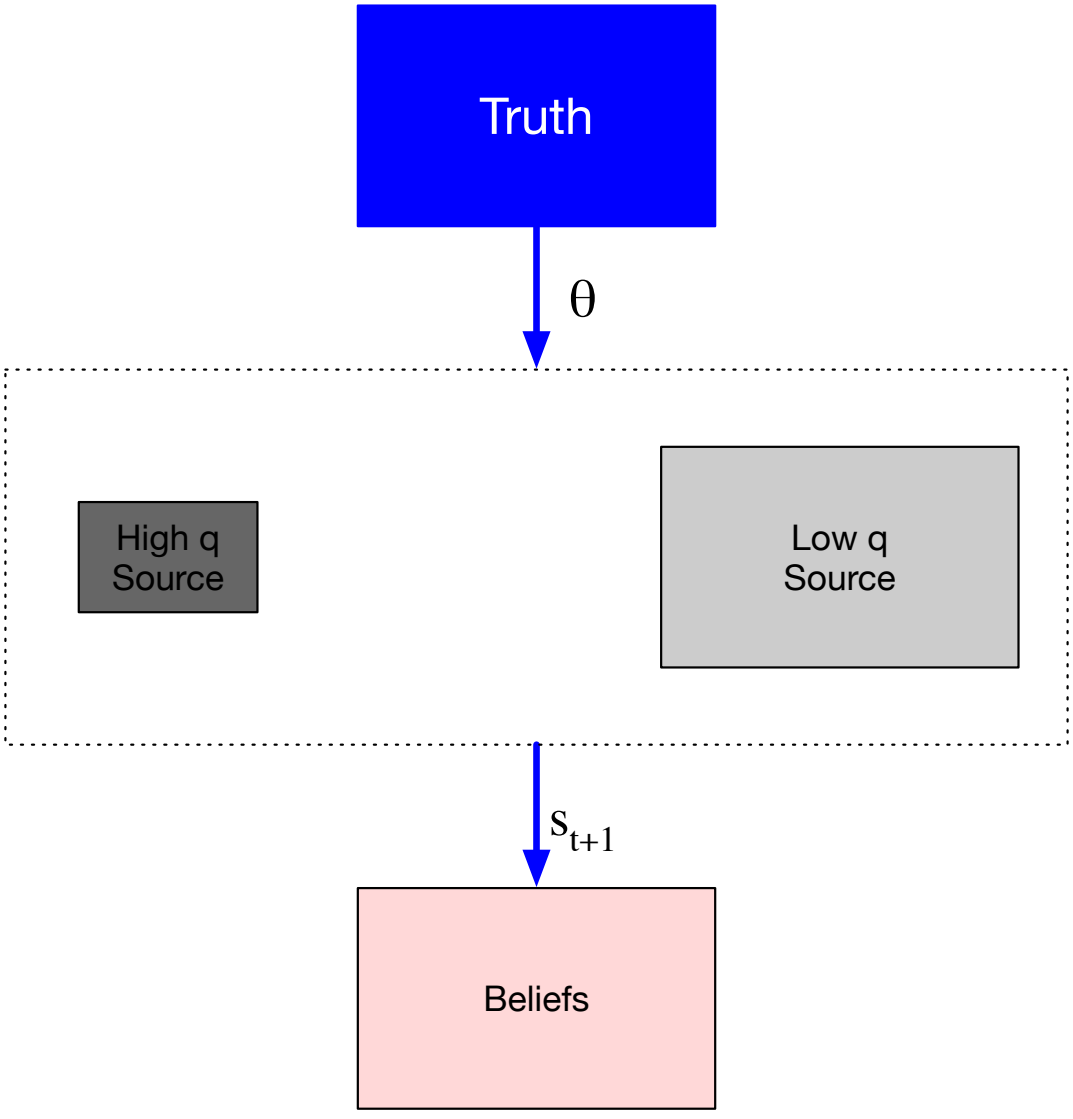
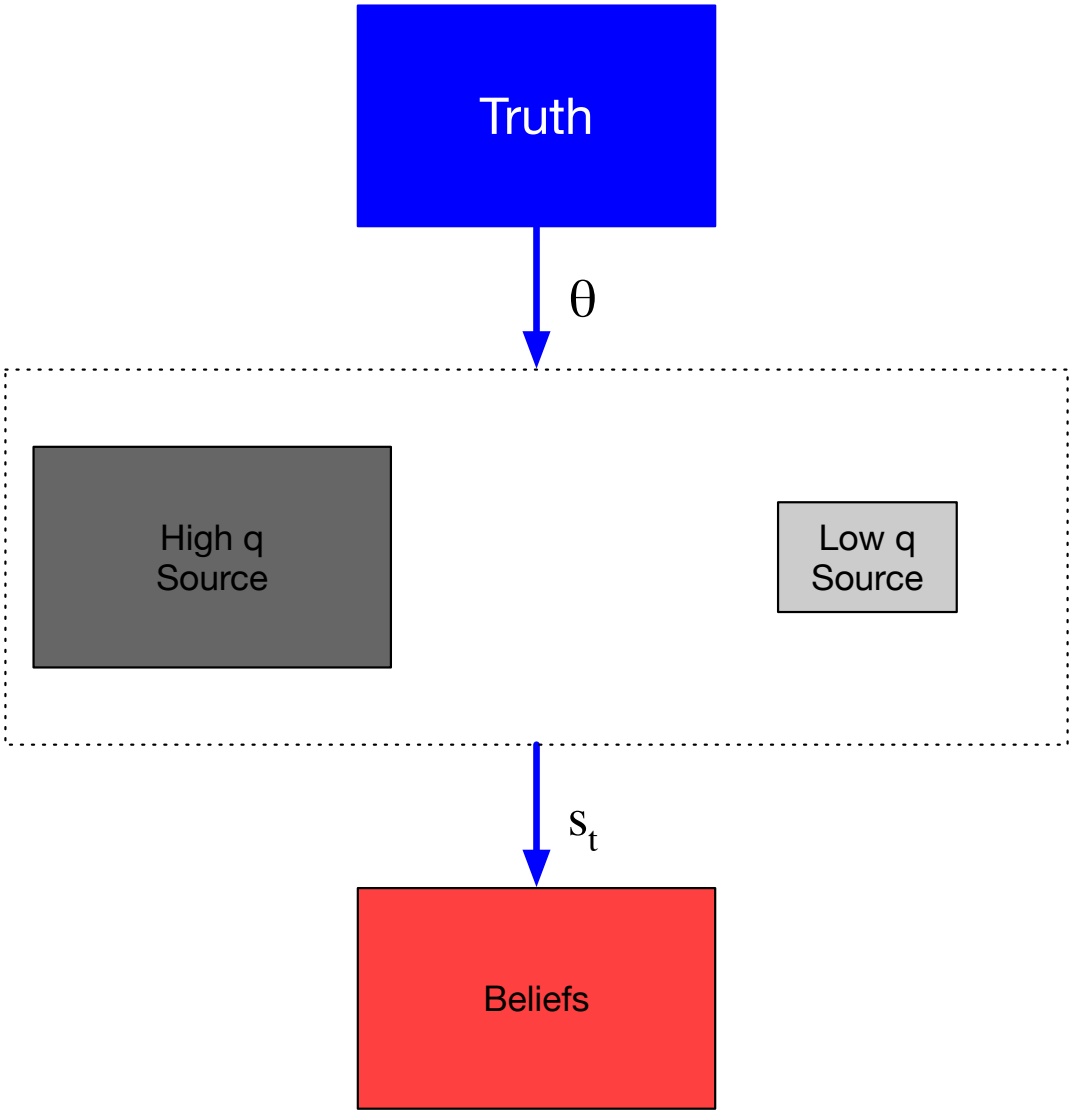


Pre-Screener Story



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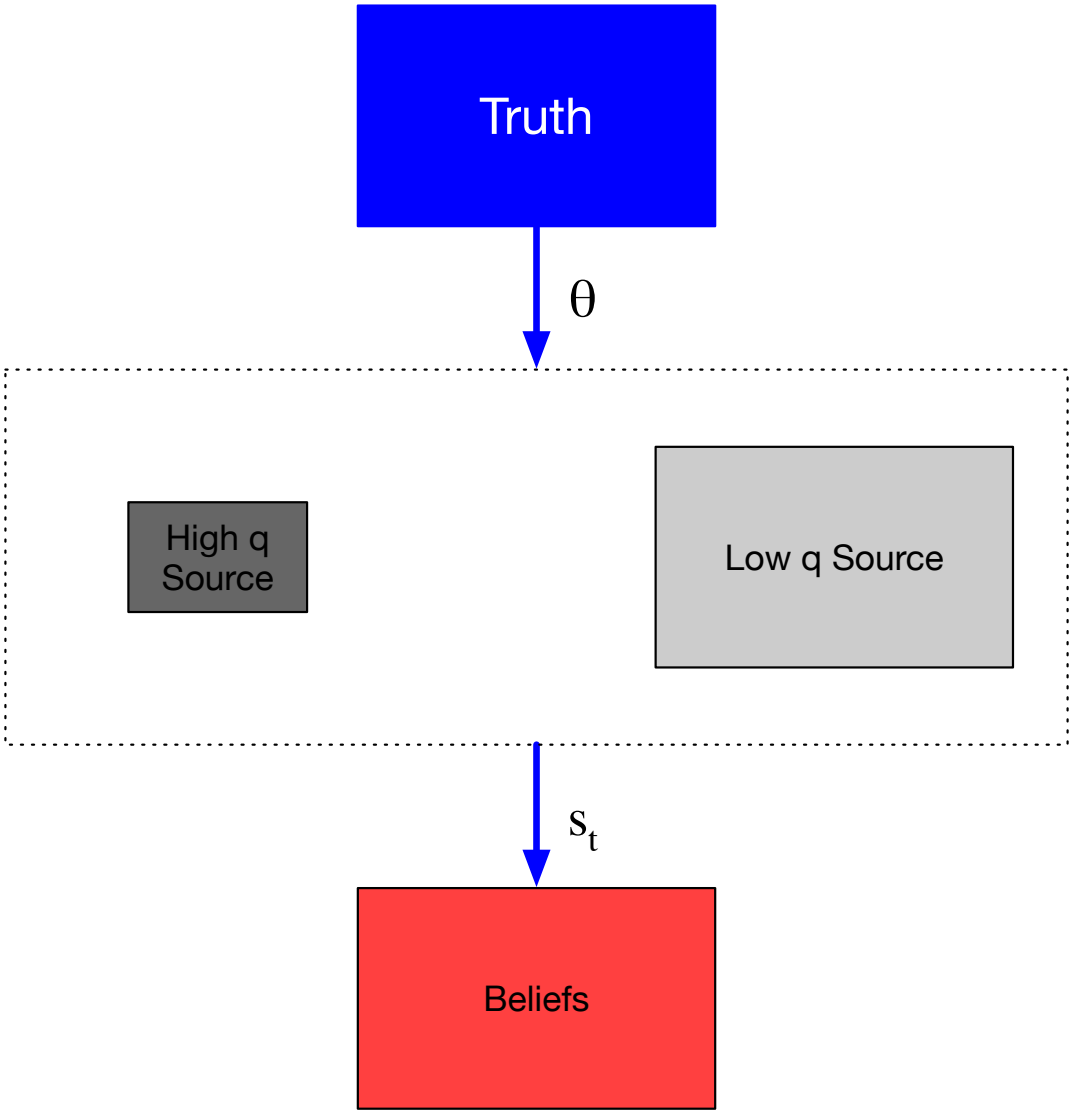

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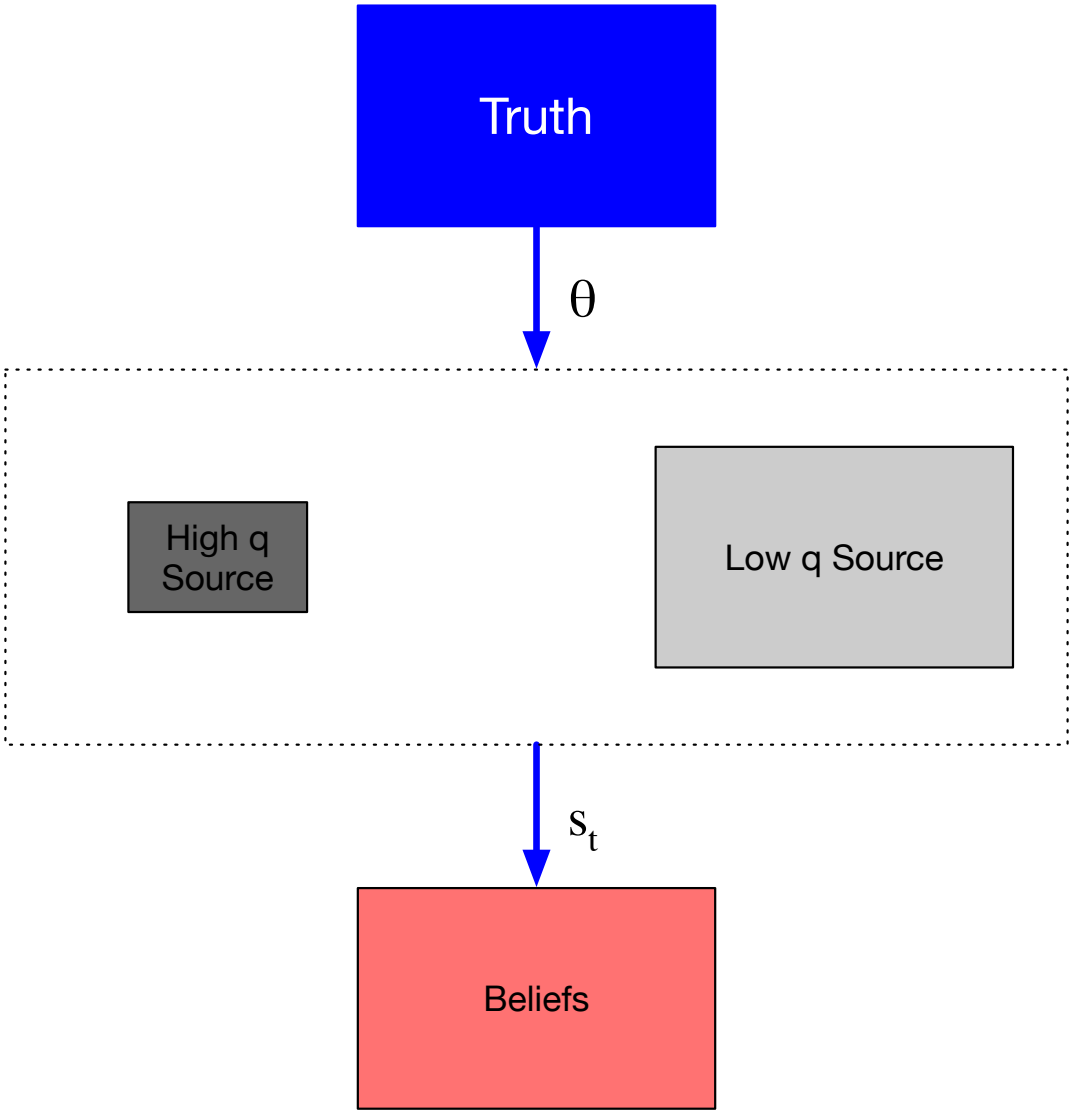

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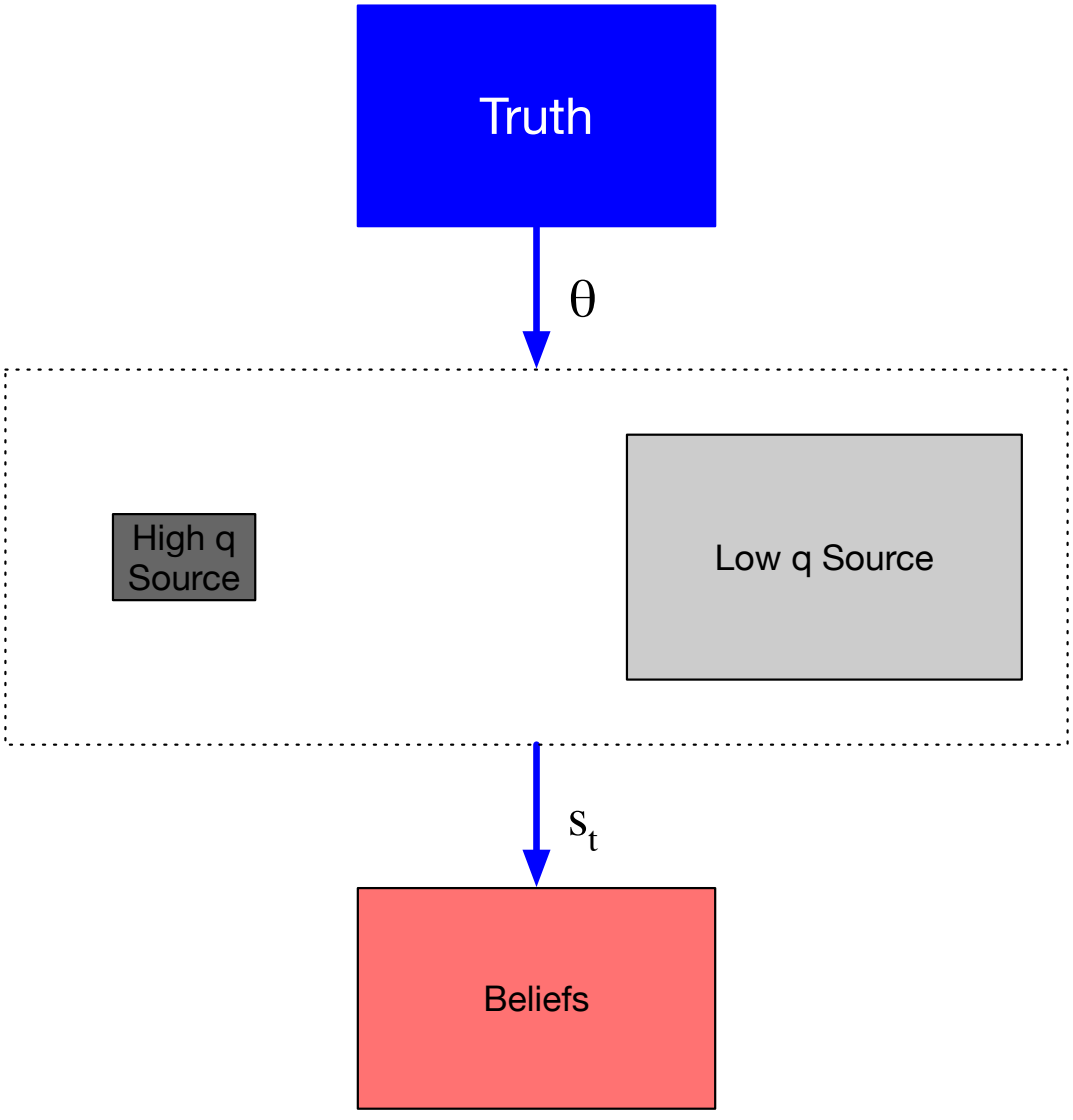

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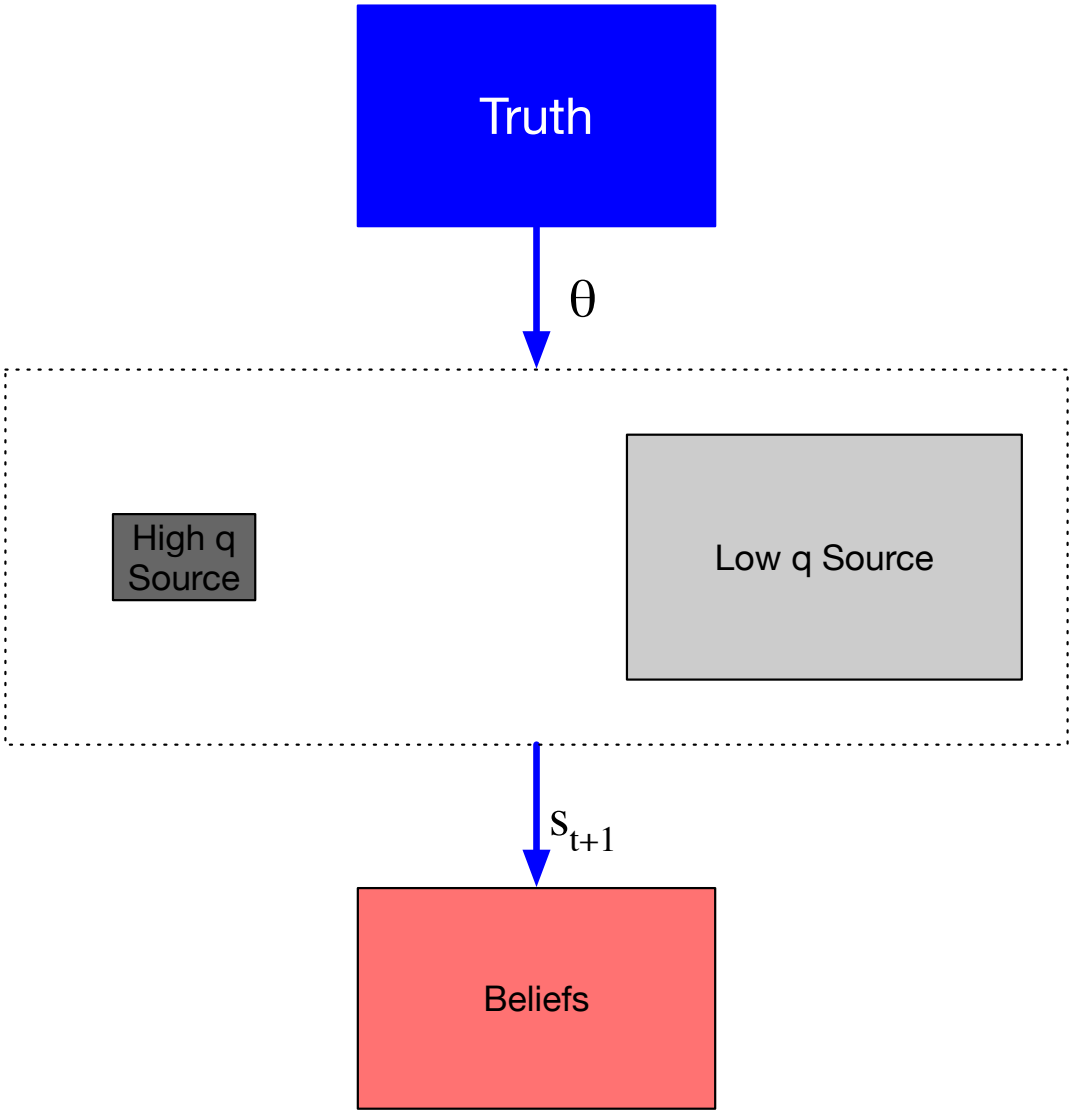

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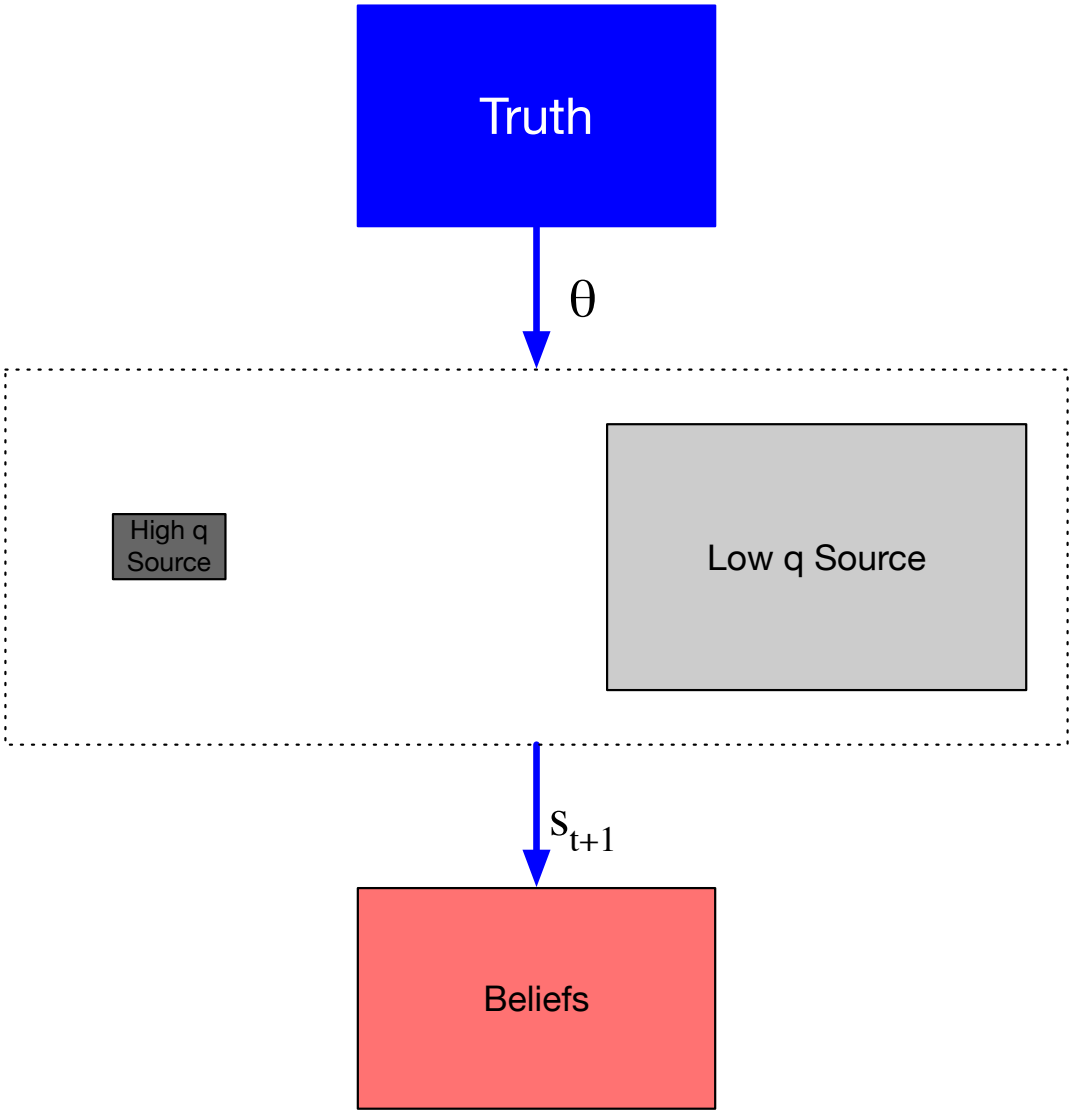

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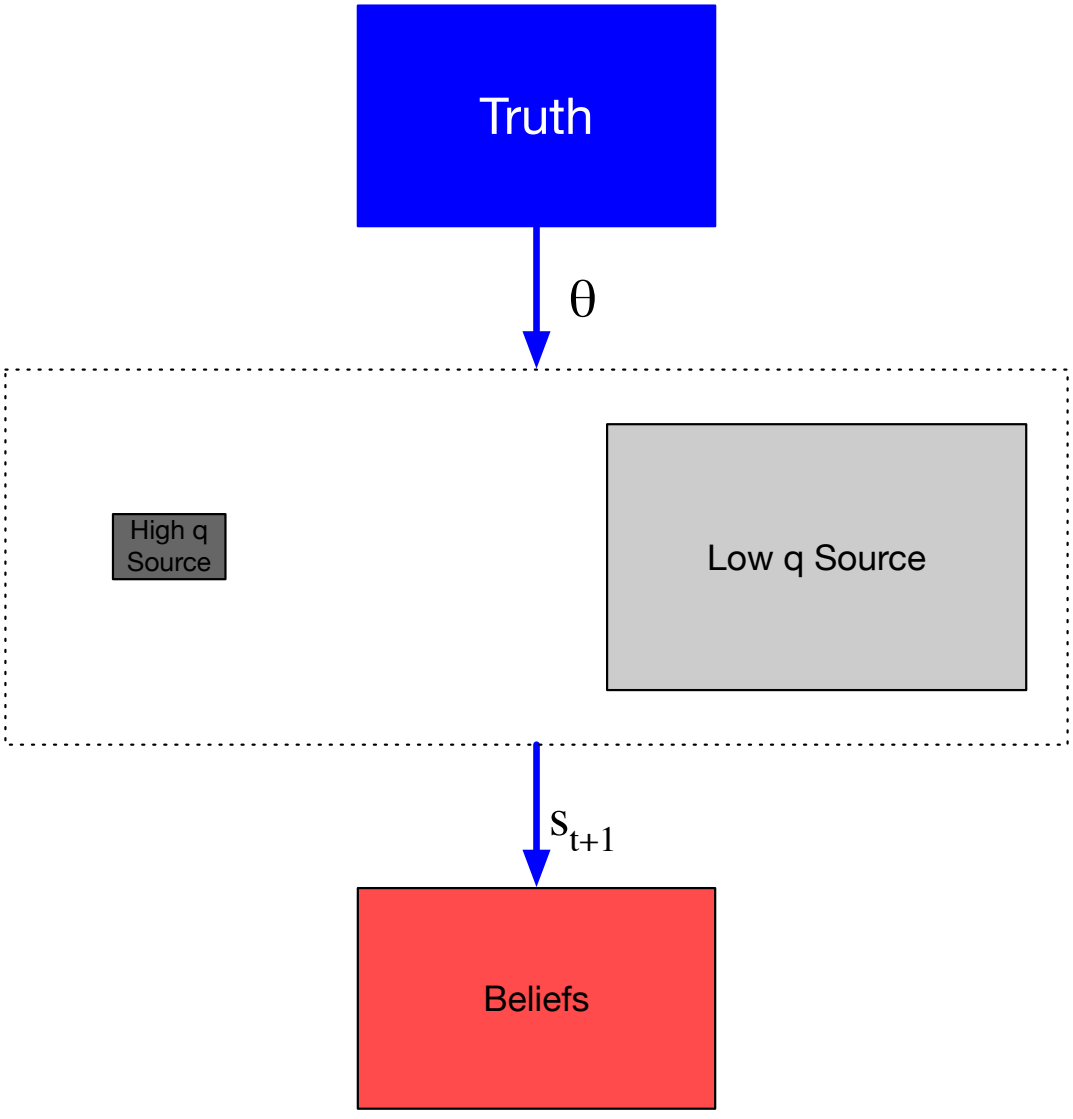

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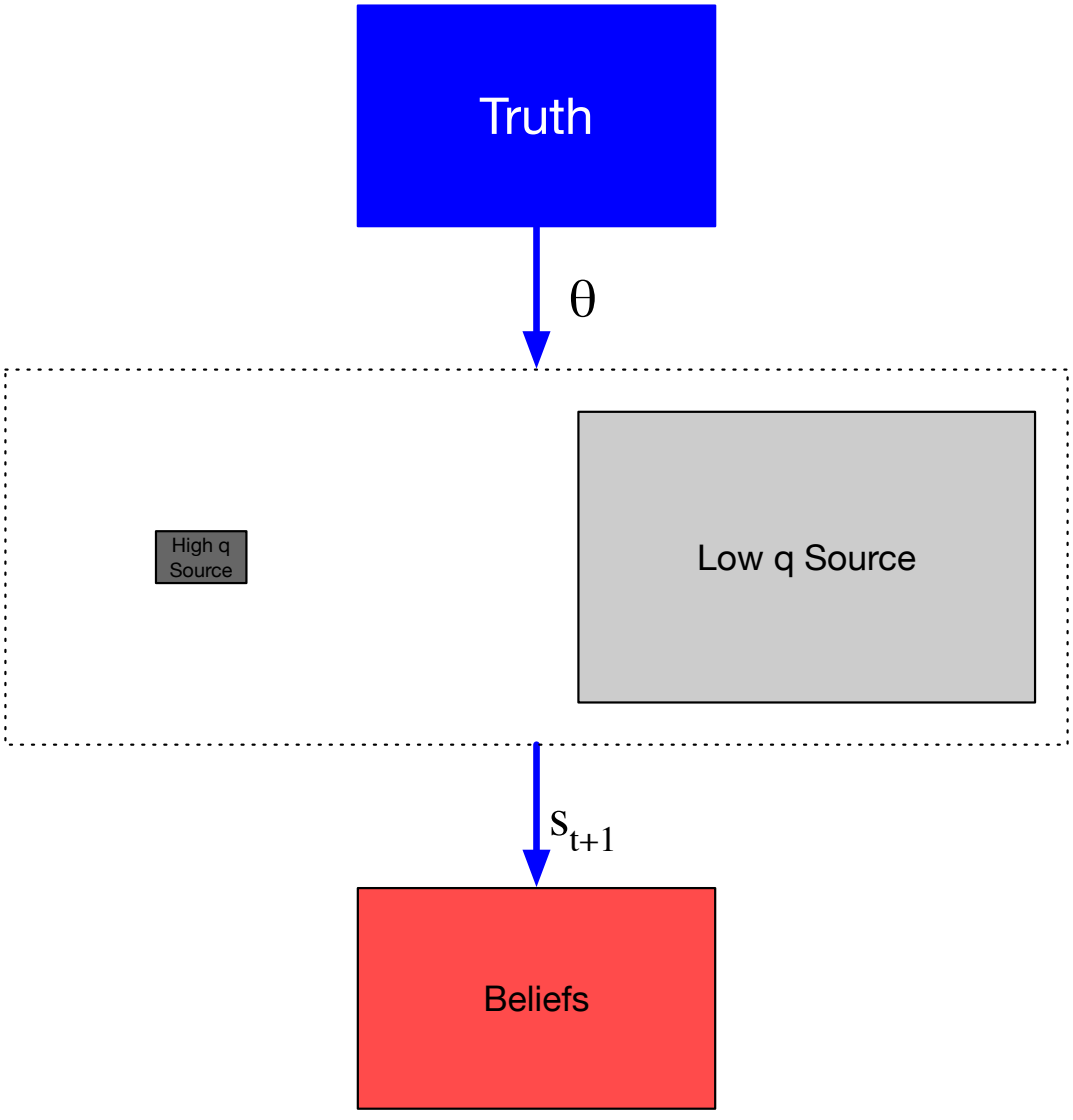

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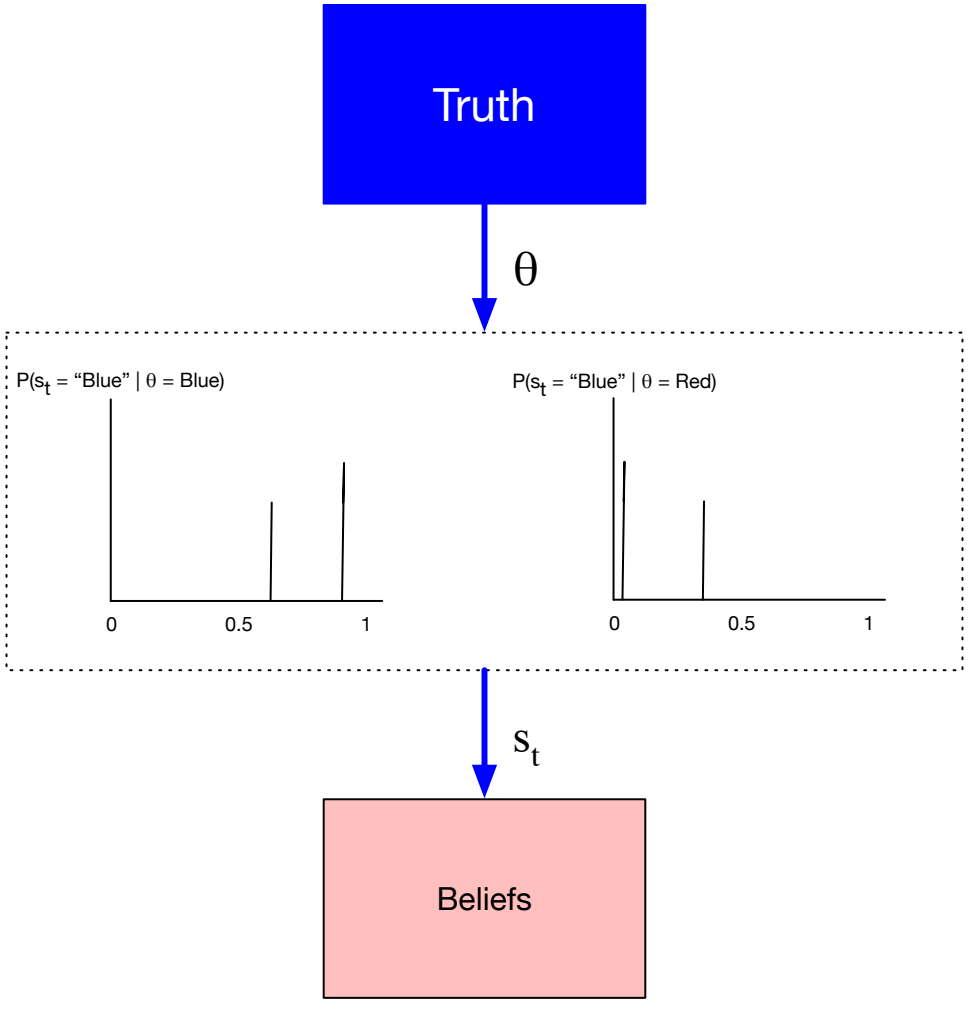
- If identical ex-ante beliefs, need different signal orders.

Alternative 1: The Fragility of Asymptotic Agreement



This paper

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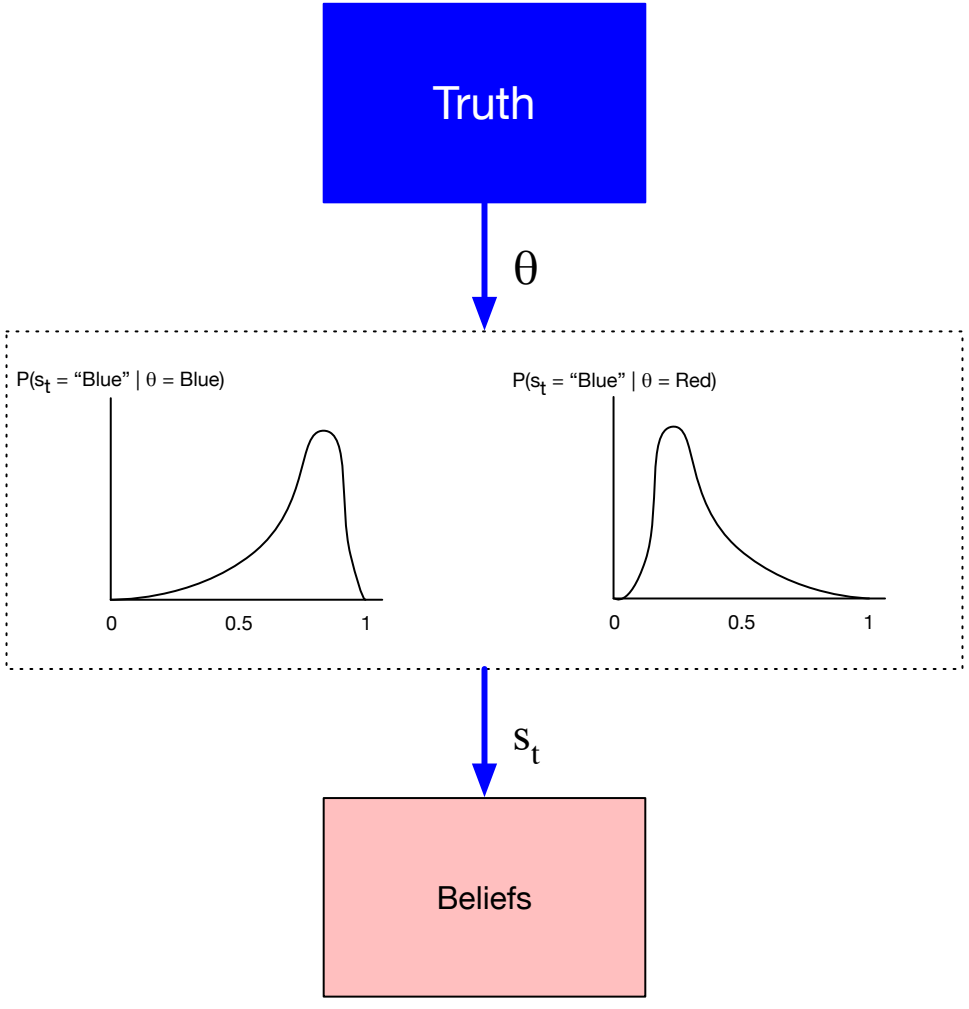
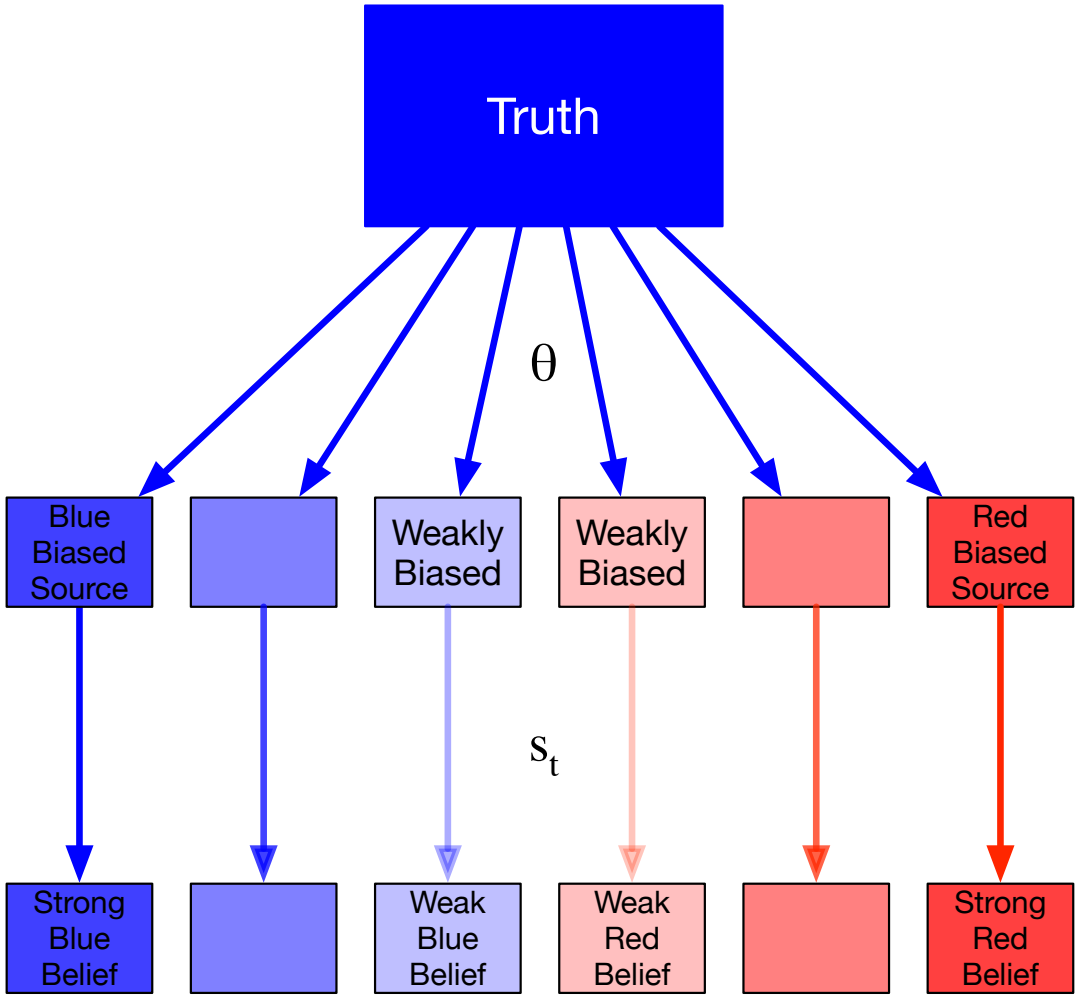


Acemoglu, Chernozhukov, and Yildiz (2016)

Alternative 2: Inattention

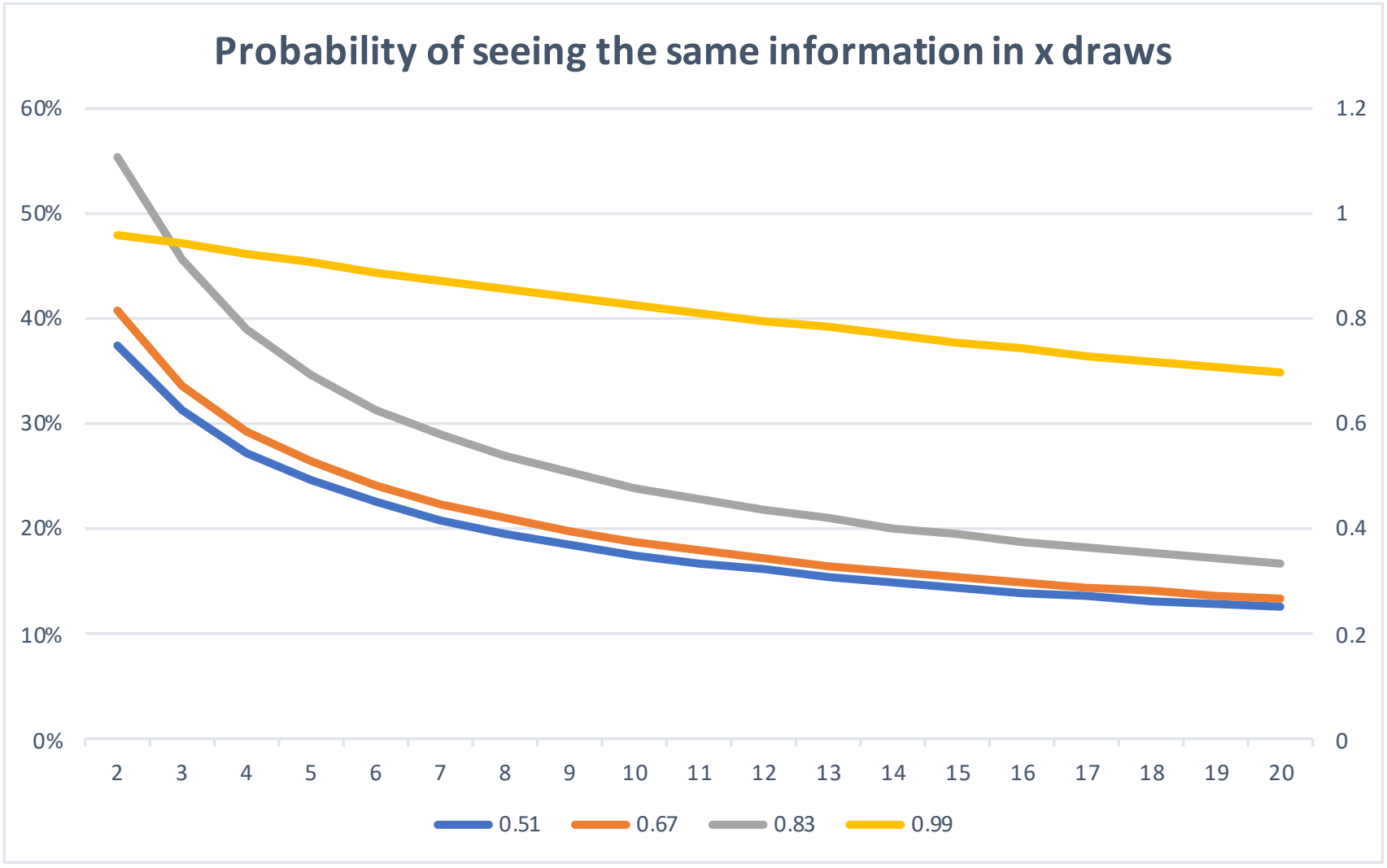


Nimark and Sundaresan (2018)

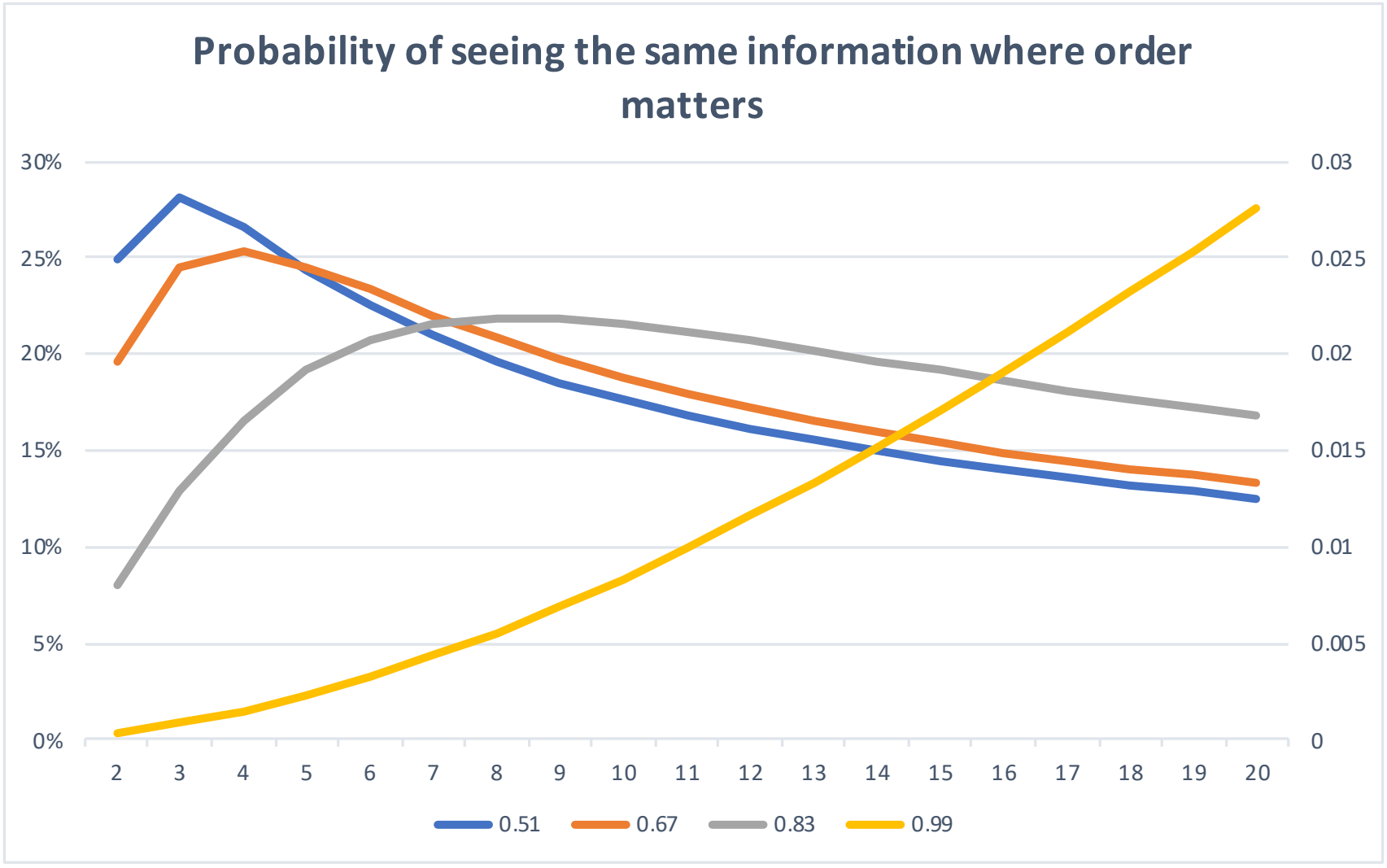
Comments

- Need ex-ante identical agents
- Need two different sources of identical quality
- Need agents to see same (but not infinite) signals
- Need them to see signals in different order
- Need them to not learn from each other
- So when do results actually hold?

Comments


Probability of seeing the same information in x draws
60%
50%
40%
30%
20%
10%
0%
1.2
1
0.8
0.6
0.4
0.2
0
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
0.51
0.67
0.83
0.99

Comments


Probability of seeing the same information where order matters
30%
25%
20%
15%
10%
5%
0%
0.03
0.025
0.02
0.015
0.01
0.005
0
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
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- But then $>50\%$ chance that Bayesians would disagree anyway!
- Optimal pre-screening conditions exist in limit.

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- But why bubbles?

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Chinco (2018)

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Behavioral Bias + Limits to Arbitrage = Equilibrium Pricing Error

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Chinco (2018)

Behavioral Bias + Limits to Arbitrage = Equilibrium Pricing Error

- Biases
  - overconfidence
  - sentiment
  - extrapolation
  - etc...
- Constraints
  - margin
  - short horizons
  - short sale constraints
  - etc...

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  - Correlation in beliefs about state and source
  - Maximal/minimal trust in source
  - Persistence and asymmetry
  - Disconfirming signals and asymmetry?

Minor comments

- Too many propositions!
- Not enough discussion about some of them.
- Too many anecdotes/examples/justifications
- Burn in period - why not just different priors
- Define measure of disagreement clearly - see Zanardo (2017)

Conclusion

- Interesting, and to my knowledge, novel theoretical mechanism!
- I think the non-comparison results are the most interesting!
- In need of the right motivating example.