# Discussion of "Bayesian Persuasion: Evidence from the Laboratory" by Quyen Nguyen

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## Setup

- (One of the) first experimental test(s) of Kamenica and Gentzkow's (2011) model of persuasion.
- Sender builds signal structure by (virtually) putting cards of various colours into envelopes of various colours. One of the filled envelopes is drawn at random.
  - State of the world = colour of card in drawn envelope
  - Signal = colour of envelope
  - Receiver's action = guess of colour of card
- Clever experimental procedure
  - Would results change if not computerized? (Probably hard to check...)

# Summary of Results (I)

- Receiver's guess is optimal >90% of the time.
  - $\bullet$  If "red" and "blue" are equally likely, receiver guesses "red"  ${\sim}60\%$  of the time.
  - Difference from 100% important given discrete setting.
  - Consistent with other experiments with indifference?
- In pilot run (all sender strategies allowed, no feedback), sender's strategy is consistent with theory only  $\sim \! 1/3$  of the time, and shows little improvement over time.

# Summary of Results (II)

- In main run (4 sender strategies available, feedback), sender's strategy is initially optimal  $\sim 1/3$  of the time, but this increases to nearly 2/3 by rounds 60-80.
  - $\bullet \ \sim \! 1/2$  of subjects converge to optimal strategy,  $\sim \! 1/4$  to another,  $\sim \! 1/4$  don't converge
- Results conform to expectations (where they weren't diffuse).
  - Given that receivers mostly act according to theory, it might be interesting to verify that senders' behaviour doesn't change much when receivers are automated. (If it does, then something weird/interesting might be going on.)

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  - Not likely for Strategy 1 (all cards in red envelopes), but possible for Strategies 3 and 4
- Did many senders converge to optimal strategy despite experimenting with other strategies and being initially unlucky with the optimal strategy?
- For senders that didn't converge, did their frequency of playing each strategy depend on their experience?

#### Minor Comments

- Did it matter that card and envelope colours were the same?
- Paper mentions that some receivers may have tried to punish senders that chose less informative strategies. Might be interesting to explore further.
- In the write-up, I would have preferred to have strategies ordered by the sender's theoretical expected payoff (assuming that the receiver guesses "red" just over 50% of the time when it's 50/50).

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- Thank you!