

White Lie

馬健原 Jeffrey Ma, 林鈞樂 Jules Linden

Agenda

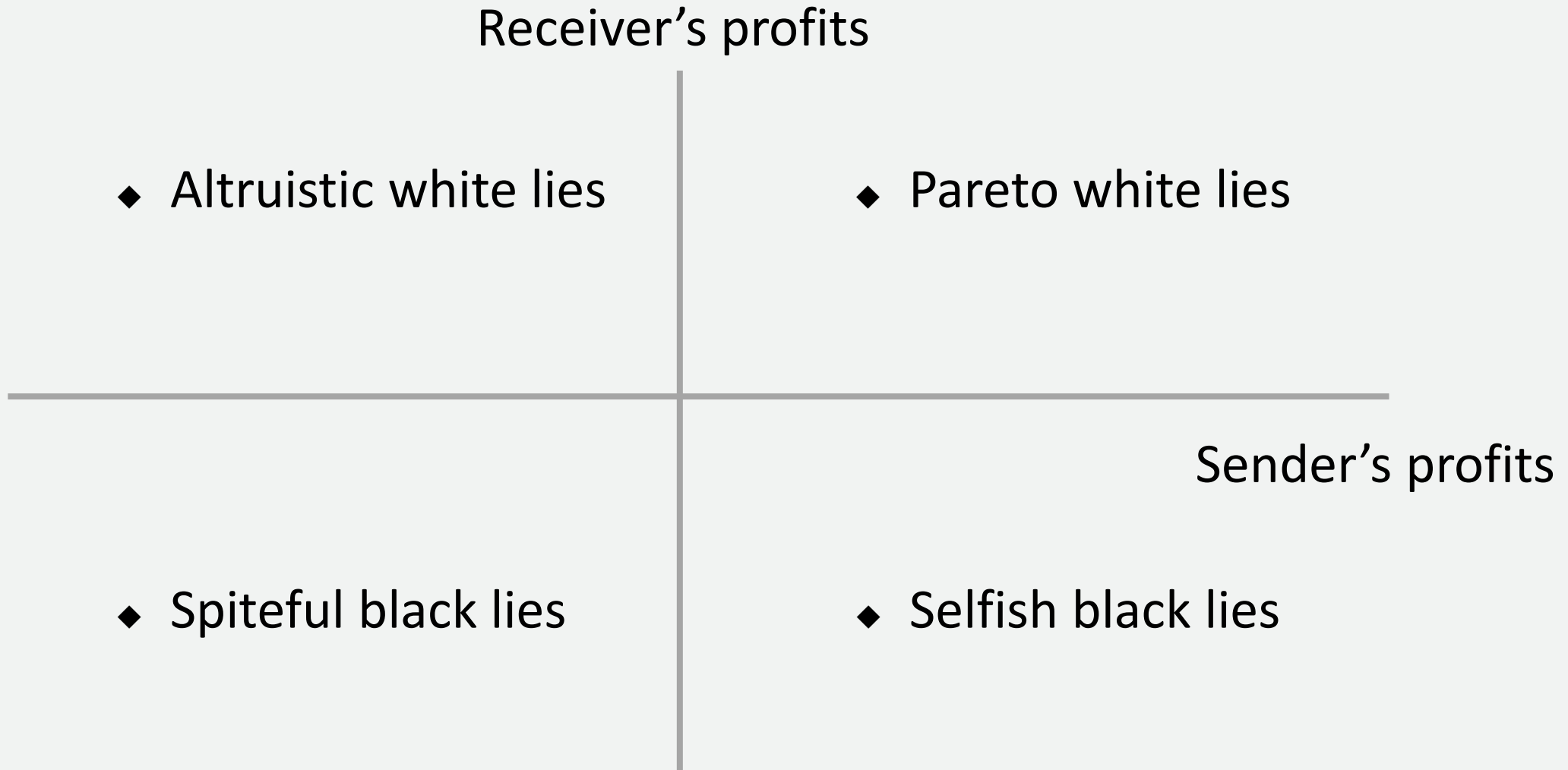
- The introduction of lies
- Experiment 1: design & outcome
- Experiment 2: design & outcome
- Conclusion

The introduction of lies

Why people choose to lie is important.

- Black lies: selfish ones, involving acts that help the liar at the expense of another.
- White lies: the liar intends to improve another's benefit

The introduction of lies



The introduction of lies

Utilitarian (useful lies) vs. Moral concern

Pareto white lie: Check if someone is lie aversion

Agenda

- The introduction of lies
- Experiment 1: design & outcome
- Experiment 2: design & outcome
- Conclusion

Experiment 1: Design

- Two players: Sender and Receiver
- Sender knows about the real point of the dice, and he has to send the message $\{1 \sim 6\}$ to the receiver.



Experiment 1: Design

- Receiver then report the message. If it is right, both sender and receiver get 20 as reward
- If wrong, there are several different treatments



Experiment 1: Design

Treatment	Right	Wrong
T[-1,10]	(20,20)	(19,30)
T[1,10]	(20,20)	(21,30)
T[10,10]	(20,20)	(30,30)
T[1,-5]	(20,20)	(21,15)
T[10,0]	(20,20)	(30,20)

Experiment 1: Outcome

Treatment	Fractions of lies
T[-1,10]	33/101 (33%)
T[1,10]	49/101 (49%)
T[10,10]	66/102 (65%)
T[1,-5]	38/104 (37%)
T[10,0]	57/109 (52%)

Experiment 1: Outcome

- In altruistic white lies treatment $[-1,10]$, 33% of sender choose to lie

→ The phenomenon of social preference

Experiment 1: Outcome

- In Pareto improvement treatment [10,10], 65% of sender choose to lie
→ Lie aversion effect
- But in another treatment [1,10], the percentage of lying decrease to 49%
→ People care about their own incentives

Experiment 1: Outcome

Other interesting compare:

[1,10](49%) vs. [1,-5](37%)

[10,10](65%) vs. [10,0](52%)

→ Both demonstrate social preference effect

Experiment 1: Outcome



Gender Differences:

1. In the T[1,-5] treatment, men tells more lies than women
2. Women are more likely to tell an altruistic white lie than men
3. Women are less likely to tell a Pareto white lie than men

Agenda

- The introduction of lies
- Experiment 1: design & outcome
- Experiment 2: design & outcome
- Conclusion

Experiment 2: design & outcome

- Within-subject design:
 - One Subject
 - Multiple sets of payoffs and decisions
- Risk: Experimenter demand

Experiment 2: design & outcome

Table 5 Payoffs (in \$) in the Within-Subject Design

Payment possibility	A	B
1. $(T[-1, 10])$	(20, 20)	(19, 30)
2. $(T[1, 10])$	(20, 20)	(21, 30)
3. $(T[10, 10])$	(20, 20)	(30, 30)
4. $(T[1, -5])$	(20, 20)	(21, 15)

Experiment 2: design & outcome

- Result 1: willing to tell an altruistic lie
- Result 2: Many do not even tell Pareto lies
- Result 3: Propensity to lie is affected by own and other's payoffs

Table 6 Fraction of Lies in the Different Treatments

Payment possibility	Fraction of lies
1. $(T[-1, 10])$	25/58 (43%)
2. $(T[1, 10])$	38/58 (66%)
3. $(T[10, 10])$	44/58 (76%)
4. $(T[1, -5])$	30/58 (52%)

Experiment 2: design & outcome

Gender differences:

Table 9 Percentage of Men and Women Who Lie

Payment possibility	Fraction of lies among men	Fraction of lies among women
1. ($T[-1, 10]$)	9/28 (32%)	16/30 (53%)
2. ($T[1, 10]$)	20/28 (71%)	18/30 (60%)
3. ($T[10, 10]$)	22/28 (79%)	22/30 (73%)
4. ($T[1, -5]$)	18/28 (64%)	12/30 (40%)

Agenda

- The introduction of lies
- Experiment 1: design & outcome
- Experiment 2: design & outcome
- Conclusion

Conclusion

Why should we care?

- Monitoring and control
 - Manager' s feedback
- Consequence-based vs. Believe-based guilt
 - First-order Believe about the social norms! E.g. Poker
 - Disutility from violating social norms

Conclusion

- Gender difference
 - Hence, lying aversion can't be the only explanation
 - Pareto results: lying aversion is important
- But,
 - Gender-difference: not only simple cost of lying
 - social preferences are important too



Conclusion

- Value of the results lies in the interaction of:
 - Incentives and consequences
 - Lying aversion
 - Social norms

