CS395T
Agent-Based Electronic Commerce
Fall 2006

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Week 12a

Good Afternoon, Colleagues

Are there any questions?

Logistics

- Last Thursday's class

Logistics

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- Next readings

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Reputation Mechanisms

- Karen's slides

The Market for Evaluations

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- Who should consume when?
  - individual incentives vs. social optimum

Assumptions

- risk neutral
- same benefit any time (sliver of discounting)
- honest reports
- use doesn't diminish others' values
- binary evaluations
- same tastes
- source of uncertainty identically distributed

Clarifications

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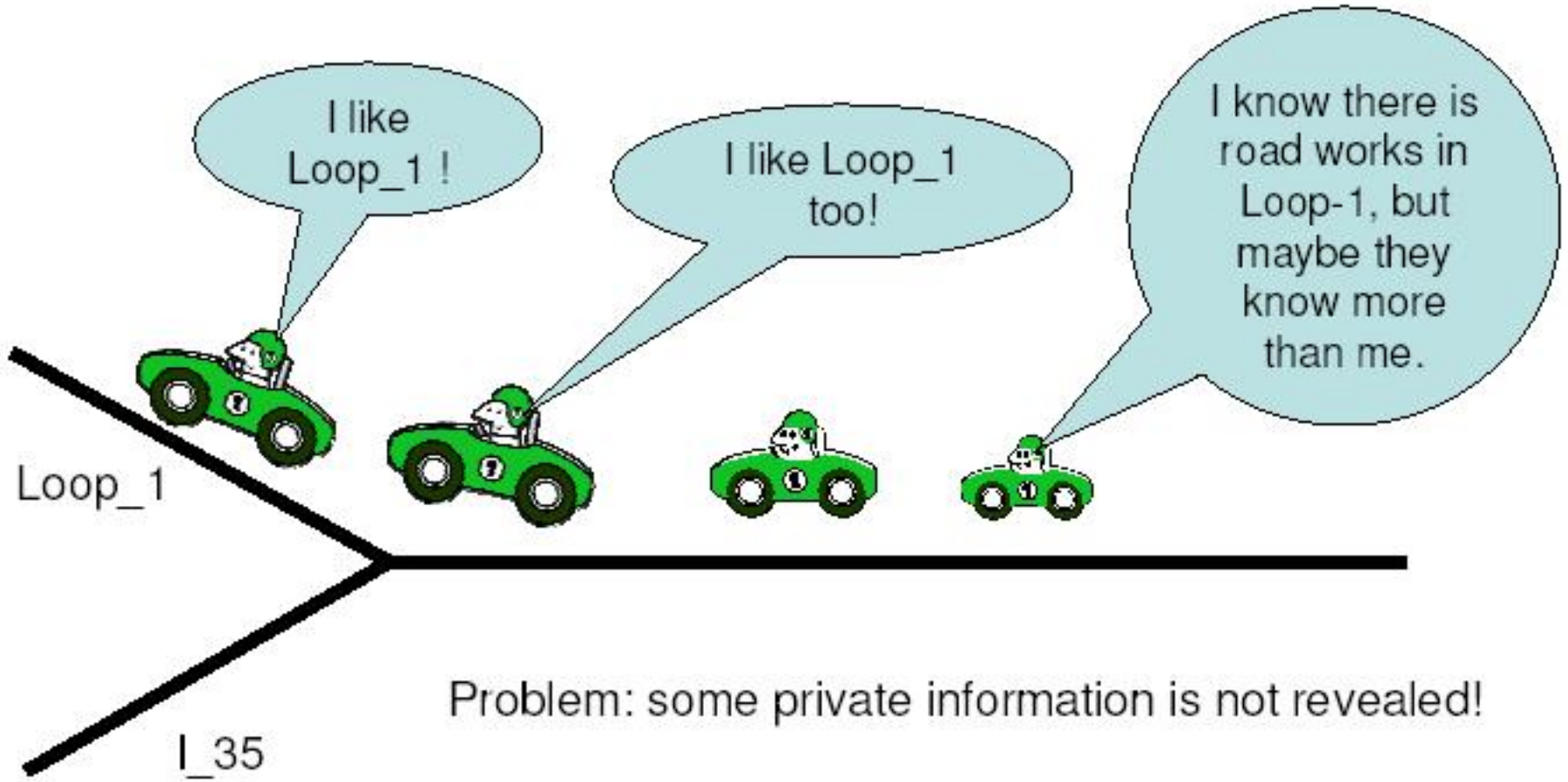
- Asymmetric inefficiency (p. 575)

Statistical Herding



Problem: some private information is not revealed!

Interesting points: asymmetric inefficiency in evaluation acquisition.

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- Footnote 13: why one more node can add more than one evaluation?

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- p updated using Bayes theorem?

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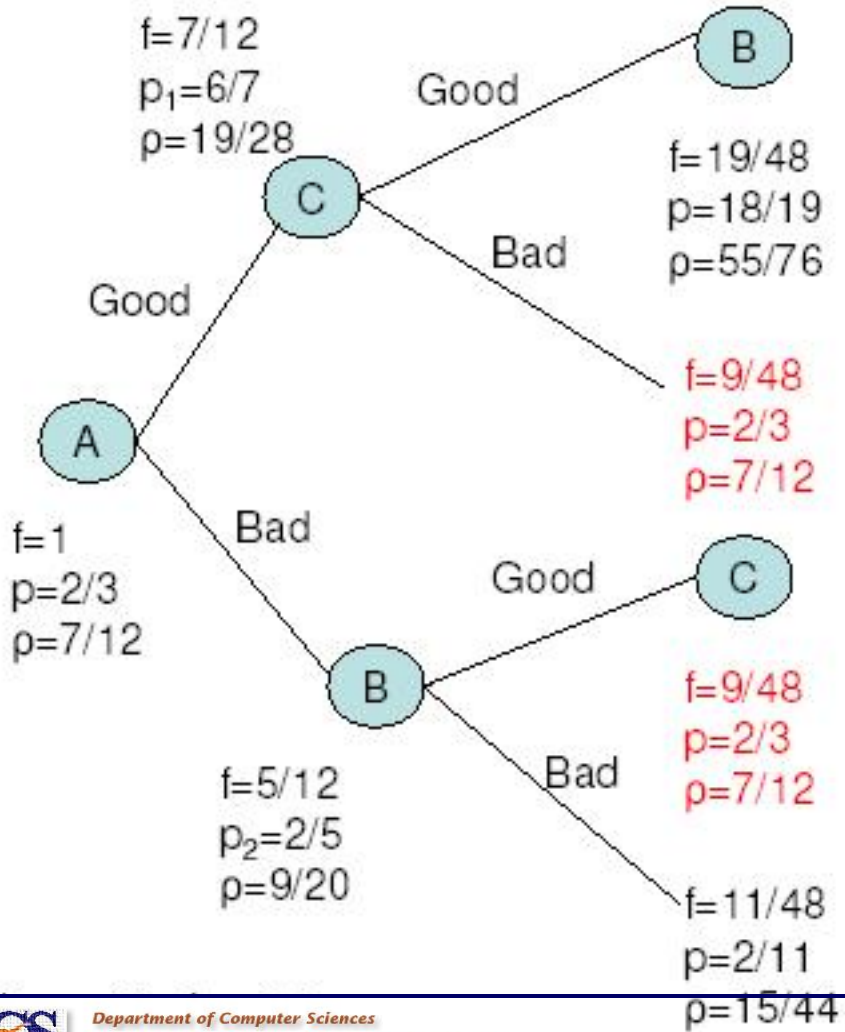
$$\text{Bayes: } P(C|S) = \frac{P(C)*P(S|C)}{P(S)}$$

A		B		C	
Good	Bad	Good	Bad	Good	Bad
12	-24	12	-24	1000	-1000



Computation of binary tree

f=1

p=2/3

ρ = pg+(1-b)(1-p)
= 2/3 * 3/4 +1/4 * 1/3 = 7/12

p_1 = pr(is Good & evaluates Good)
/ pr (evaluates Good)
= (2/3 * 3/4) / 7/12
= 6/7

p_2 = pr (is Good & evaluates Bad)
/ pr (evaluates Bad)
= (2/3 * 1/4) / 5/12
= 2/5

…

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- Ultimately, they suggest side payments (connection to next week)

Class Discussion

- Dave DeAngelis on foms of reputation