CS395T
Agent-Based Electronic Commerce
Fall 2003

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Logistics

- Submitting responses to readings
  - Prefer non-summary ones
  - Show me you've **thought** about the readings

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- Any questions?

Rational choice theory

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- Section 1.2.4: people are not always rational.
- Can this be explained away by arguing that with humans, the payoff function is not fixed once and for all?
- No! (Kahneman and Tversky)

Mixed strategy equilibrium

		Player 2	
		Action 1	Action 2
Player 1	Action 1	4,8	2,0
	Action 2	6,2	0,8

Bayes Nash Equilibrium

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Bayes Nash Equilibrium

- Allows for uncertainty about opponent strategy
- Is it ever helpful for a player to know **how** certain he is about an opponent's expected actions?
- How is this expectation of opponents actions different when the player is allowed repeated game sessions with the same opponent versus anonymous matchups?

Axelrod's tournament

- Iterated prisoner's dilemma with identity

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- What if you play for a known finite amount of time?

Axelrod's tournament

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- What if you play infinitely?
- What if you play for a known finite amount of time?
- Some strategies:
  - hawk (always Fink)
  - Grim trigger (cooperate until the other defects)
  - tit-for-tat
  - Joss (tit-for-tat with periodic defection)

Focal points

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- When and where?

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- We need to meet in Paris on a particular day.
- When and where?
- What are the Nash Equilibria?