

Plan for Second SPE Class

Philosophy 444

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Lemons

- Assume 80% good, 20% bad
- Assume good are worth 15, bad are worth 5.
- Assume seller will take a 10% discount because need to sell
- If no one knows about quality, all cars sell
- If everyone knows about quality, all cars sell
- If buyer knows and seller does not, all cars sell
- If seller knows and buyer does not, no cars sell

Exit or Play

- This is a big reason to use SPE
- Choice between playing PD and getting 2, you take the 2
- Same with these various mixed strategy NEs
- Really works best when there is a single NE

Steering towards NE

- Choice of getting 2 or playing Battle of Sexes
- If you play, obviously intend to play to get 4
- So that's what you'll get
- Huge advantage here
- Note that Battle of Sexes has three equilibria - but the other two are ruled out by playing

First Puzzle about SPE - rules out too much

- Chain store game
- Go over the basic structure
- First competitor chooses exit or entry
- If exit, payoff is 5,1 (incumbent first)
- If compete, then tough or conciliate
- Tough = 0,0; Conciliate = 2,2
- Nash says do either, SPE says Enter-Conciliate
- And it says this if there are 100 successive possible entrants
- But really?

What is a Strategy

- Key point: strategies include moves to be made at ruled out nodes
- How to interpret that?
- Metaphysical - it's what to do if you screw up - but why include that - and why assume you'll be able to carry it out
- Epistemological - it's what the other person should believe

- But now there are two problems
- First, intuitively you choose a strategy, but you don't choose what the other person believes
- Second, why should they believe that you'll go back to SPE after not doing it
- This is particularly pressing in Chain Store Game
- If I compete the first five times, the sixth competitor should get the message
- But the unique SPE has me cooperating at that very node
- For Nash, we avoided this by saying it's all about the long run
- But in SPE settings, the long run is just another game that SPE should apply to
- This is something of a mess, and I don't think anyone has a good way out
- At this point, some folks get off the bus and say we should just do experimental work

Second Puzzle about SPE - rules out too little

- Money burning game
- See other handout