

# 444 Lecture 18

O'Connor Chapter 5

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3/16/23

# Day Plan

Demand Game

Basins

Equity

Disagreement Points

Punishment

Varieties of Disagreement Points

Building Power

# Demand Game

First, a brief note on the structure of the games at the heart of this chapter.

- These are simultaneous move games.
- They are not like the ultimatum game that you may have heard about.
- Nor are they like real world negotiations.

# Negotiations

But they are a bit like negotiations.

- They are at least a little bit like strategies for a real world negotiation, especially if it works by something like English Auction.
- The numbers are something like a reserve price.
- In principle you could complicate the game a bit more by adding in extra strategies within each round.
- But this is probably the best way to think about it.

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# Basins of Attraction

I don't have much to say here, but I really wanted to draw attention to the very surprising graph on page 114 (figure 5.3).

- I guess up to this point most of the models hadn't been *that* different from what I would have guessed a priori.
- But this one really was surprisingly different.
- Would be kind of interested in running another version of this with multiple overlapping games.

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# What is Fair

- We've talked about this a bit, but it's really worth thinking about what counts as a 'fair' distribution.
- This can have effects both for the payoffs (people value fairness) and for dynamics (people move towards fair)



# Fairness and Markets

- This matters a lot in market economies.
- Often the fair outcome is the one driven by the market.
- And that's true even if different forms of market infrastructure would have produced different outcomes.

# Fairness and Deontology

- It also matters in the contexts of norms like “Don’t Steal”.
- Sometimes whether an outcome is coded as fair depends on how it relates to an initial condition that we accept as fair.
- And that in turn might depend on facts that, if we thought about them directly, we would not think of as morally significant.

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# Disagreement Points

The fact that different people are differentially able to walk away from a game is really important. But...

- I'm kinda suspicious of Figure 5.5 (page 119).
- The basins of attraction of the equilibria where the type with more ability to walk away end up with less are surprisingly large.
- Is there a real world situation that is like this?
- Or is this a case where the model doesn't really reflect reality?

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# Punishment

I've been worried a bit over the course of this that we've changed what we're talking about when we discuss punishment. In particular, do we mean:

1. Changing the payoffs; or
2. Choosing a strategy that leads to lower payoffs for the 'punished'.

These are both important things, but I'm not sure they are the same thing

# Punishment

And around page 126 we see some movement between these two notions.

- In the game table, punishment for a high bid is depicted as the payoffs being externally lowered.
- But then we get discussions of non-equilibrium moves within games.
- Maybe these are the same thing?
- Feels like we should keep them separate.

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# Population Divergence

I really liked the stuff around page 126 on what happens if there is divergence within the population.

- Most of the games so far have essentially presupposed uniform populations, at least within types.
- Here we get a nice effect of the existence of a sub-population within one but not the other type.

# Credible Signals

And this I think really does matter to the real world.

- Sometimes what matters in these games is not what your disagreement point is, but what you can credibly signal that it is.
- We're getting back here to things that would come up if we modelled each interaction as a negotiation over time.
- Anyway, sometimes it is really obvious what your type is, but there is no way to credibly signal willingness to walk away.
- And in that case, the other player might (quite rationally!) assume that your disagreement point is something like the average of

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# Building Power

I was a bit confused by the game on page 128 and after, where success causes one to have a higher disagreement point.

- I don't really see the causal mechanism for this; it seemed much more plausible in the other direction.
- Maybe it's that the returns to the game come in resources that can be saved?
- Maybe it's that there will be other games to play - where your type by default gets the good side of the equilibrium?
- It's a nice game, but I would like to hear more about the real world