

Strategic Moves

Dante Yasui

Winter 2024

EC327 Game Theory

Outline

Classification of Strategic Moves

Commitments

Threats and Promises

Additional Topics

- We have already talked about how different types of games favor some agents over others
 - I.e., first mover advantage,
 - second mover advantage,
 - asymmetric info
- So it would make sense that if players can *manipulate* the rules of a game in their favor, they will try to do so.

- We can think about adding a first-stage to our original game
 - **First Stage:** specify how you will act in second stage
 - **Second Stage:** the original game
 - but now players set their beliefs based on what happened in the first stage.

- Different first stage actions correspond to what we will call:
 - commitments,
 - threats,
 - or promises
- Whether any of these actions is **effective** depends on the beliefs of the other player(s).
 - The **credibility** of a strategic move *matters*.

Examples of Strategic Moves:

- Amazon publicly *commits* to going carbon neutral by 2040
- Parents *promise* "you will get a PS5 if you get all A's" to their children
- Nuclear powers *threaten* "Mutually Assured Destruction" to each other in **brinkmanship** games

Conditional Strategic Moves

- I might declare a **response rule** which is a move that depends on someone else's behavior
- I might try to take action to stop someone from doing something through a **deterrence** strategy
- Or I could try to get someone to do something through **compellence**
- **deterrence** or **compellence** could take the form of a **threat** or **promise**:
 - A **threat**: "Unless your action conforms to what I want, then I will *harm* you"
 - A **promise**: "If your action conforms to what I want, I will **reward** you"

Classification of Strategic Moves

Commitments

Threats and Promises

Additional Topics
