

Art 380: Game Theory

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Lecture 10

Schedule

- test going over
- chapter 11

test results

- 4 100's
- 22 A's, 15 B's, 2 F's
- Too easy. Scale up for UMBC!

Chapter 11: Defining Rules

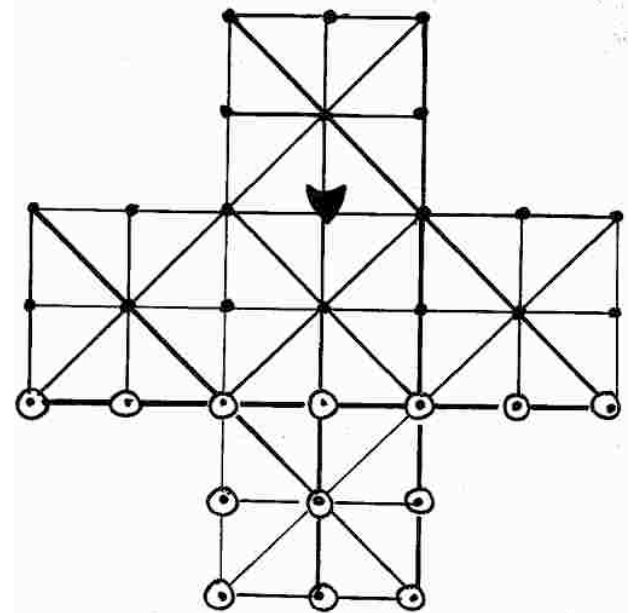
- Rules give the inner, formal structure of a game
 - Games that have different equipment but the same rules are the same game.
- Rules are not the experience of play
 - Chess in Harry Potter vs. Chess w/ yr. Mom
- Game strategy is different than game rules.

Characteristics of Game Rules

- Rules limit player action
- Rules are explicit and unambiguous
- Rules are shared by all players
- Rules are fixed
- Rules are binding
- Rules are repeatable

apply to all players?

- might be asymmetrical: fox and geese
 - fox hops over goose to kill it
 - geese surround fox to kill it
- more geese than fox
- players take turns as fox
- if you're going to make a strange rule, you'll probably spend a lot of effort to recover from that



Hand Rankings of Poker

- 5 of a kind (??)
- Straight Flush: 5 cards of one suit, in sequence, no gaps
- 4 of a kind: 4 4's, 4 Kings, etc.
- Full house: 3 of a kind and a pair
- Flush -- all 5 in one suit
- Straight -- sequence, no gaps (34567)
- 3 of a kind
- 2 pair
- 1 pair
- "High" as in "Jack high"

rules niceties

- there are many named variations– just ask
- hey! The dealer is called the “button”
- “blinds” == “ante”
- much other jargon: yawn.

Poker Variations

- "Wild" cards-- cards whose value may be set by the player.
 - One-eyed Jacks (SD), Suicide Kings (H)
- Stud Poker: deal first card down, bet, next card up, bet, up, bet, up, bet, down, bet
 - everyone can see your up cards
- Seven-card stud: Two down, 4 up, 1 down, take best 5.
- Not everyone need put in the ante

Texas Hold 'em

- Poker Variant
- 2 cards down, bet, 3 up to table ("the flop"), bet, 1 up to table, bet, 1 up to table, bet
- http://boardgames.about.com/cs/poker/a/texas_rules.htm



Whence Poker?

- Endemic to NOLA in the 1820's
- A game called, Poque, is French, and related.
- From German Poch, since 1441
- Many variations, many names, from all over Europe.

Thoughts on Poker

- Not one game, but hundreds
- More-or-less swappable elements
 - wildcards, number of cards in a hand, cards up or down or to the table, when you bet,
- Underlying consistencies
 - hand rankings, how to have a round of betting, the button, discards,
 - ensures fairness of different games
 - gives meaningful context for variations
- Increases the value of the game's skills

For next time

- Chapter 14