A Sampling of Card Games

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Introduction

• Classifications of Card Games
• A small, diverse, simple sample of card games using the standard ("French") 52-card deck:
  – Trick-Taking: Oh Hell!
  – Shedding: President
  – Collecting: Gin Rummy
  – Patience/Solitaire: Double Freecell
Card Game Classifications

- Classification of card games is difficult, but grouping by objective/mechanism clarifies similarities and differences.
- Best references:
  - “The Penguin Book of Card Games” by David Parlett (250+)
Parlett’s Classification

• Trick-Taking (or Trick-Avoiding) Games:
  – Plain-Trick Games: aim for maximum tricks or ≥/= bid tricks
    • E.g. Bridge, Whist, Solo Whist, Euchre, Hearts*, Piquet
  – Point-Trick Games: aim for maximum points from cards in won tricks
    • E.g. Pitch, Skat, Pinochle, Klabberjass, Tarot games

*While hearts is more properly a point-trick game, many in its family have plain-trick scoring elements. Piquet is another fusion of scoring involving both tricks and cards.
Parlett’s Classification (cont.)

- Card-Taking Games
  - Catch-and-collect Games (e.g. GOPS), Fishing Games (e.g. Scopa)
- Adding-Up Games (e.g. Cribbage)
- Shedding Games
  - First-one-out wins (Stops (e.g. Newmarket), Eights (e.g. Crazy 8’s, Uno), Eleusis, Climbing (e.g. President), last-one-in loses (e.g. Durak)
- Collecting Games
  - Forming sets (“melds”) for discarding/going out (e.g. Gin Rummy) or for scoring (e.g. Canasta)
- Ordering Games, i.e. Competitive Patience/Solitaire
  - e.g. Racing Demon (a.k.a. Race/Double Canfield), Poker Squares
- Vying Games
  - Claiming (implicitly via bets) that you have the best hand (e.g. Poker)
- Banking Games
  - Gambling games with one or more players against bank (e.g. Blackjack)
McLeod’s Classification by Objective

• By Objective:
  – Capturing cards (e.g. trick-taking, fishing games):
    • Capture as many/as few/exactly a specific number/set of cards and/or tricks
  – Shedding/accumulating (e.g. War) cards
  – Forming combinations of cards
    • includes Rummy, Canasta, Vying, Banking games
  – Comparing single cards (e.g. Cuckoo)
  – Other objectives: discovery (e.g. Mafia, Clue, Eleusis), race (e.g. Cribbage), etc.
McLeod’s Classification by Mechanism

• By Mechanism:
  – Outplay games:
    • Trick-taking (plain, point), Beating, Climbing, Adding, Fishing, Matching Games and War Group
  – Card exchange games:
    • Draw and Discard (e.g. Rummy games), Commerce group (exchange hand cards with common face-up table cards), Cuckoo group, Quartet group (request neighbor cards (e.g. Go Fish, Authors), Card passing (giving/taking)
McLeod’s Classification by Mechanism (cont.)

• By Mechanism (cont.):
  – Hand-comparison games:
    • Showdown games, Vying games, Banking games
  – Patience games:
    • Single-player/competitive solitaire
  – Other games
    • Combat (e.g. War), Compendium (2+ mechanisms), Race games, Role games (e.g. Mafia), Miscellaneous
Trick-Taking Game: Oh Hell!

• 3-7 players (4-6 recommended), ~45 minutes (We’ll play a single round with maximum cards.)
• Hands – each hand is played with successively different numbers of cards dealt evenly to each player:
  – 3-5 players: 10, 9, 8, ..., 3, 2, 1, 2, 3, ..., 8, 9, 10
  – 6 players: 7, 6, 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7
  – 7 players: 6, 5, 4, 3, 2, 1, 2, 3, 4, 5, 6
  – Short variant: 1, 2, 3, ..., max
• Dealer: First dealer chosen by high card drawn. Deal passes to left. Dealer leads the first trick of each hand.
• Trump suit: Top card of undealt cards is turned to reveal hand *trump* suit.
Oh Hell! Bidding and Play

• Bidding:
  – Begins left of dealer ends with dealer
  – Each player bids the number of tricks they will seek to take
  – The “Hook”: The dealer’s last bid must not allow all players to meet their bids exactly for that hand.

• Play:
  – Lead may be any suit including trump.
  – Players must follow suit if possible. If not, any card (including trumps) may be played.
  – Highest trump wins. If no trump, highest in suit led wins.
  – Trick winner leads the next trick.
Oh Hell! Scoring

• If a player’s trick bid is made exactly, score 10 points plus the number of tricks.
• If a player’s trick bid is missed, deduct 10 points times the number of tricks by which they missed the bid.
• Scoring is kept by a designated scorekeeper.
• In the case of a tie after the last hand, play another hand with all players and the maximum number of cards until there is a clear winner. (Players not involved in the tie may yet win.)
Shedding Game: President

• (Teaching variant: Aces high, 2s low, 2-1 taxation)
• 4-7 players (or more with additional deck)
• Goal: Go out as early as possible to climb to the highest position of privilege in this unfair game.
• Determine starting order (e.g. by high card)
• Deal out all cards starting with “President” (1st player), then “Vice President”, ..., clockwise around to “Vice Scum”, “Scum” and back to President. Deals with more than 4 will be uneven with leading players having more.
President Card Play

• Lead: President leads first “trick”. Winner of each trick leads the next unless winner “went out” on trick, in which case next “in” player to left leads.
• Lead plays one or more cards of a rank (e.g. two 3s). Suits are irrelevant.
• Play may follow to left with exactly the same number of cards in a higher rank (e.g. two 4s, two 5s, ..., two As) or “pass”.
• A player may play after previously passing.
• When all pass in succession, the trick is won by the most recent player that played (highest set).
President Order and Taxation

• The player order for the next round is the order in which played “went out” in the previous round. People change seats accordingly. Often the President sits in the nicest chair, whereas a stool/crate may be reserved for the scum. The President may decree a presidential order that the scum must wear a silly hat, etc.

• After the first round, new rounds additionally have “taxation”:
  – The president exchanges any 2 cards for the scum’s 2 highest ranking cards.
  – The vice-president exchanges any card for the vice-scum’s highest ranking card.
President Miscellany

• President is excellent as a party game as people may join/leave between hands without ruining the fun:
  – Players move up in order to fill spots left by those departing between rounds.
  – New players start in the middle. (Some start new players as the scum, but that’s not welcoming!)

• Optional scoring: 2 points and 1 point for going out 1\textsuperscript{st} and 2\textsuperscript{nd}, respectively.
Collecting Game: Gin Rummy

- 2 players, 52 cards, Aces low
- **Object:** to be the first player to score 100 points or more.
- **Meld:** a set of 3 or more cards of the (1) same rank (e.g. 7♣,7♦,7♥) or (2) same suit in sequence (e.g. A♠, 2♠, 3♠, 4♠)
- **Deadwood:** cards not in melds
- **Card points:** 10 for face cards, A=1, number value for number ranks
- **Deadwood points:** sum of card points for all cards not in melds
Gin Rummy Play

- The dealer alternates. The dealer deals 10 cards to each player and turns the top card of the remaining draw pile face up to form a discard pile.
- Each turn, player may draw the top face-up card from the discard pile or the top face-down card of the draw pile.
  - First turn exception: If the dealer declines the top face-up card, the opponent may begin the deal play by drawing that card, or may also decline. If the opponent declines, the dealer begins by drawing from the draw pile.
- After drawing, the player must discard.
- A player who would have less than or equal to 10 deadwood points after discard may end the deal’s play by knocking, i.e. discarding face-down.
Gin Rummy Scoring

- After a player knocks,
  - The knocking player lays down melds face-up and reveals deadwood cards.
  - The opponent lays down any melds.
  - If the knocking player has any deadwood, the opponent may then “lay off” opponent deadwood cards to knocking player melds. Any remaining opponent deadwood is revealed.
- If the knocking player has no deadwood, they are said to have “gin”. That player scores 20 points + opponent deadwood points.
- If the knocking player has deadwood that is...
  - ... less than opponent deadwood, the knocking player scores the deadwood point difference.
  - ... greater than or equal to the opponent deadwood, the opponent “undercuts” and scores 10 points + the deadwood point difference.
Solitaire Game: Freecell

• The solitaire card game of FreeCell is an interesting random-generated puzzle that is solvable with high probability (~99.999%).
• Setup: A shuffled 52-card deck is dealt into 8 cascade columns left-to-right and overlapping as columns extend downward.
• Freecells: 4 positions that can hold any single card
• Foundations: 4 face-up piles (initially empty) that each run in sequence from Ace up to King in a single suit.
• Object: to complete the foundations with all cards
Freecell Play

• Rules govern single card movements, but a player may move sequences of cards if such rules permit:
  – Any card may move from the top of a cascade to a freecell.
  – A card may move from a freecell or cascade onto a foundation if it is an Ace or is the next rank higher than the top foundation card in the same suit.
  – A card may move from a freecell to a cascade if the cascade is empty or if the card is the next rank lower with a different red/black color.
Freecell Play Shortcuts

• Hold 0-4 freecell cards in your non-dominant hand for speedier play.
• Having \( n \) cards in your hand means that you can move top stacks of \( n + 1 \) cards from one cascade to another.
  – Explanation: The first \( n \) cards could have been placed in freecells, card \( n + 1 \) could have been moved directly from cascade to cascade, and the first \( n \) cards could have been sequenced back onto card \( n + 1 \).
• Having \( n \) cards in your hand and \( m \) empty cascades means that you can
  – move a stack of \( (m + 1) \times (n + 1) \) from one cascade to another non-empty cascade. (Why?)
  – move a stack of \( m \times (n + 1) \) from one cascade to another empty cascade. (Why?)
Double Freecell

- This is an original invention, but competitive solitaire (a.k.a. patience) games of this type are common.
- Play as Freecell except:
  - Two players
    - each use distinguishable card decks
    - share common foundations
    - have individual cascades and freecells
  - The first player to empty all of cards from their cascades and freecells wins.
  - If both players declare that they cannot (or will not) play, the player that has played the most foundation cards wins. A tie may result.
Conclusion

- Thousands of cards games and variants have existed over time.
- Most fall within a few categories by objective or mechanism.
- We’ve sample four games of different types: Oh Hell! (trick-taking), President (shedding), Gin Rummy (collecting), Double Freecell (competitive patience)
- To learn more:
  - [http://www.pagat.com](http://www.pagat.com)
  - any of David Parlett’s books (e.g. *The Penguin Book of Card Games*, *Teach Yourself Card Games*, *Oxford A-Z of Card Games*)
  - Merilyn Simonds Mohr’s *The New Games Treasury*