Sequential Placement Optimization Games:
Poker Squares, Word Squares, and Take It Easy!

Todd W. Neller
Outline

• Learn and play Poker Squares
• Generalize game concepts (sequential placement optimization games)
• Learn and play two closely related games:
  – Word Squares
  – Take it Easy!
• Final Game Design Thoughts
Poker Squares

• Materials:
  – shuffled standard (French) 52-card card deck,
  – paper with 5-by-5 grid, and
  – pencil

• Each turn, a player draws a card and writes the card rank and suit in an empty grid position.

• After 25 turns, the grid is full and the player scores each grid row and column as a 5-card poker hand according to the American point system.
# American Point System

<table>
<thead>
<tr>
<th><strong>Poker Hand</strong></th>
<th><strong>Points</strong></th>
<th><strong>Description</strong></th>
<th><strong>Example</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Flush</td>
<td>100</td>
<td>A 10-J-Q-K-A sequence all of the same suit</td>
<td>10♣, J♣, Q♣, K♣, A♣</td>
</tr>
<tr>
<td>Straight Flush</td>
<td>75</td>
<td>Five cards in sequence all of the same suit</td>
<td>A♠, 2♠, 3♠, 4♠, 5♠</td>
</tr>
<tr>
<td>Four of a Kind</td>
<td>50</td>
<td>Four cards of the same rank</td>
<td>9♣, 9♦, 9♥, 9♠, 6♥</td>
</tr>
<tr>
<td>Full House</td>
<td>25</td>
<td>Three cards of one rank with two cards of another rank</td>
<td>7♠, 7♣, 7♥, 8♥, 8♠</td>
</tr>
<tr>
<td>Flush</td>
<td>20</td>
<td>Five cards all of the same suit</td>
<td>A♥, 2♥, 3♥, 5♥, 8♥</td>
</tr>
<tr>
<td>Straight</td>
<td>15</td>
<td>Five cards in sequence; Aces may be high or low but not both</td>
<td>8♣, 9♠, 10♥, J♦, Q♣</td>
</tr>
<tr>
<td>Three of a Kind</td>
<td>10</td>
<td>Three cards of the same rank</td>
<td>2♣, 2♥, 2♦, 5♣, 7♣</td>
</tr>
<tr>
<td>Two Pair</td>
<td>5</td>
<td>Two cards of one rank with two cards of another rank</td>
<td>3♥, 3♦, 4♦, 4♠, A♣</td>
</tr>
<tr>
<td>One Pair</td>
<td>2</td>
<td>Two cards of one rank</td>
<td>5♦, 5♥, 9♣, Q♣, A♥</td>
</tr>
<tr>
<td>High Card</td>
<td>0</td>
<td>None of the above</td>
<td>2♦, 3♣, 5♠, 8♥, Q♣</td>
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Scoring Examples
## Let’s Play!

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Strategy Discussion
Generalizing Poker Squares

• A random item (e.g. playing card) is announced to all.
• Each player independently places that same item into a grid (e.g. 5x5 square grid).
• These steps are repeated (e.g. until grids are full).
• The goal is to place the items so as to achieve the highest scoring configurations of items (e.g. poker hands).
• “Sequential Placement Optimization Games”
Word Squares

a.k.a. Crosswords, Word Exchange, Stock Exchange

Image source: M. Mohr. The New Games Treasury
Word Squares General Overview

- A random **letter** is announced to all.
- Each player independently places that same **letter** into a 5x5 square grid.
- These steps are repeated until grids are full.
- The goal is to place the **letters** so as to achieve the highest scoring **words**.
Word Squares Rules

• Each player has a pen and paper with a 5x5 grid.
• Players take turns choosing and announcing letters that each player must write into an empty grid space.
• After 25 turns, grids are scored for words formed across/down within rows/columns as follows:
  – 5 letters → 10 points; 4 letters → 5 points; 3 letters → 2 points
  – Words contained within other words do not count. E.g. one scoring TWINS cannot also score TWIN, WIN, WINS, and INS.
  – Overlapped words may score. E.g. a row/column with GAMEN would score both GAME and AMEN for 2x5 = 10 points.
  – As in other word games, challenges are allowed, so that players should agree upon word restrictions (e.g. 3-or-more-letter Scrabble words) and a dictionary (e.g. Scrabble player’s dictionary) to check challenges.
Take it Easy!
Ravensburger App Example Board
Take it Easy! General Overview

- A random **hex tile with numbered, colored lines** is announced to all.
- Each player independently places that same **hex tile** into a **hexagonal hex grid with 3 hexes on a side**.
- These steps are repeated until grids are full.
- The goal is to place the **hex tiles** so as to achieve the highest scoring **completed single-color lines across the grid**.
Take it Easy! Rules

• Each of the 27 hex tiles has number, colored lines edge-to-edge through the tile center
  – Each color corresponds to a specific number 1-9.
  – There are 3 colors/numbers for each direction, and tiles must be oriented with numbers upright.

• Each player has the same 27 tiles. One player mixes his/her tiles facedown, drawing, announcing, and placing each tile into an empty grid space along with all other players.

• Once all 19 hexagonal hex grid spaces are full, scoring occurs. For each line of a single color that spans the entire grid, a player scores the number of tiles in the line multiplied by the line number (1-9).
Concluding Thoughts

• The difficult part of game design is creating good game mechanics.
• Once a good mechanic is devised, it can be applied in many ways.
  – In this case, the sequential placement optimization game (SPOG) mechanic served to create a Poker solitaire game, a word game, and a line formation game.
• Note that one can mutate designs both by adding and taking away constraints.
  – Example: Imagine removing a constraint that SPOG configurations must be along lines. What if one used a hex grid with different terrain/building types, with scoring according to adjacency of different tile types.
Resources and References

• Gettysburg College Poker Squares Page: http://tinyurl.com/pokersqrs
  – References
  – Rules and play grids

• Word Squares:
  – http://boardgamegeek.com/boardgame/10210/word-squares

• Take it Easy!:
  – http://boardgamegeek.com/boardgame/128/take-it-easy

• “Sequential Placement Optimization Games”