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Amazons, Penguins, and Amazon Penguins

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Abstract
This talk discussed a family of games based on Amazons (1988), a distant relative of Go (area control) and Chess (queen-like movement), innovated with the introduction of move obstacles. Hey! That's My Fish! (2003) restricted the addition of obstacles and added varying points for position visits. Introducing original related game designs (e.g. Amazon Penguins (2009) and Paper Pen-guins (2009)), we demonstrated how game mechanics are like genes that mutate, crossover, and invite evolution of new games.

Keywords
games, Amazons, game design, Hey! That's My Fish!

Disciplines
Computer Sciences | Game Design

Comments
This presentation was given for the Gettysburg College Games Club on October 27th, 2017 at Gettysburg College.

Amazons, Penguins, and Amazon Penguins

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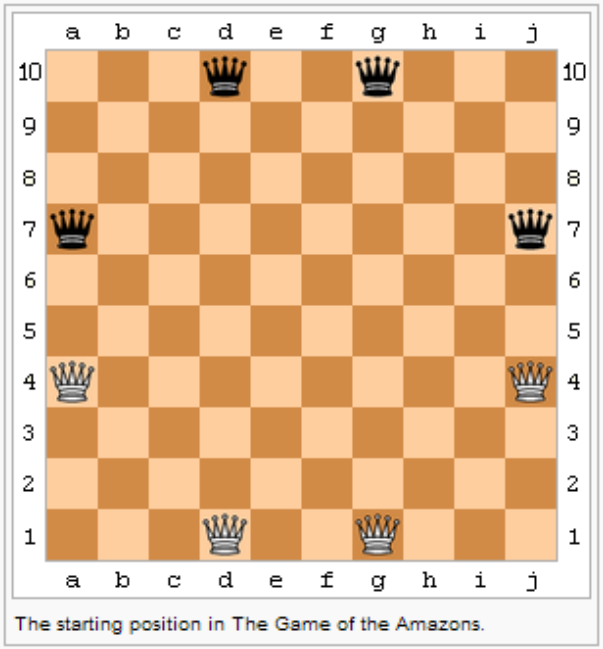
Amazons (El Juego de las Amazonas)

- Walter Zamkauskas (1988)
- Object: To be the last player with a legal move.
- Board: square grid (10x10 standard, but smaller works)
- Pieces:
  - 4 Amazons each in light/dark colors (e.g. Chess pawns)
  - Markers to mark “arrows” on grid (e.g. Poker chips)
- Initial setup: (see figure)
- The light color plays first.

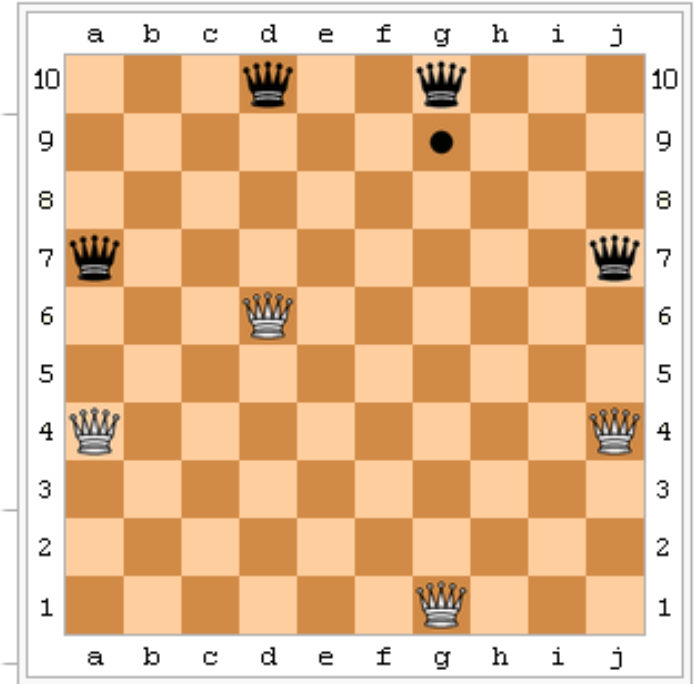


The starting position in The Game of the Amazons.

Source: Wikipedia

Amazons: Move

- A move consists of two parts:
  - An **Amazon** of one's color makes a non-capturing queen move.
  - The moved Amazon then shoots an **arrow** a non-capturing queen move away from the Amazon's new space.
- Amazons and arrows block spaces. Amazons do not capture. Pieces may not move on or beyond blocked spaces.

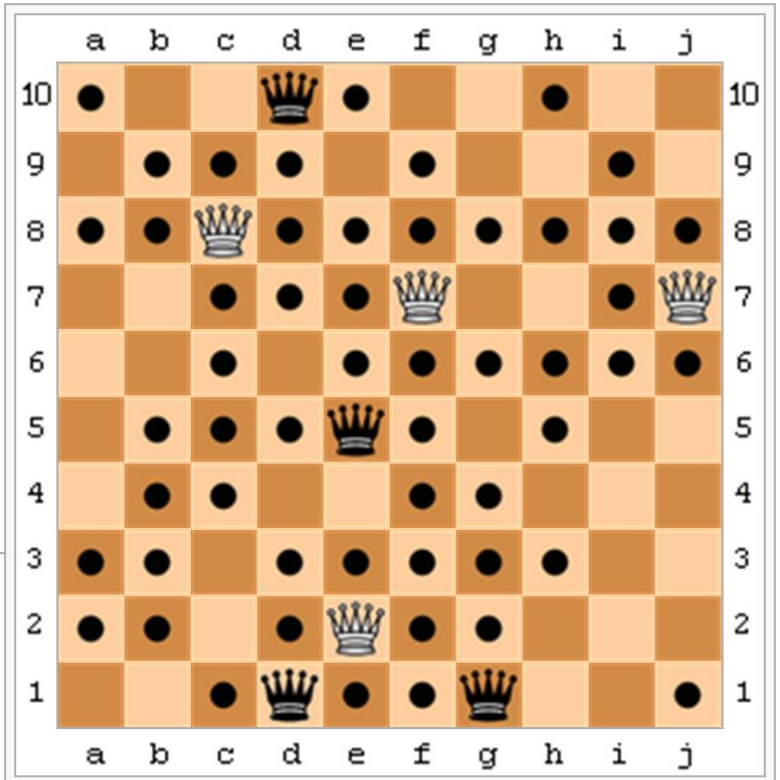


The diagram shows a possible first move by white: d1-d6/g9, i.e. amazon moved from d1 to d6 and fired arrow to g9.

Source: Wikipedia

Amazons: Game End

- Play sometimes ends by mutual consent when all Amazons are separated and the number of remaining legal moves is easily counted.



A completed Amazons game. White has just moved f1-e2/f1. White now has 8 moves left, while Black has 31.

Source: Wikipedia

My 8x8 Amazons Variant (2009)

- Use an 8x8 chessboard.
- Place white pawns at A3, C1, F1, and H3 of the chessboard.
- Place black pawns at A6, C8, F8, and H6 of the chessboard.
- Mark “arrows” with Poker chips.
- Let’s play!

Penguins
(Pingvinas, Hey! That's My Fish!)

- Günter Cornett, Alvydas Jakeliunas (2003)
- Object: To collect the most fish.
- Board: hex grid (60 hex tiles: 10 x 3-fish, 20 x 2-fish, 30 x 1-fish)
- Pieces: 4 penguins each in 4 colors
  - 2 players: 4 penguins ea.
  - 3 players: 3 penguins ea.
  - 4 players: 2 penguins ea.
- Initial setup: Take turns
  - laying tiles
  - placing pieces

Photo credit: David Morris

Penguins: Move

- A move consists of two parts:
  - A penguin of one's color makes a move in any grid direction.
  - The player claims (removes) the tile the moved penguin moved *from.*
- Penguins and removed tiles block spaces. Penguins do not capture. Pieces may not move on or beyond blocked spaces.

Photo credit: Ralf Christian

Penguins: Game End

- Play ends when neither player can move, and sometimes ends by mutual consent when all penguins are separated.
- Players then claim remaining fish as possible, including fish underneath penguins.
- Highest total fish wins.

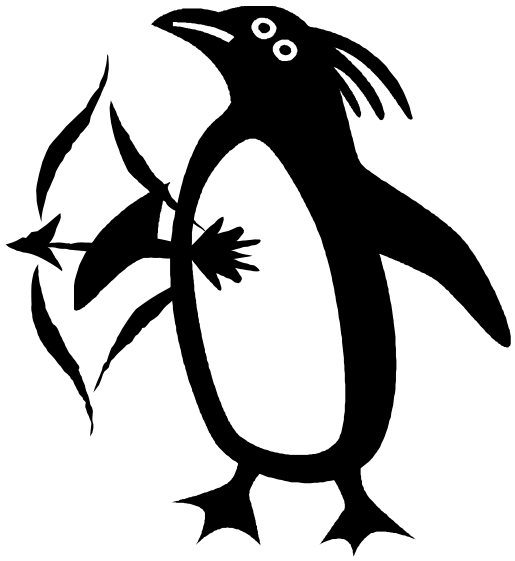
Photo credit: George Angear

Mr. Pauper's Penguins

- Set up board with Poker chips:
  - 30 white (1 fish)
  - 20 red (2 fish)
  - 10 blue (3 fish)
- Use pawns, cheap figurines, battle miniatures, etc. for penguins
- Experiment with unique layouts, house rules; enjoy and innovate!

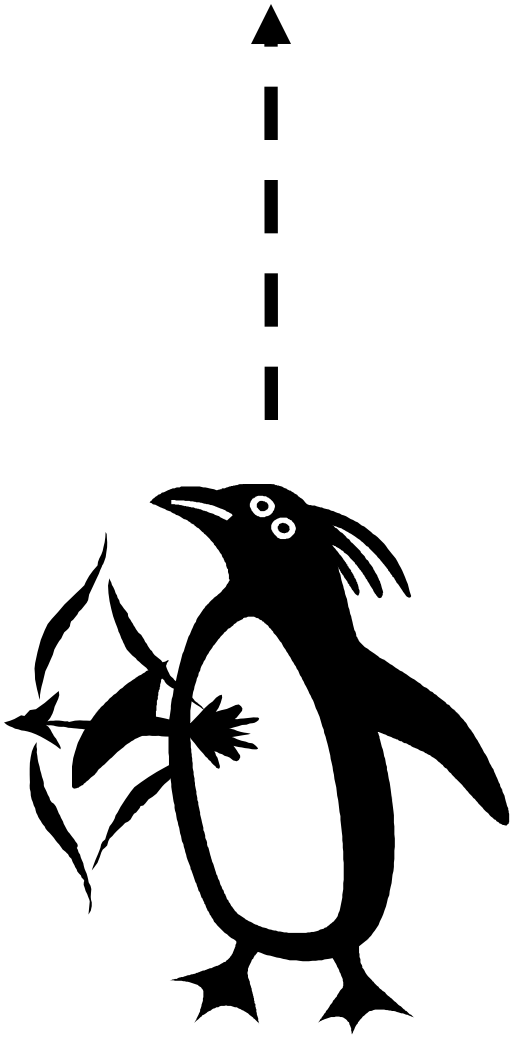
Amazon Penguins

- My core idea: Penguins objective with Amazon moves
- Board: 8x8 square grid (e.g. Chess board); also hex grid variation
- Pieces:
  - 4 Amazon Penguins each in light/dark colors (e.g. Chess pawns)
  - 64 poker “fish” chips: 32 x white (1 fish), 21 x red (2 fish), and 11 x green (3 fish)
- Initial setup: Take turns
  - laying fish chips (“fishin’ chips”?)
  - placing Amazon Penguins



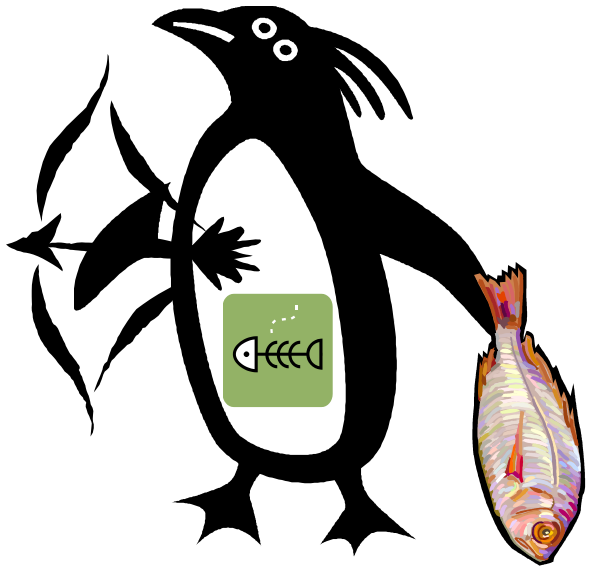
Amazon Penguins: Move

- A move consists of two parts:
  - An Amazon Penguin of one's color makes a non-capturing queen move.
  - The moved Amazon Penguin then spear-fishes (removes/claims) a fishin' chip a non-capturing queen move away from the Amazon penguin's new space.
- Amazons Penguins and missing chips block spaces. Amazons Penguins do not capture, and may not move/shoot on or beyond blocked spaces.



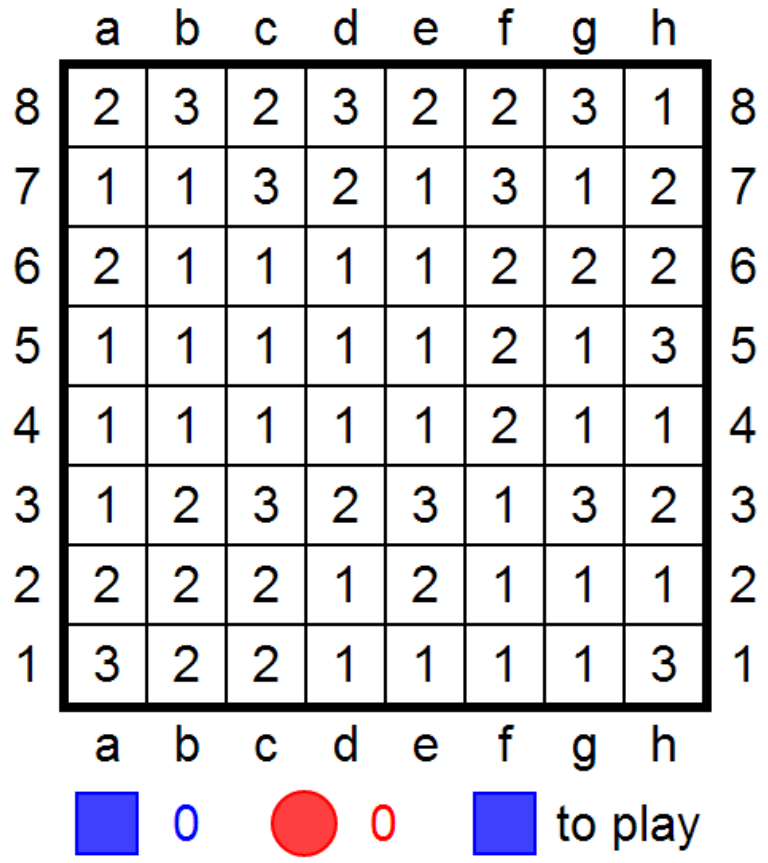
Amazon Penguins: Game End

- Play ends when neither player can move, and sometimes ends by mutual consent when all Amazon Penguins are separated.
- Players then claim remaining fish as possible, including fish underneath Amazon Penguins.
- Highest total fish wins.



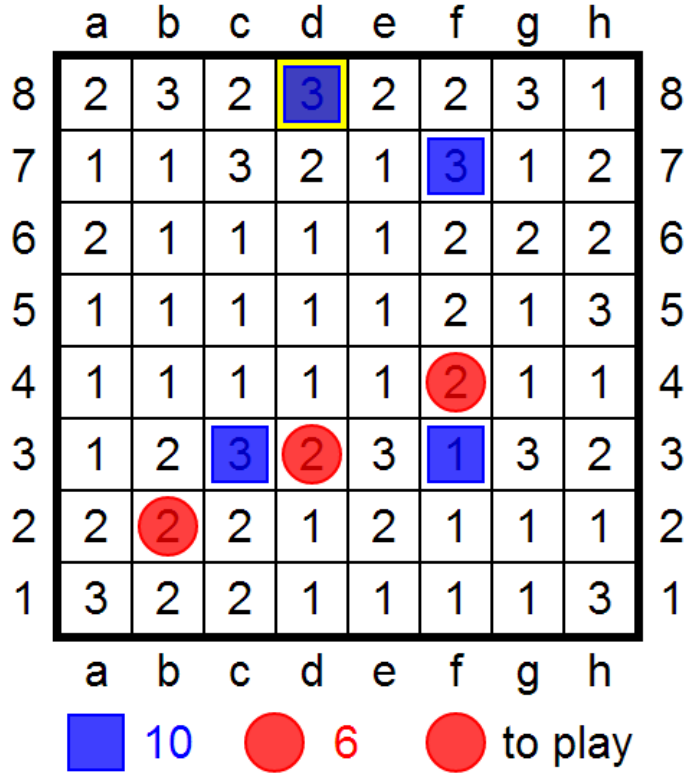
Paper Pen-guins

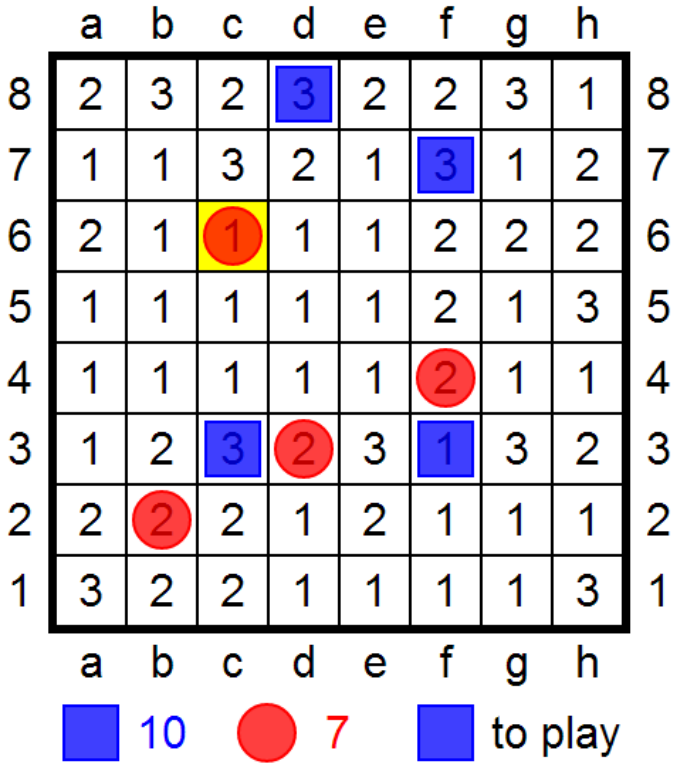
- My core idea: Pen and paper penguins on a square grid.
- Board: 8x8 square grid filled with random point distribution of 32 ones, 21 twos, and 11 threes. (May be generalized to other sizes with proportions 3:2:1.)
- Pen(s)/pencil(s), ideally contrasting color pens.
- The first and second player mark square and circle pieces, respectively.



Paper Pen-guins: Initial Placements

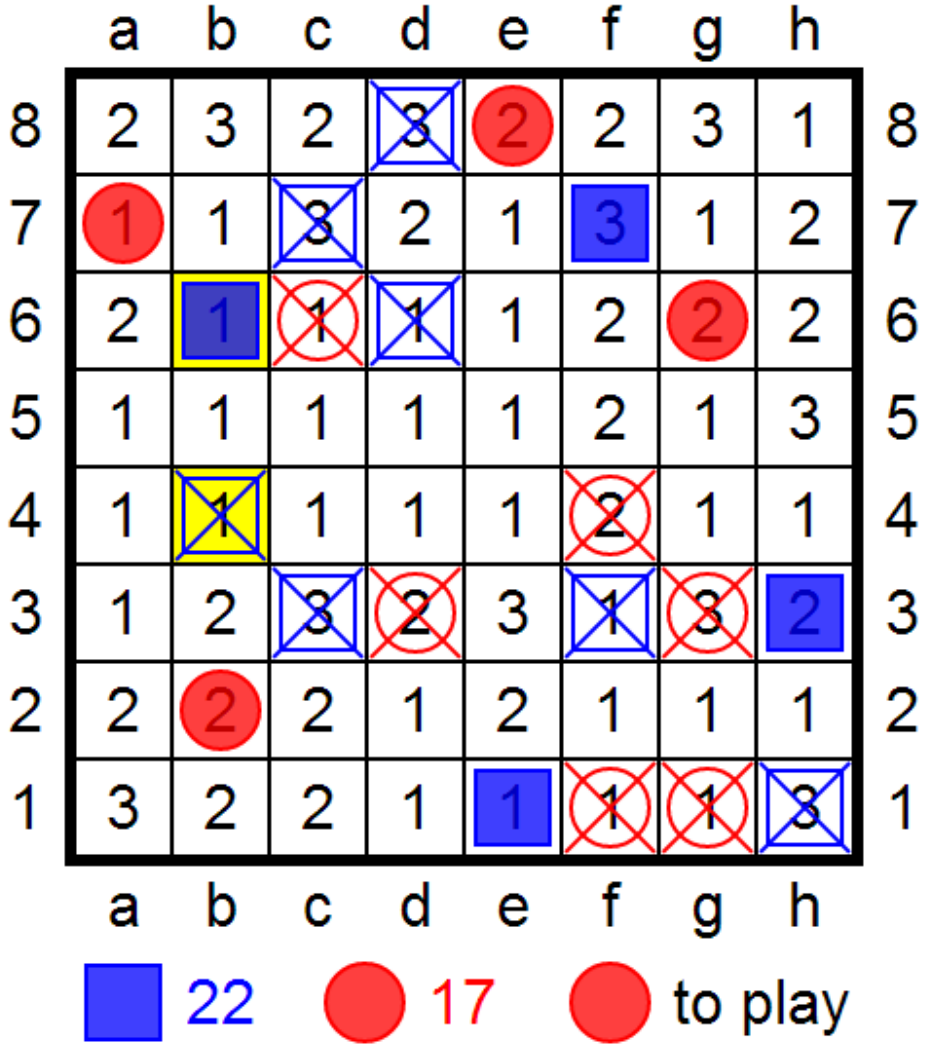
- Players take turns “placing” pieces by scoring point numbers and circumscribing them with player shapes, 4 per player.





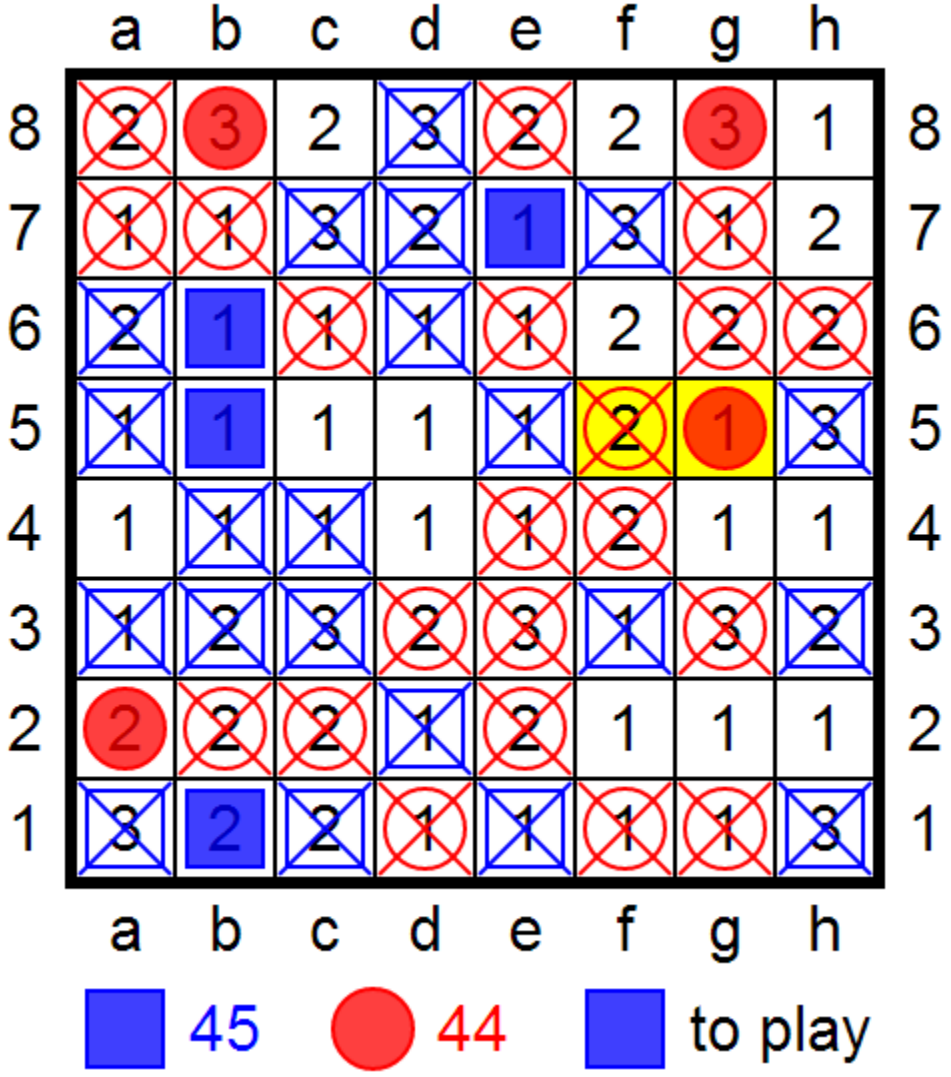
Paper Pen-guins: Move

- Following placements, players take turns making queenlike “moves”. The source position is blocked with an “X” drawn corner to corner. The destination position score number is scored and circumscribed with the player’s shape.



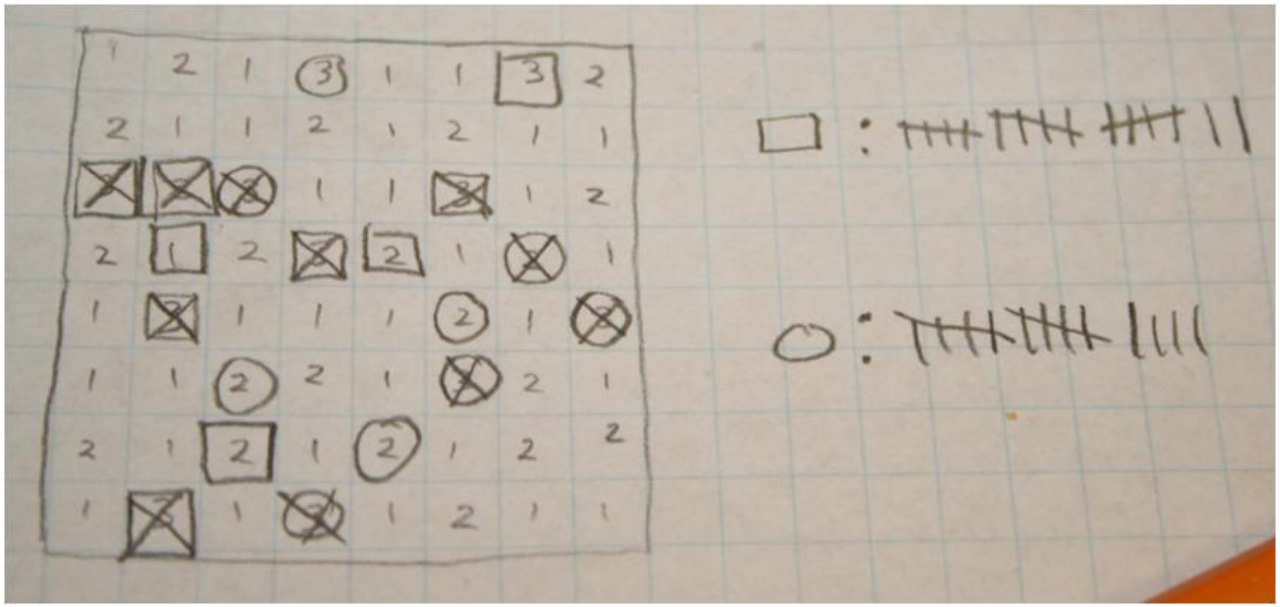
Paper Pen-guins: Game End

- Play ends when neither player can move, and sometimes ends by mutual consent when end play is agreed upon.
- Players then claim remaining points as possible.
- Highest score wins.



Paper Pen-guins with a Single Pencil

- Using a single pencil and graph paper, one can improvise a game of Paper Pen-guins by
  - taking turns placing 3s, 2s, 1s in the grid, and
  - relying visually on shape rather than color:



Conclusion

- **Amazons (1988),** a distant relative of **Go** (area control) and **Chess** (queen-like movement), innovated with introducing move obstacles.
  - Compare with **Quoridor (1997)** and **Splits/Battle Sheep (2010)**.
- **Hey! That's My Fish! (2003)** restricted addition of obstacles and added varying points for position visits.
- Game mechanics are like genes that mutate, crossover, and invite evolution of new games, e.g. **Amazon Penguins (2009) and Paper Pen-guins (2009)**
- Exercise your own creativity in not only inventing new mechanics, but combining favorites in interesting ways!

References

- Amazons:
  - http://en.wikipedia.org/wiki/Game_of_the_Amazons
  - http://www.boardgamegeek.com/boardgame/2125
- Penguins:
  - http://www.boardgamegeek.com/boardgame/8203
- Paper Pen-guins:
  - http://cs.gettysburg.edu/~tneller/games/paperpenguins