CMS.608 / CMS.864 Game Design
Spring 2008

February 12: Types of Fun & Game History

Game Design

CMS.608/CMS.864

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About today

- Game history as incremental evolution
  – Exercise
- Game design as MDA. From systems to fun
  – Exercise

A short history of matching tile games

- From brand new to well-known.

- **Q.** What kind of games is PopCap interested in publishing?
A. Not just match-3 puzzle games! We're interested in pushing the boundaries of the casual games market with a variety of different projects. (PopCap 2006)

- On the big portals, at any hour, day or night, tens or hundreds of thousands of players gather to play Hearts, Spades, Canasta, chess, backgammon and a zillion shareware match-three games. (Varney 2006)

Jewel Quest (IWin 2004): Moderate innovation

- "Match-Three games have done well historically and have proven to be quite addictive. We wanted to take a familiar concept that people already enjoy and raise it to a level that is much more exciting and engaging than it's ever been.

Image removed due to copyright restrictions. Please see any screenshot of Jewel Quest, such as http://www.jesperjuul.net/text/swapadjacent/index_image030.jpg
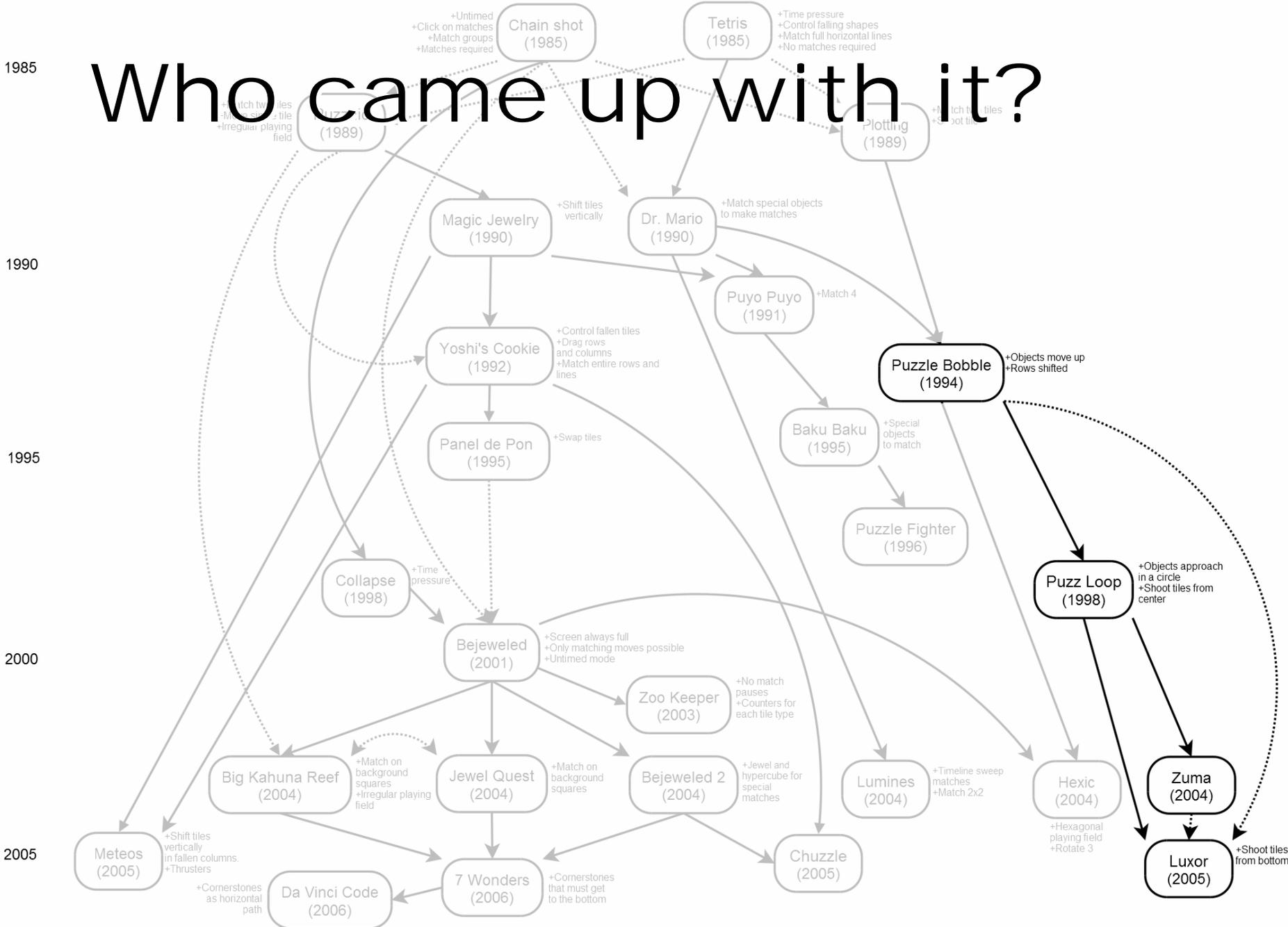
7 Wonders: Cornerstones

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http://www.jesperjuul.net/text/swapadjacent/index_image032.jpg

Matching Tile Games: A Family Tree

1985

Chain shot (1985)
+Untimed
+Click on matches
+Match groups
+Matches required

Tetris (1985)
+Time pressure
+Control falling shapes
+Match full horizontal lines
+No matches required

Puzznic (1989)
+Match two tiles
+Move single tile
+Irregular playing field

Plotting (1989)
+Match two tiles
+Shoot tiles

1990

Magic Jewelry (1990)
+Shift tiles vertically

Dr. Mario (1990)
+Match special objects to make matches

Puyo Puyo (1991)
+Match 4

Puzzle Bobble (1994)
+Objects move up
+Rows shifted

Yoshi's Cookie (1992)
+Control fallen tiles
+Drag rows and columns
+Match entire rows and lines

Baku Baku (1995)
+Special objects to match

1995

Panel de Pon (1995)
+Swap tiles

Puzzle Fighter (1996)

Collapse (1998)
+Time pressure

Puzz Loop (1998)
+Objects approach in a circle
+Shoot tiles from center

2000

Bejeweled (2001)
+Screen always full
+Only matching moves possible
+Untimed mode

Zoo Keeper (2003)
+No match pauses
+Counters for each tile type

Big Kahuna Reef (2004)
+Match on background squares
+Irregular playing field

Jewel Quest (2004)
+Match on background squares

Bejeweled 2 (2004)
+Jewel and hypercube for special matches

Lumines (2004)
+Timeline sweep matches
+Match 2x2

Hexic (2004)
+Hexagonal playing field
+Rotate 3

Zuma (2004)

2005

Meteos (2005)
+Shift tiles vertically in fallen columns.
+Thrusters

Da Vinci Code (2006)
+Cornerstones as horizontal path

7 Wonders (2006)
+Cornerstones that must get to the bottom

Chuzzle (2005)

Luxor (2005)
+Shoot tiles from bottom

SameGame vs. Tetris: The two roots of matching tiles

- Non-timed vs. Timed
- Fallen tiles vs. Falling tiles
- Tile similarity vs. Entire lines
- Obligatory matches vs. Free movement

Who came up with it?

1985

Chain shot (1985)
+Untimed
+Click on matches
+Match groups
+Matches required

Tetris (1985)
+Time pressure
+Control falling shapes
+Match full horizontal lines
+No matches required

...les
...tile
+Irregular playing field
(1989)

Plotting (1989)

Magic Jewelry (1990)
+Shift tiles vertically

Dr. Mario (1990)
+Match special objects to make matches

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Puyo Puyo (1991)
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2005

Zuma (PopCap 2004) and clones

Image removed due to copyright restrictions. Please see any screenshot of Zuma, such as http://games.softpedia.com/progScreenshots/Zuma-s-Revenge-Screenshot-48665.html

"It's kind of the year of the Zuma clones," said Gwertzman, … "Zuma came out in 2004, and it was the #1 best selling arcade game on Real Arcade for that year. We were all very excited about it, but it's 2005 and there have been a ton of very obvious Zuma clones. There was one called Luxor, and like five or six others. "

Puzz Loop (Mitchell 1998) and clones

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Luxor (Mumbo Jumbo 2005)

Image removed due to copyright restrictions. Please see any screenshot of Luxor, such as http://upload.wikimedia.org/wikipedia/en/4/4f/Luxor_Screenshot1.jpg

- … asked by the moderator about the influence of *Zuma* on *Luxor*, Walker hesitated, commenting: "*Zuma* was certainly a factor." After thinking about how to integrate the basics of *Centipede* and *Galaga* with puzzle game mechanics, the developers worked from the core mission to have a game without negative in-game actions.

Different versions of a history
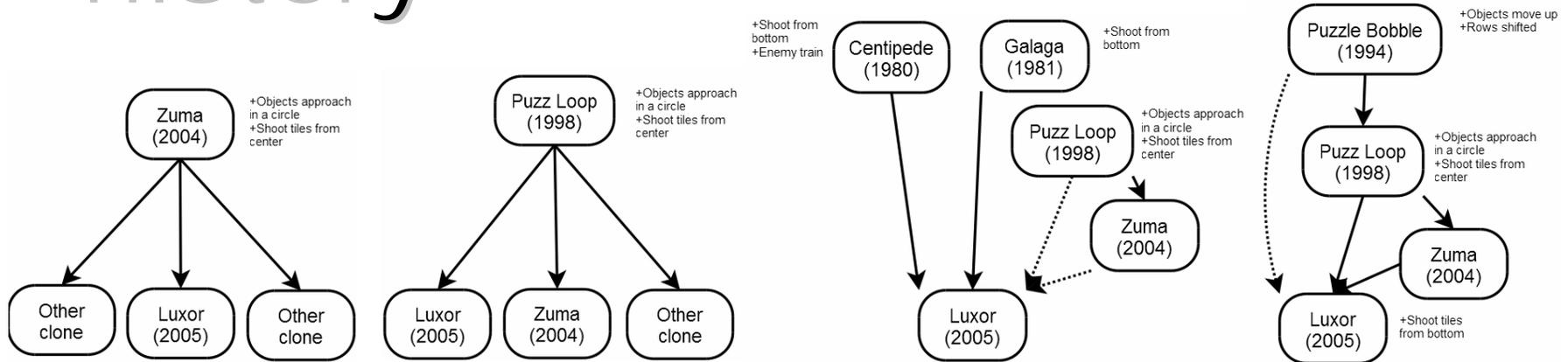
Developers claim originality.

Players see games as "version of other game".

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Contradictory interests

- Developers want to be (perceived as) innovative. (And make money.)

- Players want fun...

- Should games be **brand new** (modernist poem) or **familiar** (crosswords, puzzles, Sudoku)?

Exercise

- Make a history tree of a genre.
- (Card games, sports, video games).
- 15 minutes, present. 3:55 PM

- Make the best history ever written.
- What parameters change?
- Is there a "first" game? Several?
- Where is the genre going?

Tetris is NP-complete

- We prove that in the offline version of Tetris, it is NP-complete to maximize the number of cleared rows, maximize the number of tetrises (quadruples of rows simultaneously filled and cleared), minimize the maximum height of an occupied square, or maximize the number of pieces placed before the game ends.
(Erik D. Demaine, Susan Hohenberger, David Liben-Nowell: „Tetris is Hard, Even to Approximate", 2002)

- What does and doesn´t this tell us about Tetris?

What are games really?

- State machines?
- Complex systems?
- Emotions?
- Stories?
- Graphics?
- Culture?

Mechanics – Dynamics – Aesthetics framework

- **Mechanics**: The rules and concepts that formally specify the game-as-system.

- **Dynamics**: The run-time behavior of the game-as-system.

- **Aesthetics**: The *desirable emotional responses* evoked by the game dynamics.

Aesthetic goals

- I want to make game that makes the player feel ...

- Accomplishment? Fantasy?

- How do you plan on making the player feel this?

- How do other games accomplish this?

- "Immature poets imitate; mature poets steal." (T.S. Eliot)

Types of fun (Ion Storm)

Clearing
Collection
Creation
Discovery
Diversion
Expectation
Experience
Expression
Fantasy

Fellowship
Goal-completion
Investment
Media-migration
Narrative
Obstacle
Sensation
Victory

Take Halo 3 and add ...

- Creation.

- How?

Exercise: Identify types of fun in two games

- List the **10 most important** types of fun
- Make up *generalizable* types of fun where something is missing
- 20 minutes
- Present

The great cliché: I want a game that can make me cry

- What does it take to make a player cry?

Thanks

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