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# Puzzle Writing: Best Practices

Clara Fernandez-Vara
Singapore-MIT GAMBIT Game Lab

# Who am I?

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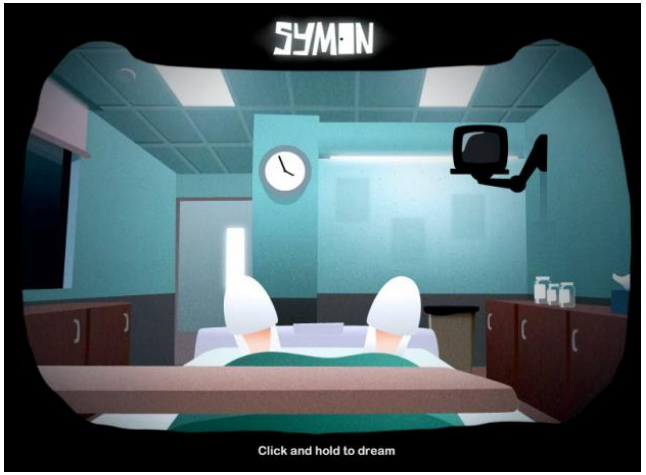

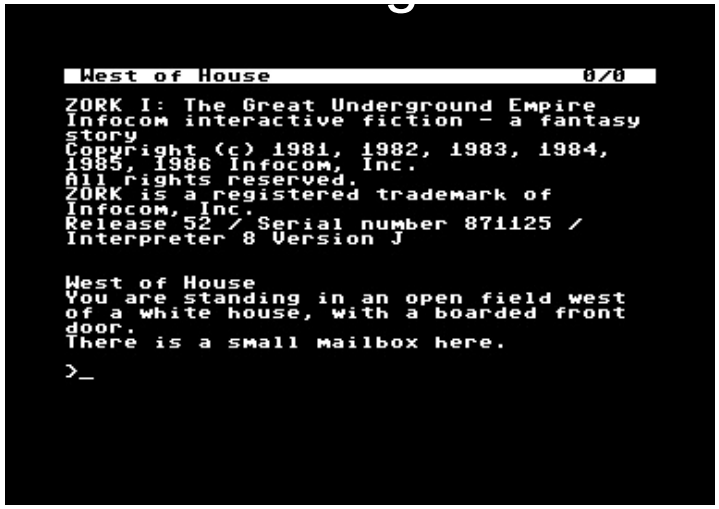


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(1993)

# Summary

- What is a puzzle?
- Puzzle patterns
- Evaluating your puzzle

# What is a puzzle?

- It's a problem in need of one solution
- ... but ideally more than one path to that solution.
- Not a competitive challenge.
- Requires more thinking than skills.

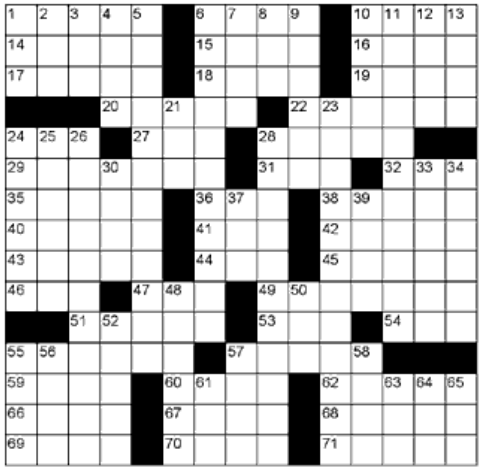
# What is a puzzle?

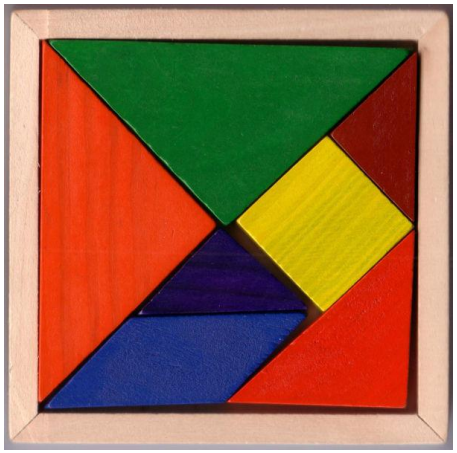
- It's a mystery that we feel compelled to solve.
- It's a gap that the player has to fill.

See Danesi, Marcel. The Puzzle Instinct. Bloomington, IN: Indiana University Press, 2002.

# What is a puzzle?

- In order to solve the puzzle, the player needs to achieve insight.
- Insight provides pleasure: feeling clever is fun.
- Insight can be  incremental.





LVL 9-6
1762
MENU
+30
BONUS +700

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# Integrating Puzzles and Story

- A single solution helps bringing the player to a specific situation once the puzzle is solved.
- Characters and props in the puzzle should also be part of the story.

まあまあか
ふぅん…
ビクトリア
あたしが出すナゾを、あんたが解いてくれたらね！
ふむ。
やはり緑はいいな。
部屋に植物っていいよね。
レイトンのひとこと
もどる
ルークのひとこと

# The Contract Between Designer and Player

- Games where puzzle and story and game are integrated have an implicit contract.
  - If the player is too difficult, or too easy so there is no challenge, the player will lose interest.
  - If the player gives up, she will not experience the story.
- The puzzle has to be **fair** to the player.
  - Player must have all the information needed to solve the puzzle.
  - In videogames, designers should not be trying to prove their cleverness, but helping the player feel clever.

# Puzzle Patterns

- Different ways to achieve insight
  - Selective Encoding
  - Selective Comparison
  - Selective Combination

From Sternberg, Robert. Beyond IQ: A Triarchic Theory of Human Intelligence. Cambridge: Cambridge University Press, 1985.

# Selective Encoding

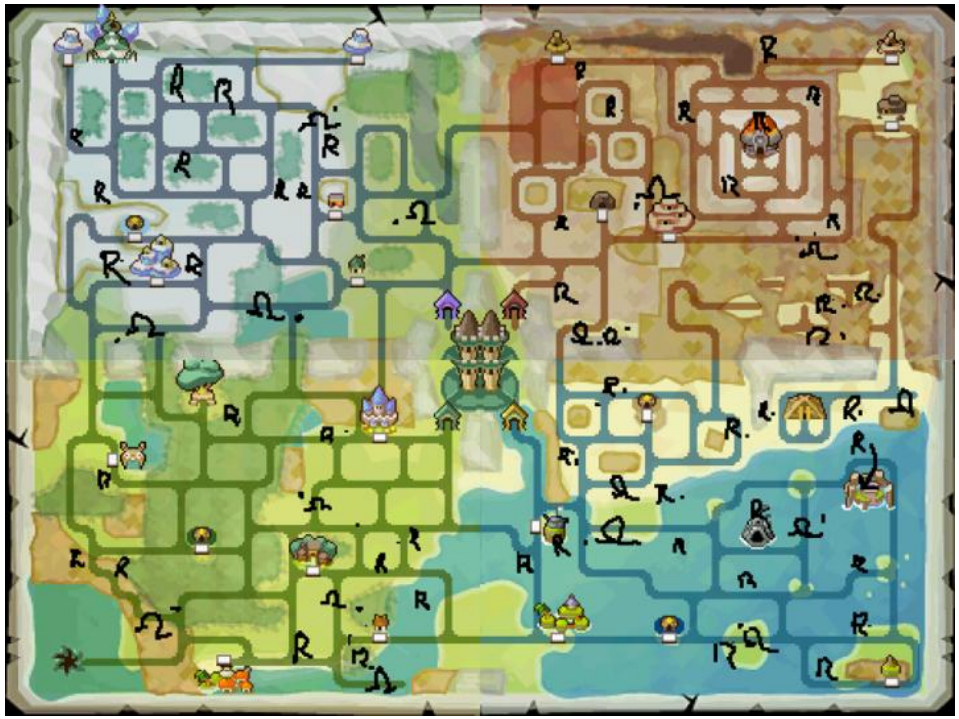
- Making apparently irrelevant information relevant.

# Selective Comparison

- Using analogies and metaphors, in order to draw a non-obvious relationship between two pieces of information.

# Selective Combination

- Joining pieces of information in order to form a novel one.

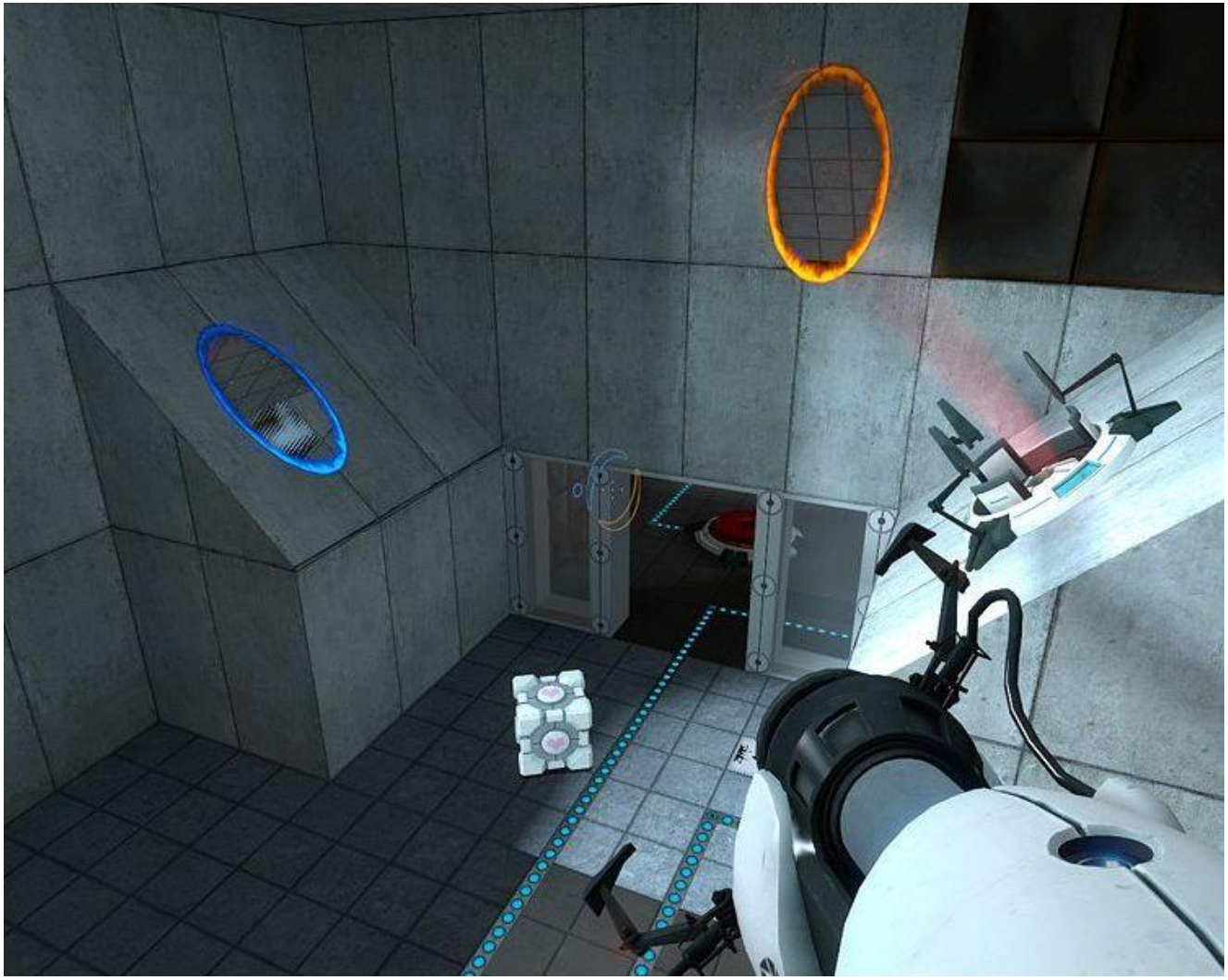


# Evaluating Your Puzzles

- Writers/designers can evaluate their puzzles even before they are implemented.
- What follows is a checklist, in the form of questions, to ask oneself before implementing the game.
- This list is not a substitute for playtesting.

# Evaluating Your Puzzles: The Basics

- What knowledge does the player need to solve the puzzle?
  - Knowledge of the world
    - Socio-cultural activities
    - Math
    - Physics
    - Logic
- If the knowledge does not come from everyday life, is it provided in the game? How is the information given?



# Evaluating Your Puzzles: Integrating Puzzles and Story

- Does the puzzle include characters and objects from the story?
- Does the solution to the puzzle constitute an event in the story?

SELECTED TILE
Straight
Straight Tiles allow the flow to continue in a straight line.
Y FINISHED
A SWAP

49
04

(C)2001 Sony Computer Entertainment Inc.

# Evaluating Your Puzzles: Difficulty

- If knowledge of the world is needed to solve the puzzle, how specific is it?
- If the knowledge is given in the game:
  - How far apart is the information provided?
  - How accessible is the information?
  - Is the information redundant?
  - Can it be re-accessed?

59
So you want to get to the Forest Sanctuary, do you?
Menu

59
There's a path we locals usually take. Just go west of this village to find it.
Menu

59
But listen, young fellow-- it's called the Lost Woods for a good reason.
Menu

59
One wrong step, and boom! You go right back to the entrance.
Menu

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Menu

Menu

59
Talk to the locals here. They can tell you what you need to know.
Menu

59
Just pay attention to the tree branches.
Menu

59
Just don't listen to that fourth tree. It has no sense of direction.
Menu

# Evaluating Your Puzzles: Localization

- Is the puzzle based on puns or specific cultural knowledge?

# Evaluating Your Puzzles: Usability

- How obvious is it that there is a puzzle?
- How obvious are the pieces of information?

See Randy Smith's talk at GDC 2009: Helping Your Players Feel Smart: Puzzles as User Interface

# Conclusion

- Puzzles are one of the devices that bring together writing and game design.
- Designers / writers should respect the contract with the player to provide a fair puzzle.
- Most puzzles can be solved by following three basic types of thinking.
- Many of these principles also apply to math / physics/ logic puzzles.

# Thank you for listening!
# Questions?

telmah@mit.edu

Twitter: clarafv

http://gambit.mit.edu

# Note

- This presentation is directed to writers / designers.
- It focuses on integrating puzzles in the story.
- Puzzles are highly dependent on environmental narrative, so they involve all disciplines.

Diner Plate
What?
Hint
Quit
Reset
Rules
Submit

# Selective Encoding

- Making apparently irrelevant information relevant.

LIFE
098
00
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