

# How to Evaluate Games

Some Ideas from  
*The Art of Game Design, a Book of Lenses*  
Jesse Schell

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- ▶ To evaluate a game, evaluate your experience of it.
- ▶ How does it feel to play the game?
- ▶ Exciting, frustrating, intriguing, frightening, ...
- ▶ Why do you keep playing? Why did you start?
- ▶ What could be improved to make the experience richer?
- ▶ What games give you similar experiences?
- ▶ What games are completely different?
- ▶ What experiences would you like to see in this game?

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- ▶ Observe silently, like a Zen master



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- ▶ Play is whatever is done spontaneously and for its own sake.
- ▶ Play is manipulation that indulges curiosity.

# Curiosity: Play Answers Questions

- ▶ What happens when I click this?
- ▶ Can I beat this team?
- ▶ What can I make with this clay?
- ▶ How many freethrows can I make in a row?
- ▶ How do I finish this level?
- ▶ What new monsters will I find next?
- ▶ How do I use this weapon?

When evaluating a game, ask yourself what questions it raises, and how satisfactorily it answers them.

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- ▶ A game is a problem-solving activity, approached with a playful attitude.

# Game Qualities

- ▶ Games are entered willfully
- ▶ Games have goals
- ▶ Games have conflict
- ▶ Games have rules
- ▶ Games can be won and lost
- ▶ Games are interactive
- ▶ Games have challenge
- ▶ Games can create their own internal value
- ▶ Games engage players
- ▶ Games are closed, formal systems.

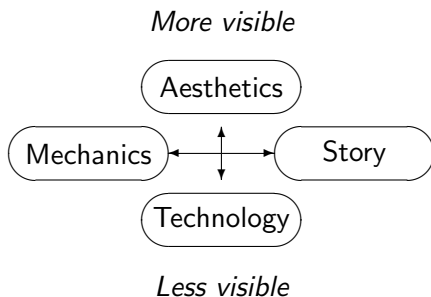
When you evaluate a game, look at how well or poorly it achieves these qualities. What could be done to improve them?

# Games Pose Problems

- ▶ Find a way to get more points than the other guys
- ▶ Find a way to defeat a monster
- ▶ Find a way through a maze
- ▶ Find a way to complete this level
- ▶ Find a way to destroy the other player.

When evaluating a game: What problems does the game give the player? Are there hidden problems that arise? How does the game generate new problems each time, so players come back?

# The Four Elements of Games



- ▶ Which areas are best? Worst?
- ▶ How could they be bettered?
- ▶ Is there *balance* and *blend* between all four?

# Theme

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- ▶ *Titanic*: Love is stronger than death.
- ▶ *Hercules*: Virtue can defeat death.
- ▶ *Toontown online*: Play can defeat work.
- ▶ Does every element of the game support the theme?

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- ▶ Age, sex, occupation, politics, personality,...
- ▶ Males prefer:
  - ▶ Mastery
  - ▶ Competition
  - ▶ Destruction
  - ▶ Spatial Puzzles
  - ▶ Trial and Error

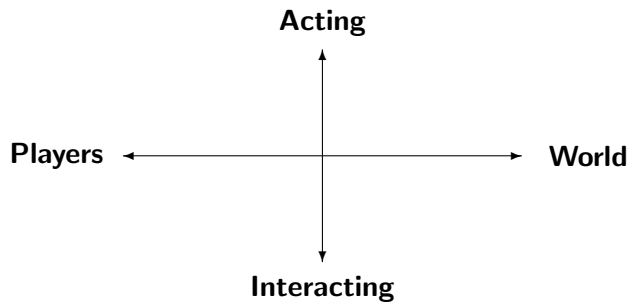
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- ▶ Females prefer:
  - ▶ Emotion
  - ▶ Real world
  - ▶ Nurturing
  - ▶ Dialog and Verbal Puzzles
  - ▶ Learning by Example

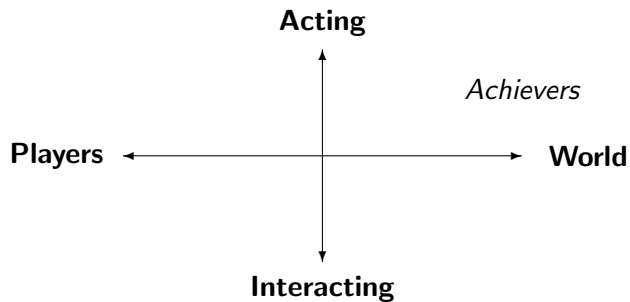
# Game Pleasures

- ▶ Sensation
- ▶ Fantasy
- ▶ Narrative
- ▶ Challenge
- ▶ Fellowship
- ▶ Discovery
- ▶ Expression
- ▶ Submission

# Taxonomy of Player Types

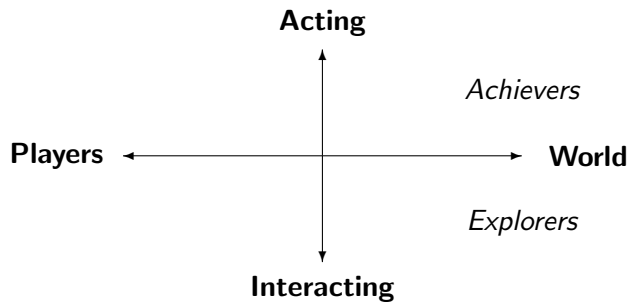


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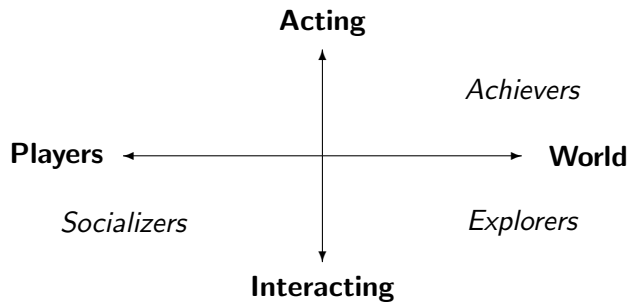




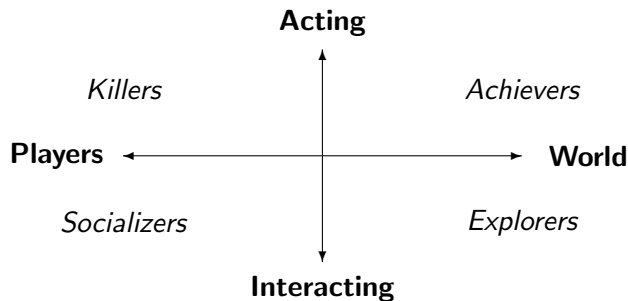
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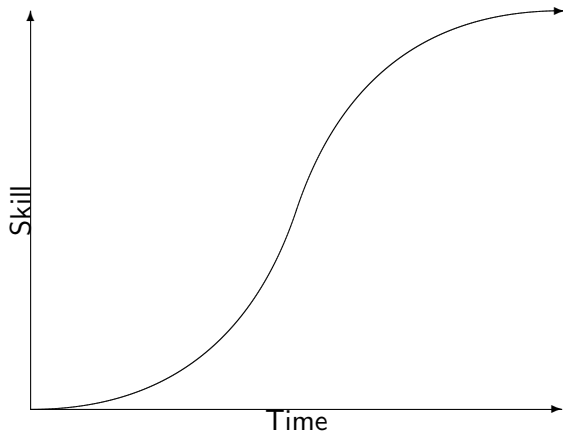
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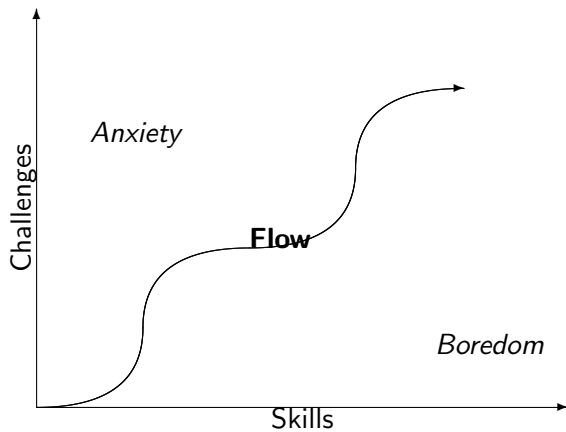
# More Subtle Pleasures

- ▶ Anticipation
- ▶ Delight in Another's Misfortune
- ▶ Gift Giving
- ▶ Humor
- ▶ Possibility
- ▶ Pride in Accomplishment
- ▶ Purification
- ▶ Surprise
- ▶ Thrill
- ▶ Triumph over Adversity
- ▶ Wonder

# The Learning Curve



# Flow



# Factors Affecting Flow

- ▶ Clear goals
- ▶ No distractions
- ▶ Direct feedback
- ▶ Continuously challenging

# Game Mechanics

- ▶ Space
- ▶ Objects, Attributes, and States
- ▶ Actions
- ▶ Rules
- ▶ Skill
- ▶ Chance



# Space

- ▶ Discrete or continuous?
- ▶ Number of dimensions?
- ▶ Bounded or infinite?
- ▶ Nested?
- ▶ Mental spaces?

# Objects, Attributes, and States

- ▶ Objects are state machines, their attributes depend on their states.
- ▶ Secret attributes: known, shared, etc.

# Actions

- ▶ What are the *verbs*?
- ▶ What actions are built in to the rules?
- ▶ What objects can they act on?
- ▶ What actions are *emergent*?
- ▶ What side effects are there?

# Rules

- ▶ What are the fundamental rules?
- ▶ Are there “laws” or “house rules”?
- ▶ Are there modes in the game?
- ▶ Who enforces the rules?
- ▶ Are the rules easy to understand?

# The Most Important Rule of All

- ▶ What is the ultimate goal?
- ▶ Is it clear to the players?
- ▶ Is there a series of goals? Do the players realize this?
- ▶ Are the goals related to each other in a meaningful way?
- ▶ Are the goals concrete, achievable, and rewarding?
- ▶ Are short-term and long-term goals balanced?
- ▶ Do players get to choose between goals?

# Skills

- ▶ What skills are required?
- ▶ Are there categories of skill missing?
- ▶ Which skills dominate?
- ▶ What experience do the skills create?
- ▶ Are some players much better at these skills? Does that make it unfair? Is there a way to handicap the game?
- ▶ Can players improve their skills?
- ▶ Does this game demand the right amount of skill for its target audience?

# Chance

- ▶ Are certain events governed by chance?
- ▶ What is the perceived chance?
- ▶ What are the rewards?
- ▶ Are the chance calculations complex?
- ▶ Estimating chance is a *skill*.

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- ▶ Beware dynamic balance!

# Puzzles

- ▶ Goal easily understood
- ▶ Easy to get started
- ▶ Give a sense of progress
- ▶ Give a sense of solvability
- ▶ Increase difficulty gradually
- ▶ Parallelism lets the player rest
- ▶ Pyramid structure extends interest
- ▶ Hints extend interest
- ▶ Give the answer!
- ▶ Perceptual shifts are a double-edged sword

# Interfaces

- ▶ Does the game do what is expected when you use the control?
- ▶ Do you get the experience of being in control?
- ▶ Is the feedback too busy?
- ▶ Does the feedback direct your attention correctly?
- ▶ Is it a joy to use (swiffer vs. sweeping)?