Game Design Tips

Jesse Schell
The Art of Game Design
A Deck of Lenses
by Jesse Schell
The Lens of Surprise

Illustration by Diana Patton

Surprise is so basic that we can easily forget about it. Use this lens to remind yourself to fill your game with interesting surprises. Ask yourself these questions:

- What will surprise players when they play my game?
- Does the story in my game have surprises? Do the game rules? Does the artwork? The technology?
- Do your rules give players ways to surprise each other?
- Do your rules give players ways to surprise themselves?
The Lens of The Toy

To use this lens, stop thinking about whether your game is fun to play, and start thinking about whether it is fun to play with. Ask yourself these questions:

- If my game had no goal, would it be fun at all? If not, how can I change that?
- When people see my game, do they want to start interacting with it, even before they know what to do? If not, how can I change that?
The Lens of Griefing

Illustration by Nick Daniel

To make sure your griefing is minimized, ask yourself these questions:

- What systems in my game are easy to grief?
- How can I make my game boring to grief?
- Am I ignoring any loopholes?
Outline

• Process Tips
• Design Tips
• Story Tips
Process Tip #1: Fun comes first!

- Fun is most important
  - What is fun about it?
  - Atari vs. Intellivision
TWO PICTURES ARE WORTH A THOUSAND WORDS.

Atari vs. Intellivision?
Nothing I could say would be more persuasive than what your own two eyes will tell you. So compare for yourself.

Game for game, feature for feature, I think you’ll find Intellivision is clearly superior.

— George Plimpton —

ATARI®
HOME RUN™ BASEBALL

INTELLIVISION®
MAJOR LEAGUE BASEBALL™
Process Tip #1: Fun comes first!

- Fun is most important
  - What is fun about it?
  - Atari vs. Intellivision
- Mock up the fun first
  - Computers might not be necessary
Process Tip #2: Prioritize!

- You don’t have time for everything
- Do the riskiest parts first
- Foundational vs. Decorational Tech
Mickey Mouse’s First Cartoon?
Steamboat Willie (November, 1928)
Plane Crazy (May, 1928)
Disney Cartoons present
A Mickey Mouse
Sound Cartoon
Steamboat Willie
A Walt Disney Comic
by Ub Iwerks
Produced by Cinephone System
Copyright 1928 Mainie
Ragdoll Physics - Decorational
Ragdoll Physics -- Foundational
Ragdoll Physics -- Foundational
Ragdoll Physics -- Foundational
Winners: Take the GBA and press START!
AN EXCITING NEW FRONTIER IN VIDEO GAMES

JOURNEY

ASK FOR IT AT YOUR LOCAL ARCADE

FROM BALLY MIDWAY

© 1983 BALLY MIDWAY MFG. CO.
What is the Process of Game Design and Development?

1) Think of an idea.
2) Try it out.
3) Keep changing it and testing it until it seems good enough.
Process Tip #3: Leave Time to Iterate!

- Sims
- Rollercoaster Tycoon
- Pokemon
- Halo
Process Tip #4: Cheat!

• Things don’t have to be perfect – they just have to seem that way
  – Perception ≠ Reality

• Reality ≠ A Good Game
  – Pirates
Process Tip #5: Combine! Evolve!

• You don’t have to invent a new genre – you just have to innovate!
• Magic the gathering based on Cosmic Encounter
• Myst an evolution of text adventures
• Pokemon a combination of Final Fantasy and insect battles
Design Tips
Design Tip #1: KISS!

- Look for elegance, look for multitasking
- If it isn’t helping you, get rid of it!
- Tetris
- Othello
- Toontown Inventory
Design Tip #2: Know the difference between experience and structure
THE VISIBLE MAN
A Science Assembly Project

THE WONDERS OF THE HUMAN BODY REVEALED!
FROM SKIN TO SKELETON...
assemble, remove, replace all organs!

Includes an ILLUSTRATED HANDBOOK
written by Medical Authorities in everyday language

ACTUAL SIZE
Design Tip #3: Use the Elemental Tetrad

Aesthetics

Mechanics

Technology

Story
Elemental Tetrad

- **Mechanics**: Rules and procedures
- **Story**: The sequence of events that unfolds
- **Aesthetics**: How your game looks, sounds, smells, tastes, and feels.
- **Technology**: Any materials or interactions that make your game possible.
- Which is the most important?
Space Invaders

- Technology: New!
- Mechanics: Balanced!
- Story: Alien Invasion!
- Aesthetics: Nice!

- All four work toward one goal.
Design Tip #4: Know your audience!

• Make it accessible to them!
Computer Space vs. Pong
Design Tip #4: Know your audience!

• Make it accessible to them!
  – Pong vs. Computer Space
• Make it resonate with them!
Design Tip #4: Know your audience!
Design Tip #4: Know your audience!

• Make it accessible to them!
  – Pong vs. Computer Space

• Make it resonate with them!
  – Deer Hunter

• Test it on them!
Design Tip #5: Create Balanced Asymmetric Risk!

• Not sure the wisest thing to do? Good!
• This is different from not knowing how to play the game, of course!
• Battlezone
Design Tip #5: Use Balanced Asymmetric Risk!
Design Tip #6
Let Surprises Emerge!

• “A good game is one you can win by doing the unexpected and making it work.”

• Chess

• Sims

• Simple elements that can combine in complicated ways. Takes time!
Story Tip #1: Create a Conflict!

- No conflict, no story.
- Conflicts are interesting.
- Keep it simple.
Story Tip #2: Put the story to work!

- Shape it to meet your needs! Story is more flexible than gameplay.
- Use cliches when they can help you!
Story Tip #3: Use Simplicity and Transcendence!

- Medieval
- Modern
- Futuristic
- War
Story Tip #4:
Keep your story world consistent!
Make a Great Game!
Questions / Discussion?

- **Process Tips**
  - Fun comes first
  - Prioritize
  - Leave time to iterate
  - Cheat
  - Combine! Evolve!

- **Design Tips**
  - Keep It Simple, Stupid
  - Understand Experience vs. Structure
  - Use the Elemental Tetrad
  - Know your audience
  - Use Balanced Asymmetric Risk
  - Let Surprises Emerge

- **Story Tips**
  - Create a conflict
  - Put the story to work
  - Use simplicity and transcendence
  - Keep your story world consistent

- **Email:** jschell@cmu.edu