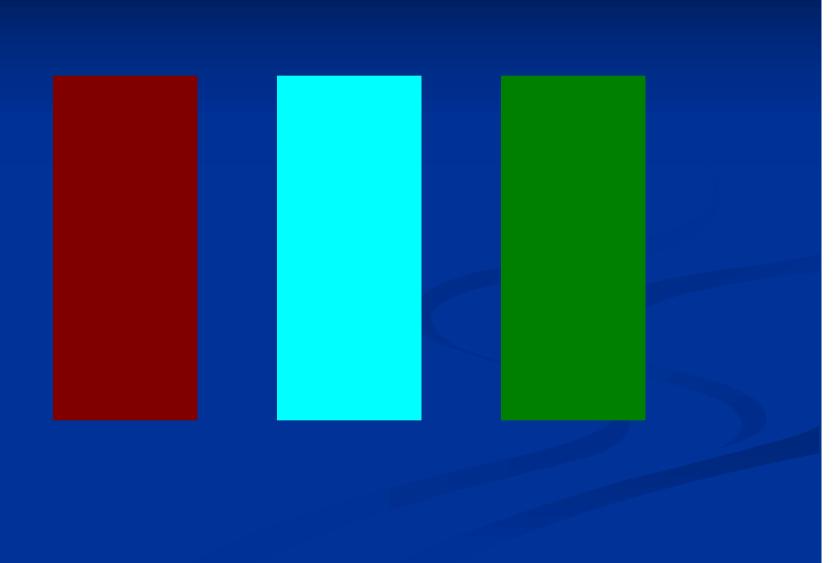
Robust, Dependable, and User Error Tolerance Lessons from Computer Games (Part II)

Dan Siewiorek
IFIP Working Group 10.4
Siena, Italy
July 4, 2004

Making Things Fun

Jesse Schell

The Pierce Effect



What's the Lesson?

- Use Indirect Control
- Limit the Options
- Control the Outcomes
- Cheat!

Tip #1: Use the principles of themed entertainment

Themed Entertainment Principles

- 1. Know your story.
- 2. Tell your story using every means possible.
- 3. Assume your guest's point of view.

Know your guest

What's important to them?

What do they like?

What don't they like?

Why?

What do they expect from you?

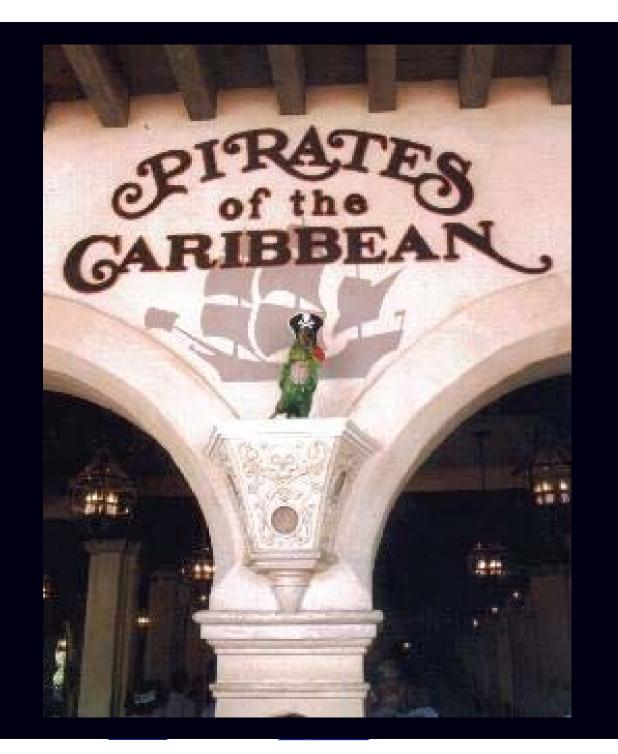
Why have they come to see you at all?





Pirates Case Study

First Principle: Know your story.





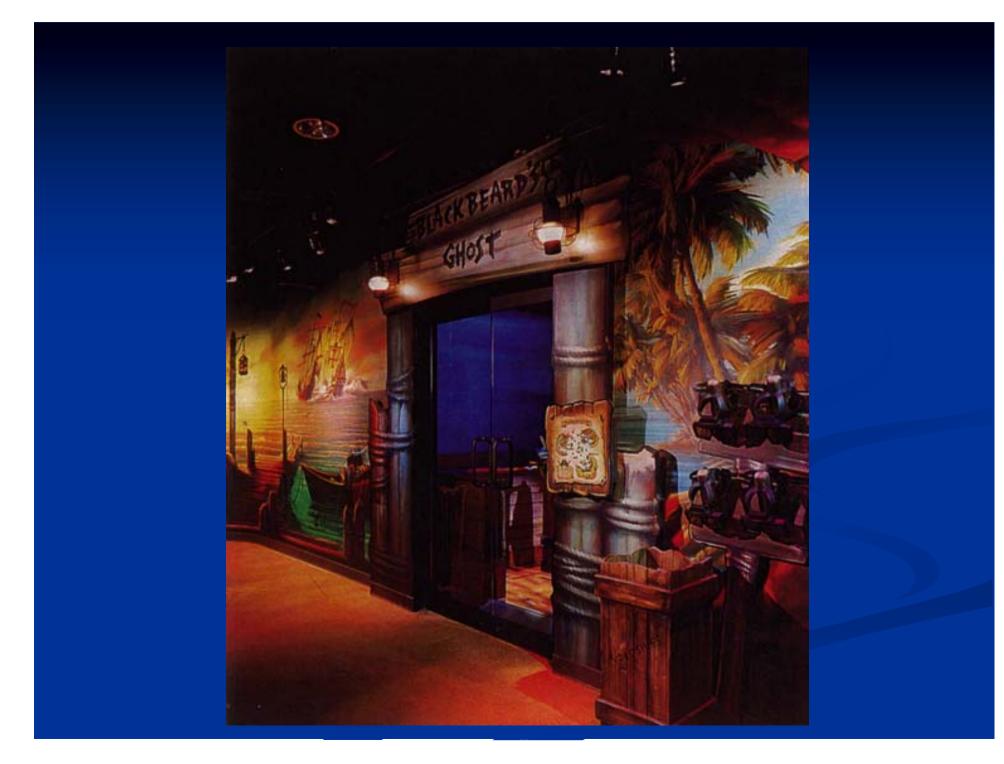


Pirates Case Study

Second Principle: Tell your story using every means possible.

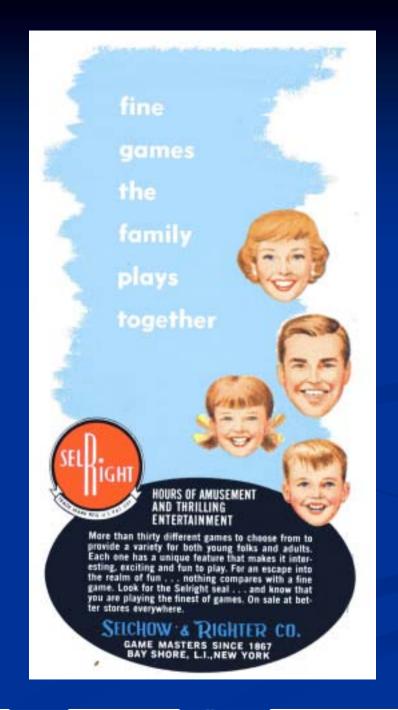






Pirates Case Study

Third Principle: Assume your guest's point of view.



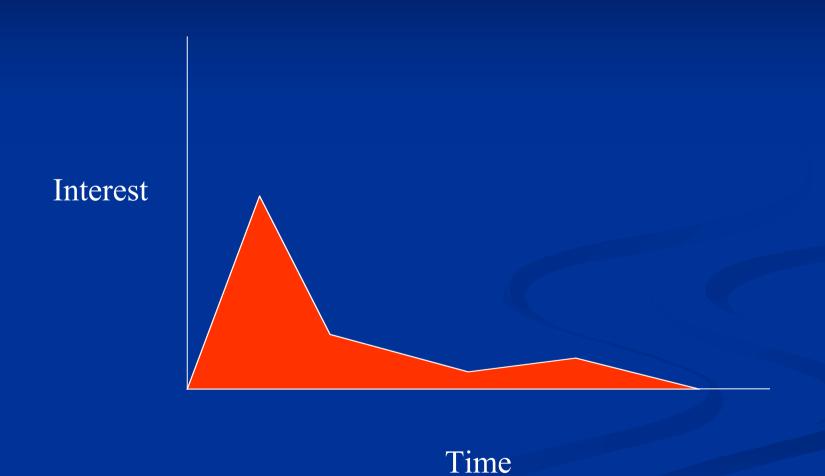


Tip #2: Use Interest Curves

A Bad Interest Curve



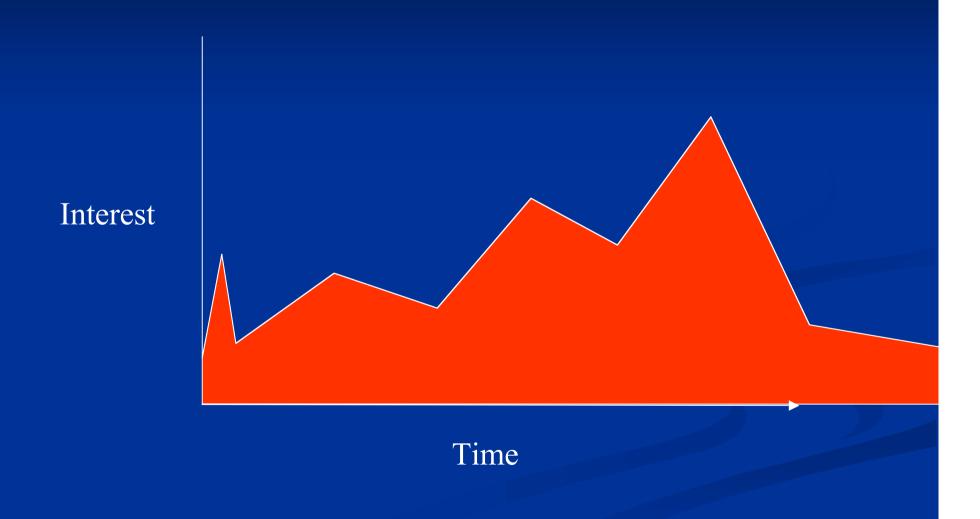
Another Bad Interest Curve



Still Another Bad Interest Curve



A Good Interest Curve



The Power of Imagination

Close your eyes...

Surprises Are Interesting!

- Journal of Neuroscience
- Surprise is the root of all comedy
- Surprise is the root of all strategy



Tip #3: Use Indirect Control

Indirect Control through Goals

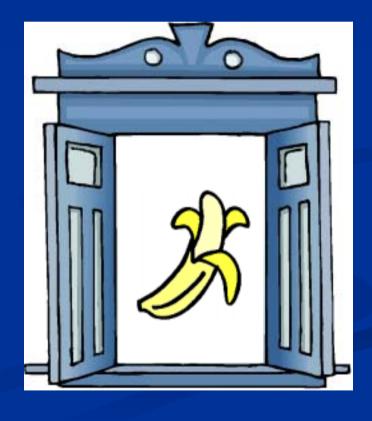




Indirect Control through Goals

Go get some bananas!

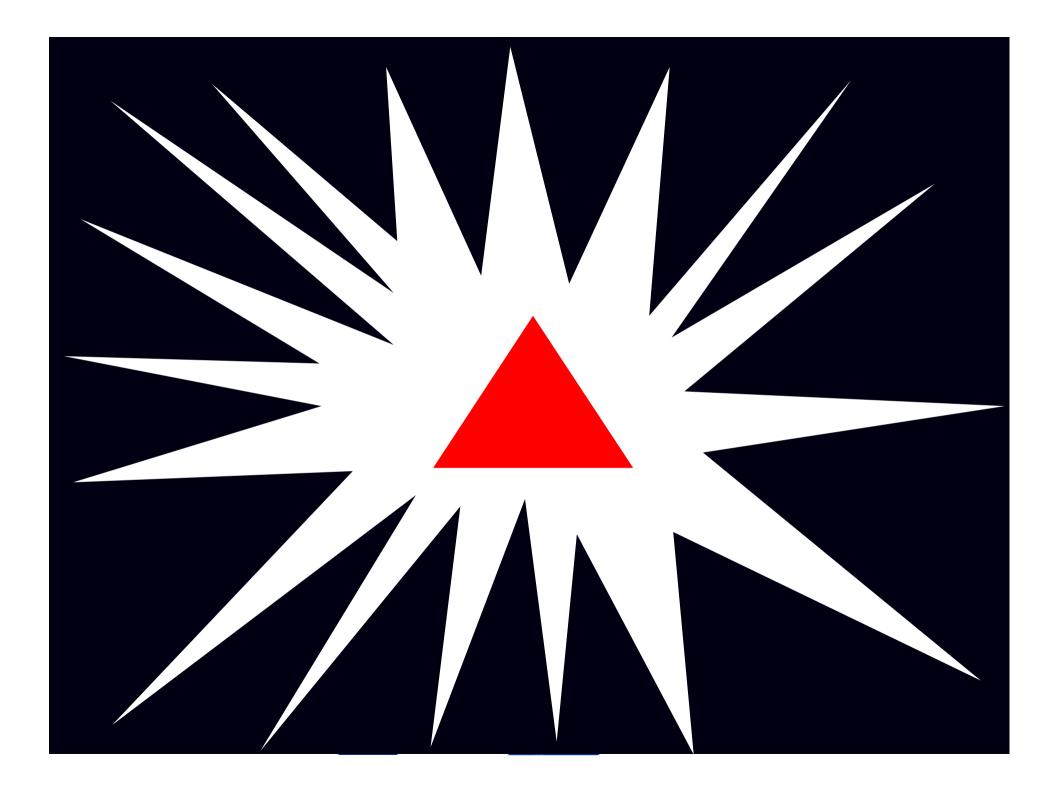


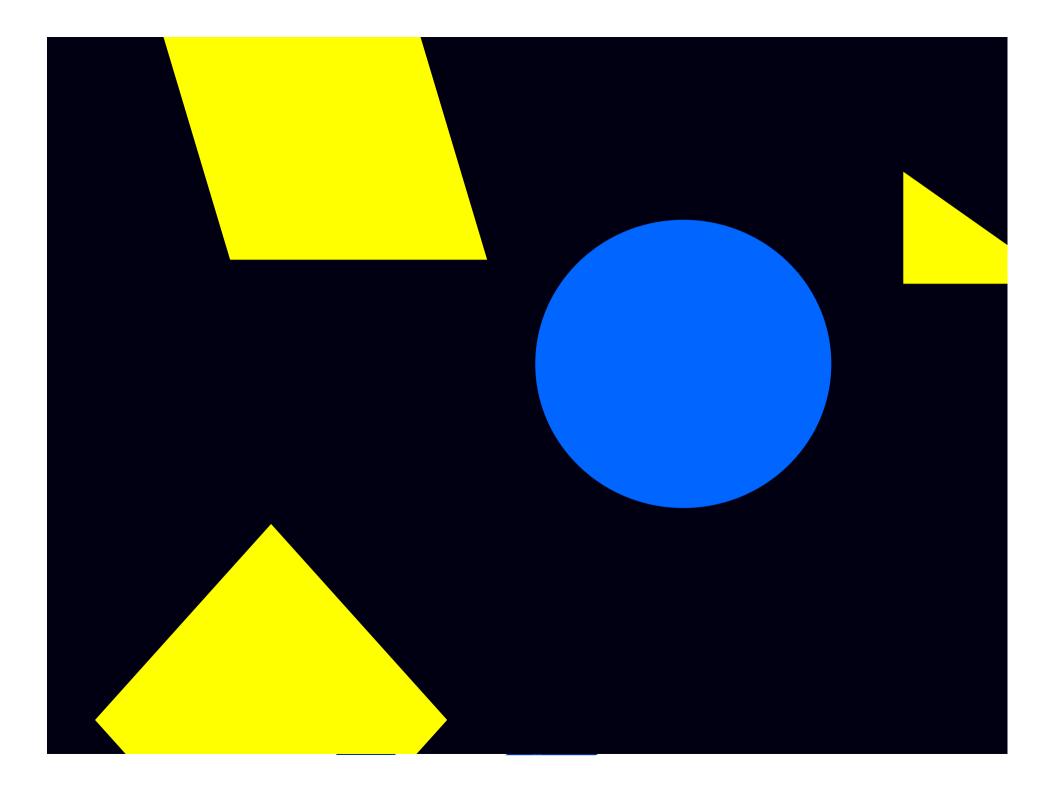


Indirect Control through Interface



Indirect Control through Visual Design





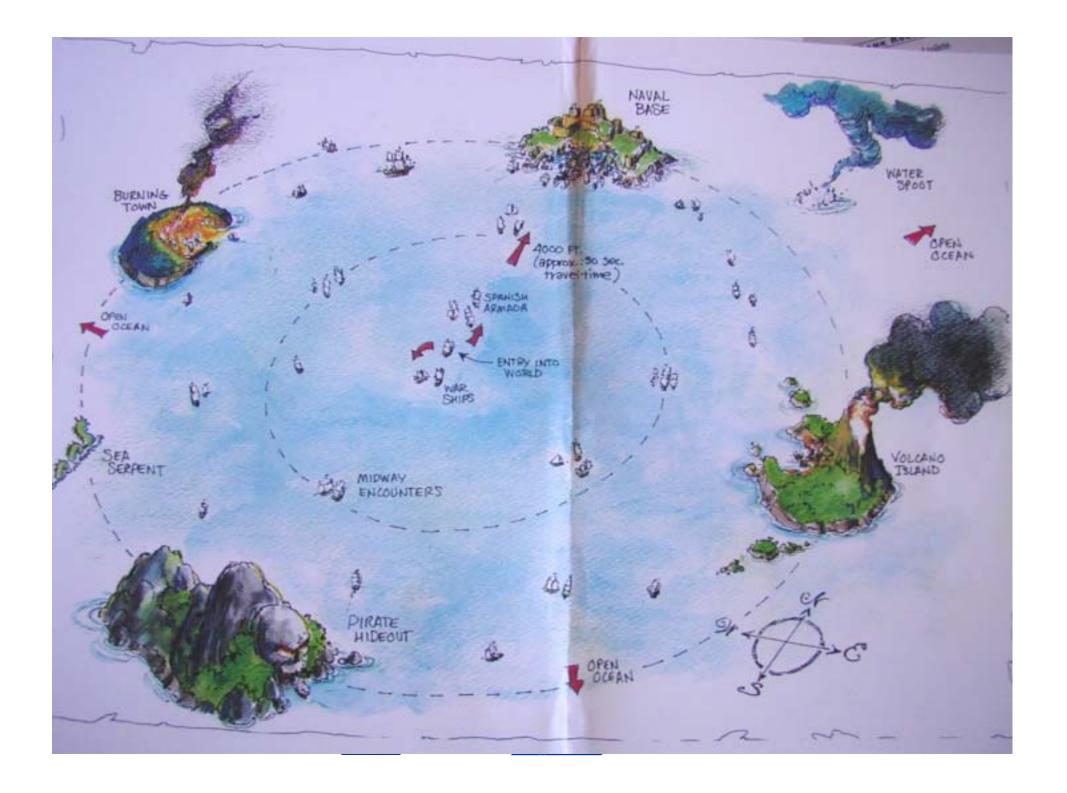


Indirect Control



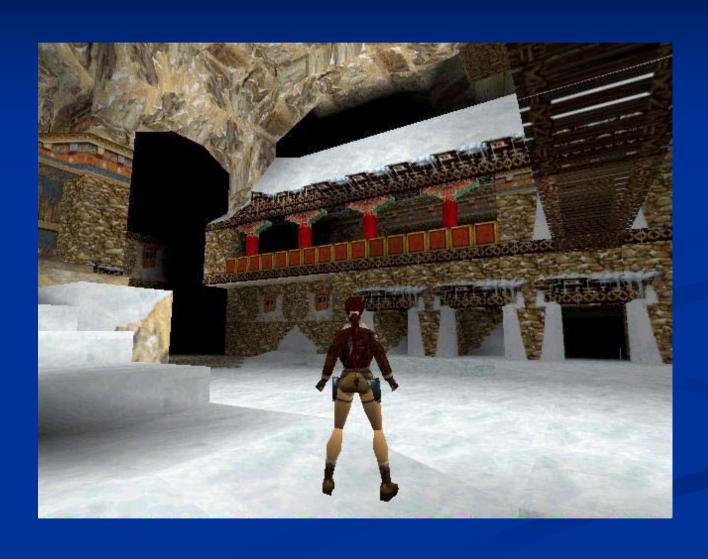
Indirect Control (multiplayer)







Indirect Control Through Avatars







Five Methods of Indirect Control

- Goals
- Environment Design
- Avatar
- Non-Player Characters
- Music

Tip #4: Lead gradually from the simple to the complex

"...guided along, as it were, a chain of flowers into the mysteries of life."

- Charles Willson Peale

KISS



Tip #5: Control Expectations



Control Expectations



Tip #6: Use the pleasure of touch

- Rubik's Cube
- Mordak Story
- Immediately Reactive
- Use sound it simulates touch.
- Understandable Approachable
- Touch has power cannon story

Tip #7: Make it Feel Right

- Virtual Cannon Story
- Become the user

Tip #8: Empower the user



Tip #9: Engender Passion



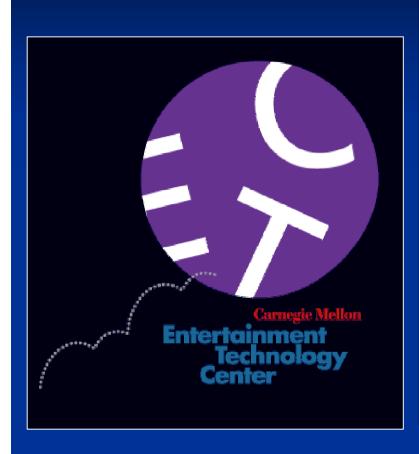
"Long experience has taught me that the crux of my fortunes is whether I can radiate good will toward my audience. There is only one way to do it and that is to feel it. You can fool the eyes and minds of the audience, but you cannot fool their hearts."

- Howard Thurston

"When it comes to the requirements for pleasing an audience, all the knowledge and instruction in the world is worth less than one ounce of soul."

Ottawa Keyes

Summary



Jesse's Tips for Making Things Fun

1: Use the principles of themed entertainment

2: Use Interest Curves

3: Use Indirect Control

4: Lead gradually from the simple to the complex

5: Control Expectations

6: Use The Pleasure of Touch

7: Make it Feel Right

8: Empower the user

9: Engender Passion

Email: jns@cs.cmu.edu

Web: www.etc.cmu.edu