An Introduction to Online Virtual Worlds

Jeffrey Jacobson, Ph.D.
Director, PublicVR
http://publicvr.org
Ensemble Pavilion in the Digital Preserve Second Life

Peter’s Social Media Class at School of Information Science University of Pittsburgh, USA
Second Life

• 3D Environment web accessible.

• See this island.

• See the reader board.

• Shared by hundreds of thousands.

• Uses a very interesting network architecture, where multiple servers maintain the illusion of a contiguous space.
Second Life 2

• See my Avatar

• The ancient art of puppeteering.

• Mirror neurons in the brain.

• Notions of social space carry over, perfectly.
The Elastic Sense of the Self

This Old House

Star Wars’ Queen Amidala
Emotional Impact is Uniquely Informative

Bailenson 2008
• We are animals capable of reason
• Affective Computing
• Cognitive Science does **not** do a good job of representing emotional processes in the brain.
MUDDs

• The first online role playing.

• Most of it fantasy or Science Fiction based, because **We require context to function.**

• All text, text + still shots, etc.

• Still going strong, today. (free, easy, fun)

• Precursor to Myst & Everquest.
MMORPGs
WOW
Ashen Empires
Star Wars
etc. etc.
MMORPGS

- Heavily Contextualized
- Very profitable.
- Lots of extra socializing, especially through voice chat.
- Guilds, friendships, marriages. My niece and nephew.
- World of Warcraft has over 50% of the market. Sweatshops in China!
World of Warcraft
General Purpose OnlineVR

• Second Life is the only one left! (“There” just died.)

• Respectable in the press and scientific literature.

• Making money.

• Software platform is aging dangerously, an unavoidable problem.
River City
Virtual Reality (Original Definition)

CLARTE 2007
Immersive VR

Touch!

Sound!
Multisensory Perception is Uniquely Informative

Data & Emotion Waters 1980
Left Brain, Right Brain, **Hind**-Brain

b) 58” wide large display

Large display 58” wide

Small display 20” wide

θ = 15.8°

6 feet

17.33 feet

c) Bird’s eye view of the small and large displays.

Bakdash 2006
Augmented Reality

Kaufmann 2006
Mobile Phone as Window

Layar Inc.

/source is linked
Motion Capture & Haptics

Becoming Dragon

a 365 hour immersive performance in Second Life

Dec 1 - 17th
Opening Reception, Dec 1st 7-9pm
Daily hours, 11am-7pm

Micha Cardenas
2008
Fun New Interfaces

• 3D Televisions coming soon (shutterglass)

• Gestural interfaces

• Cheap projectors

• LIfe-Sized Gateway to Second Life!
Media Convergence

• Social Media becoming more visual.

• Visual displays becoming larger and 3D

• All media becoming more interactive.

• Massive social changes resulting.

• Great opportunity and dislocation