

# **Interactive Design**

## **Audio and Design**

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# Introduction

Design = Visual design

Too bad interactive design is multidisciplinary

Audio design, game design etc. exist as well

“When I design a product, I think of my program as giving a performance for its user.” - *The Elements of Friendly Software Design* by Paul Heckel (1991)

# Interactive Design Paradigm

Music as a paradigm for interactive design:

- Instrument
- Score
- Time
- Performer & audience
- Tempo
- Play etc..

# Music Improvisation Background

- Stories and dance
- Baroque continuo & improvisation - 🎵1
- Loss of improv
- Recording of audio
- Jazz & rock
- Electroacoustic
- Game audio - 🎵2

# Video Game Audio History

- Good old days : Coder/Composer - 🎵3
- Late 1980's : FM + MIDI Musicians
- Streaming : Pro-tools Musicians
- 2000 : Film Composers - 🎵4



# Video Games Today

In 2001:

US video game sales at \$9.3 billion in revenues vs. Hollywood's \$8.1 billion

Video games adopting big budgets and management style of film studios

Video games have a strong history of interactive design worthy of study

# Degrees of Interactivity

- Performer ↔ audience
- Score ↔ improvisation
- Linear narrative ↔ interactive narrative
- Lean back ↔ lean forward
- Novice ↔ expert

# Performer ↔ audience

Performer can be considered to be the user  
and the audience are other players

and/or

Performer is computer and the user is the (pro)  
active audience



# Score ↔ improvisation

Score = High level of guidance, intent of designer

Improv = High level of play, requires more user skill and engagement

Meaning constructed in combination

# Linear Narrative ↔ “Free” Narrative

Degree of flexibility of narrative structure

Provide player with context & meaning

# Lean back ↔ lean forward

The level at which the user wishes to be engaged

Linear narrative(TV) - User is audience

Construct narrative(MMOG) - Proactive player

# Novice ↔ Expert

Important to allow entry and gratification of play by users of different skill levels

Players “lean forward” as they progress and become more proactive in narrative

# Teaching Interactive Design

Interactive design is both content and code

Coding requires different thought processes

Allow students to choose level of control over content



# Prototyping

**Level 1:** A first prototype is quickly built, but due to timeline constraints, it awkwardly evolves into final project

**Level 2:** A prototype is made and later thrown out, but much of the code remains the same. Some view the prototype as a waste of time.

**Level 3:** Multiple iterative prototypes are made rapidly. Final is built from best elements. Entire process is archived for future reference.

# Proto-Types

- Demo - Linear Demonstration - one path
- Playable - With several paths - not all
- Pilot - One complete level/episode

# Prototyping Tools

- Flash
- Director
- Pure Data/Max
- Java
- HTML
- Quicktime
- Paper

# Prototyping : Editing

- Make many sketches
- Edit out non-essential elements
- Strengthen & underline key elements
- Have a friend review

# Prototyping : Traps

- Evolve prototype into final project
- Focusing on the easy problems
- Adding too much bells & whistles



# Prototyping : Benefits

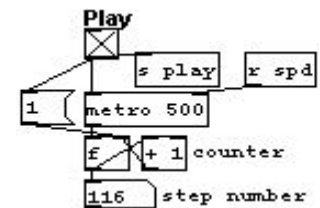
1. Demonstrate
2. Materials
3. Test
4. Experiment
5. Learn

# Demos

Code Zebra



Video Game Audio Prototyping



Interactive Music & Dance



# Contact

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