Four Approaches to User Interfaces for Audio Applications

Jörn Loviscach
Fachhochschule Bielefeld
(University of Applied Sciences)
Bielefeld, Germany
An all too Obvious Start

- Audio is audible
- But it is rarely:
  - visible
  - tangible
- Which does not fit well to regular computer-based user interfaces
- Image editors and word processors are much easier to design!
Outline

• Approach 1: Make it Tangible
• Approach 2: Make it Visible
• Approach 3: Focus on the Process
• Approach 4: Reduce the Interface
• Stimulus Package: Weird Ideas
Approach 1: Make it Tangible

Digital Musical Instruments, Augmented Classical Instruments

A Loudspeaker as Drumhead

A Versatile Percussion Instrument Based on Game Technology

For papers and videos see www.j3L7h.de
Approach 1: Make it Tangible, cont’d

Enhanced Control of On-Screen Faders

Knobs with and without feedback

Electrotactile Fader

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Approach 2: Make it Visible

Computer graphics can also do 2D, not only 3D!

Music Icons

For papers and videos see www.j3L7h.de
Approach 3: Focus on the Process

Find a metaphor for the task, not for its constituents

Why stick to the look and the workflow of antique tape recorders, mixing desks, etc.?

File System Tricks

For papers and videos see www.j3L7h.de
Approach 4: Reduce the Interface

- Graphics
- Breadth
- Level of Detail
Thank you!

Jörn Loviscach
JL@j3L7h.de
www.j3L7h.de
Stimulus Package: Weird Ideas
VR Mixing Console with One Knob

Inspired by:

Hiroo Iwata: CirculaFloor
How would a Steam-Powered Audio Studio have Looked Like?

See en.wikipedia.org/wiki/Steampunk
How will an Audio Studio on Board a Starship Look Like?
Will there be such a thing as a studio?
Will there be “Audio”?  
Will there be a “User”?  