

# Four Approaches to User Interfaces for Audio Applications

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**Low-Res Online Version**

# 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!

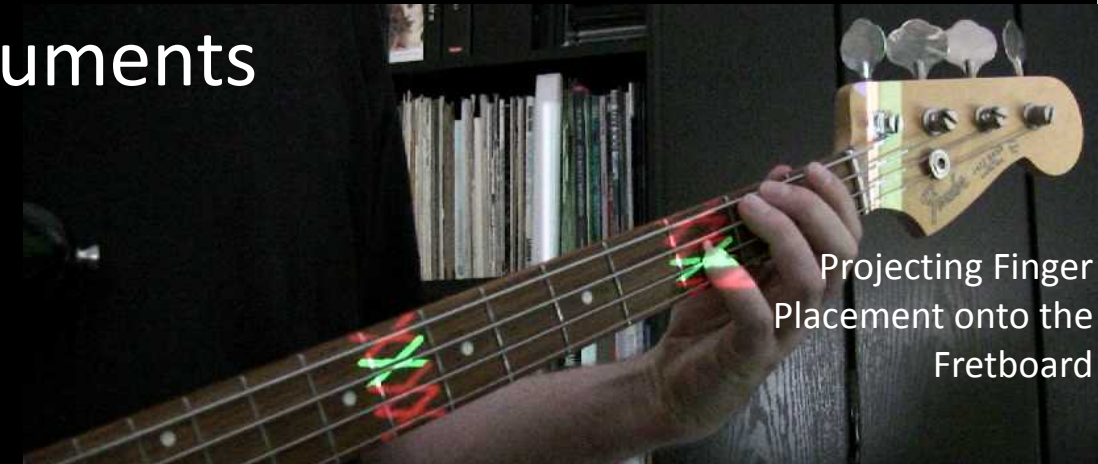


# Outline

- 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



Projecting Finger  
Placement onto the  
Fretboard



A Loudspeaker  
as Drumhead

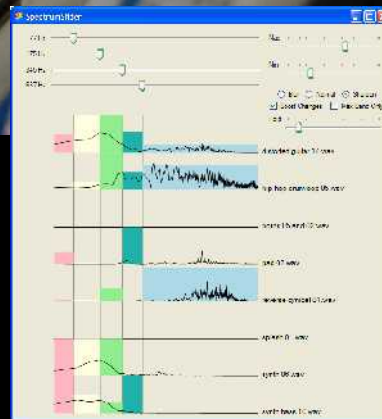
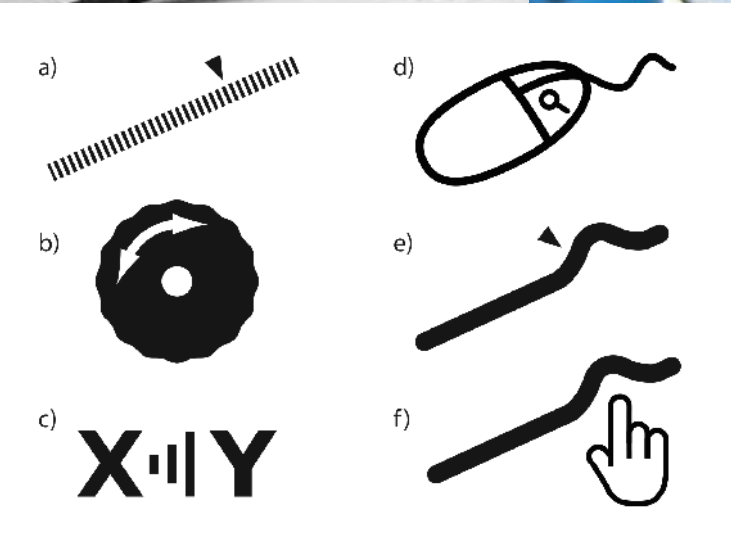
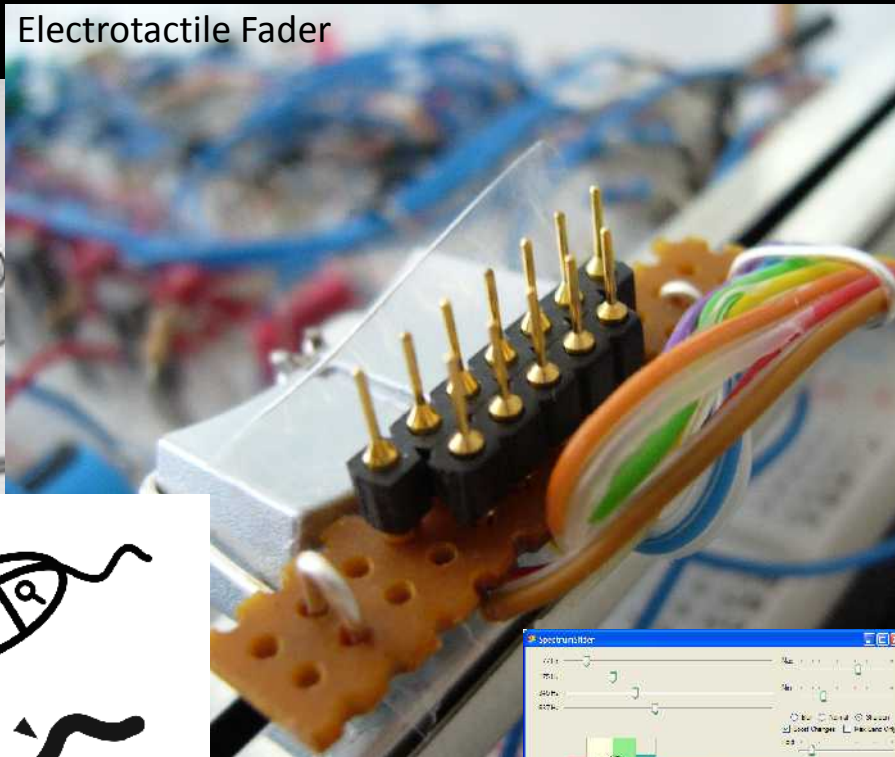
A Versatile  
Percussion  
Instrument  
Based on  
Game  
Technology



For papers and videos see [www.j3L7h.de](http://www.j3L7h.de)

# Approach 1: Make it Tangible, cont'd

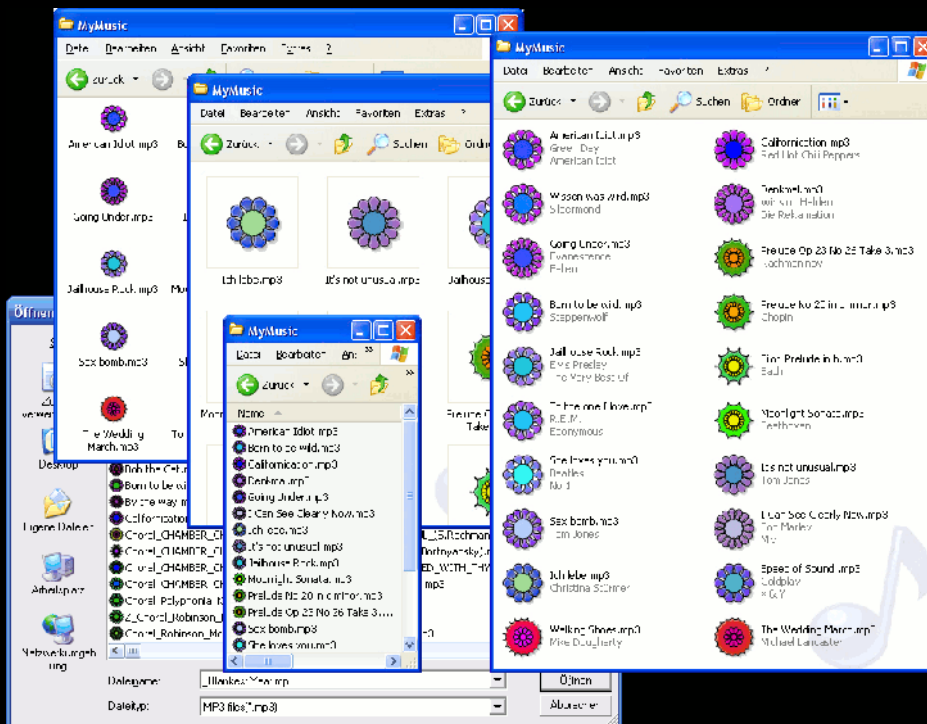
## Knobs with and without feedback



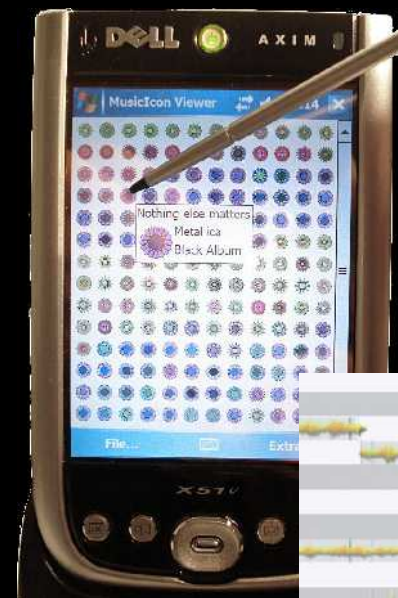
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# Approach 2: Make it Visible

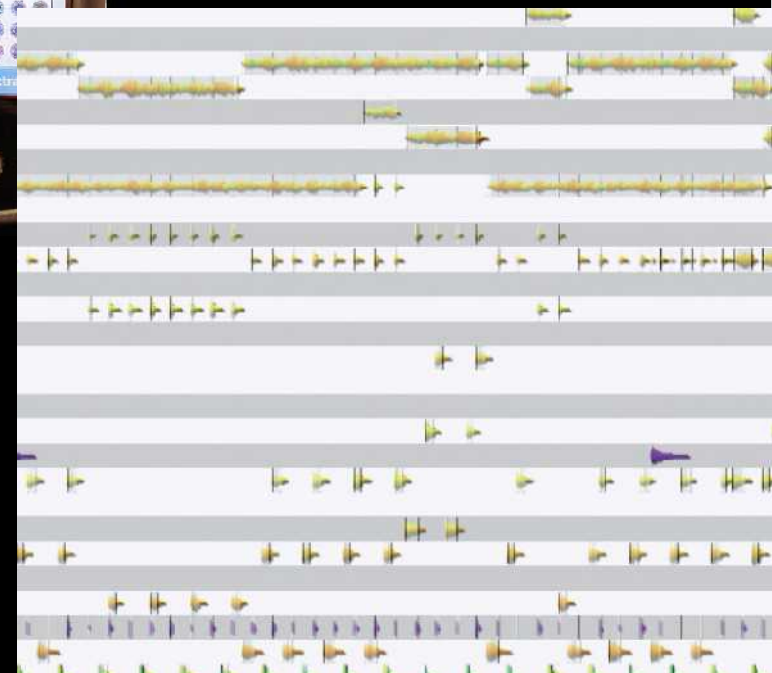
Computer graphics can also do 2D, not only 3D!



Music Icons



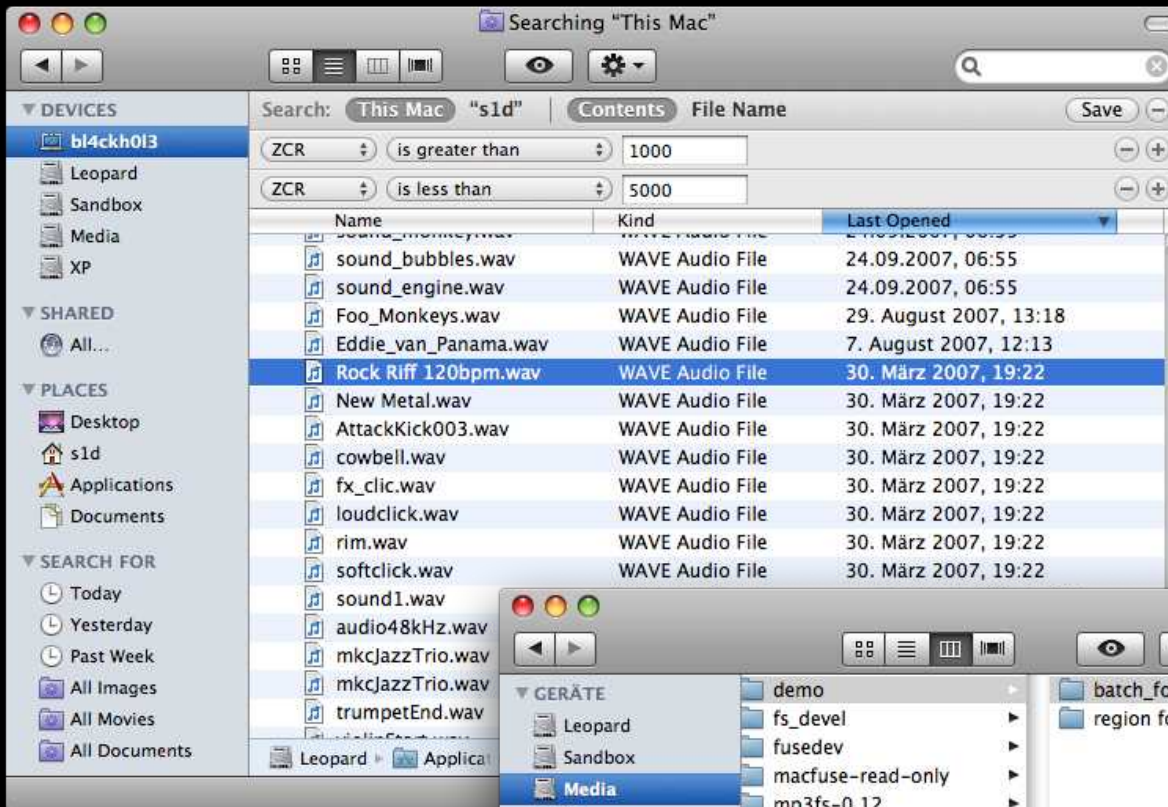
Editing MIDI Data Based on  
The Acoustic Result



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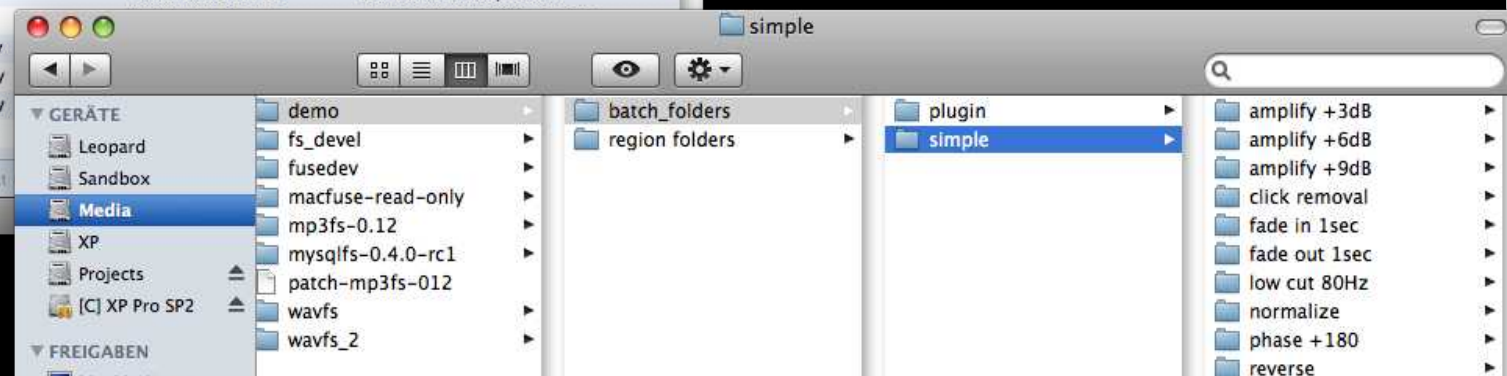
# Approach 3: Focus on the Process

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



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# Approach 4: Reduce the Interface

- Graphics
- Breadth
- Level of Detail



AbbeyRoad



Ableton



# Thank you!

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# 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?

# 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”?**