Advances in Modality

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ABSTRACT

1. OVERVIEW OF MODALITY CONCEPT AND AIMS

Modality is a project dedicated to modal interaction with synthesis processes for physical control in performance. Its primary product is the Modality Toolkit, a library to facilitate straightforward access to hardware controllers in the SuperCollider programming language. It is designed and developed by the ModalityTeam, a group of people that see themselves as both users and developers both of and for SuperCollider.

The central idea behind the Modality Toolkit is to simplify the creation of individual electronic instruments using controllers of various kinds. To this end, a common code interface, MKtl, is used for connecting controllers from various sources and protocols. Currently HID and MIDI are supported with OSC, serial port and GUI-based interfaces are planned to be integrated.

The name Modality arose from the idea to scaffold the creation of modal interfaces, i.e., to create interfaces where e.g. one physical controller can be used for different purposes or it is possible to switch its functionality, even at runtime. It is our belief that integration of such on-the-fly remapping features helps to create instruments that are flexible, powerful, and interesting to play. The strength of such a modal interface is that it allows for fast changes and more opportunity for sonic discovery as can be necessary when, for example, improvising with musicians playing acoustic instruments.

2. SCOPE OF MODALITY

- additions/unifications in basic SC,
- Modality toolkit + Various Mixed Things + closely related
- more related libs - FP/FRP, wslib, JITLibExtensions, all of Marijes device related quarks, etc

Figure 1. last workshop in Amsterdam

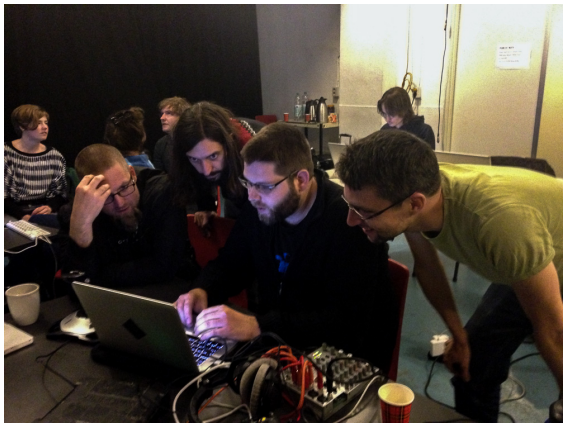

Figure 2. Workshop and open Lab at STEIM

3. ISLANDS AND BRIDGES, UNIFORM PROTOCOLS

Uniform devices (MIDI, HID, OSC, GUI, Serial) with rich descriptions, hierarchical names for all elements FakeGUI for everything

Uniform destinations: set messages, RelSet, SoftSet, // if Influx, influence

4. METHODS

Transformer islands: FRP, Influx, others - process incoming events, pass on results to destinations.

5. EXAMPLES / USE CASES

5.1 MPD 18

6. CONCLUSIONS

Modality - it's THE THING, yo!

Acknowledgments

The Modality team is (in alphabetical order): Marije Baalman, Tim Blechmann, Till Bovermann, Alberto de Campo, Jeff Carey, Bjoernar Habbestad, Dominik Hildebrand Marques Lopes, Amelie Hinrichsen, Robert van Heumen, Hannes Hoelzl, Miguel Negrao, and Wouter Snoei. Associated organisations are (in alphabetical order): BEK, the project *Design, Development and Dissemination of New Musical Instruments* of UdK Berlin/TU Berlin, supported by the Einstein Foundation, nescivi, and STEIM.