A Toolkit for Explorations in Sonic Interaction Design

Stefano Delle Monache - Università IUAV di Venezia
is about enhancing the qualities of objects in use through sound. Sound can make the qualities of interaction manifest, sharable and social.

> shape the sonic appearance of products

> support new functions or display possibilities for products

> improve the performance in interaction processes

> design informative and pleasant sonic environments
Understanding and interpreting non-visual sketches and prototypes is a core issue when designing for movement-based interaction.
Sonic interaction designers expect an effective set of methods, practices and tools.
The SDT is a front-end application in Max/MSP and Pure Data, providing a palette of *virtual lutheries and foley pits* for Sonic Interaction Design sketching and prototyping.

http://www.soundobject.org/SDT/
Set of interactively controllable physics-based sound models
- natural behaviour (natural mapping)
- continuous sound feedback
- potentially an embodied experience

Procedural approach to sound design

Resonator and interactor description by their physical-geometric properties
SDT is based on an everyday sound taxonomy.

From Closed and Gaver (1993)
Iterative process of development and evaluation of the system in workshop settings towards a tool that could:

1. grow away from a musical metaphor
2. respond to the requirements of design thinking
3. be sufficiently immediate and easy to use
4. represent a valuable platform in SID education and research
FKL 2013 - Per chi suona il paesaggio sonoro, 13 aprile 2013 - SUC, Firenze
interactive installation: Gamelunch, a sonic dining table
  investigation of surprise and contradiction in sonic interaction
(Polotti et al., 2008)
research: designing continuous sonic interaction
- continuous sound feedback for mechanical connections
- supportive and expressive feedback for cyclic continuous actions (Rocchesso et al., 2009)
workshop on paper-driven sonic narrative - paper mechanisms for sonic interaction at Conservatorio di Musica Statale C. Pollini of Padova - 2011. (Delle Monache et al., 2012)

