

Jeffrey M. Morris

Live Performance: Tappatappatappa



Topic: Music

Authors:

Jeffrey M. Morris
 Texas A&M University,
 Department of
 Performance Studies
 USA
 perf.tamu.edu

References:

- [1]
<http://www.morrismusic.org/2006/bellingham-electronic-arts-festival>
- [2]
<http://www.morrismusic.org/2011/tappatappatappa>

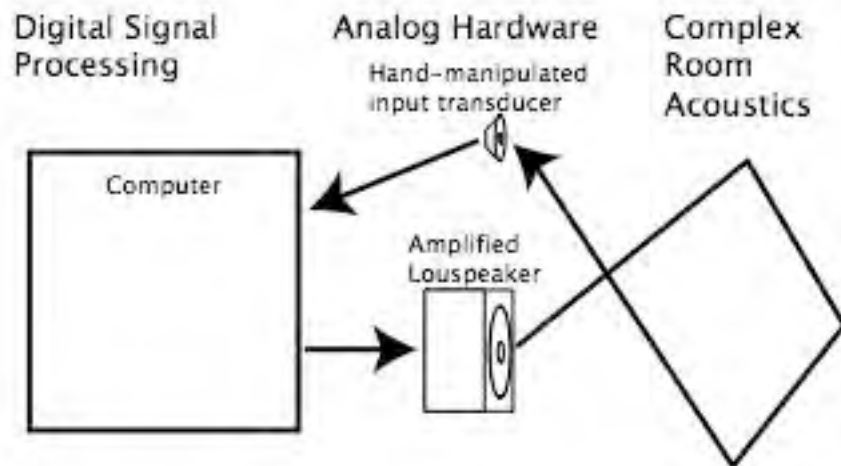
Abstract:

Tappatappatappa is a performance for improvising computer in a complex feedback system, merely guided by a human performer. Discovered while creating a generative agent for a live sampling composition for solo cello, *Tappatappatappa* uses its own output as its input, in a complex feedback loop including three stages: digital signal processing (constantly changing according to its own algorithms), the complex acoustics of the performance space, and the analog input and output hardware.

The human performer is only able to shape the performance in one of three ways: 1) introducing small sounds to the system by tapping or scraping the input transducer (a cone speaker used as a dynamic microphone) that can coax the voice of the system to bloom like a pearl around a grain of sand, 2) a few limited commands to the software, mainly like a conductor, calling for new actions to happen (but the details of the resulting actions are decided by the software), or 3) moving the input transducer around in the performance space, allowing new acoustic modes to resonate or damping resonances by pressing on the transducer.

The result is the emergent voice of the complex multimodal system itself, with the human performer limited to the role of sometimes-conductor, sometimes-animal tamer, grasping at invisible resonant modes illuminated by the feedback system. Recording examples are at references [1] and [2].

Requirements: Stereo PA and space/power onstage for performer with laptop.



Example: Digital, analog, and acoustic stages of the feedback loop.

Contact:
morris@tamu.edu

Keywords:

Feedback, improvisation, aesthetics, emergence, DSP