Club NIME II

Dual Airbags

Ben Neill and Nicolas Collins

Ben Neill and Nicolas Collins began their collaboration inspired by their unusual, if highly compatible, home-made musical instruments. In addition to the valves normally used in playing a trumpet, Neill's *Mutantrumpet* has three extra valves for channeling the air column to three different bells, one of which is equipped with a slide mechanism (like that of a piccolo trombone). In an age of electronically extended instruments, the "acoustic extensions" of the *Mutantrumpet* are refreshingly different.

Collins performs on his trombone-propelled electronics. The slide of an old trombone was coupled to an optical shaft encoder (essentially 1⁄2 of a mouse) via a retractable dog leash; by pressing switches on a small keypad mounted on the slide the player "clicks and drags" numerous parameters of a custom digital signal processor. The processor output is connected to a speaker attached to the mouthpiece of the trombone, so that the electronic sounds can be further processed acoustically by moving the slide and using mutes to affect formants, filtering, and articulation.

http://www.benneill.com
http://www.nicolascollins.com

Circumference Cycles

Chris Strollo, Tina Blaine, Robin Stanaway

Circumference Cycles is a sound and light performance piece incorporating the sculpture/instrument of artist Robin Stanaway. This sculpture called "Circumference" is made of hand blown glass circular disks suspended by thin steel cables. Vibrations made from striking the glass and strings are amplified and processed while light is projected through the 30 inch diameter rondels. The music created with the Circumference is both rhythmic and harmonic, resulting in a sound that is a blend of the tones of the glass and the guitar strings, combined and resonating sympathetically. This performance includes two rondels and two players, each processing their signal independently. Once in the digital domain, multi-timbral shaping and long repeated delays help to create a fabric of rhythms and tones. Light projected through the pieces generates reflections on the backdrop.

This performance is sponsored with the support of the Entertainment Technology Center at Carnegie Mellon University in Pittsburgh, PA.

http://www.jamodrum.net/

*reacTable**

Sergi Jordà and Chris Brown

The reacTable* is an electronic musical instrument built upon a tabletop tangible user interface. Several simultaneous performers share complete control over the instrument by moving physical artifacts on the table surface and constructing different audio topologies in a kind of tangible modular synthesizer or graspable flow-controlled programming language.

The reacTable* is a translucent table. A video camera continuously analyzes the table surface, tracking the nature, position and orientation of the objects that are distributed on its surface. Users interact by moving the objects, changing their position, their orientation, or their faces. These actions directly control the topological structure and parameters of the sound synthesizer. A projector draws dynamic animations on its surface, providing a visual feedback of the state, the activity, and the characteristics of the synthesized sounds.

http://www.iua.upf.es/mtg/reacTable/