Synap.sys

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Abstract. Memories from the past or the future, collective or personal, instincts or knowledge acquired over time. These topics are covered in this audiovisual performance of approximately 45 minutes, performed live through an interface created by the artist. This instrument symbolizes links that occur in the human brain: synapses, which are connections between neurons in order to allow the encoding of information acquired by the senses, recording of these throughout time, in addition to serving as a source for our memories. The performance deals with sensations and feelings that somehow pass through memory, through abstractions, images and sounds that are part of the forming process of these memories, which during life shape our personality and affectivity.

Keywords: audiovisual interface, generative, HOL, audiovisual performance, custom-made instrument, visual music, abstract art, lasers, arduino, acoustic.
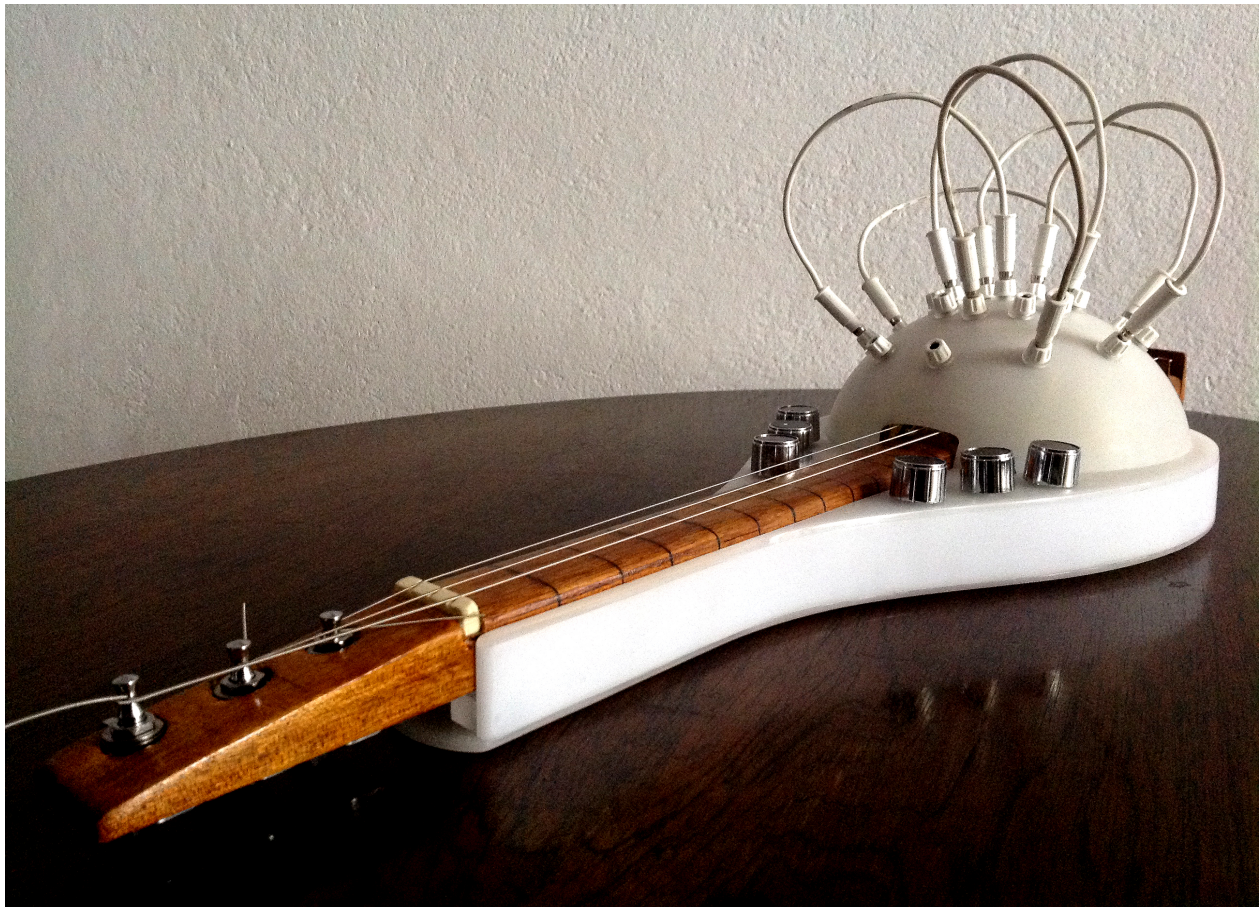
Introduction

Figure 1. Instrument

Memories from the past or the future, collective or personal, instincts or knowledge acquired over time. These topics are covered in this audiovisual performance of approximately 45 minutes, performed live through an interface created by the artist. This instrument symbolizes links that occur in the human brain: synapses, which are connections between neurons in order to allow the encoding of information acquired by the senses, recording of these throughout time, in addition to serving as a source for our memories. The performance deals with sensations and feelings that somehow pass through memory, through abstractions, images and sounds that are part of the forming process of these memories, which during life shape our personality and affectivity.

The show has 3 main parts: the connection between external and internal worlds through the data input; how this information is stored; and recall, when the data is retrieved in the format of memories. Each part has its own abstract narrative, using fundamental elements of sound and image in order to create metaphors that tell the history.

The instrument has 3 guitar strings and a pickup inside its bow. The acoustic part is independent from the digital and sends its signal to an EHX guitar pedal. The digital part is made of an arduino mega that gets the input from 20 connectors and sends them to the computer, where this information controls the audio and visual elements of the performance.   Using jumpers I connect two inputs and the max/msp patch gets this data and uses it according to the part of the piece I'm playing. It can change the part of the performance I'm playing, control visual and audio elements, according to my previous made code.

I also use a custom-made laser instrument that is played using a midi track from ableton Live. Midi information passes through a max/msp patch that controls the position of the servos where laser pointers are mounted on and the triggering of the lasers. This way I can get a very accurate synchronization between the lasers and the other elements of the show.

Figure 2. Live at Sonica (Glasgow, 2015)

Figure 3. Live at Multiplicidade (Rio de Janeiro, 2014)

Links to Further Documentation

More information, photos and videos: http://hol.1mpar.com/?page_id=1271

Biography

Henrique Roscoe is a digital artist, musician and curator. Works in the audiovisual area since 2004. Is graduated in Social Communication (UFMG) and Electronic Engineering (PUC/MG) and has expertise in Art and Culture (FUMEC).Has a conceptual and generative project called 'HOL'. With this project had performed at the main live images festivals in Brazil like Sónar, FILE, ON_OFF, Live Cinema, Multiplicidade, KinoLounge, FAD and also abroad, in England (NIME, Encounters), Germany (Rencontres Internationales), Scotland (Sonica), Poland (WRO), USA (Gameplay), Greece (AVAF), Italy (LPM e roBOt), Mexico (Transitio) and Colombia (Festival de la Imágen). Participated of videoart festivals in many countries as Germany, France, Spain, Holand, USA with documentation of the performances.Is the curator of FAD – digital art festival - that happens in Belo Horizonte since 2007. Makes part of the audiovisual duo 'ligalingha'. Develops interactive installations, programming in Processing, vvvv and Max/Msp. Builds instruments and interactive interfaces using sensors and common day objects. Produces stage design for bands like Earth wind and Fire, Skank, Roberto Carlos and events in Brazil, Germany and USA. As a VJ participated of the festivals Skol Beats, Creamfields, Nokia Trends, Motomix, Eletronika among others.
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