We Bass: inter(actions) on a hybrid instrument

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1. PROJECT DESCRIPTION

The key for a collective process of free improvisation is the interaction, dependence and surrender of its parts, so the resulting sound flux is more than the sum of each individual layer. The We Bass performance is an exploration of the symbiosis of two performers playing the same instrument: Their actions have direct consequence on the resulting sound, challenging the other player with instability and interference.

From the experiments of the English scientist Thomas Young (1773-1829) on the phenomena of diffraction and interference of light waves, we observe that interferences generated by overlapping light waves can have a character of annihilation, when they are out of phase (destructive interference), or a reinforcing character when in phase (constructive interference). From this reflection we try to deepen the discussion about the interferences of the performers inputs involved in a free improvisation session. We seek a model of connection between the performers that promotes processes of creation in the free improvisation, exploring the dialectics between reinforcement actions (processes of interaction that reinforces a certain sound moment) and movement actions (that destabilizes and transforms the flow).

We Bass is a duo performance exploring the interactions between the musicians playing one hybrid machine: an electric upright bass guitar with live electronics processing. The instrument consists of an electric upright bass with movement sensors and a live processing machine with a controller that interacts with the sensors, changing some processing parameters and some controller mapping settings, creating an instable ground for the musicians.

Fig. 1. Paulo Assis and Miguel Antar in Audioclicks Studio.

2. TECHNICAL NOTES

The instrument used is what we call a hybrid machine, using a wireless joystick (a Wii remote) attached to a custom built piezo-electric semi-acoustic upright bass. The audio signal and the Bluetooth connection go inside a live

electronics software inside a notebook. One midi controller (a Novation Launch Control XL) is also part of the hardware system.
The audio processing is done inside LiveProfessor, a plugin host software oriented for live performance, developed by Audioström Sound Software. Inside it, the audio signal is divided into eight independent channels, each with different processing. The main parameters of each effect channel are mapped into the midi controller, and the axis values from the Wii remote are mapped over some of these same parameters. Combined, both mappings create an unstable system where nor the bassist nor the controller players have total control over all the parameters. Not all axis movements from the bass are really mapped, and there is no movement sensor in the midi controller. Therefore, the performance also plays with the audience, tricking fake movements as musical gestures.

3. PROGRAM NOTES

We Bass is a duo improvisation work exploring the interactions between two performers playing one hybrid machine: An electric upright bass guitar with live electronics processing. Both musicians have their controls changed by other's actions and sensors, such as one's movements mapping other controls and the other's faders mapping one's pitch and intensity. The resulting sounds are consequence of their symbiosis, blurring the boundaries of their actions, inspiring and challenging each other with instability and interference.
Paulo Assis is sound artist and mix/mastering engineer based at Audioclicks Studio in São Paulo, Brazil. Graduated in Architecture (FAU-USP, 2002), participates in electronics, woodwork and software music projects. He is finishing his Master degree research at USP.
Miguel Antar is musician and researcher. Graduated in music at the Ateneo Paraguayo. He integrates the groups Ôctôctô, Joaju, DuoCoz, Camerata Profana, Filarmônica de Pasárgada, KairosPania Cia. Cênico Sonora and Orquestra Errante. He is doing his phD degree research at USP.
They are both members of the NuSom Research Center on Sonology at the University of São Paulo.

4. MEDIA LINK(S)

- Video: https://vimeo.com/webass

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