String Song (2019) for amplified prepared kinetic sculpture and live electronics

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1 PROGRAM NOTES

String Song is a guided improvisation for prepared kinetic sculpture and live electronics. The kinetic sculpture is a collaboration between the Aurie Hsu and sound artist, Kyle Hartzell. The sculpture integrates design elements of a violin, erhu (Chinese “spike fiddle”), and a hurdy gurdy in using motorized gears to draw a bowing mechanism across the strings. The instrument also features two sets of sympathetic strings to augment the registral range and resonance of the instrument. The various ways of playing the instrument - plucking, using a metal slide across the strings, actuating the sympathetic strings, mechanical bowing, and physically altering the bow pressure - serve as a sound source for live electronics that further expand the instrument. The duration of the piece is four and a half minutes.

Fig. 1. The kinetic-sculpture

2 PROJECT DESCRIPTION

Plucking, detuning the strings, and contacting the strings with the stick rather than the hair of the bow are acoustic ways to augment the sounds of a violin beyond bowing the strings. In the electronic realm, amplification and digital processing extend the sonic palette of the instrument, giving it a larger-than-life quality. This custom built kinetic sculpture, name, by submitter and collaborator, integrates design elements of a violin, erhu (Chinese “spike fiddle”), and a hurdy gurdy in using motorized gears to draw a bowing mechanism across the strings. The instrument also features two sets of sympathetic strings to augment the registral range and resonance. The submission, string song, is a composition for this amplified kinetic sculpture and live electronics that synergizes acoustic, mechanistic, and electrical sound.

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3 PERFORMANCE NOTES

3.1 Technical Requirements

- Amplification of instrument using one condenser microphone, sent directly to the performer's audio interface (interface is connected to performer's computer)
- Send 1/4" cables from audio interface to house mixer

4 MEDIA LINKS

- Video: https://vimeo.com/386872889 (close up of instrument)
- Audio: https://vimeo.com/386873401 (live performance)

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