SHP of THSEUS

Remote Networked Performance

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ABSTRACT

SHP of THSEUS is a collaborative audiovisual composition that draws inspiration from the Greek myth of Theseus. Over time, Theseus' ship was gradually renewed as every piece of original wood rotted and required replacement. We navigate this philosophical quandary of identity through collective control of performance setups in combination with an open score that affords individual interpretation.

The score is generated randomly from a series of 10 images. These images are categorized as either 'Sound' or 'Control' instructions and presented sequentially to each performer. A 'Sound' image is interpreted through sonic gesture, while 'Control' images prompt each performer to send control data to other performers, intervening in the local control of the remote performance setups. As instruments are altered over time, each performer relinquishes some aspects of control over their own performance as they continue to steer forward with their individual interpretation of the score.

SHP of THSEUS is realized using a Node.js-based collaborative tool called Collab-Hub[1], a client-server platform that allows any number of performers to transmit control data to each other over the internet. Performers can connect via chosen software or hardware platform (e.g. circuit-bent devices using Bendit_I/O[2]). Collab-Hub was developed at the beginning of the on-going pandemic and has facilitated semi-weekly improvised live-stream performances, collaborative instrument design, and new performances and research realized by other composers and ensembles, includ-
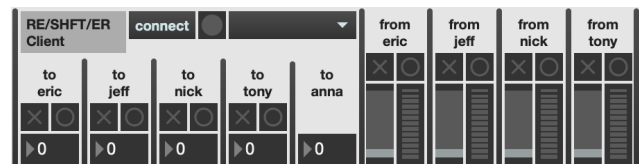
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[1]https://collab-hub.io
[2]https://www.benditio.com

Figure 1: Example Collab-Hub client GUI.

ing *Rhumb-Line*[3] and the Networked Performance project at the Advanced Computing Center for The Arts and Design at Ohio State University[4]. Additionally, the version of *SHP of THSEUS* being presented allows for audience interaction through a web-based Collab-Hub interface and locally-generated sound using web audio libraries.

1. DOCUMENTATION

SHP of THSEUS has previously been performed at the 2020 Electroacoustic Barn Dance and NowNet Arts Conference 2020. Collab-Hub has also been used for a number of improvised live-stream performances over the last year. The following links direct to portions of these performances and discussions about the instruments and tools realized with Collab-Hub:

- *SHP of THSEUS* Performance at EABD 2020: https://www.youtube.com/watch?v=BEIwRtYCloQ

- Early live-stream discussion of collaborative instrument development: https://youtu.be/hb3L6l2BmLA?t=2641

- Recent live-stream performance: https://youtu.be/i1cqU8D55ko

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[3]https://www.rhumbline.io
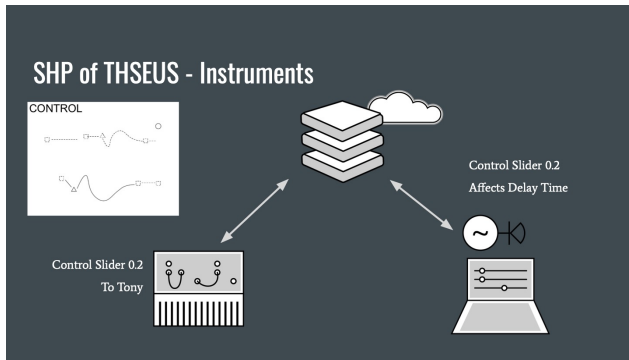[4]https://accad.osu.edu/research-gallery/networked-performance

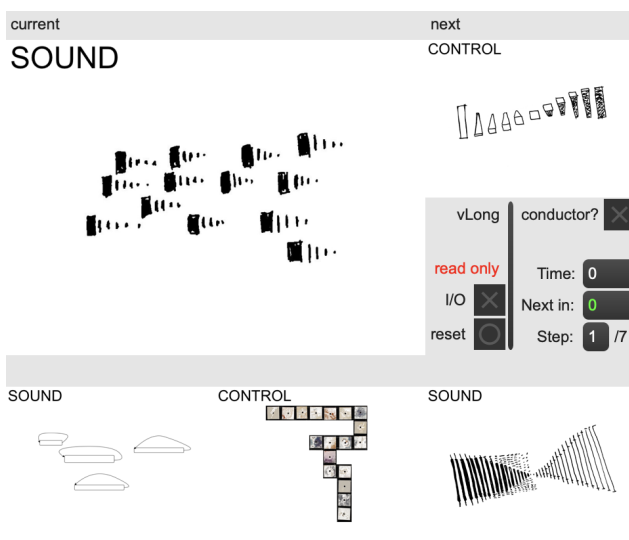**Figure 2: Diagram of instrument control over Collab-Hub.**

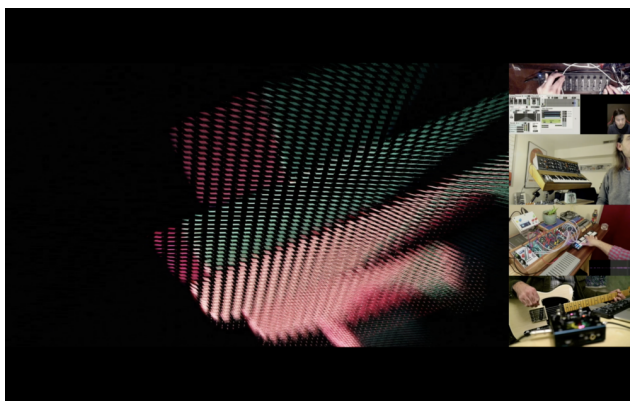**Figure 3: Screenshot from the *SHP of THSEUS* score.**

Figure 4: Screenshot from a live performance of *SHP of THSEUS*.

2. TECHNOLOGY REQUIREMENTS

A live video feed can be provided via video conferencing platform (e.g. Zoom), RTMP stream, or URL.

3. PERFORMER BIOGRAPHIES

Jeff Herriott is a composer who works in a wide range of styles. His classical works, which often include interaction between live performers and electronic sounds, have been supported by grants from the McKnight Foundation, the Barlow Endowment for Music Composition, and the MATA Festival. Jeff has scored and recorded original songs for several films with director S. Craig Zahler, including Bone Tomahawk, Brawl in Cell Block 99, and Dragged Across Concrete, the latter two of which premiered at the Venice International Film Festival. Additionally, Jeff has released multiple albums with the heavy metal outfit, Realmbuilder, and the sleepy rock duo, Bell Monks. (https://jeffherriott.com)

Nick Hwang (University of Wisconsin-Whitewater) is a composer, sonic artist, and game designer whose research involves networked performance and collaborative art-making. His work often involves human-computer interaction, fabricated-controllers, web-enabled interfaces, gameful performance, and audience-performer interplay. His work in form of music compositions for traditional and mixed ensemble, installations, and apps has been shown internationally. (https://nickhwang.com)

Anthony T. Marasco is a composer and sound artist who takes influence from the aesthetics of today's Digimodernist culture, exploring the relationships between the eccentric and the everyday, the strict and the indeterminate, and the retro and the contemporary. An internationally-recognized artist, his music and installations have been presented across the United States as well as in Norway, Italy, Brazil, Denmark, and Canada. As an Assistant Professor of Music Technology and Composition at the University of Texas Rio Grande Valley, his research focuses on topics such as web audio, hardware hacking, and creating hardware and software tools for networked music performance practices. (http://atmarasco.com)

Eric Sheffield is a musician currently interested in physics-based modeling and networked performance. He has served as the tech director for the Electroacoustic Barn Dance and performed and presented work internationally at NowNet Arts, NYCEMF, Root Signals, SEAMUS, NIME, and EMM. Eric is a founding member of the group Bell Monks, which has several releases available at music.bellmonks.com and on *clang* (clang.cl). He currently teaches music and recording as assistant professor at SUNY Broome. (https://www.ericsheffield.net)

Anna Weisling explores the relationship between sound and image and the performance possibilities shared by both. As a practice-based researcher and educator, she is particularly interested in the human-computer relationship and the ways in which computational technology can shift and change human expression. Her interactive media and installation work has been featured in gallery spaces across the US, and as an experimental visual performer she has been programmed both nationally and internationally. She has a Master's degree in Sonic Arts from Queen's University Belfast and recently graduated from Georgia Tech with a PhD in Digital Media. (https://aweisling.com)