Telematic Music: Six Perspectives

See <mitpressjournals.org/toc/lmj/-/19> for the full article plus sound files and supplemental materials.

Telematic Music: Six Perspectives covers the history, context, artistic and technical description of a network concert that the authors performed together on 16 November 2007. Performing live, the authors participated in the concert simultaneously, interactively, with high-quality low-latency software using Internet2 at Rensselaer Polytechnic Institute in Troy, New York; Stanford University in Palo Alto, California; and University of California San Diego in La Jolla. JackTrip, the audio software used for the interconnections, was developed by Chris Chafe at Stanford; the video software was Apple's iCHATav. The papers described below were presented during the Telematic Music panel at the International Society for Improvised Music (ISIM) conference organized by Sarah Weaver, ISIM Board director, and hosted at Northwestern University in Evanston, IL, 7 December 2007.

FROM TELEPHONE TO HIGH SPEED INTERNET: A BRIEF HISTORY OF MY TELEMATIC PERFORMANCES

Pauline Oliveros. E-mail: <paulineo@deeplistening.org>.

This paper describes some qualities of my network performance characteristics, beginning in 1991 with a telephone bridge connecting six cities via video telephone and progressing through PictureTel videoconferencing with higher-quality DSL lines; Internet connection with 8-second delay and no video; iCHATav with compressed video and audio opening the Internet for performance; and CD- and DV-quality transmission via Internet2.

TELEMATIC MUSIC PERFORMANCE PRACTICE: TRANSFORMING THE SOUNDS OF TIME AND SPACE

Sarah Weaver. E-mail: <sarah@sarahweaver.org>.

The paper begins with background on telematic music concerts in the year leading up to the 16 November 2007 performance of three pieces: TeleCello Concerto, Water Naught and Three Ways. The ensembles for the November 2007 performance were Tintinnabulate at Rennselaer Polytechnic Institute, VistaMuse at University of California San Diego and SoundWIRE at Stanford University. I conducted in this performance using the signing language Soundpainting. The paper outlines descriptions of the pieces and perspectives on telematic performance practice in areas such as attention modalities, audio and video delay, communication technology and the process of creating, rehearsing and performing in the medium.

TELE-SOCIAL MUSIC MAKING

Mark Dresser. E-mail: <deldresser@gmail.com>.

In fall 2007, three university-based telematic ensembles located on two coasts joined forces to co-produce a concert. The rehearsals used state-of-the-art software and a high-bandwidth network. In addition to the weekly rehearsals, a variety of consumer-level software was utilized, each with its particular tempo of communication. Three different types of structured improvisations were created, each with a conductor using the signing language Soundpainting. Surprising artistic and social dimensions emerged. The concert was evaluated on technical, administrative and artistic levels by all the participants as well as by local, remote and virtual audiences.

CHANGING THE DISTANCE: TAPES FROM GREECE AND THE BUILDING OF COMMUNITY THROUGH THE TELEMATIC MEDIUM

Jefferson Pitcher. E-mail: <info@jeffpitcher.com>.

Years ago, before the widespread use of Internet communication technologies, my closest friend moved to Greece, while I remained in California. After many months of letter-writing, we began sending audiotapes back and forth as a means of staying more connected. Eventually, we had the idea of recording these tapes at the same exact time an attempt at erasing the physical distance between us. Through the lens of this experience with breaking the time-space continuum, I examine the profound impact and immediacy of co-located performance and its ability to generate great humanity in people whose lives are lived in different parts of the world.

THE TELEMATIC APPARATUS—SEEN FROM AN INSTRUMENT BUILDER PERSPECTIVE

Jonas Braasch. E-mail: <braasj@rpi.edu>.

This paper focuses on the technological aspects of distributed music performances over the Internet, which have recently gained popularity. Although software exists to establish broadband telematic connections, current systems

typically do not address the specific needs for distributed music performances. Three of the main existing challenges—insufficient bandwidth, transmission latency and echo feedback—are described here with their current solutions. In the paper, the telematic transmission scheme is treated as a musical instrument, allowing the comparison of current developments to the historic development of acoustical musical instruments such as the piano, and its influence on music traditions.

AUDIO SETUP AND THE FUTURE OF THE TELEMATIC MEDIUM

Chris Chafe. E-mail: <cc@ccrma.stanford.edu>.

Someday mediated musical contact (and this means communication in the most personal sense) will transcend the present state-of-the-art experience, which strives to move from "almost like being there" to something "better than being there." In that spirit, but only as first step, I outline our 16 November 2007 setup for concert-quality audio connections between remote sites. The music streamed peer-to-peer using a high-definition, low-latency application for multi-channel audio connections (JackTrip, which can be freely installed on Linux and Mac platforms <code.google.com/p/jacktrip/>). A brief word follows about what the medium might become (physically and perceptually) when it becomes populated by enormous numbers of always-on interconnected peers.