Reflections of Systemic Improvisation in Zoom

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Introduction

During the spring of 2020, the authors have experimented with forms for online group improvisation, and investigated how our signaling systems for role negotiation can be applied for distance interactions. A point of departure is so called free improvisation; in short, a music with no predeterminations regarding style, genre, distribution of musical roles, narrative and such; rather interaction in real time. Due to the present Corona pandemic, in this particular presentation, we demonstrated this to an online audience by doing a telematic performance session within Zoom, where the specific infrastructure and affordances of this medium are used to constrain and mediate a musical improvisation situation. For further details, please look at the attached long abstract for the conference.

The performers

Palle Dahlstedt (*docent Chalmers/GU*) on electronics, at his studio in Brännö, Sweden, owner of the Systemic Improvisation research project.
Per Anders Nilsson (*Prof. GU*) on electronics at his studio in Lindome, Sweden, collaborator in the Systemic Improvisation project.
Chris Chafe *(Prof., Director, Center for Computer Research in Music and Acoustics, Stanford Univ.)* is playing cello and bowed sitar, and are our guest.

Challenges: timing

To perform in real time in a telematic setting challenges the performers in many ways. The most obvious is timing, where the latency can be everything from 25 milliseconds to as high as 500 milliseconds, and sometimes even more. In Zoom, the platform used for this presentation, one may say, the latency is out of control, and impossible to predict. As a consequence, playing music based on a common rhythmic lattice is not possible. As previously mentioned, we are practicing free improvisation, and a common practice is to interact with sounds as the principal musical parameter, in contrast to parameters such as scales, harmonies, pulse, and meter common in more conventional musical practices. When performing in this setting, you act, react, and interact on what you hear, and when, there is no other way, in contrast to reading and playing from a written score for instance. Cause of the

latency, a random component is active, however the latency is quite consistent during one session, but may well change in new session, even if everything else is identical. In this particular performance, we adapted to the given situation quite quickly, and eventually did not think about it.

Challenges: listening and monitoring

Another challenge is to make up a robust monitoring situation: to hear yourself, and the co-players is one thing; and how the final mix sounds, what the listener/viewer will hear, is yet another. Our experiences from this performance were that monitoring is a trickier problem to deal with than the latency. Two of us, Palle and Per Anders, did play electronic instruments, which have no acoustic sound at all. This means that we are totally depending on the monitoring system, and therefore the signal from our instruments has to be fed locally from the mixer, and not from the delayed internet line. To sum up: each individual performer may hear the others, and themselves in an acceptable way, but as it turned out in this case, we had no idea of the balance between the instruments for the viewers/listeners.

Playing with zoom

At the center of the systemic improvisation research has been to mediate free improvisation, e.g., with computer software and/or dice. Here we used the medium for the telematic performance, Zoom, for mediation as well. Referring to the enclosed long abstract for details of the implementation. Using the built-in signals in Zoom, such as stop, continue, thumbs-up and down, and coffee cup, did work very well. It really changed the interaction, and forced us to split the attention in several ways. Firstly, what we normally do in non-mediated improvisations: 1) to control and play your instrument, 2) to interact with the others in relation to what you hear; and secondly what a mediated system adds 3) to take notice to signals/rules, and adjust your playing and interaction accordingly; 4) to feed new instructions to the other players. What happened was that the Zoom environment, as with others systems developed, did change the interaction patterns at the players. Furthermore, each system has its own agencies; it does change the interaction characteristically, different for each system. Whether the musical outcome is better or not is irrelevant here. What counts in our research however, is whether any system have a clear impact on the interaction, and as a consequence, the musical outcome.