

## Curves | a collaboration between Shackle en Männer mit Motoren

The **Curves** project focusses on performances that use analog and digital media, improvisation and composition in both image and sound.

This project is a collaboration between *Männer mit Motoren*: Sven Hahne (computer and video), Matthias Muche (computer and trombone) and *Shackle*: Anne La Berge (flute and electronics), Robert van Heumen (laptop-instrument). It is a continuation of previous collaborations between *Shackle*, *Männer mit Motoren* and the organizations *Zeitkunst*, *Volsap Foundation* and *WEST28*. For the past three years they have come together for short intensive working periods to develop their own specific methods for interactive image and sound improvisations.

*Curves* falls under the umbrella of **Shackle's** *Shackle Affair* and *Shackle Bits* projects. In these projects they combine guest performers and/or silent film excerpts with the *Shackle System*. La Berge and Van Heumen developed the *Shackle System* as a self-designed digital cueing system which operates as a third member in their duo. The system consists of a series of musical sections that are proposed semi-randomly by an interactive computer program. The section proposals include descriptions of sound material, timing, dynamics and other musical parameters. Players are free to cancel propositions and request new ones at any time.

Muche and Hahne started working together more than 10 years ago. Their initial focus was to extend Earl Brown's and John Cage's ideas for using visual symbols as graphic scores. They fashioned their own versions of this by using abstract moving images. Since then, Muche and Hahne have continued to work on a software-system that translates audio into images in the most direct way possible. Their remarkably intimate and personal collaboration **Männer mit Motoren** (*Men with Motors*) evolved out of their annual festival for intermedial performance *Frischzelle* with the international ensemble *Timeart*. Their name is inspired by the critical theoretic reflection of media arts and our society's technological progress.

The **idea for Curves** evolved during collaborative work sessions in 2015, where the four artists researched methods for interacting with Hahne's visual material and for building protocols to sample and re-sample audio, using both acoustic and electronic instruments. By combining both composition and improvisation, and acoustic and electronic sounds, the two duos have formed a shared workplace. All four of them are seasoned composer/performers.

They plan to research and extend their boundaries of real-time audio-visual performances during their upcoming work periods on the *Curves* project.

The **research themes** are:

1. Image translated into sound and sound into image. In the last collaboration sound influenced the visual material directly. At times the influence was literal, such as showing the audio waveform in a specific color per player. In this project we would like to work on building more complex translations of audio to visual. Another part of the exchange of information would be to reverse the relationship and work on the sonification of the visual material by mapping audio to image and then back to audio in a feedback loop. One of our major challenges in this process is to create an artistically compelling result.
2. Sampling and processing audio. All four artists sample one another's audio. A multilayered sound environment can be created by varying musical parameters in the live acoustic playing and, at the same time, by processing one another's digital samples. Our plan is to spend the bulk of our research on strategies to control and expand this complex and potentially very exciting sound world.
3. Simultaneous specific and random control. Using various levels of control, including random control has been a priority in the collaborations between *Shackle* and *Men with Motors*. We would like to continue our research on the balances between human interaction, digital interaction and automated processes in our control and communication systems.
4. Refining the techniques for communication. Our plan is to develop a communication system that will be a composition and improvisation tool for our performances where we can fine tune our collaborative aesthetic voice. The communication avenues that we anticipate delving into are: using OSC over a wireless network to exchange data, using visual cues from the video projections, using visual cues from the *Curves/Shackle System* broadcast on mobile devices, using audio cues from the processed sample material, using audio cues from the synthesized digital audio and using audio cues from the live acoustic players. In our residency at EMPAC we would like to explore other communication techniques that have not presented themselves to us yet, such as live video exchange and sensors.

An initial list of more **technical research topics** are:

- An elegant and robust digital communication protocol among 4 people that is virtually plug and play.
- Various levels of cueing and responding to visual and digital cues.
- An audio input/output and communication protocol between the SuperCollider and Max systems that monitor our sound world.
- Live composition/improvisation structures that work in long time spans.
- Scenography.

One of our priorities is to develop our communication protocol where we function as an electro acoustic quartet rather than two duos coming together sporadically. In order to deepen our identity as a quartet, we will be committing longer periods of time together where brainstorming, invention, programming and reflection will all find their places.

*Shackle* and *Men with Motors* will work together for a week in October 2016, culminating in concerts at the Kunsthochschule für Medien Köln and Splendor Amsterdam as a first step to building the *Curves* project.

Contact: <http://shackle.eu/> & <http://www.menwithmotors.de/>