

PULSENDE PIBER (Pulsing Pipes) 2016

For bagpipe and 3 pulse-jet trombones.

Composed by Lars Kynde.

Pulsejet instruments by the artist collective Illutron: Christian Liljedahl, Tobias Lukkassen and Lars Kynde

Performed at the Klang Festival in Copenhagen 2016 and in a new version at Sand Songs in the Hague 2016



The project takes its starting point in Christian Liljedahl and Tobias Lukkassen's research in the pulse-jet technology, which was invented during 2nd world war by the Germans to send V1-bombers against England.

A pulse-jet is the simplest jet motor possible. Explosions occurs in a chamber, and because of the resonant properties of the exhaust and intake pipes, each explosion triggers the next. The frequency of the pulse jet is determined by the length and width of the exhaust and intake pipes.

The jet engines can due to their loud sound be heard over large distances thus making the speed of sound perceivable. Inspired from renaissance visual anamorphosis effects, this piece aim at creating a similar audio-anamorphosis. The rhythm will sound "correct" at only one particular spot in between sound sources of great distance. At all other places the rhythm will sound distorted because of the relatively slow motion of sound.

In this work, the bagpipe is playing a duo with a giant version of itself. The bag pipe walks in a composed pattern on an open area. In each corner of the area there is placed big powerful pipes instruments: The pulse-jet trombones. The three pulse-jet trombones are arranged in a distance-pattern that creates rhythmical harmony and disharmony depending of the listeners position in relation to the pulse-jets and the bagpipe player. The musical score includes a mapped route for the bagpipe-player to walk through the sonic landscape.



Klang Festival in Copenhagen 2016