scratching wood

elektroacoustic piece for woodscratcher machine, slice of a trunk and 4 speakers.

The woodscratcher



Figure 1: scratching wood (foto; myro myska)

The woodscratcher is a composition and sound generating machine, which cuts a 2-5~cm thick disk of a wooden trunk in a circular line along the growth rings of the wood. The disc is sensored with 4 pickup microphones on 4 sides, playing this signals over 4 speakers in the corner of the room, which spans acoustically the slice wood spatialized over the room. This scratching in the concert is done until the inner part of the disk falls to the ground and the piece ends.

The movement of the cutting tool behaving like an over-sized record player needle, has the performing function and is an allusion the production of records as wall as playing them. The woodscratcher pretends to extract and play the information which resides in the piece of wood cutting it in an excessive performance. The wood is heard as acoustic material with inhomogeneities annual rings by superimposing a loops of the cutting process. With the progression of the cutting process the sounds evolves of the pieces in more and more rubbing and squeezing sounds. The audio signal filter functions of the wood is heard like repeatedly changing formants, almost imaging voices in the noise.



Figure 2: Scracthing process

The composition

With this performances not only the machine as performer is broached as the issue, also the exploration of unknown material is an artistic statement as also defining the structured and timing of the piece. The aesthetics lies in the excessive performance beyond feasible by a human actor or musician. Also the many possible associations and associative links to the world of music performance. One of them is the sound based on the "noise" of the experimental music pieces since the 70s. and another with ideas of Herbert Bruen's computermusic project "sawdust" from that time, when the rejection of oscillators as a tone generator for free definition of single events down to the scale of samples as a liberation of note-oriented Music generation.

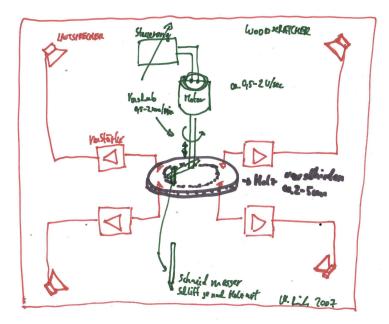


Figure 3: Partiture

The transition in algorithmic composition to the composition of processes as in-

strument like done in live composition is expanded to the construction of a mechanical machine which is the live composer. The main aspect of this is that the process does the composing and the machine is composed for executing the process of extracting the piece out of the disc of wood, destroying it and defining the audible result of the piece. So composer becomes a mechanical engineer and inventor of machines and the musician the operator as machinist.



Figure 4: End of piece (foto:martin polak)