



***Reverberation, a property of space essential to the perception of electroacoustic phenomena***

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Reverberation is a natural part of the sound scene that surrounds us every day. Its presence is obvious and intriguing in a church nave, musical and inspiring in a good concert hall, surprising and astonishing in a forest or in the mountains. It also tends to go unnoticed due to habit: in urban spaces, in apartments or well designed offices.

Under natural conditions, noticeable or not, reverberation always and everywhere accompanies human auditory perception. A listener placed in an anechoic chamber feels growing discomfort, the sounds of speech or acoustic instruments become as if they were shadows of themselves - their reception in such extremely unnatural conditions becomes increasingly tiring, irritating.

The question arises whether the situation could be reversed. Can reverberation be used to "legitimize" for auditory perception the sounds that do not exist in nature, that are created artificially? Could reverberation make crackles, fragments of acoustic waves and computer simulations of multiple complex sinusoidal tones "credible"? Is it possible to make them "real" and intriguing, pleasant in perception, and in consequence to "build" from such sounds... music?

During the seminar an example of creating this type of music will be presented.

It is a sound experiment of the author - a short piece "Binary Lament - the fourth approach" developed in the electroacoustic composition class of Prof. Lidia Zielińska at the Academy of Music in Poznan.

To build a synthetic sound stage, the author used DAW Reaper program, as raw materials he used fragments of sine waves, crackles, synthetically built human glottal tone with a fundamental frequency of 123 Hz together with its five harmonics.