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Notions of Experiments in EAM

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Abstract

In this paper the author presents notions of artistic experiments, in relation to electroacoustic music practices. As a start one may pose some questions: what is electroacoustic music, what is an experiment; is electroacoustic music still a form of experimental music? Are there answers to such questions? This presentation does not claim to give definite answers, rather a number of questions and perspectives are proposed on subject matter. One crux is that neither electroacoustic music nor the experimental is clearly defined and agreed upon.

What is electroacoustic music? It is, from my point of view, art music created with electronic equipment, generated and/or replayed and heard from loudspeakers, sometimes mixed with other media such as film/video, and/or musicians playing traditional musical instruments. And its roots can be found in the 20th century western art music tradition.

What is experimental art? Artistic experiments aim to explore the unknown and to create new artistic paths and is not subject for analyses of success or failure. In my opinion, the evaluation of a given artistic experiment is based on subjective aesthetical preferences and will accordingly be judged differently from artist to artist. Another view on experiments is to regard the electroacoustic music studio as an experimental system. The electroacoustic studio, whether it is a big professional studio or a lap-top based home studio, can like a church organ be regarded an experimental system. In such a view, it serves many purposes: as a musical instrument for realizations of artistic ideas, as well as a resource for artistic and scientific experimentation with sounds.

From one point of view electroacoustic music is no longer experimental because most barriers are broken. From another, it is still experimental, since composers nevertheless are still experimenting with new tools, and new expressions of music. The aim with such experimenting is most likely not to produce new knowledge per see, rather to produce new music, with each new piece composed however, new knowledge is produced.

Electroacoustic Music

What is electroacoustic music? Wikipedia gives as point of departure: “electroacoustic music originated in Western art music around the middle of the 20th century, following the incorporation of electric sound production into compositional practice”. The webpage Ears2 states: “Electroacoustic is a name that could describe any electronic technology that works with sound. As a creative genre it can include many different types and styles of work, including

both of the types from which it emerged: Musique Concrète and Elektronische Musik".[1] Peter Manning (2004) claims that the term EAM was introduced and used by a "small but steady growing group of practitioners" (p. 403), which led to divide EAM into two types, namely acousmatic music, that is, music in recorded form replayed on loudspeakers. Whereas the other type is "live-electronic music" that includes works where electronic devices are used to generate and/or process synthetic or "real-world" sounds, including musical instruments, in real time. Moreover, Manning claims that this division of EAM:

> however, present very real problems to a wider public, as, unlike terms such as 'electronic' or 'computer', they have no obvious roots in the experiences of everyday life. As a result, they represent for many a vision of an art form that is both elitist and inaccessible (p. 404).

The term EAM is known and understood by a small community of music creators, and according to Manning an elite of connoisseurs that share aesthetical values to a certain extent. Furthermore, it is art music created with electronic equipment, generated and/or replayed and heard from loudspeakers, and its roots can be found in the 20th century western art music tradition.

Towards (a definition of) Experimental Art

In this context, it is important to differentiate between scientific and artistic experiments. Scientific experiments are about verifying, disproving, or establishing the validity of a hypothesis, and relies on repeatability; the same results shall occur when a given experiment is repeated. Let us leave scientific experiments with this. Artistic experiments are something else that rather explore the unexpected and the unknown: "The experimental artist wants her artwork to be different from all the other artworks around her. She desires that her results be unusual, unfamiliar to the point of looking peculiar, perplexing. She may be drawing on conventions, she may be working inside one or more traditions".[2] The website *Material Art* says that "[…] one of the few generalizations that may safely be advanced about contemporary art is that it *experiments*—and not just with its given materials; art is inclined to experiment with anything and everything: 'with raw matter or time, relationships amongst people, things and tendencies'".[3] Artistic experiments aim to explore the unknown and to create new artistic paths, and is not subject for analyses of success or failure. In my opinion, the evaluation of a given artistic experiment is based on subjective aesthetical preferences and will accordingly be judged differently from person to person. It is in this way we must understand experimental art.

Experiment, Experimenting, Experimental

There are at least three ways to understand experiments. As a noun, *an experiment*, as a verb, *to experiment* or as an adverb, *to be experimental*. An artistic experiment could be many things, and a common notion is that most artists are experimenting to a certain extent, at least when creating/composing new works. In electroacoustic music however, experimenting without any other purpose than to explore new technologies available, can be seen as a parallel to basic scientific research. On the one hand, an artistic experiment may create experiences and produce new knowledge that later can be used in artistic works. On the other, to be experimental may

[1] http://ears2.dmu.ac.uk/encyclopaedia/electroacoustic-music (12/27/2017)
[2] http://bigother.com/2010/03/12/what-is-experimental-art/ (12/27/2017)
[3] *What is Experimental Art?* www.materialthinking.org (11/15/2017)

be to bring in new technologies directly in artistic productions, without knowing the outcome. John Cage has given words to such thoughts: in *Silence* (1961), he initially objected that he was experimental, rather he meant that an artist did knew her material, and that: "experiments that had been made had taken place prior to the finished work, just as sketches are made before rehearsal and paintings precede performances" (p. 7). Cage eventually changed his mind, and e.g. discovered it is a huge difference between composing and listening; it is impossible to imagine how a listener will perceive a certain piece. Cage has defined it such as: "the word experimental is apt, providing it is understood as not as descriptive of an act to be later judged in terms of success and failure, but simply as an act the outcome of which is unknown. What has been determined?" (p. 13).

The term *experimental music* is as much a label of a particular era, as an approach in music making. In *Experimental Music* Michael Nyman (1999) proposes that it all started with Cage's 4"33' in 1952, and Cage also gave name to it in his essay *Experimental Music* in Silence (1961). Brian Eno asks in the foreword to Nyman's book (1999) what the experiment was in experimental music. He answers: "perhaps it was the continual re-asking of the question 'what could music be'. […] And from it, we concluded that music didn't have to have rhythms, melodies, harmonies, structures, even notes, that it didn't have to involve instruments, musicians and special venues". (p. xii). He claims it was, and still is, a revolutionary proposition. As example of what experimental music can be, Nyman describes Cage's use of the piano as a sounding object rather than playing it conventionally (p. 216), he affirms however: "Needless to say, it is in no sense a definition of experimental music that pianos should be used this way –Feldman's keyboard writing, for instance, has always been every bit as 'sensitive' as Debussy's or Webern's" (p. 216).

The Electroacoustic Studio as an Experimental System

Another view on experiments is to regard the electroacoustic music studio as an experimental system. In the article *Research Organs, as Experimental Systems* (2013) Peter Peters claims that "Church organs always have been instruments of knowledge" (p. 88). Peters refers to Rheinberger who defines experimental systems as "[basic units] of experimental activity combining local, technical, instrumental, institutional, social, and epistemic aspects" (in Peters 2013 p. 89). The British flute player and author David Toop (2006) suggests that a similar network of contextual connections appear when he is playing his flute:

> Now I mostly concentrate on playing my beautifully constructed if rather expensive Miyazawa flute, though the foundation of what I try to do is much the same. I breathe in air, then exhale through a technological system which embodies ergonomics, cultural history, aesthetic design, and a philosophy of art that entrains sonic phenomena through precise engineering. (p. 3).

In Toop's point of view the concept and identity of a musical instrument is contextual. The concept "flute" is made up of different aspects: representation, the physical object, the sound, the space, the history and tradition, repertoire, flute players, etc. This stems well with Rheinberger's notions: the local is the present situation and context; the technical is about available hard and software; the instrumental is the way present technology facilitates and "translate" artistic visions into sounds and music; the institutional is about the "commonness" and institutionalized use of technology employed; the social is the way we communicate, understand and use technology in the context of electroacoustic music; and finally, the epistemic is our knowledge of subject matter. We will find the basic units for experimental activity as defined by Rheinberger in all musical instruments, and therefore may be regarded

experimental systems. Moreover, the electroacoustic studio must be claimed to be a musical instrument, a claim that e.g. Brian Eno supports, as he in 1976 proposed that every studio should have sign saying *This Studio is a Musical Instrument*.[4]

The electroacoustic studio, whether it is a big professional studio or a lap-top based home studio, can like a church organ be regarded an experimental system. In such a view, it serves many purposes: as a musical instrument for realizations of artistic ideas, as well as a resource for artistic and scientific experimentation with sounds.

Coda

What then is experimental in electroacoustic music? In my view, the most important experiments were done in the 40s, 50s, and the 60s, when the present hegemony of what music is, was broken. Experimenting pioneers such as Schaeffer, Cage, Stockhausen, and Ferrari asked with their experiments what music could be, and sound like, and as Eno states: it could be, and sound like anything. In that sense, electroacoustic music is no longer experimental since most barriers are broken. From another point of view, it is still experimental, since composers nevertheless still experimenting with new tools, and new expressions of music. The aim with experimenting is most likely not to produce new knowledge per see, rather to produce new music, and with each new piece composed, new knowledge is produced.

References

CAGE, John, *Silence: Lectures and Writings,* Wesleyan University Press, Hanover, N.H. 1961.

MANNING Peter, *Electronic and Computer Music,* Oxford University Press, New York. 2004.

NYMAN, Michael, *Experimental Music: Cage and Beyond*, Cambridge University Press, Cambridge. 1999 (1974).

PETERS, Peter, Research Organs, as Experimental Systems, *Experimental Systems Future Knowledge in Artistic Research*, Ed. Michael Schwab, Orpheus Institute. 2013, pp. 87-101.

TOOP, David, 'Hvor musikalsk är meningen: Lydkropp', *Parergon* 1–2/2006, p.7.

[4] http://music.hyperreal.org/artists/brian_eno/interviews/unk-75a.html (12/27/2017)