A SEMINAR/LECTURE WITH
PER ANDERS NILSSON
THURSDAY OCTOBER 27, 2016
7:30 PM
LOTTE LEHMANN CONCERT HALL
ADMISSION IS FREE

ABOUT THE SEMINAR/LECTURE
In the Academy's lecture and concert series, and from his current position as an experimental musician and writer, Per Anders Nilsson will present his current research on musical perception and the development of his own musical compositions. He will discuss the role of music in shaping human behavior and the impact of music on our emotions and mental states. The lecture will also explore the concept of musical cognition and its implications for music education and therapy.

ABOUT THE SPEAKER
Per Anders Nilsson is a renowned experimental musician and composer. He has conducted research on musical cognition and its applications in music therapy and music education. Nilsson has published extensively on the role of music in shaping human behavior and the impact of music on our emotions and mental states. He is currently a Ph.D. candidate at the University of Gothenburg, where he is working on a project that explores the relationship between music and cognitive development.

www.music.ucsb.edu

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Per Anders Nilsson
Ph.D./Professor in music
Systemic Improvisation

An approach to music improvisation

The participants form integral parts of a system of human and virtual agents, and characteristic music emerges depending on the system structure and the nature of the transformations.
A major aesthetic (and systemic) tenet in my thesis *A Field of Possibilities* is that musical improvisation has strong similarities to gaming, play, and sports.

Another important tenet is the distinction between *design time* and *play time*.
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Music as game

Concepts from the fields of interaction design and game design applied on music open new perspectives on music.

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Gaming Theories

Play we said, lies outside the reasonableness of practical life; has nothing to do with necessity or utility, duty or truth: All this is equally true of music. (Johan Huizinga)
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Gaming Theories

• Play is voluntary
• Play creates its own meaning
• Play is autonomous movement
• In play we represent ourselves

Exchange play for music?!

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Gaming Theories

A game consists of:

• Goal
• Space
• Rules
Game mechanics
Static properties of a game, its fundamental rules, objects, and procedures.

Game aesthetics
Dynamics that occur between a player and a game as a consequence of its rules and goal; game mechanics give rise to activity and interaction.
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Gaming Theories

Game aesthetics

Rule consistency, emergence, chance, gamer elimination, skill, tempting challenge etc.

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Player types

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<th>Acting</th>
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<td>Socializers</td>
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Music as a game 1:

*Giant Steps* (John Coltrane)

Player types?
Aesthetics?
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Music as a game 1:

John McNeall says: “Giant Steps is interesting in itself, which means that a player is as much played by the piece, as playing it” (Thinking in Jazz, Berliner 1994). Giant Steps is a play that is set in motion by the musicians, and according to Gadamer: “the movement of play has no goal that brings it to an end; rather, it renew itself in constant repetition”

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Music as a game 2:

Click Piece (John Stevens)

The aim in this piece is to produce the shortest, most precise sound possible.

Player Types? Aesthetics?
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Music as a game 3: 
*Chasing The Chords*

In essence, the idea is a musical game that asks a piano player to guess and play one chord, out of three possible, simultaneously with a randomly generated chord.

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Music as a game 3: 
*Chasing The Chords*

From a system theory point of view the *Chasing Chords* concept is inspired of aspects of evolution. In *Mind and Nature* Gregory Bateson describes the forming of living organisms as the combination of two stochastic systems. If we regard the musical outcome as a living organism, how is it shaped?
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Music as a game 3: Chasing The Chords

In the first system, according to Bateson, “the random component is genetic change, either by mutation or reshuffling”. The creation of the three chords involves two random processes, namely selection of one of the pre-generated three chords plus duration until the next successive event shall occur.

Bateson describes the second system such as “the random component is provided by the system of phenotype in interaction with the environment.” In Chasing Chords the computer generated chords are moving targets, and in practice it is impossible to solve the task. The resulting musical outcome is a combination of those two stochastic systems; the random generations of chords and the musician’s struggle to hit them.
Systemic Improvisation is a kind of music-making where normal musical interaction is transformed by the introduction of aural or visual cues generated by computer-based virtual inter-actors. It also connects to, and rely upon, the tradition of experimental music.
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A crucial and significant concept in the experimental music tradition, as Michael Nyman defines it in *Experimental Music*, is task; to perform is to solve a series of tasks rather than self-expression and/or expressing concepts. Michael Nyman argues: “for each experimental composition presents the performer with a task or series of tasks which extend and re-define the traditional (and the avant-garde) performance sequence of reading-comprehension-production”. What is important is the intention to fulfill the given task.

Systemic Improvisation

The Systemic Improvisation project aims to form a theoretical model of improvisation systems, and a tool-kit for the design, implementation and communication of such systems, to enable other musicians to work with systemic improvisation.
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*The Bucket System*

The Bucket System is a new kind of musical interaction/situation/work, and a continuation of Dahlstedt's and Nilssons's long-term research into technology-mediated musical creativity and performance.

The Bucket System is an open structure of signs, a notation, and it is up to the participants to make up rules for each particular performance.
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The Bucket System

The Bucket System relates to Cardew’s *Treatise* (1963-67) such that it’s graphic score demands the performers to make up their own rules. It is mention worthy that *Treatise* is to be read in a linear narrative fashion, whereas The Bucket system is non-linear. Tilbury (2008) claims that Cardew admired Christian Wolff’s pieces such that: “the signs do not represented sounds; they created situations in which the performers act, and the instructions consists mainly of suggestions as how the players interact” (Tilbury 2008).

Example from Treatise
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**The Bucket System**

A player receives a new instruction where (s)he is forced to halt or change whatever going on, and since the participants are interrupted all the time, no one will be able to develop things as usual. After a while, one get used to this, and change approach: from planned actions and personal expression, to be much more aware of the present, to be in the present, and to be open for what it offers.

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**The Bucket System**

**Metaphor**
- Fast=Busy
- Medium=Simple
- Fixed=Extended

**Behavioral**
- Fast=Solo
- Medium=Interact
- Fixed=Vacillate

**Simple Hierarchy**
- Fast=Lead
- Medium=Support
- Fixed=Background

**Hierarchy with Opposition**
- Fast=Lead
- Medium=Support
- Fixed=Opposition
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*Signs, Cycles, Snares* in Halmstad 2014.

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Workshop at Gino Robair’s place, 2015
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Performing at NIME, 2015

Thank You!

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