

Material Investigation (I): Percussive Materials and Surfaces (2011)

proposal by

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BASICS: This performance is an invitation to the public to enter a laboratory for the investigation of basic sound qualities of different percussive materials: stone, wood, glass, skin etc.

The duration of the performance is about 1 (one) hour.

Number of performers: 2 (+ a sound engineer provided by the organizer)

Specified requirements: se below.

Having developed a topology of improvisation since 2007 the two performers, the composer Ivar Frounberg (DK) and the percussionist Kjell Tore Innervik (N) wanted to strip down the idea of musical expression to its very basics. The result is the laboratory performance

Material Investigation (I): *Percussive Materials and Surfaces*

Web-page: under construction

FROM: The topology for improvisations were build up around investigation of new instruments within the NIME-project at the Norwegian Academy of Music under the artistic research area: *Music Novelty and Innovation*. Main focus had been the glass-bowls, proprietary wooden instruments, an elk-drum, etc. used as instruments extended with computer real time sound processing (The *Urtiin Duu Delay* a.o.). The NIME-approach was presented in 2009 within the project *Friction and Transformation* (in collaboration with the composer Peter Törnquist, Tromsø Symphony Orchestra and the Vinternat-festival), in 2010 within the project *The Quantum Mechanics of My Life* (NMH Sinfonietta), as well as at other occasions and places.

TOWARDS: The strip down of music expression was welcomed because both performers felt a necessity to sharpen the concept within music performance. Both wanted to submit the institutions of classical music: improvisation, work, composer, performer, etc. to a thorough investigation, in order to understand the basic notions of presenting sound as a cognitive medium. The visual art world in general has gone

far from the classical and traditional concept of creating visual objects. The music world still sticks to its well-established institutions and categories. The challenge of contemporary music is to discuss these 'classical' institutions and thus facilitating the possible new artistic expressions of music and sound. *Material Investigations* was developed by strip down key notions as the performer as *opposed* to the composer, the want of considering the *instrument* a sound producing body, the *work* a process, musical *form* as the ritual and laborious repetition of the experiment, the *concert* as a laboratory.

Memory and space.

The basis for the performance is a rigorously repeated sequence defined by a Max/MSP-patch having three states: a) recording for 15 seconds and picking up the spectral content of the recording, b) 15 seconds of playback of the spectral content and directing it around the hall in a circle, and c) 5 seconds of count in for the next recording. The recordings are layered on top of each other thus constituting a 'memory' for the audience. The count in allows the performer to reproduce the regularity of pulse recorded before and relate to it. The duration of the total of 35 seconds was chosen since it is within the time span of the human short term memory¹.

For each of the material objects a basic investigational pattern is determined. The pattern is defined in terms of the topology of the object - not of any 'musical' considerations. A rectangular diabase stone suspended on two basic supports reacts very much the same as a key from a marimba. The sound emanates from both ends vibrating freely in the air as well as from the middle of the bar. The topos close to the suspending basis gives a more muffled sound as the nodes of the vibration are positioned there². Investigational patterns used on bars could be: a) excite only one topos within the recording cycle, b) start moving from one end of the bar and proceed to the other within the recording cycle, c) move across the bar at a given topos, d) a number of other geometric patterns...

Current material objects are: (data to be provided)

a diabase stone (xx * yy * zz, ww kg.)

a low key (C#) from a marimba (xx * yy * zz, ww kg.)

a log of wood (xx * yy * zz, ww kg.)

a glass bowl (diameter: height: weight:)

¹ http://books.google.com/books?id=_NxpAwgSyoEC&pg=RA2-PA43&lpg=RA2-PA43&dq=Short+term+memory+timespan&source=bl&ots=riI822rswU&sig=yrvj9YcPNVUzD7pnKhU7kHTYyE4&hl=no&ei=pIV8TbusEsvCswbr-cjpBw&sa=X&oi=book_result&ct=result&resnum=1&ved=0CBUQ6AEwADgK#v=onepage&q&f=false

² cfr. Thomas D. Rossing: *The Science of Sound*, 2nd. edition, 1990

a glass rod (diameter: xx height: yy; weight: kg.)

a drum made by an aquavit barrel coated with elk skin
(diameter: xx height: yy; weight: kg.)

a soft drink bottle modified w. drilled holes (3)
(diameter: xx height: yy; weight: kg.)

Microphone placement and typologies are other important issues. For the performance at least two microphones for each material object will be used: an overhead microphone (condenser, cardioid directionality, approx. 0.5 to 0.75 m. above the instrument) for picking up sound emanating from the object, and contact microphones for picking up the material vibration within the object. Both microphones are recorded separately during the recording cycles, and the unmixed signals are distributed to the two proximate loudspeakers in the performance space³.

ADDITIONAL: In connection to the performance it is possible to implement the following activities:

Lectures and master-classes with the composer, senior professor Ivar Frounberg, The National Academy of Music, Oslo. Titles could be:

Master-classes in percussion performance with ass. professor Kjell Tore Innervik, The National Academy of Music, Oslo.

Workshop (from 3 to 5 days) with both performers.

Installation: items from the performance can be set up as an independent installation in the foyer of the performance space. This requires...

³ This is the most common microphone set up. Some of the material objects will require other types of microphone, several contact microphones, etc.

REQUIREMENTS:

The Performance Space

- an open floor preferably squared 9 * 9 meters
- the audience will be seated directly on the floor (no chairs provided!)
- the material objects, microphones, loudspeakers, cabling, computers and mixing console will be distributed around on the floor
- lightening should be provided to spot the individual objects (covering a floor area of 1.2-1.5 * 1.2 -1.5 meter, or the equivalent)

Technical Set Up

4 channel PA-speakers placed along the walls in front, to the right, to the left and behind the audience, 2 subwoofers front and back. Height: approx. 1.0 m.

Mixing console feeds the 4+2 channel PA, sends 4 channels (pre-fade) to the processing computer (dynamic selection of inputs during the performance); receives signals from microphones (more than 8 - 16 channels) and the processing computer (6 channels).

The processing computer sends 6 channels of audio: front, right, back, left and 2 sub.

A small table (height: 0.6 m. above floor) carrying the computer and the soundcard.

The mixing console and the computer table are both placed on the floor.

Each of the material objects needs basic mounting and at least one contact and one acoustic microphone, a cloth covering the floor (1.5 * 1.5 m) and a spotlight or a lamp.

Setup time: no less than 3.5 hours including sound check.

List of Equipment will be provided

BIOGRAPHIES:

Kjell Tore Innervik – web: www.innervik.no

Kjell Tore Innervik er diplomutdannet slagverker fra Norges musikkhøgskole, har gjort seg bemerket som en individuell artist som ikke er redd for å utforske ny musikk og nye formidlingsformer. Han er ansatt som l. amanuensis ved Norges musikkhøgskole, hvor han har utviklet et nytt instrument, en kvarttonemarimba og jobber nå med eksperimentelle slagverkinstrumenter og elektronikk.

Utdanning og forskningsvirksomhet

1996 - 2001 Bachelor grad, Norges musikkhøgskole (NMH)

2001 - 2003 Mastergrad, Diplom studiet for solister, NMH

2004 -2008 kunststipendiat I stipendprogrammet for kunstnerisk utviklingsarbeid

2008 -2009 Post-doc stipendiat ved, NMH

2009 – 2013 Første amanuensis ved NMH og viserektor for formidlingsvirksomheten

Omfattende kunstnerisk virksomhet på nasjonale og internasjonale arenaer med fokus på samtidsmusikk og eksperimentell musikk i ulike formater. Har også vunnet konkurranser som Norgesmusikkhøgskoles solist konkurranse (conoco/phillips) 2003 og Rikskonsertenes Intro Klassisk (2004-2007) CD utgivelser og andre publikasjoner: "Migrant in the new" januar 2011 (Aurora)

Ivar Frounberg – web: <http://www.edition-s.dk/composer/ivar-frounberg>

IVAR FROUNBERG -born in 1950- has composed orchestral pieces like *What did the Sirenes sing as Ulysses sailed by?* (1987-89), numerous pieces for major chamber-ensembles and sinfoniettas from *Drei-Klang* (1982) to *The Quantum Mechanics of my Life I-VI* (2010); as well as pieces in which interactive computer-performance play an important role: for example *Time and the Bell* (1990; performed at the ISCM Music Days in Zurich 1991 and ICMC in Banff, Canada 1995). One of his most performed pieces is *Embryo* (1985) which was performed at several major festivals like Peiling-festivalen in Stockholm and ISCM Music Days in Cologne, both 1988.

During the 1990's a consequent musical concentration is found, culminating in *...to arrive where we started* (1993, performed by ensemble *die Reihe* at Wien Modern 1998). In this piece the musical material is varied at the micro-level with repetitions calling not on meditation rather on a sharpened attention from the listeners.

His latest work, like *Three Cognitive Objects and Improvisations* (2010; for *Copenhagen Art Ensemble*) include eclectic confrontations between disparate styles ('heavy metal', jazz-improvisation), dream-telling and quotes of earlier works.

IVAR FROUNBERG was assistant professor in electro-acoustic music and computer music at [The Royal Danish Academy of Music](#) in Copenhagen. Until 1994 he has been active in music politics as a board member of [KODA](#) (the performing rights society) and the Danish Composers' Society. In 1994 Ivar Frounberg was music coordinator at the [ICMC, Aarhus](#) in Århus and in 1996 he was president for the planning committee of the World Music Days 96. In 1995 he received the prestigious Prize in Honour of the Composer Carl Nielsen. From 1998 to 2000 he was chairman for the Danish Institute for Electro-acoustic music (DIEM) and he was member of the Danish State Art Council for the period 1999-2001. He is currently senior professor in composition at Norges Musikkhøgskole in Oslo, Norway.