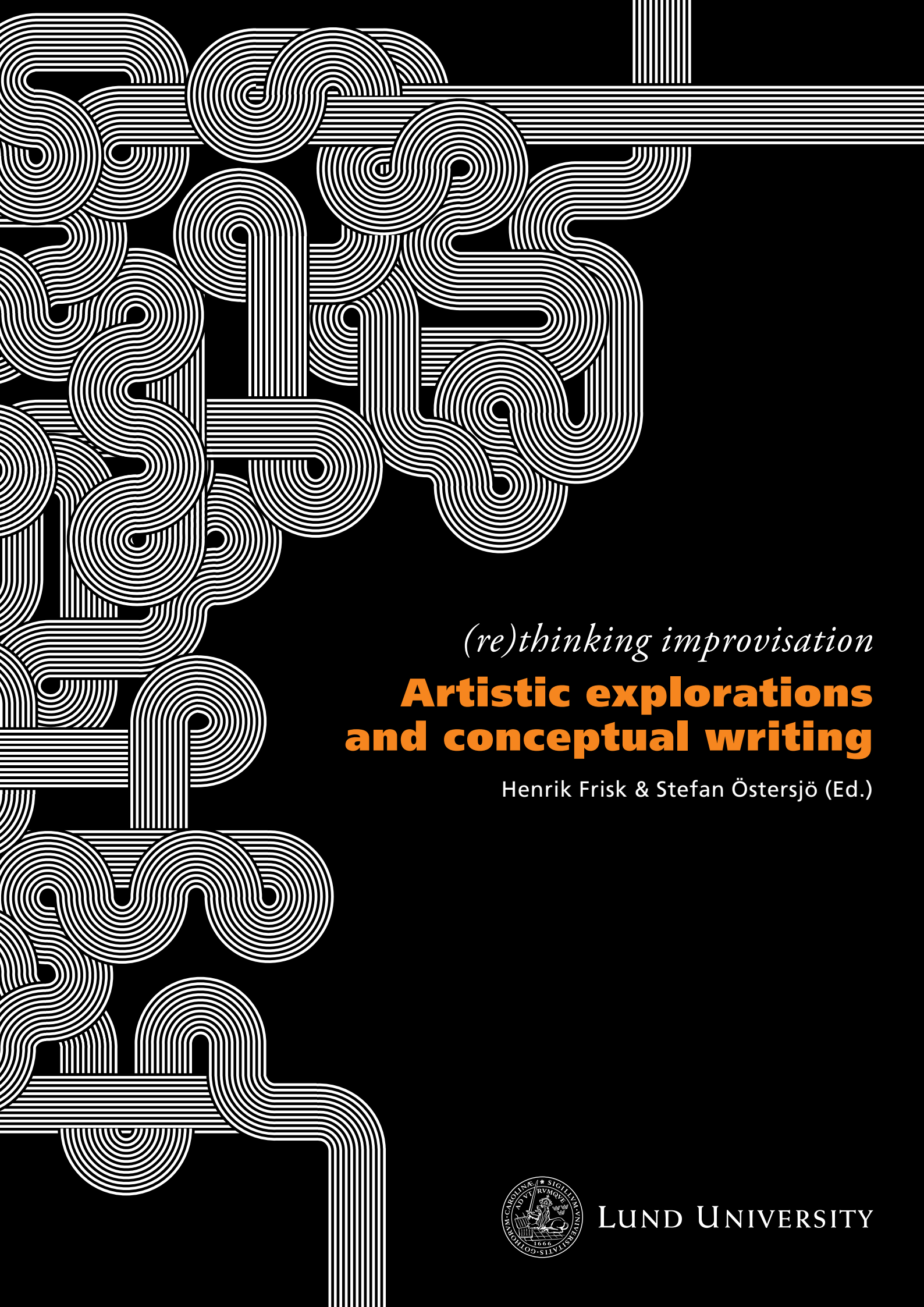


(re)thinking improvisation

Artistic explorations and conceptual writing

Henrik Frisk & Stefan Östersjö (Ed.)

Lund University

Table of Contents

Video

1. (re)thinking audience and group interaction

Ingrid Cogne: Boule
Gerhard Eckel: Random Access Lattice
Karin Johansson: Performance St Johannes Church

2. (re)thinking the actors, vectors and factors of improvisation

Anne Douglas: Critical Review
Gaelyn Aguilar & Gustavo Aguilar: Human Computer

3. (re)thinking composition and interpretation

Ture Larsen: Rehearsal of "Beslutningens anatomi".
John Tilbury: Open rehearsal on Paragraph Six in Cardew's The great learning
Helen Papaioannou: Exploring Aspects of Rhythm in Graphic Score Improvisation

4. (re)thinking text and action

Sten Sandell: Music Inside The Language
Sten Sandell: Drones, Rhythm and Space
Gino Robair: I, Norton

5. (re) thinking instrumental and computer interaction

Alan Courtis: Networked Performance with Bennett Hogg, Victoria Johnson, Per-Anders Nilsson and Christopher Williams
Laurens van der Wee: Lemuriformes
Cléo Palacio-Quintin: Synesthesis 4: Chlorophylle

6. (re)thinking idioms, conventions and tradition

The Six Tones: Tứ Đại Oán
Susanne Rosenberg: ReBoot/ OmStart and Kurbits-Koral
Olof Misgeld: Vallåt
Pär Moberg & Dan Svensson: An attempt at a Nordic Raga

Audio

All material on these two CDs was recorded live during (re)thinking improvisation at Inter Art Center in Malmö, Sweden.

CD 1

1. *Ture Larsen:* Beslutningens anatomi (12:28) performed by *The Six Tones* and *Wu Wei*, *Kalina Goudeva*, *Rasmus Scharff Kjøller, Liudas Mockunas, Jakob Riis, Thanh Thuy*, and conducted by *Ture Larsen*

2. *Matthew Ostrowski & George Cremaschi:* Humpenscrump (5:07)

3. *Group Improvisation:* Duty (The ethics of improvisation #2) (12:03) performed by *Per-Anders Nilsson, Wu Wei, Thanh Thuy, Kalina Goudeva, Rasmus Scharff Kjøller, Liudas Mockunas, Quang Hung, Stefan Östersjö* and *Jakob Riis*

4. *Kim Ngoc Tran Thi:* Chuyển Dịch (Move) (2011) for tranh, bầu and electric Vietnamese guitar (11:36), performed by *The Six Tones*

5. *Helen Papaioannou:* Cogs (2011) for two saxophones and electric guitar (7:13) performed by *Helen Papaioannou, Henrik Frisk* and *Stefan Östersjö*

6. *Henrik Frisk:* The Transparent I (2011) for chamber ensemble and electronics (11:23) performed by *The Six Tones* with *Wu Wei, Rasmus Scharff Kjøller, Markus Falkbring, Kalina Goudeva* and conducted by *Rei Munakata*

The Six Tones: *Nguyễn Thanh Thủy*, đàn tranh / *Stefan Östersjö,* guitars and tỳ bà,
Nguyễn Quang Hưng, đàn bầu / *Henrik Frisk*, saxophone and electronics
Wu Wei, sheng / *Liudas Mockunas*, saxophones / *Jakob Riis*, electronics / *Rasmus Scharff Kjøller*, accordion / *Markus Falkbring*, viola / *Kalina Goudeva*, double bass
*Per-Anders Nilsso*n, electronics
Matthew Ostrowski, electronics / *George Cremaschi*, double bass
Helen Papaioannou, saxophone
Ture Larsen, conductor / *Rei Munakata*, conductor

CD 2

1. *Matthew Ostrowski & George Cremaschi:* Mateotechny (4:39)

2. *Christer Lindwall:* Es muss alles anders werden (2008) for chamber ensemble (world premiere) (10:53) performed by *The Six Tones* with *Wu Wei*, *Rasmus Scharff Kjøller*, *Markus Falkbring* and *Kalina Goudeva*, conducted by *Rei Munakata*

3. *Group Improvisation:* Virtue (The ethics of improvisation #1) (9:11) performed by *Wu Wei*, *Liudas Mockunas*, *Henrik Frisk*, *Jakob Riis*, *Rasmus Scharff Kjøller*

4. *Staffan Storm:* While the City Sleeps No 2 (2006) for dan ty ba, dan bau and electronics (9:45) performed by *The Six Tones*

5. *Sandeep Bhagwati:* Transience (2008) for voice(s), 1–3 aerophones and 1–3 chordophones on texts from the 13th century Japanese anthology Wakan Roei Shu (transliterated and translated by J. Thomas Rimer) (11:57) performed by *Wu Wei, Nguyễn Thanh Thủy, Nguyen Quang Hung* and *Markus Falkbring*

6. *Group Improvisation:* Happiness (The ethics of improvisation #3) (17:03) performed by *The Six Tones* with *Wu Wei, Liudas Mockunas, Jakob Riis, Kalina Goudeva* and *Rasmus Scharff Kjøller*

The Six Tones: *Nguyễn Thanh Thủy*, đàn tranh / *Stefan Östersjö,* guitars and tỳ bà,
Nguyễn Quang Hưng, đàn bầu / *Henrik Frisk*, saxophone and electronics
Wu Wei, sheng / *Liudas Mockunas*, saxophones / *Jakob Riis*, electronics
Rasmus Scharff Kjøller, accordion / *Markus Falkbring*, viola / *Kalina Goudeva*, double bass
*Per-Anders Nilsso*n, electronics / *Cléo Palacio-Quintin*, flute
Matthew Ostrowski, electronics / George Cremaschi, double bass
Rei Munakata, conductor

All video recorded and edited by Rutberg Media, mastered at MPEG.SE, Stockholm.
All audio recordings were produced by Henrik Frisk at the Inter Arts Center. Mixed and mastered at Inter Arts Center by Henrik Frisk and Stefan Östersjö.

Thanks to all organisations that contributed to the festival and conference at the Inter Arts Center: Ars Nova, C/Y Contemporary, CIRMMT, Debaser, Grace och Philip Sandbloms fond, Helge Ax:son Johnsons stiftelse, Frim Syd, Inkonst, Jazz i Malmö, Kulturrådet, Konstnärssnämnden, Letterstedtska föreningen, Media Massage, Signal, Skånes scen för live- och crossoverkonst, St Johannes Church, Malmö stad, Musik i Syd, Sparbanken Finn Framtidsstiftelse, Stiftelsen framtidens kultur, Swedish Research Council

(re)thinking improvisation
Artistic explorations and conceptual writing

Graphic design / Cover illustration Lovisa Jones
Print Elanders Sverige AB 2013
ISBN 978-91-979584-9-3

Henrik Frisk & Stefan Östersjö

(re)thinking improvisation: from Individual to Political Listening

When we designed the International Sessions on Artistic Research and the accompanying festival under the same title as the research project, *(re)thinking improvisation*, we imagined the event to be a venue for compiling and convening various conceptual approaches to improvisation. The aim of the three-year research project has been to examine three primary aspects that we found to be inextricably integral to improvisation yet were often only implicitly, if at all, included in its study and description[1]:

- Interaction
- Attentive listening
- Musical freedom

By ”interaction” we mean the social nature of performing as well as the ways in which cultural tools such as musical instruments and other artefacts function as agents in musical discourse. Attentive listening can be understood as a somewhat Adornian conception of active and informed musical hearing. In what ways does the performing musicians’ active listening inform the manner in which an improvisation unfolds?

However, the outcome of the various subprojects presented a rather complex picture. Studies of multimodal interaction between improvising performers have indeed been an important research strand. But the findings have also indicated how the seemingly distinct aspects bleed together. For instance, the most prominent feature of interaction that emerged from the studies has been analyzed as different modalities of listening. Hence, the category of attentive listening has come to be understood as integral to the interaction between performers. In a similar way, our understanding of the concept of musical freedom points more to the function of constraints and conventions than towards any magical entity of artistic freedom or divine inspiration distinct from non-improvised musical forms and traditions.

By the end of the sessions, and even more so after reviewing the submitted papers, as well as the performances and the video from the lab sessions, the outcomes of the event had already underlined the complexity of the issues at hand. Within the frame of the festival, forms of knowledge production that combine artistic and conceptual ways of thinking were assembled. Rather than offering any conclusions, the materials afford new questions, emphasizing the fluid nature of improvisation as artistic practice. The point of this short introductory essay is not to provide answers but rather to approach this vast material by establishing a meta-level perspective through questions such as:

- What does ”rethinking” improvisation signify?
- Doesn’t ”rethinking” imply ”defining”? And how can we define the art of improvisation when the practices are so divergent in different traditions?
- Are there universals in improvised music, and if so, how can they be defined and discussed?
- What is the impact of the theory/practice divide in improvisation?
- What is the relation between improvisation in everyday life and in artistic practices?
- What is the social and political significance of improvisation in artistic practice?
- In what ways can improvisation guide and inform philosophical enquiries?

The structure of the publication is similar to that of the lab sessions held during the event. Although the grid makes for an efficient organization of the texts, and alt-

1) This is not to say that these aspects have never been seriously considered in previous research. As for interaction, a notable contribution on the interaction between jazz musicians is Ingrid Monson’s book *Saying Something: Jazz Improvisation and Interaction*. (Monson 1996).

hough we use the same headings in this essay, we have attempted to redraw the map, as it were. Rather than reading the texts as expressions of the themes of the event, we are looking for intertextual connections between the ideas presented in the articles, and therefore we have organized the texts according to the headings. By re-reading the individual contributions in this way, and thus by establishing conceptual connections between the practices and modes of thinking which were demonstrated at the event, we believe that it is now possible to begin the process of rethinking improvisation.

(re)thinking audience and group interaction

The study of social interaction within a musical artistic practice is one of the broadest and most interesting fields within artistic research. The complex and multimodal means of communication between members of a musical group in performance may have much to say about human communication in general. It is also one of the fields most commonly referred to by both social and computer sciences as an area that to a great extent could inform their own scientific research. The perhaps somewhat naïve and troublesome, but nonetheless envious, view of the symphony orchestra as an ideal social organisation where a large group of individuals are all following the authority of one leader without losing their own individuality and space for personal expression is a wet dream for any organisational strategist[2]. The intricate and lucid interaction between the members of a string quartet is another, less authoritarian example that is often held up as an ideal form of communication in a small format. However, in reality, musical interaction harbours questions and competences that go far beyond the narrow logic of corporate efficiency, and efficiency may not even be the main objective for musical interaction, certainly not for improvisational interaction. Due to its multimodal nature, depending on what angle we view it from, different shapes and patterns may emerge.

Marcel Cobussen (pp. 92–94) touches on one of the key aspects of interaction in his description of a performance with the percussionist Han Bennink, that of the function of listening as a multimodal way of connecting individuals and material in the resonance of the sounding music, in the bodies of the performers and listeners, and in the space:

> The contact between wood and metal strings or wooden sticks led to new acoustic experiences; the contact made the floor sound, a giant surface with an enormous potential of different pitches, volumes, and timbres. In Deleuzian terms, one could say that Bennink formed a rhizome with the floor. (p. 93)

The importance of the in-performance listening as distinct from common listening is also stressed by **Diemo Johnson** and **Victoria Schwarz**: ”You should also learn to put yourself in zero position, to be here and now and listen to what is” (pp. 164–167).

In addition, the further abstraction of graphic notation holds a related possibility of modifying the musical-social communication and interaction, as is pointed out by **Helen Papaioannou** (pp. 62–63), specifically referring to the repetitive flows of motion that are an integral part of the scores that she presents. It is an important aspect of her composition *Cogs*, and in the lab session and the subsequent concert performance (which can be found on CD 1 in the present publication), the development of specific modes of interaction, as related to the design of the scored materials, took shape.

Several events and presentations during *(re)thinking improvisation* explored the interactions between an audience and virtual or spatial contexts. **Ingrid Cogne's** opening installation *Boule* (p. 27) became a parallel to **Magali Ljungar-Chapelon's** presentation of her concept of ”virtual reality arts play” (p. 157).

Gerhard Eckel (pp. 42–47) turns the spotlight on human-machine interaction mediated by sound in his installation *Random Access Lattice*. By exploring the natural tendency for human curiosity, the players who engage with his handheld instrument and virtual grid are naturally guided towards ”readiness and dexterity”, possibly leading the way into outright improvisation. This is not unlike the way computer games incorporate the will or intention of the user as an agent in the interactive interface. The relatively complex but speech-like sounds that the installation generates triggers the desire to understand and motivates the user to explore.

The relationship between freedom and constraint, as well as between improvisation and composition, was also highlighted in the conducted performances during the festival, most notably in the rendering of parts of Cardew's *Great Learning*, directed by John Tilbury, as well as in the performance of **Gino Robair's** (pp. 127–128) opera *I, Norton* with the Swedish group Operaimprovisatörerna, and in the concert and lab session with different versions of **Ture Larsen's** *Beslutningens anatomi* with Ensemble Ars Nova and guests from around the world. The difference between a sign inscribed as visual gesture in space and as written text is questioned, while a different question also emerges that has to do with work identity and individual agency.

While the signs refer to quite specific musical materials, the identity of the performers and the individual freedom expressed in the moment of performance may constitute the agency that defines the identity of the work. In these specific constellations, the individual identities are also situated in different cultural contexts and musical traditions, and work identity is in each case negotiatied with the conductor (who is also to be understood as the ”composer”) in each performance.

In the ongoing discussion on methods for artistic research, **Karin Johansson** has experimented with an ”auto-ethnographic case study with the aim of obtaining a close-up picture of how I in my musical practice related to the expansive approach” (pp. 49–61). Although most artistic research projects have probably dealt with some form of auto-ethnography, albeit without calling it thus, Karin's recollection of her failed attempts to interview herself focuses on the method's inherent difficulty. However, her ”failure” with her self-interviews led to a further discovery of what she came to call *The Pit*, a state of artistic practice in which the subjective sense of the ongoing work is highly negative. She claims that some of the most creative moments in the course of this collaborative research project were characterized by such feelings as vulnerability and insecurity, which can be interpreted as signals that one is approaching the outer limits of one's comfort zone. This of course has a strong bearing on the topic of group interaction, pointing beyond strife toward mutual agreement and a search for flow in the interaction.

Gaelyn and **Gustavo Aguilar** (pp. 77–80) describe a related but somewhat reversed approach in one of the early projects carried out by the Tug Collective. Defined as performative ethnography, *Ah, Raza! The Making of an American Artist* uses the theory and methodology of improvisation ”to encourage dialogue and action that will seed and extend deeper readings of these themes of recuperation and expansion [...] that people along the U.S./México border are immersed in” (p. 78). Improvisation is the ”crucial unifying component” as much as a ”critical compositional element” and is rooted in the listening self. The collaborative practice of Tug shows us that the impact of improvisation is not limited to well-defined formations such as audiences and groups, but may well be free-range, open and non-hierarchical (ibid).

(re)thinking composition and interpretation

The recurring question of the relationship between the practices of composition and improvisation tends to evoke discussions of definition and demarcations. A starting point when designing the sessions in this event was the conviction that the socially constructed understandings of these concepts are highly diverse in different cultures. Local definitions of these entities must then be understood as provisional and certainly not as absolutes. **Sandeep Bagwaati** (pp. 99–104) argues along the same lines for a fluid conception of improvisation and composition:

> In practice, scores define what is considered context-independent by the composer or by a certain cultural tradition. No score will thus

2) See Bennis & Nanus (1985); Druker (1988); Traub (1996) for some examples of this romantic view on communication within the orchestra.

ever totally determine all aspects of a musical performance: some elements of music making will always be contingent – and thus improvised. (p. 99)

Furthermore – and this was the logic behind the notion of rethinking composition and musical interpretation – it was assumed that the function of interpretation may be understood differently from what is typically expressed by the common usage of the term as a performance of a score-based work, or for that matter, the making of an analytical interpretation of such a work (Levinson 1993; Östersjö 2008).

Karin Johanson discusses how organists leaning on the liturgical tradition are part of a pre-modern conception of the musician's labour. Rather than emphasizing originality they "adopt the given system, adapt to it and perhaps develop it. Notions of copyright or musical ownership do not exist. Musicians in pre-capitalistic times did not own their compositions and musical works were not seen as having legal identities." (p. 56). Hence, musical production within this discourse relates differently to the notion of the musical work.

Musical notation has been used for many different purposes over time and throughout different cultures, creating manifold interrelations between the act of performance and the score (Butt 2002). In Western culture, we have had a strong bent towards thinking of performances as interpretations of a work. But can the opposite also be the case? Can a score be an interpretation of a work? This is indeed how Luciano Berio conceptualizes the final movement of his seminal work *Sinfonia*: "This fifth part may be considered to be the veritable analysis of *Sinfonia*, but carried out through the language and medium of the composition itself" (Berio 1986, p. 6).

Similar approaches emerged in *Calendar Variations* by **Anne Douglas** and **Kathleen Coessen** (pp. 29–41). At times the original score faded away, leaving place for novel and unique creations. In composition and interpretation alike, various texts emerge as fundamental in the staging of experimental situations. These texts may be scores in the traditional sense but can just as well be any other kind of artefact or construct. For instance, "in the case of a piece for instrument and electronics, much of the identity of the work is also specified in the computer programming and in the electronic sounds" (Frisk & Östersjö 2006, p. 247). Gerhard Eckel discusses the function of software in the process of composing the sound sculpture *Random Access Lattice*, which was displayed during the event:

> Evolving the software becomes part of the experimentation and is thus subject to the serendipity and contingency typical for improvisation. During the compositional process, the sculpture functions as the main epistemic object in the experimental system. The epistemic object transforms into a technical object, a black box, once this process has terminated and the piece is finished. Therefore, composition through improvisation may be qualified not only as a poetic and aesthetic but also an epistemic practice. Improvisation engenders knowledge in the compositional process. (p. 47)

Through these multiple perspectives on improvisation and composition, it may be concluded that interpretation, improvisation, composition, and the musical "work" are fluid but closely interrelated concepts. While definitions may then become more localized, and often narrowly political, a study of how these concepts interact and bleed into one another appears to us to be a means by which we can begin reconsidering some of the fundamentals of Western art music, and perhaps a starting point for potentially rethinking improvisation.

(re)thinking instrumental and computer interaction

There is an obvious asymmetry between improvising on traditional instruments and improvising with and on computers. Compared to the conceptual stability of traditional instruments, such as the violin or the piano, the computer is in a state of constant flux. Updates of both computer hardware and software, along with the relatively short life span of technology, contribute to the difficulty in developing expert skills and solid performance practices in the domain of interactive electronic music. Furthermore, there is an important conceptual difference between traditional and computer-based instruments. Whereas minute control of low level parameters such as vibrato, attack, and dynamics is second nature for most instrumental performers, the same can be very daunting on computer instruments, partly due to the lack of solid, general, and meaningful interfaces. On the other hand, the computer's aptitude for control of higher level processes such as form or algorithmic development is unparalleled. In the *(re)-thinking* sessions many different kinds of computer interaction were presented, from laptop performers such as **Jakob Riis** and some of the members of the *Lemuriformes* group, through the mediated manipulation of Diemo Schwartz and Victoria Johnson and direct manipulation of **Cléo Palacio-Quintin's** (p. 163) "hyperflute", over to more visually oriented interaction schemes.

In his paper, **James Gordon Williams** (pp. 169–175) points to the feedback between the system consisting of his own improvisational practice and the technology that he explores. One may even go further and argue that a general property of artistic research is that it uses the practice of the researcher to inform the research questions and outcomes. In the case of musical interaction involving technology, the feedback between the practice, the research, and the technology is an important property that was approached by several of the presenters. While it is true that technology by necessity influences the practice, one may also argue that the ways in which musical practice can change our understanding and alter our views on technology is a key issue for this kind of research.

Live coding[3], as was presented and demonstrated by the *Lemuriformes*, is a practice in which the feedback between the different modes of expression is particularly important. The *Lemuriformes* use the graphical programming environment Max/MSP, and the meaning of the objects placed on the screen is created and recreated throughout their performance. This kind of signification, however, is actually not particular to computer interaction or live coding but rather reminds us of Bennink's reterritorialization of the floor into a becoming-instrument. In the *Lemuriformes'* performance the small rectangles on the screen, further manipulated by the graphic artist redrawing them on the screen, are not meaningful as musical actors until they are experienced as such in the performance. Or, as put by Cobussen, the different actors – involving the floor, percussion player, screen, objects – "(in) form and create one another" (p. 93).

In the networked performance with **Alan Courtis**, **Bennett Hogg**, Victoria Johnson, and **Christopher Williams** that (paradoxically) took place in the *(re)thinking composition and improvisation* session, the latency in the connection was obvious, and in the conversation with Alan after the performance, which is on the video in the present publication, the extent of the delay becomes clear to the somewhat amused audience. However, none of the participating musicians found the latency to be a problem in the performance. See for instance Bennett Hogg's account in his critical review (p. 19). This is analogous to the way **Jason Robinson** (pp. 64–74) discusses networked performance in his paper:

> While we might assume that such latencies restrict or prevent fundamental potentials in improvisation, I contend something of the opposite. Instead, improvisative methodologies are especially poised to make creative sense of latencies and it should come as no small surprise that improvisation weaves prominently in much telematic music. (p. 66)

A further discussion, which was not addressed in the sessions, is how telematic performances relate to the multicultural and postcolonial perspectives of society. Indeed, this may be the most significant contribution of this growing performance culture in how it promises to erase earlier conceptions of centre and periphery. However, we must also bear in mind that in the present day, networked performance is still exclusive to regions of the world in which computers and internet access can be obtained. In this sense, telematic performance may be seen as a reminder of the classical dividing line between those who have economic power and those who do not.

3) Live coding is a particular form of electronic music where the computer musician creates the sound generating processes on the fly, in real time. The computer screen is projected on stage for the audience to see the commands, or objects, that constitute the "patch".

(re)thinking the actors, vectors and factors of improvisation

One of the lab sessions was designed differently than the rest, since it contained a roundtable discussion of philosophically oriented papers on improvisation. Headed by Marcel Cobussen, the outcome of this discussion was less theory-laden than could be expected. One may say that what brought the contributions together was a focus on the human sensibilities towards listening and, following Cobussen's outline of the factors that are at play in any improvisation, how we listen to other musicians, instruments, audience, technicians, musical or cultural background, space, acoustics, and technology. Contrary to the industrialized and modernist view of society, that line of reasoning can perhaps be further expanded by looking at improvisation as an important factor of life itself. Douglas and Coessens, for example, point to three particular characteristics of human life from which improvisation emerges: unpredictability, unrepeatability, and social complexity (p. 30). These characteristics require every individual to continuously employ improvisation in an ever-changing manner. **Anders Ljungar-Chapelon** (pp. 107–113) similarly brings up the unpredictable nature of daily life activities in an attempt to position the concept of improvisation, and asks rhetorically if driving a car is not an enterprise that requires the driver to improvise (p. 108).

David Linnros (pp. 95–97), however, differs from this point of view and claims that the starting point for any improvisation must be to intentionally depart from everyday modalities of perception in order to achieve the specific focus on the now, which is the (impossible) goal for every instance of artistic improvisation. The claim that it is the intention rather than the action that lies at the centre of improvisation necessarily excludes the act of improvisation from daily life. Linnros sees musical improvisation as an activity trapped in the "continuity of coming", distinct from the temporal multiplicity of everyday life. However, an important distinction between Douglas and Coessens and Linnros is that while Linnros looks at improvisation from the point of view of the improviser, from the inside looking out, the perspective of Douglas and Coessens is rather from the outside looking in. Perhaps this fact contributes to the difference between their conclusions. But what is then the interrelation between improvisation in everyday life and the arts?

Erik Rynell claims that "the way meaning is produced within theatre is to great extent analogous to how meaning is produced in real life" (p. 123). Similarly, Douglas and Coessens identify a series of principles of improvisation that are common to both everyday life and artistic practice. Furthermore, sensitivity as a factor in musical improvisation was a recurring thread in the discussions held during the conference, but may also be seen as a condition, or an actor, that inspires and fuels improvisation. Erik Rynell, however, points out that sensitivity is also an important aspect of theatre and thereby establishes a link between the research of the relations between "words and actions in a given context" and the aesthetics of sensitivity.

Sensitivity is also an agent of attentive listening, something which Linnros refers to as ascultation, or "listening through the stethoscope" (p. 97). It is to put one's attentive focus on the "inner rhythm of a thing" while keeping and holding on to the past in a Husserlian retention, to hear the rhythm of a flow. Listening is also always about action. **Magnus Andersson** and **Anne Marit Ligaard** highlights this aspect, asserting that it is only by way of action and the change that it achieves that "we can hear what is going on" (pp. 81–88). Such a process-based understanding bypasses the Cartesian split: "For an analysis to grasp what is at stake in an improvisation, it must acknowledge this corporeal thinking." The notion that the body is a thinking and obviously sensitive actor that has an operative impact on the practice of improvisation is put forth by **Sven Bjerstedt** (pp. 89–91), **Matthew Ostrowski** and **George Cremaschi** (pp. 158–162), as well as **James Gordon Williams** (pp. 169–175).

Where we often speak of listening as a way of approaching the other, Linnros describes listening as an "openness towards an outer duration" (pp. 97) in an attempt to tune one's mind to a movement in turn related to Bergson's discussion and definition of intuition. The limited attention span in highly demanding structural listening is, according to Linnros, closely related to the way Bergsonian intuition requires the intellect to not get in the way, to not let it 'interrupt the listening with the incision of abstraction' (ibid). Linnros continues by offering a definition of improvisation as being this kind of listening coupled with the act of creation, adding that "a Bergsonian concept of improvisation would be nothing but the Bergsonian concepts of perception, listening and creation put together" (ibid). Thanks to Bergson, argues Linnros, we have access to tools and concepts with which we can approach conceptually improvisation, despite its unique and elusive character.

Marcel Cobussen instead identifies the singularity of the practice by stating that each improvisation is a work of its own, with its own particular prerequisites for study and its own particular relationships. For these reasons, rather than determining a set of general concepts for the study of improvisation, each time "the interactions between minds, bodies, and environment need to be investigated anew" (p. 94). It is not the similarity in improvisational method that connects the results; rather, it is the divergence in the outcome, despite the conceptual similarities, that unifies the differing improvisational strategies.

(re)thinking idioms, conventions and tradition

Although it is true that any improvisation is in a unique space of its own, there are more or less similar contexts for improvisation which can nonetheless be analyzed from similar points of view. The greater part of the concert performances during *(re)thinking improvisation* consisted of encounters between musicians from different cultures and from different stylistic paradigms. The festival audience and the participating artists and scholars could follow new collaborative performances between musicians representing traditional music from three different continents as well as from different stylistic directions in jazz and free improvisation. The formally structured components could be a traditional tune, a composed score, or a conductor working with specific signals for structuring free improvisation. Key to all such collaborative experiments were local negotiations of musical meaning. These negotiations took place not only in discussions during rehearsals but even more so over the course of performance. These negotiations were also at the heart of this lab session, for instance, in the critical discussion from the perspective of traditional Indian music which Sandeep Bagwaati introduced after Pär Moberg's performance of what he and his co-musicians conceived of as a *Nordic raga*. On the one hand, the challenge in cross-cultural exchanges is to create situations of mutual learning in which individual traditions are treated with sufficient knowledge and respect; on the other hand, these encounters demand a constant acknowledgement of the fluidity of cultural and personal identities and a willingness to engage in negotiations that redefine the material and psychological tools that contribute to our musical and cultural identities.

There is a striking connection between the experiences of musicians from different cultures and those of the artists involved in the *Calendar Variations* project mentioned above, specifically in how they chose to:

> ...yield meaning through the coming together of different viewpoints within a shared territory, encountering the other in all its social, ecological and artistic facets. As we questioned our experience, new thoughts, ideas, emotions, possibilities enter in, enriching that experience through seemingly inexhaustible paths and trajectories. (p. 31)

One may say that the common artistic strategy was to explore difference as a parameter in creative collaboration, to allow the friction between different modes of expression to become a vehicle for artistic innovation.

Renewal can also come from within a tradition when performers adopt novel perspectives on their own practice, such as expressed in the performances and the writings of **Susanne Rosenberg** and **Olof Misgeld**: "To actually play in the tradition

means to create one's own variants – in dialogue with the tradition" (pp. 176–182). This is in line with studies by Rosenberg on the inevitable change that happens as a consequence of songs being passed along orally. A shared element in their accounts is the conviction that the transmission of a tradition is manifested not in literal preservation but in the creative renewal through dialogical interaction.

James Gordon Williams addresses the historical, socio-cultural, and political aspects of musical experimentation, referring to his own project with the feedback piano as "a radical, sonic assault on hegemony manifested in the musical, cultural, political, and spiritual realms" (p. 169). He further discusses musical innovation and provides examples of how the history of musical feedback "represents sonic manifestations of agency" that have specific meanings as political resistance.

(re)thinking text and action

Text and action, taken together, may draw our mind towards drama, but text and action have both wider and narrower connotations, for instance, as defining aspects of singing, also without dramatic action. Most importantly, the concept of text has been widened considerably through the linguistic turn in continental philosophy, and it is within this wider perspective that it is understood here. Rynell mentions situatedness, the element in acting which has the closest relation to improvisation, and asserts that "situated acting is acting that is based on understandings of contexts that are real (as is fundamentally the case in performance art) and/or are conceived as real" (pp. 123–125). Perhaps one may employ an alternative reading and look at how **Sten Sandell** (pp. 139–141) uses the spatial properties of the church in Kalv to "situate" his performance there.

Sara Wilén (pp. 129–138) points to the many layers of texts that are present in any musical performance, be they drawn from notated or written sources or from the personal inner musical library (Folkestad 2012) of oral traditions. This intertextuality is taken even further in improvisatory practice that draws also on literary texts and drama, such as in her own practice as opera-improviser. The situatedness of the action and the play between idioms and conventions from different genres creates a complex scenario in which the singers take part in an interperformative (Haring 1988; Parks 1988) "dialogue with genres that also become a vehicle for immediate expressions of different layers of subjectivity" (p. 136).

Due to the limited time available for rehearsals of Gino Robair's opera *I, Norton* (pp. 127–128), the solid experience of the group Operaimprovisatörerna came as a blessing, and Robair comments that this unusual situation – trained opera singers and seasoned improvisers – resulted in an unusual performance. The musicians and actors were allowed to conduct their own actions and initiatives and, comments Robair, "although I influenced the performance with various cues, the ensemble was responsible in large part for the final realization and success of the performance" (ibid). We believe that it was specifically this interperformativity, which emerged in the encounter between the idioms and traditions embodied by the singers, that created this dynamic relation to the text of Robair's *I, Norton.*

Looking ahead: What is the signification of 'rethinking' improvisation?

Why think about music? The famous saying "Talking about music is like dancing about architecture" (perhaps best represented in its variable form "Talking about ___ is like ___ about ___") captures the common intuition that musical knowing is essentially distinct from analytical thinking. What can be gained by talking about rather than merely making music? How do our minds work when we make music? Along the same lines, Henk Borgdorff poses the question of whether it is "possible to achieve a linguistic-conceptual articulation of the embedded, enacted and embodied content of artistic research" (Borgdorff 2012, p. 170).

But what do we mean by "thinking"? We believe that it is necessary to acknowledge how much of the most serious 'thinking' in the field of music is indeed situated outside the verbal domain and best described, following Merleau-Ponty, as thinking-in-music (Merleau-Ponty 1964). Or, as explained by Jacques Attali, we wish to point towards ways of theorizing through music rather than about it (Attali 1977, p. 4). By acknowledging our ability for thinking-through-listening (Östersjö 2008), we may not only arrive at a rethinking of musical improvisation, but also the beginning of an epistemology of artistic research can be identified.

Resonance: From individual to political listening

Following Nancy (2007, p. 67), we find the shared understandings created through listening, the "resonance" of the sound within the bodies of perceiving subjects, to be one of the fundamentals of *thinking-through-listening*. This reverberation stretches from the personal to the intrapersonal and into the collective and political domains of human existence. Hence, in the resonance of an aesthetic phenomenon like feedback in music, many political concepts are also articulated and a shared knowledge is constructed.

In an article on the embodied political entities in the Turkish call to prayer, Eve McPherson emphasizes the interaction between listeners and practitioners in a way that further specifies our understanding of the function of resonance in musical listening:

> Moreover, as the call to prayer is publicly expressed sound, its agents of meaningful processing and interpretation are both those who produce the sound, muezzins, and those who hear the sound, the local residents. These combined agents produce and take in the sound, and for a collective moment are affected by its generation and seem to have come to an agreement about what this embodied practice contains in terms of historical and social information. (McPherson 2011, p. 16)

Edward Said reminds us of the political nature of all cultural activity (2003, p. 27). The way in which this resonance connects different levels of human life can be expanded to a cross-referencing of seemingly distinct levels of cultural activities. By adopting a political perspective on the concept of musical style, the common battlefield made up of different stylistic approaches to improvisation can be rethought of as different manifestations of political action (though not often intended as such). Like Said, Attali points to the political nature of all music and the ways in which it is closely associated with commercialism and mass consumption. Music, however, also heralds subversion and the possibility for "a radically new organization" that is yet unimagined (Attali 1977, p. 5). We may look at artistic research as a space in which such expressions of radically new organizations could be developed, although having said this, the relation between artistic freedom and academic structures needs to be carefully considered. *(re)thinking improvisation* was organized with the intention to acknowledge and address the complexity of the relations between artistic communities and the institutions of musical education by bringing together several independent concert organizers, along with the project researchers, into its program committee. It is also essential for the credibility and assessment of artistic research that the research be clearly situated outside of academia. For the political dimension of artistic research (and of any musical practice) to emerge, it must be situated in a particular social, theoretical, cultural, and philosophical framework which we believe has been developed within postcolonial and feminist epistemologies. In the sociological analysis of cultural institutions, both with Adorno and in Bourdieu, we see approaches towards new understandings of the interrelations between the individual and the social. Attali strikes a similar note as in Adorno's critique of mass culture and music as a commodity deprived of all its meaning, but at the same time he situates this discussion in a contemporary and political understanding of these forces:

> [...] music is not innocent: unquantifiable and unproductive, a pure sign that is now for sale, it provides a rough sketch of the society under production, a society in which the informal is mass produced and consumed, in which difference is artificially recreated in the multiplication of semi-identical objects. (Attali 1977, p. 5)

A radical critique of institutional structures is indeed necessary but not sufficient. The movement towards a ”radically new organisation” must also involve a new understanding of our subject positions (Hall 2000) and the hybridity of migratory identities. The filmmaker and feminist researcher Trinh Minh-ha discusses the nature of this shift of perspective and emphasizes the need not only to focus on self-expression of the world but to challenge the individual by the production of ”texts” that question the systems of domination. This perspective, ”while it must insist on the self as the site for politicization, would equally insist that simply describing one’s experience of exploitation or oppression is not to become politicized” (Trinh 1991, pp. 163–164). This shift involves more than just personal development or new understandings but must take shape in artistic expression and ”to know – to speak in a different way” (ibid., p. 164).

The politics of musical traditions, notation and of improvisation

What is the signification of conforming to the traditions of an idiomatic style of improvisation? From a political perspective, the answer is highly dependent on the context. When the Chinese sheng player Wu Wei joins the Vietnamese/Swedish group The Six Tones in a performance of *He Moi,* a Vietnamese tune from traditional Cheo theatre, an exploration of the boundaries between distinct idiomatic traditions (musical idioms that have always had a political significance) is launched through a dialogue that would have been unthinkable without the freedom of mind that may emerge from the openness of true listening. Jean-Luc Nancy asks, ”What secret is at stake when one truly listens, that is, when one tries to capture or surprise the sonority rather than the message?” (2007, p. 5). In Wu Wei’s explorations of the sonorities that emerge in this no man’s land between different musical traditions, a kind of music is revealed that is, again, anything but innocent. The complexity of the relationships between the musical traditions of Vietnam and China has much resonance in the political violence in the past. But in addition, the individual traditions are not only informed and influenced by but are also expressions of the two countries’ politics. Returning to Nancy, sound has never been apolitical, and there is no way in which a clear demarcation can be drawn between message and sonority. But what is the secret at stake in a performance such as that of Wu Wei? Is it not found in the modes of listening? The politics of ”true listening” is a challenge to the Western concept of the Oriental ”other”. In this space, in which meaning has to be negotiated in between traditions and musical idioms, true listening is the primary source for human interaction.[4]

In the present day, traditional Swedish music and culture has become part of the current political debate surrounding the Swedish national democratic party (Sverigedemokraterna). It is not surprising that many folk musicians in Sweden feel uneasy about the way the national democrats have hijacked traditional culture, including music, and turned it into a vehicle for their nationalist propaganda. But is the influence from other cultures a threat to national tradition and identity? Obviously, interest in the preservation of the national culture grew out of national romanticism in the 19th century. The roots of the current movement for traditional Swedish music are, in other words, based on conservative political values. However, much water has flown under the bridges between the defenders of national culture in those days and the folk movement of the 1960s. The pendulum of political bias can swing quite radically over the centuries. In the present day, there is a growing awareness of the necessity of change as fundamental to the transmission of a tradition. The investigations of Susanne Rosenberg and Olof Misgeld into the basic functions of variation and improvisation in traditional Swedish music can be understood as a demystification of the way traditions are communicated and how they live on. Though there was no outspoken political intention behind their research, the current political debate has become a context that gives these musical practices further political relevance.

Helen Papaioannou shifts the focus from the composer’s intention towards the real-time interaction between the performers by means of a score that does not represent sounding results so much as it is intended to evoke action. The authority of the score and its imagined representation of the composer’s intention in the regime of werktrue and the hierarchies that it assumes are thus bypassed. In similar ways, Sandeep Bagwaati’s interactive score in the series *Comprovisations* creates a space where meaning can be negotiated in relation not only to the composer’s inscriptions in the score but also in relation to the traditions embodied by the performers. Kim Ngoc Tran Thi, in her composition Move, makes the identity of the composition highly dependent on the identity of the performers and specifically on the hybridity that emerged through the long-term blending of traditional Vietnamese music and experimental Western modes of expression in the work of The Six Tones. All these examples of musical works, which can be found in the present publication, point to the further political implications of a shift in the view of the composer and of the score in relation to a globalized and postcolonial society.

By situating the diverse kinds of music-making discussed above in a wider discourse, a politicization may be said to occur. However, our claim is that in essence, it is the resonance within the listening subject that reveals the political nature of all artistic practice. This claim has very little to do with what is commonly referred to as political art and goes beyond any specific modelling of the artistic output along political lines. Also, it is not linked only to verbal discourse on music but it is rather a discourse in music (Folkestad 1996) that has the potential to create the radicalization that Attali discusses.

Like much artistic practice and research, neither the project (re)thinking nor the event *(re)thinking improvisation* have come to an ultimate end, but instead should be regarded as contributing to the widening field of research into musical improvisation. Although limited in scope and also, as always in human activities, replete with shortcomings, it was an attempt to address and bring together some of the many expressions of this shift in contemporary musical practices. The present publication contains essays, both in writing and in musical performance, that share some of these qualities. It is our hope that *(re)thinking improvisation* may provide a spark in the emerging field of artistic research and contribute to a development in which experimental work can constitute a bridge between academia and the many musical subcultures, the laboratories in which we can experiment, and can provide a site where we can learn, with reference to Trinh Minh-ha, ”to know – to speak in a different way”.

4) A further discussion of the transformation of traditions and the function of openness in listening to the other is found in the text by Nguyen and Östersjö in the present publication.

References

Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge.* New York: Harper and Row.

Berio, L. (1986). *Sinfonia, Program Note, (trans Underwood, J).* Erato Disques.

Borgdorff, H. (2012). *The conflict of the faculties : perspectives on artistic research and academia.* Leiden University Press.

Denzin, L. & Giardina (2006). ”Disciplining qualitative research”. In I*nternational Journal of Qualitative Studies in Education* vol. 19, no. 6, Nov–Dec, 2006, pp. 769–782, Routledge.

Druker, P. F. (1988). ”The society of new organizations”. In *Harvard Business Review*, vol. 70, no. 5, pp. 95–104.

Eco, U. (1989). *The Open Work.* (Transl. by A. Cancogni). London: Hutchinson Radius.

Folkestad, G. (1996). *Computer based creative music making : young people's music in the digital age.* Göteborg: Acta Universitatis Gothoburgensis.

Folkestad, G. (2012). ”Digital tools and discourse in music: The ecology of composition”. In Hargreaves, D., Miell, D. & MacDonald, R. (Eds.). *Musical Imaginations:Multidisciplinary perspectives on creativity performance and perception*. Oxford: Oxford University Press.

Frisk, H., & Östersjö, S. (2006). ”Negotiating the Musical Work: An empirical study.” Proceedings of the *International Computer Music Conference 2006.* San Francisco, California: Computer Music Association, pp. 242–249.

Frisk, H. (2008). *Improvisation, Computers, and Interaction: Rethinking Human-Computer Interaction Through Music.* Ph. D. Thesis. Lund University.

Gibson, J. J. (1986). *The ecological approach to visual perception.* Hillsdale, N.J.: LEA.

Hall, S. (1993). "Cultural Identity and Diaspora". In Williams, P. & Chrisman L. (ed.) *Colonial Discourse & Postcolonial Theory: A Reader.* New York: Harvester Wheatsheaf.

Hall, S. (2000). "Who Needs Identity?". In du Gay, P., Evans, J. & Peter Redman (Eds.). *Identity: A Reader.* London: Sage Publications.

Haring, L. (1988). "Interperformance". In de Gruyter, W. (ed.), *Fabula*, vol. 29, no. 1.

Levinson, G. (1993). "Performative vs. Critical Interpretations of Music". In Krausz, M. (ed.), *The Interpretation of Music: philosophical essays.* Oxford: Clarendon Press.

Merleau-Ponty, M. (2002). *Phenomenology of Perception.* London: Routledge.

Mozart, L. (1951/1776). *A Treatise on the Fundamental Principles of Violin Playing.* Oxford: Oxford University Press.

Nancy, J.-L. (2007). *Listening.* (Transl. by C. Madell). New York: Fordham University Press.

Nowotny, H. (2011). Foreword in Biggs, M., & Karlsson, H. (Eds.). *The Routledge Companion to Research in the Arts.* Abingdon, Oxon: Routledge.

Parks, W. (1988). "Interperformativity and Beowulf". In *Narodna Umjetnost, Croatian Journal of Ethnology and Folklore Research*, 1989, vol. 26, no. 1, pp. 25–34. Retrieved from http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=98757&lang=en

Said, E. W. (2003). *Orientalism.* Stockholm: Ordfront

Traub, J. (1996). "What CEO's could learn from the Orpheus Chamber Orchestra". *New Yorker Magazine*, Aug 26/Sep 2.

Wörner, K. (1963). *Stockhausen: Life and work*. California: University of California press.

Östersjö, S. (2008). *SHUT UP 'N' PLAY! Negotiating the Musical Work.* Ph. D. Thesis. Lund University: Sweden.

Östersjö, S. (2013). "The resistance of the Turkish Makam and the Habitus of the performer". In *Contemporary Music Review.* vol. 32, no. 1. London: Routledge.

Trinh T. Minh-ha (1991). *When The Moon Waxes Red: Representation, Gender and Cultural Politics.* New York: Routledge

Bennett Hogg

not here, not yet: thinking improvisation

The following text is based on a transcription of *Critical Review III*, and the group discussion that closed the *(re)thinking improvisation* symposium in Malmö in November and December 2011. It has, however, been extensively rewritten. Quotes from named individuals are taken from this transcription, other references from outside of the session are in the endnotes.

I'm going to start with the title of the symposium, *(re)thinking improvisation*, and from the start draw attention to the brackets around the "re-"; it's a qualifier, rather than something completely integral, and we should therefore be prepared to drop it if we are really to review the symposium. "Re-" also implies a repetition with changes, an "again", so to speak, it implies that rethinking must come after thinking. We need to be aware that *(re)thinking improvisation* can blind us to "thinking improvisation" – the unlikeliness of this grammatical construction in normal English points at the difficulty of dealing with language, but also names, in a slightly awkward way, the various frictions between doing and thinking that cropped up a lot during the symposium. These frictions were usually articulated through language, and perhaps it is inevitable that this should be so when we understand thinking as something separate from doing, largely because thinking is generally thought of as something we do with language, whereas doing is just doing, and language is not necessary.

I was invited to make my critical review at the end of the symposium, and I think that by that point we had done a great deal of thinking improvisation, but we certainly had not rethought it. An exhiliratingly diverse group of people had been sharing their thoughts about improvisation, as though they had been allowing their thoughts to socialise with other thoughts. By the end of the symposium everyone had found some things out, but in my view *(re)thinking improvisation* could not really start until the symposium was over. Since then I've been getting lots of other thoughts about it, and at some point in the future I might be able to go off and rethink it. Rethink improvisation. But not here, not yet.

Thinking Improvisation

Is there anything useful we can get from this idea of "thinking improvisation"? Words inherently have multiple meanings, which may be one of the reasons we get so fixated on definitions. There is a problem, though, with definitions. As Nietzsche (1887/1998, p. 60) wrote in *The Genealogy of Morals*: "Only that which has no history can be defined," and I think that this is a really important idea to keep in mind when we are confronted with the urge to define, particularly that urge to define by way of opposition. In a very simplistic reduction of arguments that surfaced again and again throughout the week, improvisation exists only in relation to its necessary "other", which is composition. I have a problem with the ways that this issue – improvisation versus composition – demonstrates the way we use language to organise the world, to organise our culture, and so on – because it's something we don't think through critically enough. We in fact allow ourselves to be organised by these kinds of uncritical oppositions. Organised? Or dominated?

Structural opposition has been a paradigm of Western thought for centuries, but it was probably the work of Saussure that really made it into an explicit theme for language. From explicit theme it became almost a law of nature, and for a while during the twentieth century any alternatives to a structuralist world view of language might be seen as hopelessly misinformed or out-of-date. But why can't we think of improvisation as improvisation? Why does it have to be thought of in relation to something which it may or may not be? We know that something feels soft because we have learned what this feels like by touching, not in relation to its opposite, to hard. That distinction comes later; why should "soft" not also be under-

stood in relation to ”wet”, or to ”prickly”?[1] Improvisation may be the same as composition (real-time composing, spontaneous composition) or it may not be the same as composition, but why, whenever this subject comes up, does the discussion get stuck? Some really interesting discourses that had nothing to do with the composition-improvisation dichotomy were about to emerge and then time after time, ”WHAM!!!”, the discussion gets completely closed down, monopolised by this linguistic boxing match, Improvisation in the left corner, Composition in the right. We end up ignoring or missing out all of the other things we could be finding out about; as Chris Williams pointed out in the discussion that followed on from my review:

> ...is it thinkable, is it imaginable that improvisation would once again be so well integrated into institutional and academic discourse in the Western world that we didn't think about it as a topic anymore? Where we could talk about improvisation in space, where we could talk about instrument design, where we could talk about so many more interesting things than improvisation capital ”I”.

I think there's an important point here: Is it only in the discourses of cultural institutions that are suspicious of improvisation – and by implication any phenomena that are not regulated, fixed, and able to be ”known” – (such as some universities) – that we have this urge to objectify things, to make them ”different”? Tim Morton writes, in relation to the idea of the environment, that:

> ...in a society that took care of its surroundings in a more comprehensive sense, our idea of environment would have withered away... Society would be so involved in taking care of ”it” that it would no longer be a case of some ”thing” that surrounds us, that environs and differs from us...In a society that fully acknowledged that we were always already involved in our world, there would be no need to point it out. (Morton 2007, p. 141)

It may be that, given the academic and institutional frames within which much of the symposium took place, we found ourselves wanting to close things down because we were not sure how to make language work for us. Were we maybe compensating for something that came up a lot; many people said things like ”well, we're not really sure what's going on; we're not really sure what we're doing when we're improvising; we do not know what is going to happen next”. There were a lot of those kind of comments, I took thousands of notes during the week and this ”not knowing” is an issue that keeps coming up. We don't *know* what we're doing and so – and I think this is related to the composition-improvisation trap – there is another point where things can get closed down. But the key point with improvising is that it's not about *knowing*; it's about *finding out*. Throughout the practical sessions I've seen people doing this in their performances, and their workshops, and their presentations. This improvising process seems to be a process for finding stuff out. We might not like what we find out. We might find a complete mismatch between our musical backgrounds, our musical styles, our musical cultures that might make us very dissatisfied by our improvising, but we found that out. For me this is a really central issue; if we are ”thinking improvisation” it is not about having a definition, but of doing improvisation-thought. It is ”not knowing”, it is ”finding out”.

In the various sessions, but also chatting with people between sessions, after concerts, over dinner, four topics came up regularly that drew my attention. This is not to say that these were the only topics that interested me, but in my critical review I organised the ideas that I decided to present around these four topics, and so it makes sense to structure the following section according to these same topics.

Instruments and technologies

The status of instruments and technologies, particularly digital technologies, is problematised in improvisation in ways that seem to be less acute in other musics, though in part this is because many other musics have quite a restrictive approach to technologies, and this may in fact be a defining aspect of a musical approach. In free improv. there seems to be an anxiety of indecision about the relative status of organic, acoustic, and digital instruments that I come across a lot. It is a way of making music that is probably more open than any other to the technologies deployed across the practice, and yet vast differences of ideology and philosophy exist within the practice as a whole. In practical terms, these difficulties can be easily resolved; Matthew Ostrowski and George Cremaschi for example pointed to how, if you're playing the double bass you need to amplify it if you're playing with a computer, not to make it loud, necessarily, but to put it into the same ”space” as the computer sounds. If there are different spaces that the sound inhabits, it makes it harder to work together, not literally different spaces, but different *sounding spaces*. In the distributed improvisation we did with Alan Courtis, I didn't have any problem with the fact that he was actually thousands of miles away in Buenos Aires; all of us were going through amplifiers, and I was listening to the sound of his guitar through the same loudspeakers as the rest of us were going through – I think I had my eyes shut, in fact. The music that Alan was hearing in Buenos Aires was probably very different from what we were hearing in Malmö, but whether we were synchronised in the same way with each other in the two cities was not really important. In our room we were synchronised with Alan's sound, and I imagine that he was synchronised with ours, but they weren't the same combinations of sounds at each location because of the different latencies in the sending and receiving network. But it felt like it worked because of our approach to listening.

Some people hold to the idea that technology ”gets in the way” of pure human expression, something Derek Bailey notes as ”the anti-instrument attitude” (Bailey pp. 101–102). I can sympathise with this viewpoint – it is a position that many improvisers come to after years of research – but I'd like to mention at least one improviser I know who positively cultivates the way that technology can ”get in the way”. John Ferguson, a lecturer at Kingston University in London started life as a rock guitarist, but since developing a post-vernacular free improvisation practice has been working with lots of effects pedals, Max/MSP patches, hacked and circuit-bent electronics, *Wii*-motes, light sensors, and so on. He sets up complicated systems where he doesn't quite have control over it; the set-up takes on its own life and starts to become what John Bowers has called a ”performance ecology” (Bowers 2003). This is an environment that the improvisers devises that they have to negotiate, but it's not completely determined, and you're never quite sure what's going to happen when you click a particular pedal because everything has an effect on everything else, a complex series of interactions are set up, so when you click on a pedal: is it going to set something else off that you weren't expecting? At a certain point you get to information overload; there is more stuff coming back at you than you can cope with it. Ferguson's way of dealing with this, though, was not to try to make things simpler and regain ”control”, his strategy was to start imagining agency within the technology; that the technology has desires, personality, agency; that there is intentionality behind it, and he calls this ”imagined agency”. For Ferguson, as soon as he started to imagine that the technology was, in a sense, human, that there was an agency there that he could never fully know, he found that this completely unlocked the gridlock of information overload that he had been having with his performance ecology.

The body

I think that one of the things that often crops up in thinking improvisation is the extent to which it is all dependent upon embodiment. Musical information gets incorporated into the muscles and bones – and into those non-linguistic parts of the brain – as actions, gestures, feelings, patterns, repetition. Victoria Johnson talked about how improvising ”abolishes the self”, so that you become just a listener, as though the playing is something happening to you, not something that you are doing. I think that this model of the self is close to the Cartesian cogito, a mind that seems to live inside of the body, but which is not of the body, and this is what we instinctively think of when we hear the word ”self”. When this ”self” is suspended we have a different kind of consciousness, and it lets the listening go inside of you, so to speak, and it affects you directly, you don't think about it. When I reflect on my

1) I am here drawing on the basic arguments of Lakoff and Johnson in their books *Metaphors We Live By* and *Philosophy in the Flesh*.

own practice, I find that when I'm improvising I also have to abolish this Cartesian sense of the self, at least that is what it feels like is happening, but maybe what is more accurate is that I find a different *kind* of self – less of an *ego*-self – so that this music "going inside" transforms you physically without the experience passing through rationalization. When I play a G major scale, for instance, I set out to play it, and I already know what it is. The rational, emotional, physical, and mnemic aspects of my being are involved. In free improvisation, though, the relations change. What's going on in the room and in your self translates into states of physical being, which, when you allow them to activate themselves, they make a sound through the violin. The violin becomes a device, a sensor, and I think of it as a means for a kind of "sonification" as well as a musical instrument, because those physical transformations engendered by listening and letting sound/music "in" can come back out of the body in the form of movements, and these are registered by this device, this thing that makes a sound whenever you move. I have often talked about using the violin as a sort of seismograph, except that it records invisible things happening inside my body, rather than invisible tremors under the earth. Actually, the violin is a lie detector. Anyone who is an improviser will know this awkward, embarrassing moment, when you know that you've stopped listening, that you are actually just "going through the motions" and you're not really improvising anymore, maybe when the ideas have just dried and you have to fall back on something you know will "work" but which isn't really connected at all. That's when the violin tells you – and your audience – that you're lying.[2] I think instruments do that; they're lie detectors, and I like that aspect of them, because again, there's a sort of imagined agency there, even if this is a machine-agency. It's a productive metaphor for thinking about the instrument differently that I think has particular relevance for improvised musics.

Culture and history

James Gordon Williams brought up the issue about the historical "memory" that the piano has, the piano as a site where cultural phenomena from the past and the present coincide, opening up not only the potential for engagement with this history, but also marking the power politics of the culture(s) within which is has existed and developed. I experience something acutely similar with the violin, in fact I go so far as to think of it as being a sort of recording device.[3] On the personal level when I have a violin in my hands I can remember tunes that I could not sing or whistle, I don't know their names, but the violin makes it possible for my hands and my ears to remember things that would be irretrievable without it. I like this kind of "interface" model of the violin, because it also gives access to the range of different cultural histories of the instrument that inform my interactions with it; folk styles, classical gestures, raw sonorities, experiment. This, for me, brings the personal history of my relationship with the violin and improvising into dialogue with a more general cultural history. The piano has some three or four hundred years of a very complex social history inscribed within it. It cannot be reduced to the huge Steinway in the bourgeois concert hall, as though that were the ultimate piano besides which all other pianos are only stages of development. The upright piano in a coal miner's house in Northumberland, where I come from in the North of England, or the piano playing ragtime in a brothel in New Orleans. The piano is also the instrument for playing hymns in a village Methodist church, being prepared by John Cage, *Für Elise* filtering through the apartment walls in the film *Rosemary's Baby*. What we think of as *the* piano is plural, and it exists in so many different places, and this is always already part of it.

Tradition and identity

Cultural and personal memories are invested in our bodies and in our minds – are active phenomena in our enactive and embodied consciousness – but also in "external objects", like musical instruments. The complex ways in which different musics are afforded by these relations – selection and rejection of practices and sounds – leads on to the idea of tradition and identity. Is a tradition a "thing"? I ask this in the light of Christopher Small's "There is no such thing as music"; there is no such thing as music, because music is not a noun, it's a verb, and Small coins the term "musicking" to account for this. So we do musicking. However, when fragments of personal or cultural musics appear in the middle of a "free" or "non-idiomatic" improvisation, there is a temptation – at least from the point of view of an audience – to think of these moments as "quotations", as elements in a collage of *things*. Interestingly, that this collage model has any currency in practice was very explicitly denied by Susanne Rosenberg during the discussions we had as part of the critical review. When I asked if she thought that recognisable fragments of folk song were "objects" in a sort of postmodern collage, or was it the case that she was inhabiting a space of practice in which those objects are available, she replied that it was more like being in a landscape. "Something that you're in. You're soaked in it. . . . I don't think of it as objects or something outside myself". Here we can see something that many of us can identify with; when we improvise the materials we improvise with are somehow part of us. Through improvising we construct and constitute ourselves in an active process of making. It is not the case that we exist separate from these acts and sounds, but rather that these acts and sounds go towards making us who and what we are.

Improvisation holds together an inconsistent set of values and beliefs, some of which are even quite contradictory. The notion of freedom that is often so central to improvisation opens up the space in which to build one's own identity. This is a nexus of ideas that include the value of being free to develop oneself, the discourse of being true to oneself, and also very often a healthy amount of communitarian thinking – that we only truly become ourselves in a society of others, equal and free and self-determining. Much of the avowed ideology of the self-styled Western democracies lies within these stories, even if the reality of things is somewhat different. There is, though, a complication, which is that the marker of individuality has, in some discourses, come to be defined as the same thing as originality. The paradox here is that originality, as a defining attribute of individuality, must become fixed as a recognisable style if it is to have any commercial or cultural value. More than that, originality and artistic freedom in whatever manifestation becomes valued only in an economy which demands newness. To quote Evan Parker, ". . . by the time a theoretical position is arrived at in which it is thought the term "non-idiomatic improvisation" is the best description of something as instantly recognisable as Derek Bailey's guitar playing we have reached what E.P. Thompson called in another context 'the terminus of the absurd'".[4] If it is in the non-idiomatic that freedom from idiom lies, for many artists – we might even say *most* artists – who pursue the non-idiomatic, defining their work negatively in terms of what has already gone before ends up caught in the trap of personal style. Indeed, an original "non-idiomatic" style that is recognisable can serve as the marker of the overcoming of style, however ironic that may be. This is not to say, as Henrik Frisk pointed out in the discussion, that "one of the things that may actually be productive when discussing improvisation is to look at how improvisers deal with improvisation and accept that looking for that kind of freedom is one method". It is difficult, though, to think of the freedom-individuality-originality nexus without bringing in the values of market capitalism, whose political agenda many improvisers are, of course, strongly opposed to, at least at the conscious level.

If we imagine, for a moment, that this notion of free space mentioned above might be something like a "frontier mentality" in nineteenth-century America. There is a large and apparently free space that we can go into, and I can claim that bit of it for myself, and I can sell that bit of it to someone else because I claimed it first, and that soon becomes a commodity. I'm not saying that this is what Derek Bailey or Ornette Coleman did in any conscious way, but if you live in this capitalist culture, if you want to be a musician, particularly if you wanted to be a black jazz musician when Ornette was working, if you didn't have something that stood out and identified you, someone else was going to jump in ahead of you. The story we have from Ornette is that his music was his

2) This is an idea I've been working with for several years, see Hogg (2011).

3) See Hogg, B. (2012)

4) See "Evan Parker's extensive programme notes for a performance in Rotterdam, May 1992" at http://www.efi.group.shef.ac.uk/ [accessed 19:03 GMT Saturday, 13th October, 2012].

individual vision and that's where he was going with it, but that is not what we could call an *innocent* individuality. It is, rather, an individuality that is engendered by a particular culture that someone lives in. This is something that goes right through the culture. Originality. The idea of originality and newness is intimately tied to the production of the capitalist commodity. Originality in the arts becomes valuable around the same time that entrepreneurial, individualistic capitalism moves to the centre of the European economic stage. In the preceding eras artists had been understood as one set of makers whose work revealed divine Creation, but who did not create anything themselves, in the sense of creation *ex nihilo*. *Creatura non potest creare* – That which is created cannot itself create. Instead, as Derrida charts in his Psyche: *Invention of the Other*, artists "invented", that is to say, they *came across* things that had already been created by God, the word "invention" coming from the Latin *invenere*, to come upon (something) (Derrida, 2007).

As the epistemological ground began to shift post-Enlightenment, originality became a valuable commodity. No longer bound to invention only, makers could claim that they *originated* things, art for art's sake becomes another way of saying that creation *ex nihilo* is possible. It is no surprise that we talk of artists having a trademark; this is not an innocent use of the word. Intellectual property is predominantly a capitalist idea. It's complicated, though, because as long as we live under capitalism, there can be no absolute right or wrong in this. I have occasionally heard people vilify the avant-garde – Ornette included – as an absolute paradigm of capitalist individualism, along something like totalitarian Socialist Realist terms, as though striving for originality is what is wrong with the world. But Ornette Coleman is just another person making a living under a system he did not choose, and therefore he's part of that system, just as we all are the parts of the systems we live in; we're never outside of them completely. Freedom as release from social and cultural constraints turns out to be a value that is in part derived from the system that sets up the constraints in the first place. This is further complicated when the politics of race, sexuality, age, and so forth come into play.

It ends up as a very complex series of relays and relationships, but as improvisers, we should be able to deal with this, being aware, as we are, of the co-existence of contradictory and paradoxical situations; such situation are constitutive of our reality. They are, after all, things that we must negotiate every time we play.

But because of this, the "anything goes", dare I say *empty* freedom of straightforward rejection, or evasion, of anything past or culturally significant is not very productive. This is, I think, the problem with Bailey's term "non-idiomatic" improvisation. The idea of a sort of utopian, absolute freedom is actually quite empty. As Gaelyn Aguilar noted, as a species "we don't actually handle chaos very well. And so we divide ourselves up into groups, both large and small, to help us to handle that chaos, but it's also because those divisions actually are the thing that give meaning to our lives". Another avatar, if you like, of this is that people either want to invent, or to respect an already existing, tradition, even if that's a tradition that rejects tradition. We often look to discover limitations that make some kind of improvisation possible. Otherwise it's just an empty freedom, in which the work produced doesn't really mean all that much to anyone. It's utopian. Utopia means "no place" and so anything utopian I think often is actually useless to us because it is not actually *anywhere*. As embodied consciousnesses we have to deal with the here and now, informed and organised by a whole range of, cultural, economic, and social issues constituted through history. Such systems can be very productive for us to resist against; a counter-hegemonic arts practice is only so defined in opposition to a dominant hegemony. Actually, those artists don't need that oppressive system in order to produce art, if the oppressive system wasn't there they would probably be producing art anyway. But that oppressive system, that hegemonic structure, affords, if you like, a reason – a need, even – to develop an identity; to differentiate from that which is "not us" or "not you", or . . .

Because improvisation is a "finding out", and not "a knowing" it is always tied to "doing". If there is something ontologically distinct about improvisation in music it seems to me that any investigation that do not take account of this will miss the point. I could be wrong, though. I believe that the symposium succeeded in "thinking improvisation" – thinking with words, with bodies, with histories, with memories, and so forth, but, as I said at the outset, I don't think we have succeeded to rethink it yet. But then again, maybe rethinking doesn't mean anything very different to thinking. I am reminded of some words of the British poet Edward Thomas, who died in the trenches in World War I, and who wrote: "The long white roads . . . are a temptation. What quests they propose! They take us away to the thin air of the future or to the underworld of the past" (Edward Thomas as cited in Macfarlane 2012, p. 307). I think that these words, from 1909, articulate the beginning of my summing up. Improvisation is a path, a quest, a temptation, an act that balances in the present between the past and the future; but it is also something fragile in many senses, something that disappears for ever at the moment of its emergence, yet which in passing through the body draws on, and at the same time feeds, memory.

References

Bowers, J. (2003). "Improvising Machines: Ethnographically Informed Design for Improvised Electro-Acoustic Music". In *Advanced Research in Aesthetics in the Digital Arts*, no. 4.

Derrida, J. (2007). *Psyche: Invention of the Other.* Stanford CA: Stanford University Press.

Hogg, B. (2011). "Enactive consciousness, intertextuality, and musical free improvisation: deconstructing mythologies and finding connections". In Clarke, D., & Clarke, E. *Music and Consciousness: Philosophical, Psychological, and Cultural Perspectives*. Oxford: Oxford University Press.

Hogg, B. (2012). "Music Technology, or Technologies of Music?" In Clayton, M., Herbert, T., & Middleton, R. (Eds.). *The Cultural Study of Music: A Critical Introduction*, 2nd ed. New York/London: Routledge.

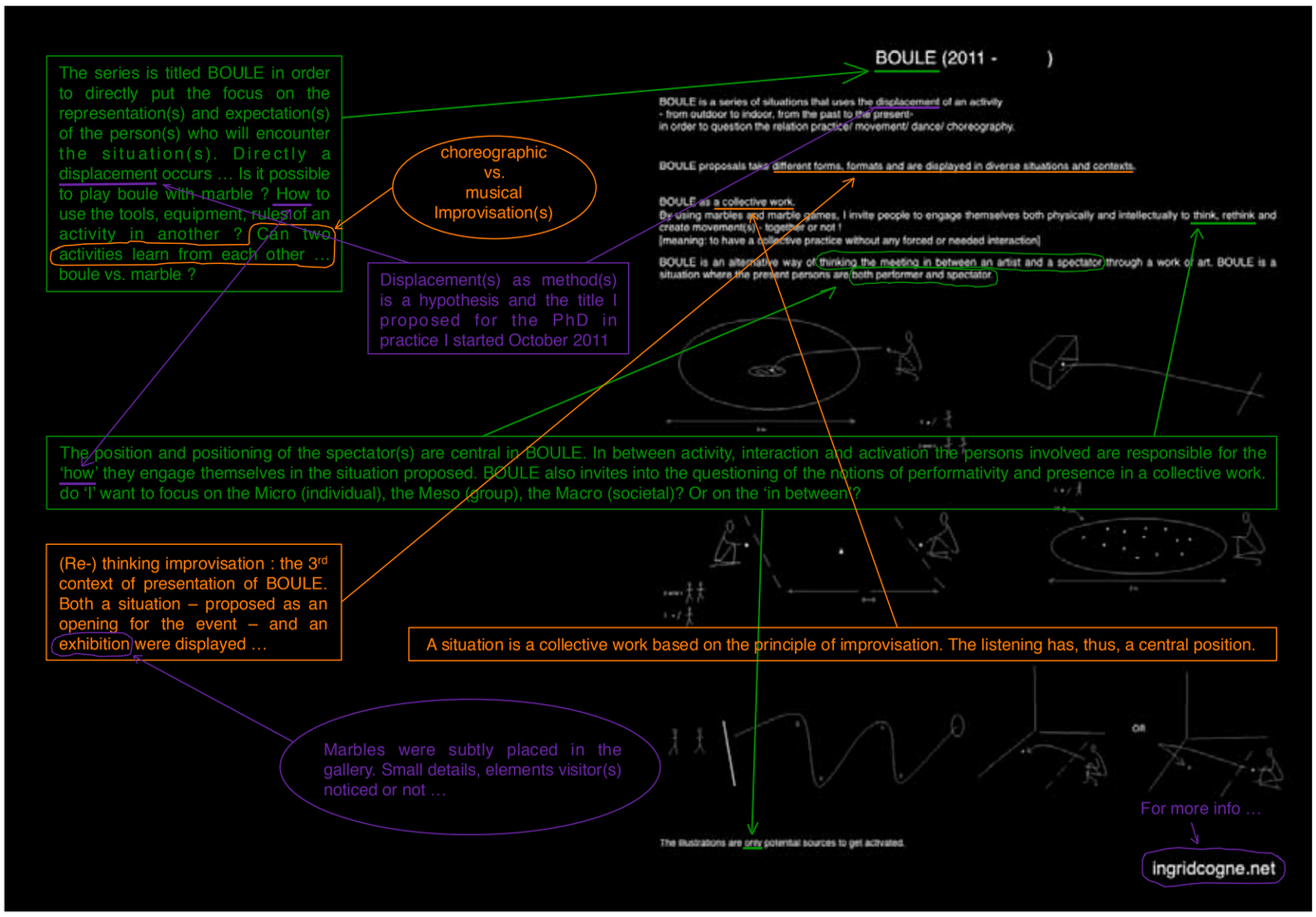
Macfarlane, R. (2012). *The Old Ways: A Journey on Foot.* London: Hamish Hamilton.

Morton, T. (2007). *Ecology Without Nature: Rethinking Environmental Aesthetics.* Cambridge MA, London: Harvard University Press.

Nietzsche, F., (1887/1998). *On the Genealogy of Morals.* Oxford: Oxford University Press.

(re)thinking audience and group interaction

Ingrid Cogne
Boule



Anne Douglas & Kathleen Coessens

Improvisation and Embodied Knowledge – Three Artistic Projects between Life, Art and Research

Introduction

In life there exists no script. The primacy of experience is a form of 'trying out' or improvisation, a moving from an indefinable and undifferentiated state to feeling our way by creating a direction.

In art, improvisation is differently nuanced. As artists, we cast a critical eye on the predetermined structures of social, cultural, material experience while recognising that freedom and constraint are profoundly interrelated. Improvisation in art across cultures is a specific approach to form making that centres the imagination (of creator/ performer/spectator) precisely on managing the interplay between freedom and constraint.

In artistic research, the artist/researcher places him/herself at the sharp point of an inquiry, re-imagining and re-configuring arts practice experimentally in the world. In research we explore new horizons of practice collaboratively, finding new meanings, working generatively and reflectively with new materials, technologies and within social, cultural processes.

Taking an expanded notion of improvisation as a "being alive" (Ingold 2011), this research traces a trajectory from improvisation in life to improvisation in art. It draws upon three interrelated artistic projects exploring collaborative improvisation experiments across the domains of visual arts and music, philosophy and anthropology: *Calendar Variations 2010–11* is a visual activity; *A Day in My Life 2011–12*, mirrors this experimental activity in music; *Sipping Water 2011–12* is a new collaboration with Dr Amanda Ravetz, anthropologist, Manchester Metropolitan University. It focuses attention through drawing. All three projects use "scores" in the form of text-based poems that imply or invite activity. They have emerged one after the other as a development from each other.

The following research questions are at the heart of this threefold artistic work: How might a revisiting of improvisation as a condition of life open up approaches to improvisation in art, challenging its current formulation as a specific formal approach? In what ways might such an inquiry inform new understandings of improvisation as a form of embodied knowledge[1] within and beyond artistic practice?

A short reflection on improvisation in life and in art

In Life

Consider the human being, with needs and possibilities, entering a world full of unexpected events, discovering different experiences and taking an active part in that world. The world's movement impels us to act, to reflect, to judge and create, to feel as we also move, encountering and interacting with other beings. In this complexity of experience the world both embraces and defies human expectation. In so doing it drives us to improvise as an ongoing series of experimental moves that are not predetermined but emerge as necessary attempts in and of the moment, as urgently needed acts in life in order to survive, but more than that – to live well.

The word "improvisation" is borrowed from the Italian 'improvviso', meaning un-fore-seen, unprepared. It has its origins in the Latin 'improvisus' and the related verb 'pro-videre', to look ahead, to prepare. The 'im' refers to its being in the moment, ad hoc. As the etymology reveals, improvisation refers to the fate of human beings to cope with an absence of predictability in their world in which materials, dimensions, perceptions and, by extension, living beings are connected in complex, often indeterminate ways.

In summary, improvisation therefore

1) See e.g. Coessens (2011).

emerges from three particular characteristics of human life. Firstly, the human world is unpredictable to a large extent. The continuity of life is not and cannot be planned precisely. Even if we search for expected outcomes, contingency and indeterminacy are part and parcel of the complexity of the world. As Hallam & Ingold (2007) write: "There is no script for social and cultural life. People have to work it out as they go along. In a word, they have to improvise." (p. 1)

Secondly, human beings are unable to repeat events precisely. The variability of situations coupled with our inability to repeat or even predict events necessitates an improvisational approach that generates a wide range of patterns of action and skill, of relational modes and ways of behaving. Thirdly, human survival depends upon collaboration and cohabitation engendering a degree of social complexity. We respond to each other in slightly different ways. We greet each other so often, but rarely in exactly the same way. We talk to each other, by constructing sentences and making gestures, but in all subsequent dialogue we vary those sentences and gestures. Moreover, with each individual, new possibilities and improvisatory acts are added.

Absence of predictability and precise repeatability coupled with the social imperative in human beings to collaborate affects all dimensions of human action: techniques and skills, social relations, happenings and events, material interactions, thoughts and the imagination. Sometimes, we try to adjust the world to our expectations and ideas. Sometimes we adjust our expectations and ideas to the world. We search constantly for an equilibrium and a viable projection of (un)expectedness (Coessens & Douglas 2011).

In Art

Though seemingly helpless, akin to surviving on a rudderless ship, humans embrace the unpredictable, layering its complexity creatively. Where improvisation in everyday life may be ephemeral, improvisation in art leaves a trace. It offers a structure to repeat the process but not to replicate its experience. Where in everyday life improvisation is a means of "keeping going", providing situations with rapid reactions and new experiences, in art the impetus is an urge to move from a loose structure to catalyzing new relationships (Douglas & Coessens 2011).

While in life, improvisation remains a potentially useful practice that will not necessarily become part of experiential knowledge, in art it has developed into an aesthetic technique, a method and even a discipline. By reflecting on experience, we come to understand it (Dewey 1938). By tracing our experiences of artistic improvisation, we develop insights that inform the next step, seeking to deepen the experience, whereas life moves on, with or without reflection.

We will discuss these elaborated forms of improvisation in art further on, and explain here the three artistic projects that tried to uncover the frontiers of improvisation between everyday life and artistic creation.

Three scores, three artistic explorations of similar pathways

As a method or tool in the arts, improvisation often starts from a constraint, freely chosen. In this way musicians improvise on a melody or theme; actors improvise on an emotion, an idea; poets improvise on a form or a set of words.

Artists can improvise on a score i.e. on the creation of another artist. A score complies to certain rules, it activates a certain behaviour and is part of a particular domain, normally music. The score is already socially, culturally and historically embedded. It represents a particular moment in the mores of musical interpretation. By having the potential to generate different responses that become unique unrepeatable events, the score offers a field of possibilities to the artist that exceeds simple articulation or translation: the artist creates "a certain thing." The score is a specific tool for artistic response (Coessens & Douglas 2011, p. 52).

In our three experimental projects *Calendar Variations 2010–11* (initiated by Anne Douglas), *A Day in my Life 2011–12* (initiated by Kathleen Coessens) and *Sipping Water 2011–12* (initiated by Amanda Ravetz), three scores offered the material for drawing out an artistic response. These scores were written texts, rather than image based or notational, more common, familiar media in either domain. They all offered a pattern for action as a basic condition towards improvisation. They were all related to performance and time and opened up potential for shared social experience. The necessity to negotiate meaning and appropriate response would arise in a shared performance. Moreover, they allowed for a blurring of individual and artistic experiences valuing the moment in which one was working and as such creating a space for "the unforeseen".

On Calendar Variations (2010–2011)

Calendar Variations is based upon *Calendar* (1971), a written score/poem by the artist, Allan Kaprow, who was working at the time in California. The poem is related an experiment in which organic growth is evoked as a dynamic between different elements. Grass, moisture, light, time result in different degrees of greenness and dryness of turf, a metaphor that resonates with human social experience. Taking it into our own context, the *Variations*-score/artwork was developed by seven artists in Scotland[2].

The artistic experiment started with an invitation sent by Anne Douglas in July 2010 to the artist researchers at Grays School of Art:

Dear All,

I would like to invite you to participate in a small experimental drawing project. Here is the exercise. The following is a score by the artist, Allan Kaprow:
Planting a square of turf amid grass like it
Planting another amid grass a little less green
Planting four more squares amid grass progressively drier
Planting a square of dry turf amid grass like it
Planting another amid grass a little less dry
Planting four more squares in places progressively greener
Activity, AK California, November 2 1971
(Coessens & Douglas 2011).
(Kaprow, 2002, pp. 120)

2) This project is a collaborative and experimental venture, started by Anne Douglas, visual artist and researcher, Robert Gordon University and co-produced by Kathleen Coessens, pianist and philosopher of Vrije Universiteit Brussel. Both are Senior Research Fellows of Orpheus Research Centre in Music, Gent. The other artists are: Georgina Barney, Chris Fremantle, Reiko Goto, Janet McEwan, Chu Chu Yuan. The work has been presented at Orpheus Research Centre in Music, Ghent, Belgium in 2010 and exhibited at Lang Byre Gallery, Woodend Barn, Banchory, Aberdeenshire, Scotland, at the University of Nottingham, UK, and at the *(re)-thinking improvisation* conference in Malmo, Sweden, in 2011.

Douglas reflects during the exhibition, *Woodend Barn* in April 2011,

The score is a riddle that evokes time through states of change. The values of green to dry increase in contrast and then decrease, establishing equilibrium at its final point. We choose to yield meaning through the coming together of different viewpoints within a shared territory, encountering the other in all its social, ecological and artistic facets. As we questioned our experience, new thoughts, ideas, emotions, possibilities enter in, enriching that experience through seemingly inexhaustible paths and trajectories. We explored, improvised and acted upon these possibilities. We left traces that lead to the world and also mirror its systems and ways of operating. These in turn provide material for a new iteration and a new improvisation.

The motivation to embark on *Calendar Variations* came from a discomfort with the way creativity in art had become absorbed in a social/political discourse and cultural policy imperatives that consume the idea of participation. As we worked, our differences as artists emerged strongly, confrontationally within the group in terms of aesthetic approaches and related beliefs. Like the score these escalated at a point in time. The lines of our drawings, "planting squares of turf', at times became boundaries to contain an aesthetic approach, a stability. At others the drawings opened up choices, opportunities to experience differently, to accommodate difference in ways that were unstable, that created instability.

In a first movement, the artists worked individually with an evolving understanding of Kaprow's aesthetic.

In Janet McEwan's experience, the world of the score and her own personal world merged in the experience of the act of cutting out a square of turf. The practice of doing it was hard, and the piece of turf, like a slab of dark layered chocolate cake, suddenly made her aware of the coincidence with her own life, as she realised that the spot she had chosen was next to the site in the garden where she had burned a lot of artwork on paper. Had the grass suffered, thrived, or been totally indifferent to the addition of the artwork to the soil? She became aware of the quality and differences of kinds of grass, of the traces left in the grass by human movement, of its delicate waving in the wind.



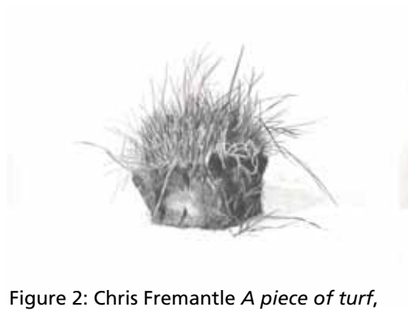




Figure 1. Janet McEwan *The experience of cutting turf*, 2011.

Figure 2: Chris Fremantle *A piece of turf*, 2011.

This kind of reflection towards the grass and the act of cutting turf was a starting point for Chris Fremantle's approach where a real square of turf, a memory of a Dürer drawing and attending to a new set of drawings in response to the score became an experience of "blurring art and life"[3].

For Chu Yuan, the score connected to social patterns, to the movement of positions of living beings towards each other, always defining and redefining their place:

The drawings here are an exploration of one trajectory of possibility if we begin to think what happens if we read Kaprow's score as reflecting a process of something taking root, spreading and growing. In what way does it grow? Does it grow below others, alongside others, or above others? Does it grow noticed or unnoticed? Does it grow being suppressed by or equal with or in dominance over others? There are two kinds of growth that I had imagined here. One in intensity/lightness or depth/shallowness as analogous with shades of green to dry, and another which is growth in area occupied, as expansion or reduction, all of which suggesting variations in terms of relationships of hostility or receptivity within the field (Chu Yuan, in Coessens & Douglas 2011, p. 41)

3) A play on Kaprow's (1993) own philosophical writings, *Essays on the Blurring of Art and Life*.

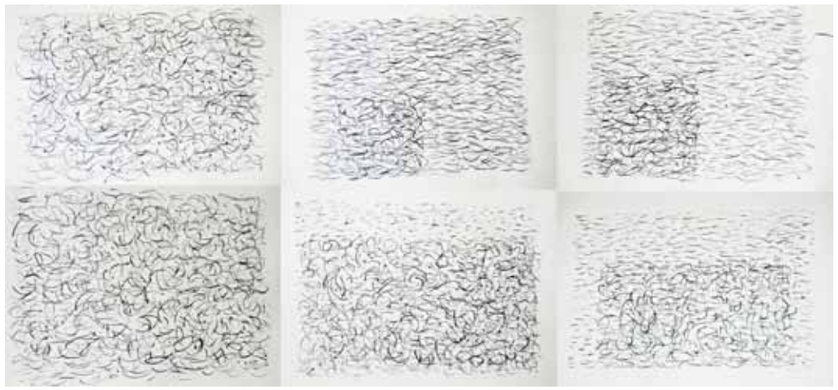


Figure 3: Chu Yuan *Stanza 1*, 2011

Reiko Goto, an ecology artist, explored the relation between humans and plants, engaging with a deep aesthetic and ethical feeling towards ecological survival and equilibrium: "I wanted to know where the aspen trees grow and how they grow here." She rewrote the score, reframing the importance of Californian turf towards the Scottish environment of Aspen trees, their presence and survival in Aberdeenshire:

Planting a tree in places progressively greener
that is supported by the sunlight, rain, soil and microbes
and that is supported by the city
and citizen

Planting another tree in the same square
that is supporting birds, moths and other wildlife,
that is supporting the quality of water and soil
and that is supporting the well being of communities and individuals

Use our imagination about natural succession
from grassland to mature forest
From less green to more green
Again and again but it is never the same
Imagine what drives this progress
Between a disturbance and restoration
Is it natural or manmade?
From less green to more green
A natural progression from sporadic to a success forest along the Dee
highland to the mouth in Aberdeen
(Reiko Goto, Calendar Variations 2011)

Figure 4: Reiko Goto, preliminary work for *Calendar Variations*, 2011.

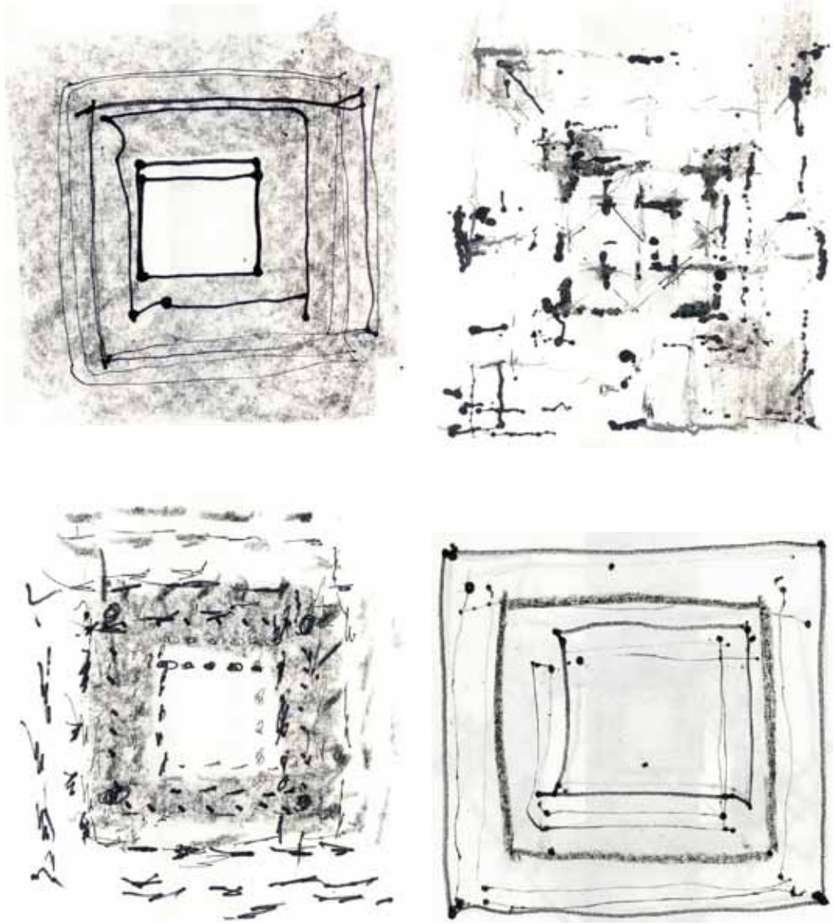


Figure 5: Anne Douglas, *Variations on Calendar*, excerpts from a sketchbook, 2011.

Anne Douglas engaged with experimental open time-spaces of drawing in which the trace, the score, and life-experiences came together in more than a hundred improvisatory variations on the theme.

What happened in these experiences was that the original score faded away, allowing for an immense field of possibilities to create unique outcomes. It opened the space for a myriad of cartographic and topographic maps of interpretations and creations, unlikely and individual interventions and performances, discussions and emotions. New ”scores” appeared like small improvisatory jumps here and there, responding to the invitation of the original score and the different worlds surrounding art, practice and individuals. These newly created objects, ”scores”, became accessible to others and thereby enlarged the game and the rules. Points of rupture have emerged on different layers by the enaction of different artists. Traces of transpositions appear that become possible between the domain of individual creativity and the domain of culture and its artifacts. At different points in the process, the same thing – a score – can acquire different identities.

The artists then worked together to figure out how to ”perform’ the score as a shared experience in accordance with Kaprow’s aesthetic. They agreed to do so through improvisatory walking. This choice was a combination of many journeys, individual and shared, that culminated in a few simple decisions:

We threw a dice to determine who would go first, who would plant the first square and by doing so create an equivalent between making a mark on a piece of paper and moving in this particular place and space. Reiko, an ecologist artist, walked the first square through the long space. She could not see her trace, she repeated it. One by one we each joined in at intervals walking behind or alongside, until we were all in the square walking round and round each other, impressing the long grass into a mark. By repetition we embodied the score's patterns with increasing familiarity letting its writing emerge through flattening the grass, keeping up, judging distance. By the afternoon our performance was seemingly effortless, intuitive as if all that matters was that very particular moment of experience. Being free in that moment somehow meant finding an equilibrium between our inner world experiences that had brought us to this point and the outer world we were sharing with others. It was like finding, mastering a new sound as one single activity, sensing and acting, judging and listening as new experiences unfolded as if for the first time. It was at this point that I really understood Kaprow's aesthetic idea. Engaging with the riddle of the score in our own time and space, sharing activity, reaching agreement on how to act was, constituted the work of art. Since that moment we have been challenged by ”exhibiting” this sense of improvisation. (Douglas in Coessens, K. *On Calendar Variations* DVD 2011)

One of the artists suddenly broke the linearity of the square by jumping in the middle of the grass field and a new opportunity of freedom and improvisation was realised. The rule of making the square was suddenly broken and spontaneous action emerged. Is that what happens also in some of the drawings of the artists?

Figure 6: *Calendar Variations Walk*, Wood End Barn, Aberdeenshire 5 August 2010

Again Douglas reflects:

If we had approached this project as research in the visual or social, rather than in artistic practice, its trajectory of development would have been very different. We would probably have found out about Kaprow, the artist in his geographical/social/political/ aesthetic context of 1970s California and used this kind of knowledge to reveal a certain kind of truth. In fact it was only at the end of the project that Kaprow's context for the Calendar score, linked to his idea of play, was discovered[4].

Instead we followed a process of taking the score into our creative imagination and experience, leaving traces through drawing in the outer world as a means to a new cycle of experience in our inner worlds. The score held us in its own rhythm and momentum. We became wanderers in its possible meanings, in the fragments of layering and overlapping, each gesture, idea or thought modifying, contesting, clashing with or complementing the next. The experience was an oscillation, a freedom to move back and forth between inner and outer selves, allowing its sense to expand and recede, re-entering consciousness differently. Our discipline was to attend, to keep moving with its momentum, to resist falling into familiar grooves, to suspend disbelief. In these ways, Calendar Variations was a process of listening to the unknown, to the other in us, to the other in the other, and to be in the moment. (Douglas 2011).

On *A day in my life* (2011–12)

As the experience of Calendar Variations opened up new possibilities of using a "non-familiar" verbally written score, we wanted to continue with a project which allowed for similar diverse, collaborative and often improvisatory outcomes, merging everyday life and artistic expertise, but now in music. We fixed the following experimental setting for *A day in my life*, an experiment started in May 2011. The research aim of this project is to understand the kinds of transformations that occur on the one hand between the everyday and artistic domains (in this case music) and on the other between visual/verbal and sound/aural perception.

There are two stages to this project. The first is to see transformations and to map them, understanding and revealing both individual artistic trajectories and the semiotic translations of the text into sound. How and why did artists take one approach or another, one perspective or another? How and why did they choose particular materials and configurations? The second stage is to take the knowledge that results from this into new forms of artistic creativity. How can one set of creations become material on another level for a new set of creations? Knowledge generation is never far removed from artistic endeavour. A text by Kathleen Coessens, *A day in my life*, is used as starting material to explore the process of musicians entering their own artistic/aesthetic experience to sonify an evocative text. Artists are asked to interpret the text in a sounding result, implying personal artistic activities of translation and transformation.

A day in my life – score
Turning on the radio – discovering a first sound,
Walking around in nature – collecting another sound,
Listening in a dark room – embracing a sound of night

Exploring the activity of your heartbeat
and the rhythm of a conversation
adding a measure of time and process

As an anthropologist
giving the sounds a space
merging culture and nature
questioning alternatively
subjectivity and collaboration

As an ethnographer
recreating the patterns of time
under the blows of rhythm
embedding alternatively
improvisation and constraint

Merging nature and culture once more
in waves to listen
in waves to walk
before making a (w)hole
growing into silence

Let us consider the score. It is a written text, offering open-ended instructions for exploring the relation between everyday experiential knowledge and artistic know-how. The score reveals life as an experiential activity: it has a beat, a rhythm, a movement. It has sounds. It describes life as performed in travel and trajectories, gesture and motion, movements in space and time. In these elements, music resembles life. The score is an invitation to create music out of life experience, everyday materials, embodied and enacted in the now, and to look at art as a form of intensification of the body that links the energies and intensities of the lived body to the rhythms and forces of the earth itself (Deleuze & Guattari 1987).

For a first elaboration of the experiment, Coessens requested a number of musicians to prepare and perform the following experiment:

Take the score/text and create your own sounding version of it.
First, find the musical output that suits your interpretation best: make a traditional, or non-traditional score, create a specific sound set-up for performance, develop a full piece out of it.

Secondly, document your choice and the process of elaboration of your musical output (questions, hesitations, materials, narratives). Thirdly, the title of the text is not 'just' a title, but an invitation to explore the findings of an actual day in your life. We also ask that the maximum duration of the musical output should be no longer than 24 minutes.

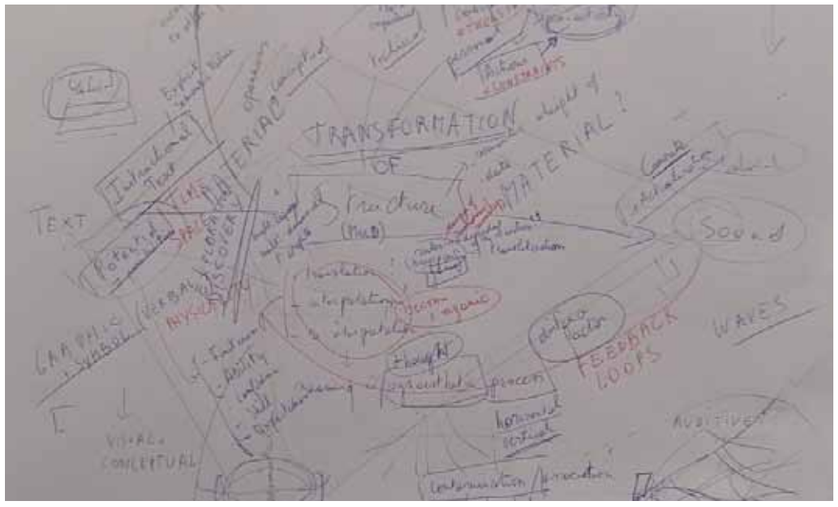
What happened next?

We gathered the first results of individual and group musical outcomes, which were considered as new materials to create a single piece.

A new development followed, alluding to different versions of *A day in my life* in a metaphorical as well as in a literal sense. Everyday materials developed into musical creations, which again became the materials for yet another musical creation. While the different artists and groups played with and manipulated the complexity of emergent materials by making their own individual pieces, the possibilities of manipulation multiplied when these confronted each other as well as merged.

Juan Parra developed a sound layer based on a drone effect — an effect where a note or chord is continuously sounded throughout most or all of a piece. Figure 7 shows brainstorming between Juan Parra and Kathleen Coessens on the transformation processes which occur between the score and the sonification of it. Parra affords one perspective upon *A day in my life*. Being part of the 100$ guitar project[5], he created a version of *A day in my life* for that occasion.

Figure 7: Mapping and conceptualising the transformation processes of Juan Parra's sonification of *A day in my life*.



4) It appears without explanation within a discussion about education and the difference between game and play expressed as a contest between values: "Game" is a structured competitive ritual to "get ahead", "to 'win'" in life. "Play is open ended, shared, non competitive, exploratory. In game "people find themselves playing less *with* each other that *on* or *off* each other." (Kaprow in Kelly 1993, p 121).

5) On Oct 20, 2010, Nick Dikovsky and Chuck O'Meara bought a $100 electric guitar from Elderly Instruments. They did not know what it sounded like or if it even worked, but were charmed by its no-name vibe and single bridge pickup that looks like an old radio. A group of their guitar playing friends were instantly charmed. The $100 Guitar is now passing through the hands of guitar players, each of which will record a piece with it (anywhere from a few seconds to 3 minutes long), and then pass it on to the next player. http://www.100dollarguitar.com/ . Juan's outcome can be seen on http://www.youtube.com/watch?v=UmdzVgD55c0

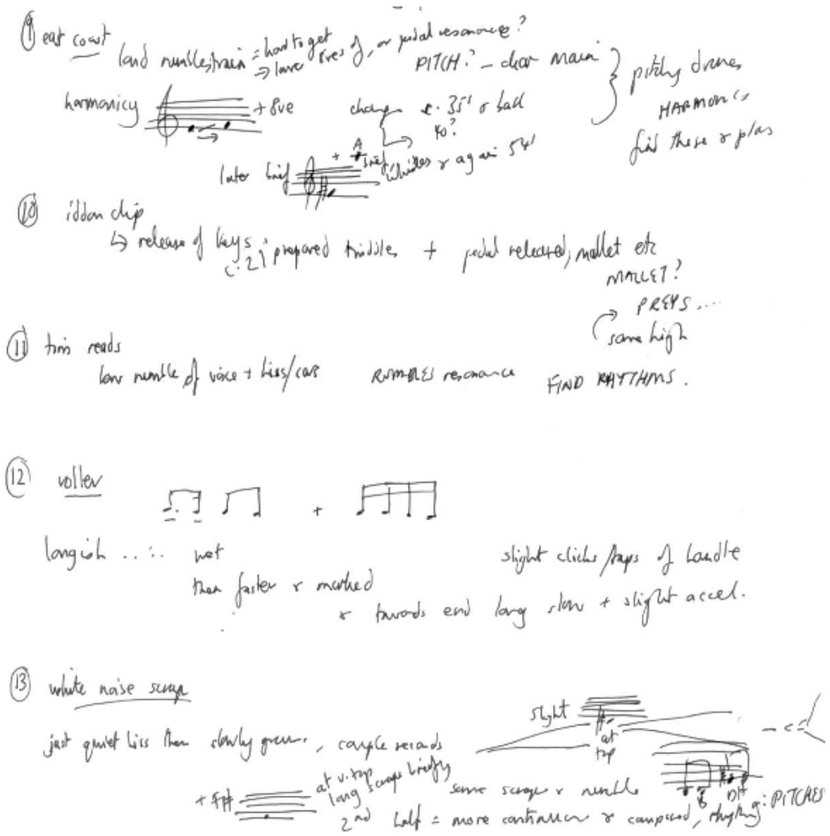


Figure 8: Catherine Law's notes for *A day in my life*, 2011.

Other artists came with very different perspectives and creative improvisations, all sounding as different layers of interpretation.

Catherine Laws[6] created 20 one-minute sound tracks on the basis of environmental sounds of one day in her life. They offered minimalist sound representations of daily noises of nature and culture including part of her own movements and habits: the train, writing, birdsong and so on. She then translated some of these sounds as short ideas and material to improvise with on extended piano (see Figure 8).

6) Catherine Laws is a pianist and researcher at the University of York and Senior Research Fellow at Orpheus Research Centre in Music (ORCiM), Gent.

Kim Cunio[7] and Vanessa Tomlinson[8] made a twenty-four minute music performance of the text, bringing in their own life experiences as well as their artistic expertise[9].

Figure 9: *A day in my life* performance, Orpheus Institute Research Festival, Gent 2011.

Figure 10: Detail of Vanessa Tomlinson's percussion instruments, *A day in my life* performance in Gent 2011.

7) Dr Kim Cunio is a composer, performer, lecturer and researcher at the Queensland Convervatorium. Australia specialising in intercultural music practice.

8) Dr Vanesa Tomlinson is a performer, lecturer and researcher at the Queensland Convervatorium specialising in solo percussion, contemporary chamber music, improvisation.

9) These 20 sound compositions of Catherine Laws as well as the version of Kim Cunio and Vanessa Tomlinson are available at http://mosamplab.posterous.com/#!/a-day-in-my-life-preparations-partial-contrib

10) The different perspectives will be part of a large artistic output in the format of both a publication and a "sounding" exhibition in 2012, the second phase of the experimental project.

Actions mirrored the particular lives of the individuals involved in sound. These gave rise to new encounters and interactions. It was in the co-incidence of the different creations between life and art that improvisation and co-creativity developed, The score forced some of the artists to reflect more upon the relation between their daily life and their artistic practice, putting them in "non safe", non habitual, unfamiliar situations.

The project A day in my life ended its first phase with a concert at the artistic research festival of ORCIM in Gent, October 2011. Other different artists have continued working on the score and will offer their materials and created pieces to the project over the next six months. These will be added to the meta-mapping of the project that in turn will aid understanding of artistic interpretation, transformation and action in collaborative improvisatory settings[10].

On *Sipping Water* 2011–12

This artistic project continues our collaborative and experimental research in the domains of art, music, anthropology and philosophy that seeks to understand embodied, experiential knowledge and situations of improvisation. In September 2011 Ravetz, as visual anthropologist, wrote the following score:

An exploration of lightness, stillness and gesture in drawing practice, in relation to improvisation and the creation of new knowledge and experience.

Take a full glass of water, a sketch book, a pencil and a pencil sharpener.

Sip the water slowly, tasting each drop.
If an impulse arises, pick up the pencil and draw. Do not draw without feeling moved to; continue until half an hour has passed.

Do this for half an hour, every day, for eight weeks.

Beginning in October 2011 we, Amanda Ravetz, Anne Douglas and Kathleen Coessens, each spend eight weeks responding to the score through drawing and writing:

10th of October 2011

Dear Amanda, Dear Anne,
I received the sketchbook last Thursday, but because of the Orpheus festival, I could not start the "sipping the water" experience.
I did it for the first time today, and just finished this strange experience of being in between the water expressing its fluidity and coldness, its invasiveness towards my invitation, and my thoughts and recollections of parts of the day, delicately searching for an ephemeral equilibrium.

Thanks for the experience,
Kathleen

The uses of different languages merge in this experimental process – visual and graphic, tactile as well as verbal, metaphorical and textual. They find an expression by way of different modes – functional, poetic, reflective and representational. The translation from the score to an experimental setting and onwards to an experiential situation involves different levels of

understanding.

The score draws upon tacit domains of experience. It acts as a mediator between our own intentions and actions (inner world) and the environment (outer world) and invites us to act in and upon the world. As a culturally evolved notational semiotic medium, a verbal score implies literacy and conceptual understanding. At the same time, it immediately forces us to engage perception fully within broad forms of embodied experience. It is situated in two directions i.e. not just between ”speaker” and ”listener’ but also between one’s inner and outer worlds of experience as individuals.

This particular experimental setting in *Sipping Water* addresses cross-sensorial capacities of expression and translation. Its strict material conditions (glass of water, pencils, paper) and its focus upon tacit dimensions of experience (sipping water) constrain as well as enable creative outcome. While each daily situation of *Sipping Water* involves a determined time and space, all action in that framework remains unexpected and allows for improvisatory freedom: Shall I draw, and, if so, what and how will I draw? How will sipping the water become a mark left as a trace on paper? How much freedom remains for the artist in this setting?

As such, an experiential situation was created at the heart of listening to oneself and forced a distance in relation to social habits as well as expertise. By distancing habit, we allowed for the unexpected. We also allowed for experiences ”in the moment” both in our thinking and in our creativity. The tactile experience of connecting inner and outer worlds (body/mouth and water) drew together familiarity and strangeness. It forced us to realise intersensory relations. The background of the score, as well as the materiality of the paper and the pencil again played on the level of semiotic understanding and skill both with the familiar and the unfamiliar. They offered the material conditions of translating sensory and imaginative processes into a drawing, extending the experience of the body with the lines on the paper in performative acts. Relationships were established on the basis of our experience of the outer world combined or adjusted with our inner world.

On reflection experimental/artistic output arises not only in response to our external environment, to what is given, but also from the inner world of the individual and h/her particular perception. Interaction and interrelatedness between actor and environment leads to a precision, a subtle ”com-prehension”, a ”grasping” of this interaction and a translation of it into a new creation. By combining the experiential with the skill of organising and perceiving complex material in relation to the whole ”as a field” (Arnheim 1986), our output realises a ”field of relations”[11]. We still have to explore the complexity of the tacit and explicit elements of the outcome of this experiment.

Figure 11: Detail of a 6 metre long document of sketchbook pages: top strip Douglas, middle strip Ravetz and bottom strip Coessens.

Returning to artistic improvisation as a tool and method

Improvisation can be a spontaneous way of creating an artwork. As such it appears like improvisation in life, where a creative act takes a spontaneous direction, without intention, rather as a kind of intuition, ”having a go”. In this case improvisation is an important quality of the work, and also part of its development. The artist creates conditions in which improvisation can occur most of the time without consciously setting them up specifically to be improvisational.

In contrast, improvisation can also become a method. In this scenario, the circumstances set out consciously to be improvisatory. One knows that one will improvise, and more or less how one will improvise though not necessarily when. In this sense the circumstances for improvisation are set up more or less in a technical way, determining constraints and allowing for moments of indeterminacy in which decisions may be made freely and spontaneously. Certain known techniques are deployed to achieve tension and balance between determined and indeterminate elements within a work. These improvisatory techniques can be taught across the performing arts, in drama, in dance or in music. They can also be acquired through experience. A play with meaning and associations in words or movements can be enhanced by extensive practice in these kinds of rehearsal or performance situations.

Artistic improvisation is a method concerned with freedom and constraints. It explores the indeterminacy of a controlled artistic situation to release original and creative responses. In improvisation the artist puts him/herself in a situation that is not totally controlled: a new situation in which the emergence of previously unexplored, new combinations can occur. This situation allows for shifts between foreground and background. In some sense, the artist searches for a situation in which he finds him/herself ’on the edge’, in a liminal space between the known and the unknown. Some domains of the arts radically take improvisation as the heart of their expression: think of jazz or of improvisatory theatre. Here improvisation is not only an experiential mode, method or technique, but has become a discipline in its own right, as it invades the whole expertise of the artist and is the fundamental articulation of its work. These domains of improvisation were not included in our experiments.

The three artistic projects in which we were engaged, were balanced on an edge between improvisation in life and improvisation in art, between life and discipline, experience and method, ”having a go” and technique. The scores allowed for experimentation with improvisation as mode and as method, rather than as technique and discipline.

11) Arnheim (1986) proposes that the human mind is “double edged” in that it engages in two forms of cognition: ‘linear’ and “field”. On the one hand in problem solving e.g. mathematics, the human mind distances itself sufficiently to abstract and deduce a linear set of connections such as a+b=c. On the other, in experiencing the world through our senses, our minds scan “a field” of complex relations and create new linkages to make sense of the complexity that we ordinarily face.

References

Arnheim, R. (1986). ”The Double-Edged Mind”. In *New Essays on the Psychology of Art*. Berkeley: University of California Press.

Coessens, K. (2011). ”An artistic logic of practice”. *International National Journal for the Arts in Society,* vol. 6, no. 4.

Coessens, K. (2011). *On Calendar Variations*. DVD

Coessens, K. & Douglas, A. (2011). *On Calendar Variations.* Woodend Barn Press, Aberdeenshire

Deleuze, G.. & Guattari, F. A. (1987/2002). *Thousand Plateaus Capitalism and Schizophrenia.* Copyright University of Minnesota Continuum Press, London.

Douglas, A. (2011). ”Wanderer there is no Road. The road is made by walking”. Unpublished keynote at *Listening Symposium*, Manchester Metropolitan University, Nov 17, 2011.

Dewey, J. (1938/1963). *Experience and Education.* New York: Collier Books. (Collier edition first published 1963).

Hallam, E. & Ingold, T. (2007). *Creativity and Cultural Improvisation.* ASA Monographs, Berg.

Ingold, T. (2011). B*eing Alive, Essays on Movement, Knowledge and Description.* London/New York: Routledge.

Gerhard Eckel

Improvisation as Epistemic Practice

Random Access Lattice[1] is a sonic sculpture to be performed by its audience. I call it a sculpture as it is a virtual object that extends into real space and because it appears sonically by means of the movements performed by the audience. Such performance is typical for the experience of any kind of sculpture, as the spectators usually feel the urge (and pleasure) to move around a sculptural work in order to grasp its spatial features. In the case of *Random Access Lattice*, the audience instead moves a kind of probe or prosthesis (Figure 1) with a palpating kind of motion through space, making the sculpture's invisible features audible.

This text is composed of a sequence of loosely connected improvisations on several of the themes that played a role in the making of the sculpture. Each section takes a certain angle to reflect about the work, complementing the others. I will first try to describe the experience of playing the sculpture. This will form a basis for discussing the concepts the work is rooted in, to be followed by a presentation of the modeling approach used for its composition. I will conclude with reflections about the improvisational aspects of composing and playing the sculpture and propose a way of *(re)thinking improvisation* as an epistemic practice.

Figure 1: Hand-held loudspeaker with markers attached for motion tracking, as used in the exhibition version of *Random Access Lattice*.

Performing the Sculpture

Imagine you hold a small loudspeaker in your hand. It is formed such that you can grab it comfortably (Figure 1). Since it radiates sound, it is perceived as a directed device, a little bit like a flash light. By turning it with your hand, you can project the sound in different directions into the room. But what sound, you will ask. This depends on where the speaker is located in space and how it is moved by your hand. If you hold it still, it will remain silent. If you move it, it will play the sound that is – so to speak – stored at the speaker's current location in the space. The faster you move, the louder the sound will be. At the same place you will always find the same sound. These are the general constraints for performing the sculpture.

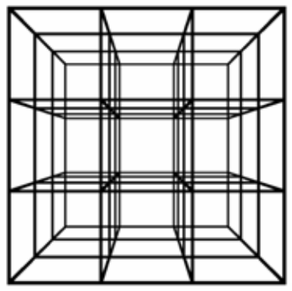


Figure 2: An example of a lattice structure with a subdivision of 4. *Random Access Lattice* uses a subdivision of 25.

But what sound will I hear, you will ask again. In this version of the piece it is voices of men and women reciting poems in 44 different languages from all over the globe. They have been recorded by volunteers and made available to the public domain at the *LibriVox*[2] website. The recordings are arranged in a three-dimensional grid – a lattice (Figure 2) – forming a cube of 2 by 2 by 2 meters. The grid is very densely spaced, as opposed to the one in the image. There is a different voice at every 8 cm along each of the three axes in the cube. If you move the speaker in between the grid lines, you will hear a mix of the adjacent voices. Only if you move it exactly on one line, you will hear the individual voice stored there.

Along the two meters of the cube's lateral length seven seconds of sound are stored. When playing, you will feel that this is an appropriate choice with respect to the movements you can perform easily with the speaker. You will also notice that you have to move the speaker very carefully in order to obtain an interesting result. An arbitrary gesture will produce an arbitrary sound. The arbitrariness ceases if you manage to repeat the gesture exactly, as this will result into exactly the same sequence of sounds. You will experience the speaker as a very faithful and reliable sensor, exactly following your movements. This often produces a tactile sensation – as if you were touching the sound, while you explore its minute details by minuscule movements.

If you have ever manipulated an analogue tape, moving it back and forth over the tape head in order to locate the exact position where to apply a cut, playing the sculpture will feel familiar to you. This will also be the case if you have used the scrubbing tool of a digital audio workstation which simulates this process. Furthermore, if you are a turntablist familiar with scratching and cutting vinyl records, you will recognize the effect. At the same time you will notice that there are two important differences with respect to scratching. Firstly, the pitch of the sounds you are (reproducing does not change with the speed of your movement and secondly, you do not hear the same sound played backwards if you reverse the direction of your movement, but you hear another sound. These are the particular constraints of playing the sculpture.

You will notice – once you have learned to control your movements – that the speech is quite intelligible. This would not be the case if the voices were transposed according to the speed of your hand or played backwards when you reverse the direction of your movement. Reading out a different voice in the forward and the backward movement also gives you more sound material to play with when repeating a gesture. Once you have got used to the constraints relating your movement to the sound, (which happens in an unconscious process performed by your body, feeling in to the space of possibilities) you will be able to explore the sculpture's full potential inherent to its three-dimensional disposition. You will find out that the sounds stored along one axis of the grid are only audible if you move along this axis. If your movement is not aligned with one of the three axes, which will almost always be the case in an unconstrained movement, you will hear a mixture of the sounds of all axes. The intensity of each sound will depend on the speed component on the respective axis. So, for instance, if you move only up and down, or left and right, or front and back, you will play only sounds stored along one of the three axes. This may also involve several sounds if your movement does not coincide exactly with one storage line (as mentioned already above). It is most likely that you will find yourself somewhere between 4 lines if you move along one axis. This means that, in total, there may be up to twelve sounds audible at a time, four per axis. As a thought experiment, imagine the movement along a diagonal of the cube. This will cause a constant fade-in and fade-out of all 12 sounds possible at a time.

It is important to point out here that you will easily manage to cope with this apparently complex (when explained rationally) situation by virtue of your bodily intelligence and the bodily understanding you acquire in encountering the particular affordances of the sculpture while interacting with it. You do not need to read this explanation in order to perform the sculpture, but the description may be helpful to understand the rest of this text, if you did not make the experience.

Related Concepts

Random Access Lattice is a sonic sculpture exploring the relationship between movement and sound, especially with respect to

1) *Random Access Lattice* has been produced during of my guest professorship at (and with the support of) the Department of Speech, Music and Hearing (TMH) of the Royal Institute of Technology (KTH) in Stockholm and the project *Dancing the Voice* supported by a scholarship from the Wenner Gren Foundation. The piece has been presented at the Exhibition on Sonic Interaction Design at the Norwegian Museum of Science, Technology and Medicine from May 29 to August 21 2011 (c.f. http://sid.bek.no, accessed Jan 13 2011). Several topics investigated through the creation of this piece form part of to the artistic research project *The Choreography of Sound* (c.f. http://cos.kug.ac.at, accessed Jan 13 2011), funded by the Austrian Science Fund (FWF): PEEK AR41.

2) http://librivox.org, accessed Jan 13 2012.

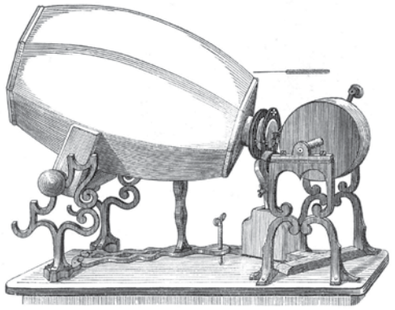


Figure 3: An early phonautograph (1859).

Figure 4: Edison with his 2nd phonograph (1878). Photograph: Mathew B. Brady.

the concept of audio recording. More than 150 years ago the idea of automatic sound tracing was formulated by Édouard-Léon Scott de Martinville in Paris and was realized with his phonautograph (Figure 3), a machine that visualizes the air pressure variations constituting what we experience as sound. Later technology, such as the phonograph by Thomas A. Edison (Figure 4), allowed also to play back such sound traces, recreating certain aspects of the sonic phenomenon that gave rise to its inscription.

Like any writing process, sound recording is dependent on the concept of movement, the principle linking time and space. In the recording process, the volatile temporal phenomenon of sound is transposed into a persistent spatial structure, such as the groove of the phonogram, the magnetic pattern on a tape, or the bit pattern on a compact disk or in computer memory (Figure 6). Sound playback reverses this transposition by reading the spatial structure, exerting a particular movement in order to recreate the temporal phenomenon.

Since the inception of sound recording technology, the crucial implication of the relationship between the engraving and the tracing movement is common sense. If they do not match, the temporal integrity of the reproduction is compromised, which is a problem any sound recording technology has to solve. At the same time, the possibility of modulating this relationship was soon discovered by composers as an interesting means of transforming recorded sound. Through its spatial representation sound became manipulable (lat. manus, 'hand') for the first time. The direct link to the movement of the hand, relating the spatial and temporal representation of the sound, can be read off with magnificently clarity from Brady's photograph of Edison cranking his phonograph (c.f. magnified detail in image 4), exposing him as a scratching DJ avant la lettre. *Random Access Lattice* revisits certain aspects of this gesture.

With his seminal 1963 work *Random Access Music* (Figure 5), Nam June Paik exposed the implications of the sound reading motion to the gallery audience in an installation. He glued recorded magnetic tape on the gallery wall and on other obejects, creating an interactive visual and sonic artwork that the audience explored by means of a hand-held tape head. Moving the head over the tape (re)produced the (recorded) music. Speed and direction of the movement determined the kind and degree of transformation with respect to the recorded material. Through their bodily motion, Paik gave the audience random (as opposed to sequential) access to his music. Paik borrowed the term "random access" from computer memory

Image 5: *Random Access Music* (Wuppertal, 1963) by Nam June Paik. Photograph: Manfred Montwé.

technology. Magnetic core memory (Figure 6) was the kind of random access memory in use between 1955 and 1975. It allowed to access a data element (a bit) at any arbitrary (i.e. "random") position in the memory space with a constant access time, as opposed to magnetic tape data storage providing sequential access. Accessing the latter is not possible in constant time, as it involves winding the tape to the right position. This is also the case with sound storage on audio tape wound up on a reels – unless the tape is unwound and glued to the wall.

Random Access Lattice pays tribute to Paik's work by further abstracting from the mechanical principles of the sound recording process invented in the 19th century. In Paik's piece, several steps of abstraction had been taken already. By using electroacoustic transducers (microphone and loudspeaker) sound is handled in its analogue electrical format. As opposed to the phonograph recording, the pattern written to the magnetic tape is invisible and intangible. A special transducer, the tape head, which converts between electrical current and magnetic field, is needed to write and read the tape. Unlike with mechanical sound recording, there is no mechanical contact between the sound trace and the membrane reproducing the sound. The electrical current representing the air pressure variations links microphone, tape head, and loudspeaker. The speed of the hand motion directing the tape head over the tape determines the way the stored pattern is reproduced via the loudspeaker. The slower the lower and the faster the higher the pattern will sound.

In *Random Access Lattice* this link between speed and pitch is suspended by using a sound granulation technique first described by Dennis Gabor, the inventor of holography (Gabor 1946).

This technique allows to read an audio recording at different speeds without changing its pitch. In 1955 the German company Springer produced a tape-based machine called Tempophone (Figure 7) that implemented this technique, allowing composers since then to independently modify speed and pitch of recorded sound material. Apart from applying this technique, which allows to "zoom" into a sound recording while keeping its pitch, *Random Access Lattice* differs significantly from

Figure 6: Magnetic core memory with 64 x 64 bits, as used in a CDC 6600, the first successful supercomputer introduced in 1964.

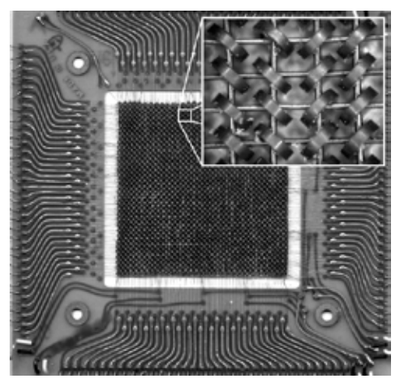


Figure 7: Tempophone from around 1960.

Paik's work in three other respects. Firstly, the sound is stored along each of the Cartesian axes in a three-dimensional lattice structure filling a cube. Where Paik's work extends the one-dimensional structure of the tape recording into a two-dimensional assemblage, a field of sound allowing for a random access, *Random Access Lattice* offers a densely packed crystalline structure that can be explored by unconstrained bodily motion in space – movement is not restricted to a surface. This is achieved by using an optical tracking system, which determines the position of a hand-held virtual sound head with high spatial and temporal accuracy (with in a millimeter, measured at a rate of 100 times per second). Secondly, the sound head and the loudspeaker is one and the same object. They form a hand-held tracked sensor which, when moved, reproduces the sound at the virtual location where it is stored in the lattice. Storage and reproduction location coincide, which underlines the spatial structure of the sound container realized with *Random Access Lattice*. And thirdly, the stored sounds may be played only in forward direction and never backwards. Each slab in the lattice carries two recordings, one for each reading direction. This is motivated by the sound material used. The whole lattice is filled with the voices of people reciting poems in various languages. Playing voices backwards makes them very hard to understand.

Composition as Modeling

At the core of the *Random Access Lattice* there is a computer program[4] which relates the data stream from the optical tracking system – the current three-dimensional position of the loudspeaker – and the sound sequences played through the loudspeaker. This program is the result of a compositional process, which I understand as a modeling task, as found in scientific modeling. There, computer modeling techniques are used to understand and predict the dynamics of complex systems, such as in weather forecasting. Unlike in scientific modeling, the compositional model is not used to explain empirical data or predict the dynamics of complex systems; rather, it is used to generate such dynamics in the first place, as a function of the audience interaction. From this perspective it can be said that the model in the case of composition has more of a poïetic than an epistemic function.

Composing means elaborating and continuously refining this model, which, at times, may include a complete redesign. After having gained enough experience with a model for judging it as insufficient, it will have to be discarded completely. Modeling is a way to express the particular constraints which are characteristic and generative of the work. In the case of *Random Access Lattice* this concerns the layout of the lattice, the mapping of the sound material to the lattice and the details of the sound granulation process, which depend on the analysis of the speaker's motion (its position and speed, the latter measured on each axis separately). The way the constraints are expressed in the model reflects (as far as possible) the way they are thought. In this sense the model functions as a (textual) representation of what is operative in the work. This kind of externalization of thought is of similar significance for the compositional process as music notation used to be at other times. Once music is notated, certain operations are possible on the level of the symbolic representation which would not be otherwise. This is where the constraints of the notational system (and the representational system in the general case) suggest or ease certain manipulations of the musical material, i.e. become generative of compositional operations. Each representational system exhibits its particular set of affordances. Reflecting and the tools used for reflection intersect. The main difference between the notion of composition as modeling discussed here and composing using traditional music notation is that the modeling approach includes the modeling of the representation, typically by means of a programming language. Composition as modeling is self-reflexive in this sense.

Improvisation as Epistemic Practice

Performing the *Random Access Lattice* will always be a form of improvisation for two reasons. Firstly, the audience performing the sculpture does not know how to play it when it encounters the piece for the first time. But, while grasping its affordances, they engage in an initial improvisational exploration, which, depending on their readiness and dexterity, may develop into an outright improvisation. When composing the piece I was aiming at leading the encounter with the sculpture into such a (layperson) improvisation situation. My approach is motivated by the conviction that everybody is able to improvise, not least because daily life requires improvisation all the time. The audience will engage in a real improvisation if they feel invited to do so by the situation the installation incites. Secondly, due to the mere abundance of sound material (the lattice contains almost four hours of voice recordings) and the vastness of the possible combinations contingent on the movement trajectories (estimated at billions of different sound grains, inhabiting each a cubic millimeter of space), a performer will hardly be able to reproduce an extended sequence of sounds. This form of resistance against mastering the situation will induce an improvisational approach, even if an expert performer, such as a professional musician is playing the sculpture (c.f. video 1:2).

But also composing the *Random Access Lattice* involved a fair amount of improvisation – which forms an integral part of my compositional practice. By composition I understand the basic "putting together" (lat. componere) of the different elements of the installation – the speaker, the tracking system, the sound material, the layout of the lattice, the motion analysis, the spatial and temporal mapping, and the sound granulation process. The disposition of these elements I understand as an experimental system in Rheinberger's (1998) sense, enabling the composition of the relationships among the elements (by means of modeling, as explained above). Intermediate results of this other level of composition are tested by experimentation through improvisation. The measurement tool used to assess these experiments can be seen in the embodied experience of improvising with the sculpture in statu nascendi. Through this process I discover what works and what does not work. On this level, all choices relating the elements are expressed in software (which functions as a kind of notation, describing something more of an instrument than a piece though). Evolving the software becomes part of the experimentation and is thus subject to the serendipity and contingency typical for improvisation. During the compositional process, the sculpture functions as the main epistemic object in the experimental system. The epistemic object transformes into a technical object, a black box, once this process has terminated and the piece is finished. Therefore, composition through improvisation may be qualified not only as a poïetic and aesthetic but also as an epistemic practice. Improvisation engenders knowledge in the compositional process.

When reconsidering now one of the intensions of the work, namely to research the relationship between sound and motion, especially with respect to the concept of audio recording, it can be seen how the epistemic dimension of improvisation becomes relevant also for the audience directly. Through improvising with the sculpture the audience familiarizes themselves with the findings of the compositional process in a pre-reflexive and non-discursive way – an engagement usually to be followed and/or accompanied by reflection and discourse, e.g. in the form of communication with fellow performers. So improvisation is not only accounted for as an epistemic practice in forming a part of the compositional process but also as an essential constituent of the experience of the work. In both cases it is the ludic engagement and tactile connection with the sound through bodily motion – the embodiment of the sound (i.e. the extension of the body into the sound) – which allows knowledge and understanding to emerge.

4) Realized with SuperCollider, "an environment and programming language for real time audio synthesis and algorithmic composition", c.f. http://supercollider.sourceforge.net, accessed Jan 24, 2012.

References

Gabor, D. (1946). "Theory of Communication". In *The Journal of the Institution of Electrical Engineers.* London: Unwin Brothers. vol. 93, no. 3, pp. 429–457

Rheinberger, H-J. (1998). *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube.* Stanford, CA: Stanford University Press.

Karin Johansson

(re)thinking organ improvisation: Revisiting Musical Practice

(re)thinking organ improvisation – Revisiting Musical Practice was planned as a practice-based artistic research study in two parts. Before describing the project, a theoretical and methodological background based on the results from my previous studies will be given below.

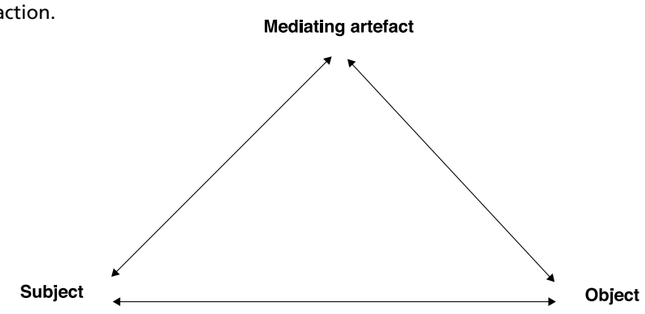
Background: Organ improvisation – activity, action and rhetorical practice

Theoretical background

The art of organ improvisation in Western European musical culture is a source for exploring learning and creative processes in self-directed learning and artistic performance. In my thesis (Johansson, 2008), organ improvisation was studied in the framework of cultural-historical activity theory (CHAT), as forming part of dynamic activity systems (Engeström, 1987; 2005) where relationships between individual and collective levels are in focus. The project had its background in my interest in the relationship between the interpretation of written music and improvisation, between musical literacy and orality and between receptivity, creativity and change. In terms of CHAT, this can also be expressed as the relationship between internalisation, externalisation and transformation:

> Internalisation is related to reproduction of culture; externalisation as creation of new artefacts makes possible its transformation. (Engeström, Miettinen & Punamäki 1999, p. 10).

Figure 1: Vygotsky's model of mediated action.



This motivates questions about knowledge and creativity on individual and collective levels, and in relation to history and the future. For example, what should be regarded as "new" knowledge in improvisation? What is musical creativity and what does it mean to individual musicians? What are the possible directions for development of the musical practice of improvisation today? What is happening in and with the practice – where is it heading?

The purpose of the empirical studies I made for my thesis was to *explore how improvisation is described, constructed and defined by organists through their production and use of improvised music in professional practice and performance in Western European music.*

The CHAT concept of activity is thought to overcome the dualism between subject and object, and to transcend the dichotomy between individual self-change and structural development. In this case, it meant that the research concerned not *either* individual accomplishments in music *or* musical objects, but relationships in the practice of mediating improvised music. Mediation is commonly expressed in the triangle used by Vygotsky (1978) showing the relationships between the subject, the object and the mediating artefacts, or tools (see Figure 1).

In the case of organ improvisation, this obviously corresponded to the relationship between an individual organist with the object of producing an improvisation while using, for example, the instrument of the organ as a tool. As a development of this mainly individual perspective, the triangle has been developed by Yrjö Engeström (1987) into a model of the human activity system, where the top, individual object-oriented action mediated by artefacts is seen as the tip of an iceberg of a collective system deeply rooted in structures of motives, rules, history and organization (see Figure 2).

The musical practice of improvisation rests on its relationship to the organ as a cultural tool. The subject is constituted by the organist/s, who in a virtual community share the object of preserving and continuing the art of organ improvisation in sounding music. The tools for achieving this may also be psychological, for example knowledge of musical styles and traditions; individual sums of learning experiences and approaches to music-making. These are used according to the rules in the area, for example discourses on music and in music; improvisational praxis; professional conventions and situational expectations. The concept of labour division may here be used for describing relationships between organists, parishes, organ builders and clergy. It might also be seen as a professional division of the subject, into differing forms of action.

This was the theoretical lens through which I studied the phenomenon of improvisation. The activity system made it possible to connect macro and micro levels as, for example, by exploring how historical patterns and individual musical goals interrelate. This can also be expressed as the relationship between activity and action (Leont'ev 1981).

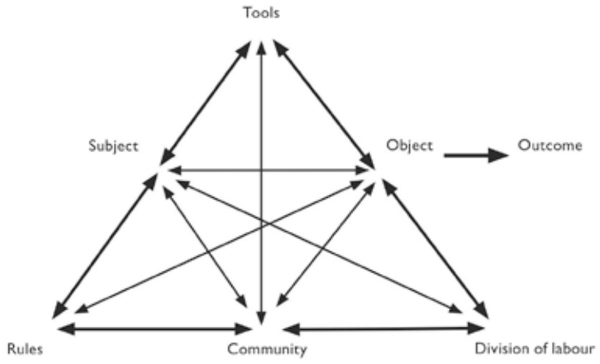


Figure 2: The structure of the activity system (Engeström, 1987).

Methodological background
In the dissertation study, ten professional organists took part in semi-structured interviews and observations of practice and performance. I did not participate with playing in this project and positioned myself as a researcher studying the practice of which I am a member through my education, professional experience and social relations. This meant that I had access to persons and contexts that might not have been easy to study otherwise, and that the participants still related to me as an insider. It was possible to go deep into the musical content in the study and I could move between being very close to the practice and taking a distance.

Methodologically, both the discourse on music – talking about improvisation – and the discourse in music – playing – was studied (Folkestad 1996). All statements were regarded as parts of the discursive practice, which meant that data consisted of both verbal and musical descriptions of improvisation. Other studies that I have conducted (e.g. Johansson 2006) have shown very interesting discrepancies between how musicians talk about music and their actual musical practice. Against this background I wanted to study the relationship between regulation and individual agency in verbal language and music. That music is discursive means that it is related to power and knowledge in musical as well as in social action (Foucault 2002). Many studies treat music-making either as a means, for example for developing identities or well-being, or as a purely intra-musical affair. My ambition was to study professional music-making with the example of improvisation as socially and musically powerful – as communicative events in discursive action. The study might thus be described as a study of the discourses in music and on music in the discursive practice of organ improvisation as an activity system.

Results from the dissertation study
Based on the analysis, contemporary organ improvisation was described as a rhetorical practice, where socially and ritually important musical messages are intentionally expressed. Organists act as musical orators with (i) a well-informed discourse awareness, (ii) an ability to make adequate self-assessments, and (iii) a stable, integrated sense of musical quality. Traditionally, improvising organists are musically literate and have extensive knowledge of major parts of the repertoire for the instrument.

Figure 3: The expansive approach

Their practice contains a range of approaches to playing, from historical style studies of composed works to varying forms of "free" improvisation which might be described as a kind of instant composition (Johansson 2012). As an intra-musical result, this means that organists' improvisation cannot be described as one specific or delimited musical phenomenon. Their 'expansive approach' towards notation and music-making can be described on a continuum (see Figure 3).

With this approach to music-making, organists deconstruct the opposition between interpretation and improvisation, between musical literacy and orality, which is common in the classical musical culture.

The results in the dissertation study also pointed to the character of improvised organ music as related to the character of the performance contexts and their corresponding views on musicianship and music-making: The liturgy, with Pre-modern roots, and the concert, with connections to the Romantic notions of individual genius, offer differing creative epistemological and creative spaces and are connected to differing definitions of improvisation.

In sum, a performance of an improvisation can be seen as the tip of an iceberg, where the total amount of personal and collective history, traditions, skills and aims are invisible and still make up the necessary conditions for musical action.

The present project *(re)thinking organ improvisation: Revisiting musical practice*

The present study was conducted in two parallel parts, study A and study B, which both had the aim to explore how individuals' musical language(s) and creative strategies in improvisation relate to socio-historical and musical structures in differing performance contexts. Even though they perform mainly as soloists, organists interact with the audience and the ritual situation while simultaneously creating it and evaluating the results. Their listening is directed towards their own playing as related to the effects in the actual situation, but also towards the unbroken musical tradition in their field. Their improvisations are always made at the crossroads of history and the present, where freedom is defined as both the individual licence to express oneself in music and as the opportunity not to be personal and original.

Thus, the interest here concerned how individuals experience, approach and relate to the structures that, as I suggest, regulate the abovementioned epistemological and creative spaces. Furthermore, the aim was to focus on differences on inter-personal as well as on intrapersonal levels.

The two parts were planned to be overlapping in time and content: one where participants from the thesis study and I would carry out for a series of workshops and concerts, and one consisting of a re-analysis of my own development and practice.

Study A

Participants
During 2009 I contacted nine of the ten participants from my dissertation study and five of them agreed to take part in a series of one-day workshops that would lead to concerts of improvisation during 2010 and 2011[1]. The group thus consisted of the following six organists (in alphabetical order; for biographies see the *Programme Book*):

- Mats Hultkvist, Helsingborg, Sweden
- Karin Johansson, Malmö, Sweden
- Jette Mogensen, Copenhagen, Denmark
- Karin Nelson, Gothenburg, Sweden

1) In the VR-project, my work was made in the context of my employment as a post-doctoral research fellow at Malmö Academy of Music. For travel expenses and accommodation in the project I applied for and received funding from Sparbanken Finns Framtidsstiftelse and Letterstedtska föreningen.

- Inger-Lise Ulsrud, Oslo, Norway
- Mattias Wager, Stockholm, Sweden

In an invitation letter I emphasized that the goals of this cooperative artistic research project, with the preliminary form of ”travelling concert/seminars”, were not defined at the onset. The activity of meeting, discussing, playing together and creating concerts would be the goal in itself; *(re)thinking organ improvisation*. In my dissertation study, the organists' practice was theorized on a collective level and they had all taken part of these results, but had hitherto never met, played together or reflected about how – and if – this influenced their thinking and music-making. Consequently, this project would be a matter of revisiting the practice against the background of the complex character of organ improvisation that I had described in the thesis. With this meeting of theory and practice, it would also function as a validation and further exploration of the results. As a theory-based but not theory-driven study of musical practice, it would form the starting point for a new journey toward an unknown destination. My expectation was that all participants would possibly experience something of what Deleuze and Guattari (1972) call deterritorialization and perhaps become destabilized in beliefs, attitudes and practice.

Methods

My intention was to conduct this study as an explorative and collaborative longitudinal case study (Hannula, Suoranta & Vadén, 2005). The aspect of collaborativity was central and important since we would all take part in and create the concerts and workshops on equal terms. In collaborative projects all participants take part in the analysis and design (Hultberg 2005), and the mixed set-up of the group (all participants were trained professional organists and two were also researchers) was in this respect seen as an advantage. In previous projects I have encountered and reflected upon the challenges and possibilities offered when combining the roles of, for example, musician, teacher and researcher. In this project I expected to be able to use the knowledge and experience I had gathered so far and clearly stated at the beginning that even though I had initiated the research process we would collaborate in carrying out all phases of the project.

The project started in August 2010 with the first set of workshop and concert in Helsingborg, and ended in November 2011 in connection with the concert and seminar at the Inter Art Center sessions in Malmö. The dates for meetings were decided upon continuously throughout the year during which every participant arranged one concert in a church or organ recital hall of their choice. This resulted in seven occasions with concerts and workshops.

Since the focus of the project was rethinking and questioning improvisation both in our individual practices and as a collective, professional phenomenon, the form of every workshop and concert was open and flexible. The time frame however, was similar: Starting after lunch on day 1, we had a workshop with group discussions and/or preparations for the concert, which usually was held in the evening. After that we had dinner at a restaurant and met again for breakfast day 2. Before some of the meetings, we shared thoughts, musical material or ideas but the concerts were always planned and prepared the same day during the preceding workshop. This meant that the programme was unknown to the audience in beforehand, and the concerts were announced simply as, for example, Improvisation concert with Nordic organists. The formats of the concerts turned out to be different at every occasion, which was partly due to a common wish to explore various ways of playing together, and partly a result of the local situations with, for example, instruments and acoustics. The material settings constitute a framework that can be regarded as both inspiring and hampering; organists are used to encountering unique instruments in every church and to master them with minimal preparation, but improvising on an instrument that has not yet become part of your musical body and integrated in the intellectual and emotional mindset can be something of a challenge. At the same time, an important experience we made during the project concerns how the resistance created by a restrictive framework can promote unexpected and positive breakthroughs. It happened several times that we had to abridge or change the form we had planned during the workshop in the course of performance. As the project evolved, we gradually became aware of the fact that our work also involved a developmental process for us as a group.

All concerts and group discussions were recorded by me and distributed to the participants for listening and reflection after every meeting. Some of the occasions were filmed, but video recording proved unsatisfactory as a mode of documentation in this project since we moved between the instruments in unpredictable ways during the concerts and only had access to fixed cameras.

The analytical work in this study can be divided into three levels: (i) an ongoing reflection and analysis of the artistic process and product in action, which was conducted by the group during the work with the concerts, (ii) an analysis of action, that is, retrospective analysis of the music material and personal experiences made by the participants individually and fed back to the group, (iii) my analysis after the completion of the project, at which stage I could move to the position of detached observer and researcher. During spring 2011, two of the participating organists left the project due to lack of time and family reasons, which meant that four of us conducted the final analysis. During a two-day meeting in October 2011 we discussed our experiences of the workshops, concerts and the project as a whole. We listened through all the collected recordings again (6 CD:s) in advance and used a guide where I had attempted to draw together some of the most important issues that had emerged so far.

Workshops and concerts

Below I give a brief description of the project's six workshops and concerts, which also describes the project as a whole.

1. St Mary's Church, Helsingborg, Sweden (August 27–28, 2010)
At this first occasion, five of the six organists participated and we started by introducing ourselves with short backgrounds about our musical careers and interests. We did not know one another very well and were all somewhat reserved. Still, we experienced the benefits of one of the central issues in this project, that might seem simple enough but is really the key to further development, namely the sharing of experiences after many years of professional activity on one's own. During the workshop we spent a couple of hours playing the two instruments (one four-manual Marcussen and a two-manual Gustavsson/Kjersgaard organ). We discussed a layout for the evening's musical event, where we were going to play between 9 PM and midnight during the Night Church (Nattkyrkan). The Night Church is an open format where people pass through, or stop for prayers, sightseeing and listening. The passing time was divided into sections according to the Ordinary of the Mass, as below in Figure 4, and introduced by a minister with a prayer or a few meditative sentences.

During this performance of improvised music every section was 10–15 minutes long. The only rule that we had decided upon in advance was a rotating order, where we moved in a circle between the two instruments. It meant that for most of the time, two organists were playing at the same time, one on the main organ and one on the smaller choir organ.

2. Storkyrkan, Stockholm, Sweden (September 30 to October 1, 2010).
All organists were present for this musical event which was announced as a Night music concert of improvised music at 8 pm. We started the sessions with a focus group discussion which I introduced with reflections about my view of central aspects of organists' improvisation.

During the workshop we constructed a complex structure of turntaking on the two organs (Marcussen) and a piano, and decided to end with common improvisations on the hymn Closer my God to thee (Närmare Gud till dig) since Storkyrkan usually has many international visitors.

3. Academy of Music and Drama, Gothenburg, Sweden (October 30–31, 2010)
This concert took place in the organ recital hall at The Academy of Music and our initial idea was to use poems for creating a framework for the listeners and ourselves. After spending some time discussing this

and searching in the library without any success we decided upon a totally different approach: In a first part, I would act as a conferencier, talking about the project, about improvisation in liturgical and concert contexts, and about the possible future of organ improvisation. This would be interweaved with a short improvisation by each of the participants, where we had decided upon the simple rule that everyone use the note A as a starting point. This part turned out as a kind of lecture-recital, and was followed by Section two which was a group improvisation without any pre-set rules. In the recital hall the console of the main organ (Willis) is turned towards the audience, and at the back is a piano and an old positive organ. We used all these instruments but were all very dissatisfied with the result after the concert since we experienced a lack of contact and confusion concerning our interaction. However, later on in the project we discovered that we had all had the opposite experience when listening to the recordings. This observation formed the starting point for interesting discussions about our personal feelings when playing and for a development of the group dialogue concerning prestige, artistic courage and interaction.

4. Uranienborg Church, Oslo, Norway (January 21–22, 2011)
Before this event, Inger-Lise Ulsrud who is the organist in Uranienborg Church, provided us by e-mail with examples of Norwegian hymns from which to choose if we wished. Chorale preludes and improvisation related to hymns constitute a central part of liturgical playing for Protestant organists, and yet we had not so far in this project chosen to focus on hymns. Rather, this area had been more or less omitted in the concerts since we wanted to avoid ending up in clichés and predictable patterns. Our general ambition was to investigate ways of playing that were not familiar, ways of listening to oneself and others that were not dependent on liturgical or ritual function, and ways of interacting that would not be burdened by our rucksacks of musical habit. In short, these workshops and concerts gave us the opportunity to create and explore an area of freedom, not only from traditions, previous knowledge

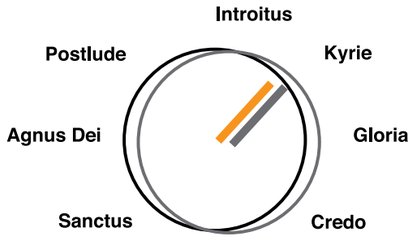


Figure 4: The time frame for the concert in St Mary's Church

and positions, but to new insights, experiences and ideas. Practically speaking, the project can be seen as a matter of returning to and sharing our sources of musical inspiration and motivation. In a busy professional musical life it offered rest, refill, and recreation but also challenged us to bracket the collected knowledge and experience – to practice epoché – in order to rethink our routines. This concert gave the opportunity to place hymn-related improvisation in a new context and experiment with formats that were not dependent on liturgical function.

5. Garnison Church, Copenhagen, Denmark (May 6–7, 2011)
The last workshop and concert took place in Garnison Church in Copenhagen, at the organ built by Carsten Lund in 1995. The concert had a time limit of 40 minutes. During the workshop we arrived at a programme that would consist of readings of poems, prayers and hymn texts in between and during the improvisations. This was a format that we had not previously used, and it varied between reading the entire text before an improvisation to letting text and music interact. In this performance we encountered the problem of timing and in the discussions later it was clear that we all experienced feelings of unrest and discontent concerning the sounding results. Again, this impression was not only modified but turned completely upside-down during the analysis of the material. These experiences instigated important discussions, for example about (i) how feelings of vulnerability and insecurity may be seen as signalling that I as a musician am about to approach the outer limits of my comfort zone, and (ii) how these feelings might be further explored in different situations and consciously utilized for artistic expansion.

6. IAC/St Johannes Church, Malmö, Sweden (November 29–30, 2011)
The final concert took place during the sessions during *(re)thinking improvisation* at IAC in Malmö, November 25 to December 2, 2011, where this project was also part of the seminar *(re)thinking space, context and tradition* (see the programme book). In addition, we held an improvisation workshop for 20 church musicians from Lund diocese about improvisation which was formally outside the sessions.

At this occasion, our initial intention was to feel free to re-use old models and ideas, but in the group improvisation we found that we were actually listening to each other in ways that we had not experienced before. I tried out an idea that I formulated during my work in Study B, namely to improvise together with myself, in the form of a sound file that I had prepared in advance. In the soundfile I had compiled and mixed extracts from earlier recordings in the project. My aim was to investigate the musical effects of entering into a dialogue with this material, that was played through the loudspeaker system in the church. What was maybe lost in sound quality was gained in the hidden sound distribution, and the result exceeded my expectations, both in terms of the experience of playing with and against the soundfile and as regards the total impact for the listeners. For example, several whom I spoke to in the audience did not realise that a sound file was involved and had been wondering if the sometimes ambulating sound could be an acoustic illusion.

Study B

A reflective, auto-ethnographic study
Starting in 2010, I carried out a reflective, case study with inspiration from auto-ethnography, with the aim of obtaining a close-up picture of how I in my musical practice related to the expansive approach (see Figure 3) and how I managed the combination of being simultaneously a musician and a researcher. Even though smaller in scope than study A, study B played an important role in this project given the opportunities it provided for introspection and uninterrupted intra-musical focus on my part. It included (i) a re-analysis of the notes and documentations of my musical experiences during the work with my thesis, (ii) video and/or audio documentations of selected practice sessions, concerts and liturgical playing, and (iii) continuous writing during this process. For study B, I concentrated on limited parts of my playing, that I selected during the first round of listening and analysing.

Methods
The purpose of this sub-trial was to make use of my acquired skill as a musician-researcher in order to investigate my own grounds for making creative choices, interpretations and taking decisions in the light of the results I previously found on a collective level.

In study B I explored the possibilities described in autoethnography (Brydie-Leigh & Ellis, 2009) as research tools, for example self-interviews and autoethnographic writing. Tessa Muncey (2010) uses the term "the missing story" in order to make visible that the story of the researcher in the research is often not told. The aim of the re-analysis was to investigate in greater depth what this "story" looked like in my case and whether there were differences depending on my position as, on the one hand, an active musician and researcher, and, on the other hand, solely a researcher. For this purpose I (i) conducted a couple of self-interviews similar to the ones I carried out with the participants in my thesis study, and (ii) practised autoethnographic writing. During my initial work with self-interviews, I found the method difficult. My assumption was that I would put questions to myself and then talk and play my way through the questionnaire quite easily, but that was not what happened. To begin with I played something just as planned, but due to the lack of encouragement and response from an interviewer (that is, from myself as a researcher) I experienced feelings of boredom and pointlessness when talking. Consequently, instead of following the plan for the interview I a) avoided the questions, b) played things that I had not planned, and c) strayed from the subject. The interview thus transformed itself into a practice session where I gradually stopped talking and considered the

method as not working. However, when I watched the recording the impression was, as often in this project, the opposite. As a researcher, I immediately identified several issues that were very interesting, in contrast to the negative personal/professional feelings that were evoked. This desolate place of boredom, emptiness, even despair, that I called The Pit, called for further exploration.

Discussion of outcomes

This project was expected to result in (i) the documentation of improvisatory processes and products, and (ii) the formulation and discussion of extended knowledge in the area. Below, I will connect a brief discussion of some the outcomes to the overall research questions given in the application text of our project *(re)thinking improvisation* in and through music: How can one define (the limits of) improvisation in music? How does interaction work in musical improvisation? What is (the role of) attentive listening in improvisation? How is, through improvisation, the opposition freedom/restriction deconstructed?

I will integrate some methodological reflections throughout the discussion[2].

1. Defining improvisation

As a musical practice, organists' improvisation is not one homogenuous phenomenon and cannot be defined as such (Johansson 2012). It is always situated in specific national, liturgical and instrumental contexts. As mentioned, it can be described as covering a continuum like in Figure 3, from a close relationship to the interpretation of scores to a kind of instant composition at the keyboard. The options illustrated by the continuum do not just illustrate preferences of creative strategies but are connected to positionings and views of music and of oneself as a musician.

The concerts and workshops in this project have given many examples of how the individual organists move on this continuum effortlessly in their music-making, and still always relate to the liturgy and the concert as performance contexts, which are in turn related to differing definitions of improvisation, strategies for learning and creating music, and sounding music. We have had the opportunity to explore what happens when improvisation for the individual musician is disassociated from the rules and regulating structures of these performance contexts.

Socially, the liturgy and the concert are both established rituals with stable frameworks for music-making and connections to two historical tracks: Liturgical improvisation is related to a Pre-modern view of music and musicianship, and concert improvisation to the Romantic tradition (Johansson 2008). Starting during the 17th century, the organ concert as a system branched off from the liturgy as a musical as well as a socio-economic development, which is mirrored in the differing musical roles of organists: In the liturgy, musicians standing in the Pre-Modern tradition are not dependent on individual originality. Instead, they adopt the given system, adapt to it and perhaps develop it. Notions of copy-right or musical ownership do not exist. Musicians in pre-capitalistic times did not own their compositions and musical works were not seen as having legal identities (Chanan 1994; Attali 20011). When learning and creating liturgical music, the organists describe how they acquire the musical language in use – the discourse in music – and participate in maintaining and developing it. Their inspiration for improvising is seen as coming from the outside, from the world of texts (Fairclough 2003).

In Romantic tradition, the aim is to produce new and original products that are "owned" by the creator. In line with this, concert improvisers do not make style studies, neither of older or modern music. This can be interpreted as a sign of respect for the ownership and copyright of the composers, who might not yet be dead. Improvisation in concert contexts thus has a sharper borderline towards composition than in the liturgy, which can be related to Benson's discussion about the hierarchies between composers, interpreters and improvisers (2003). Concert improvisers describe their most important source of inspiration as coming from inside themselves, from the inner personal musical library (Folkestad 2012). In the present project, this lead to discussions about the creative tension between craftsmanship and experimenting: The organ as an instrument is heavily loaded with musical heritage and ritual conventions (Love 2004). At the same time it is a flexible music machine that easily incorporates and develops new tendencies (Hellsten 2002). With the double focus on written and oral music, organ improvisation has a crossover character, where the individual organist acts as a meeting point for all kinds of genres and embodies the tension between representing musical history and/or the avant-garde. Improvisation for the individual organist always exists in this field of tension, that is more or less explicitly experienced. In every performance situation, at every instrument, and in every musical constellation, improvisation has to be redefined and reinvented. And yet, it has to be firmly rooted and embodied in the technical skill, artistic experience and musical craftsmanship of the musician, who also belongs to a collective of professionals that in some respects still can described as a guild. During the project we deepened the discussion about what I have called a musical discourse awareness, which means having an overview and knowledge of the options for defining improvisation in a certain field. From this springs the ability to move between requirements of different situations and to relate to the scope of musical possibilities beyond, for example, individual preferences, gender positions and traditional backgrounds. In this way, our project may be seen as an example of how the scope for individual artistic expression can be expanded through analyses of historical structures and professional positionings that are often taken for granted.

2. Listening and interaction: using insecurity and vulnerability as tools

This project has given us (as a group in Study A and me in Study B) the opportunity to question our own and others' established norms, to reach out towards new modes of expression and to examine alternative ways of listening. I will here present some of the methodological experiences in the project, described as a process from coordination, over cooperation to communication (Fichtner 1984; Engeström 2008):

During the project, we gradually encountered a collective insecurity concerning how to handle the instability of the formats that we used. This forced us to question our own and others' established norms and to reach out towards new ways of expression. A method for attaining this was to create frameworks for alternative modes of listening, which is equivalent to Engeström's (2008) description of cooperation: "Modes of interaction in which the actors, instead of focusing on performing their assigned roles or presenting themselves focus on a shared problem, trying to find mutually acceptable ways to conceptualize and solve it. The participants go beyond the confines of the given script, yet they do this without explicitly questioning or reconceptualising the script" (p. 51).

In the workshop before the second concert in Stockholm, we worked with a very detailed plan through which we tried to arrange and control new ways of listening for us as a group. We realised later in the project that this was a stage of transition to more spontaneous interaction, and we gradually developed our ways of listening, thinking and playing – our concerts and workshops presented us with a space where the usual modes of listening were not enough and where the usual frameworks did not exist. In this respect, the six occasions display a development in the listening interaction: from the initial concerts where everyone produced a lot of sound sequentially, to the more interactive and sophisticated attention to each others' sounds that took place during the later stages. Both as a group and as individuals, we developed our listening and, in the process, acquired the courage to be quieter, softer and simpler when playing.

Marcel Cobussen (2008) writes: "Unless we are ready, receptive, and also, possibly, vulnerable, the experience of listening appears to be impossible" (p. 137). We found that truly open and attentive listening was connected to vulnerability and to a readiness to put oneself and the group at risk.

By maintaining a methodological instability, which was often experienced as unpleasant in actual performance, we opened up for situations where disturbances could appear – for boundary crossing. Our first common experience of this occurred

2) Methodological results from this study were presented at the symposium Research in, with and through music at the 8th International Congress for Qualitative Inquiry, University of Illinois at Urbana-Champaign, USA, May 16–19, 2012.

during the third concert where, during the final group improvisation, most players felt that it was time to end. Suddenly, one player started all over again, which provoked another one to begin on a very well known simple tune in striking contrast to the previous structure and musical atmosphere. This event was not really discussable afterwards and was mentioned as difficult by all players until – surprisingly – we had listened to the recording (on our own): All of us independently revised our impressions and found that this group improvisation was one of the best ones we had done so far. Consequently, this difficult situation opened up for discussions and experiments which lead to an expansive transition that widened our common expressive space. This was an instance of reflective communication, in which "the actors focus on reconceptualising their own organization and interaction in relation to their shared objects. Both the object and the script are reconceptualized, as is the interaction between the participants" (Engeström 2008, p. 51)

The process was initiated by the rupture caused by one of the player's insensibility towards our common objective and it would have remained only an unpleasant, unsuccessful memory if we had not all made the commitment to stick to the design of the study by listening, analysing and sharing our experiences of being in the boundary zone, which I called *The Pit* in study B.

I began to experiment with using what I experienced when playing in *The Pit* (emptiness, desolation etc, see above) intentionally, as methods. The key to these methods turned out to be new ways of listening, for example, (i) paying attention to what music I really longed to listen to myself, and spending time searching for that sound instead of letting my hands do what they were used to, (ii) listening closer to the voice of the instrument, and (iii) listening to the recordings of myself from a distance, while still remembering how I felt and being able to evaluate the sounding music. The analysis of this work showed (i) that the "best" music occurred when these feelings occurred, and (ii) that I always interrupted the musical process too soon. I did not endure the unpleasant feelings, and as a consequence did not develop my musical ideas (which I at the time when they came up also experienced as bad and boring – if I even noticed them!). I came to the conclusion that the negative feelings can be used as signposts on the road to unknown territory, that is: If I want to expand and develop my artistic scope I need to be attentive to when futility & boredom appear, endure the tension and dare to explore what happens when I continue to listen and play instead of avoiding unpleasant emotions.

At one of the last concerts I improvised in dialogue with myself in the form of a pre-prepared sound file. In the sound file, I had compiled and mixed extracts from recordings in the project where I had worked in *The Pit*. My aim was to investigate the musical effects of entering into a dialogue with this material.

In our group discussions and evaluations we realized that we had the experience of *The Pit* in common; the situations that we experienced as insecure and difficult were connected to sounding music that we all afterwards found especially good. An important experience in the project is thus that insecurity and vulnerability can be consciously used as tools for artistic expansion, individually as well as in groups. "Insecurity" then concerns not only individual feelings and moods, but also material circumstances such as performance designs and interaction methods. This project shows how ruptures and disturbances are prerequisites for the transition between levels of interaction but also how important it is to stay with the process – enduring with insecurity and resting assured in the unknown (Edström 2008). In this project we did not have these insights from the start, but maintained one type of methodological instability by never deciding the format or content for the concerts; another example is my insistance on not leading or coordinating the work with the concerts. This kind of instability may cause irritation, frustration and inefficiency but when endured, unexpected things that often enhance quality, happen. And, most importantly, this is a way towards boundary crossing and innovative interaction (Engeström 2008).

The methodological findings in this study are dependent on the use of video and audio recordings as a source for reflection and analysis, which, it might be argued, are contrary to the nature of improvisation. However, I see method development in professional artistic work as crucial, both for maintaining a living practice during a long career and for formulating knowledge that can be transferred to other areas. Artistic and creative processes may be difficult to describe in terms of direct problem solving or task-orientation – they are sometimes chaotic, contradictory and problematic to interpret or control for the individuals who are involved in them. This project has produced some suggestions of how to capture processes of expansive transitions, how to handle the relationship between proximity and distance to the practice and how to use analysis in ways that are rewarding and artistically fruitful. It has produced new and contradictory questions about, for example, how to create stable conditions for instability, and rituals for staying in contact with wonderment questions in music making and in research. This requires a constant returning to the sources, as well as a constant breaking away from habits, bracketing favourite conventions and crossing the borders of our comfort zones.

As expected, the study resulted in many and deep reflections in and on music, and on the conditions for improvisatory music making. It also, somewhat surprisingly, gave several examples of what Engeström (2008) calls expansive transitions, and illustrates how disturbances, ruptures and expansions cause transitions in a system when they are encountered. The analysis of the project also points to how these mechanisms of transition were provided by the design of the study and by the intentional, systematic use of common procedure. Paradoxically, one of the main conclusions is that an important condition for maintaining instability is discipline, rules and planning.

3. Freedom, future and hope: meanings and functions of improvisation

In *The Principle of Hope* (1986) the German philosopher Ernst Bloch points to the utopian and innovative powers of music. He connects the small everyday hopes of ordinary people, such as daydreams, to larger hopes that include concrete plans for redesigning the future. In line with this, the liturgical improviser and the concert improviser, who are often united in the same musician, together enjoy the freedom of expressing (so-called) small daydreams as well as interpreting and projecting prophetic musical visions of the future (cf. Attali 2011). One common denominator here, on all levels of power and responsibility, might be spontaneity. Andrew Cyprian Love writes: "Spontaneity is how freedom is fully expressed. Thus awareness of a futurity, an awareness of a capacity for spontaneity, are co-inherent awarenesses for the human person. Through musical improvisation […] humans construct the future in the form of specifically human freedom" (2003, p. 275). The notion of spontaneity may be seen as transcending questions about what musical improvisation "is" and as emphasizing the aspect of being in music; improvisation means *being* and living as a musician, playing and performing music freely.

But then the concept of freedom is a tricky one. What is musical freedom? And does music promote freedom? Jacques Attali says: "Music is inscribed between noise and silence, in the space of the social codification it reveals. Every code of music is rooted in the ideologies and technologies of its age" (2011, p. 19). As improvisers, we are always dependent on a knowledge of the existing musical and instrumental codes for creating new music, new intertextual relationships and, possibly, new ways of feeling and being "free". We execute exclusive and inclusive power over our fellow musicians and our own scope for expression when we make creative choices and abandon certain ideas. On the individual level, freedom is often associated with power and ability and there is a kind of intra-musical freedom connected with limitless technical skills, dynamic artistic imagination and immersion in the present moment. However, improvisers are also parts of collective structures where "freedom" has spiritual, economical, political and ethical connotations. For example, what kind of freedom can I experience and express when I improvise a partita in Baroque style in the set framework of a li-

turgy as compared to if I play a ”free-form” improvisation in a non-religious context? Who is free, to what and from what?

This project has pointed to how freedom is experienced differently in the performance contexts of the liturgy and the concert: Improvisation in the liturgy is defined as a means, for example for illustrating ritual events or creating collective feeling. The aim is a common musical experience corresponding to the moments of liturgical drama. Adapting to given musical conditions is not described as a sacrifice of personal interests but as liberating the musician from demands of originality. Freedom here thus means not having to be individually unique, and yet, this constantly results in music that has never been heard before. In the concert, improvising is defined as an end in itself, with the individual expression in focus in individually conceived pieces of music. The object is to deliver a unique and personal musical message to the audience. Freedom equals a freedom to set personal rules and to open up for the music that is coming from the inside. Still, the resulting music often sounds familiar to the listener. These differences cannot be explained on the level of personal inclination and preference. Following my analysis of the activity systems of the liturgy and the concert, they represent two differing economic cultures, which is evident through the differing attitudes to music-making, composition and improvisation in these contexts.

The liturgy, being situated in the institution of the church, can be seen as a remnant of a feudal society, which is not only Pre-Modern but also Pre-Capitalistic in nature and, consequently, not dependent on exchange value. This explains why personal originality is not a necessary ingredient in liturgical improvisation, and why it is described as a kind of freedom *not* to be individually unique: the concept of individual, artistic expression has economic connotations. Liturgical improvisation can thus be seen as an archaic relic, carried by and dependent on the non-profit organisation of the church – but with changing notions and habits in the area of music production, the ”expansive approach” (Johansson 2008) to music-making is unexpectedly becoming modern again. It also complements and challenges the commonplace discourses on and in music in contemporary musical life through alternative musical strategies. Simultaneously, concert improvisation with its closer connections to the commercial musical arena enriches and challenges the liturgical way of making music. Not to enter the market might mean remaining in a gradually shrinking, museum-like preservational musical culture whose future development is uncertain. For every individual organist-to-be, becoming an improviser means entering into this complex picture, which can be described as a result of the meeting between Pre-modern and Romantic ways of making music, between oral and written musical culture, between informal and formal learning structures and between collective and individualistic views of musicianship.

As an artistic practice organ improvisation holds a number of seemingly incompatible contradictions and tensions, which, however, with an activity theoretical perspective (Engeström 2005) are seen as providing the potential for future change and development. For example, with its situatedness within the structures of the Church – historically stable although its position has varied through the centuries between representing social power and control, and being oppressed and persecuted – organists' improvisation is an arena for individual agency and collective conformity. Organists are at once subordinate to the rules and regulations of established contexts for musical performance *and* exclusively in power of the acoustical situation. They create, control and dominate the soundscape. This inherent contradiction is present in most music-making situations, and, as seen in this project, organists are used to thinking about and handling the sometimes conflicting interests of personal musical inclinations and collective musical function in different contexts. Considering the contemporary ecclesiastical development, this points to questions about what the goals of improvisation are and could/should be in this practice, and about where it is heading in the future.

References

Bartleet, B.-L., & Ellis, C. (2009). *Music autoethnographies: Making autoethnography sing/Making music personal.* Bowen Hills: Australian Academic Press.

Benson, B. E. (2003). *The Improvisation of Musical Dialogue.* Cambridge: Cambridge University Press.

Bloch, E. (1986). *The Principle of Hope.* Cambridge: MIT Press.

Chanan, M. (1994). *Musica practica. The social practice of Western music from Gregorian chant to postmodernism.* London and New York: Verso.

Cobussen, M. (2008). *Thresholds. Rethinking spirituality through music.* Aldershot: Ashgate.

Deleuze, G., & Guattari, F. (1972). *Anti-Oedipus.* London and New York: Continuum.

Edström, A.-M. (2008). *Learning in visual art practice.* Lund University, Lund.

Engeström, Y. (2008). *From teams to knots. Activity-theoretical studies of collaboration and learning at work.* Cambridge: Cambridge University Press.

Engeström, Y. (2005). *Developmental work research: Expanding activity theory in practice.* Berlin: Lehmanns Media.

Engeström, Y. (1987). *Learning by expanding.* Helsinki: Orienta-Konsultit Oy.

Engeström, Y., Miettinen, R., & Punamäki, R. L. (1999). *Perspectives on activity theory.* Cambridge: Cambridg University Press.

Folkestad, G. (1996). *Computer based creative music making. Young peoples' music in the digital age.* Gothenburg: Acta Universitatis Gothenburgensis.

Folkestad, G. (2012). ”Digital tools and discourse in music: The ecology of composition”. In Hargreaves, D. J., Miell, D. E. & MacDonald, R. A. R. (ed.) *Musical imaginations. Multidisciplinary perspectives on creativity, performance, and perception,* pp. 193–205. Oxford: Oxford University Press.

Foucault, M. (2002). *Vetandets arkeologi [The archaelogy of knowledge].* Lund: Arkiv Förlag.

Hannula, M., Suoranta, J., & Vadén, T. (2005). *Artistic research – theories, methods and practices.* Espoo: Cosmoprint Oy.

Hellsten, H. (2002). *Instrumentens drottning [The queen of instruments].* Stockholm: Natur och Kultur.

Hultberg, C. (2005). ”Practitioners and researchers in cooperation – method development for qualitative practice-related studies”. *Music Education Research*, vol. 7, no. 2, p 211–224.

Johansson, K. (2006). ”Organisters improvisation [Organists' improvisation]”. Report to The Swedish Research Council in the project *Musicians' interpretation-finding.* Malmö: Malmö Academy of Music.

Johansson, K. (2008). *Organ improvisation – activity, action and rhetorical practice.* Malmö: Malmö Academy of Music.

Johansson, K. (2012). ”Organ improvisation: Edition, extemporization, expansion, and instant composition”. Hargreaves, D. J., Miell, D. E. & MacDonald, R. A. R. (Ed.) *Musical imaginations. Multidisciplinary perspectives on creativity, performance, and perception,* pp. 220–232. Oxford: Oxford University Press.

Leont'ev, A. N. (1981). *Problems of the development of the mind.* Moscow: Progress.

Love, A. C. (2003). *Musical improvisation, Heidegger, and the liturgy. A journey to the heart of hope.* Lampeter, Dyfed: The Edwin Meller Press.

Love, C. (2004). ”Music as liturgical revelation”. *Irish Theological Quarterly*, vol. 69, no. 3, pp. 225–238.

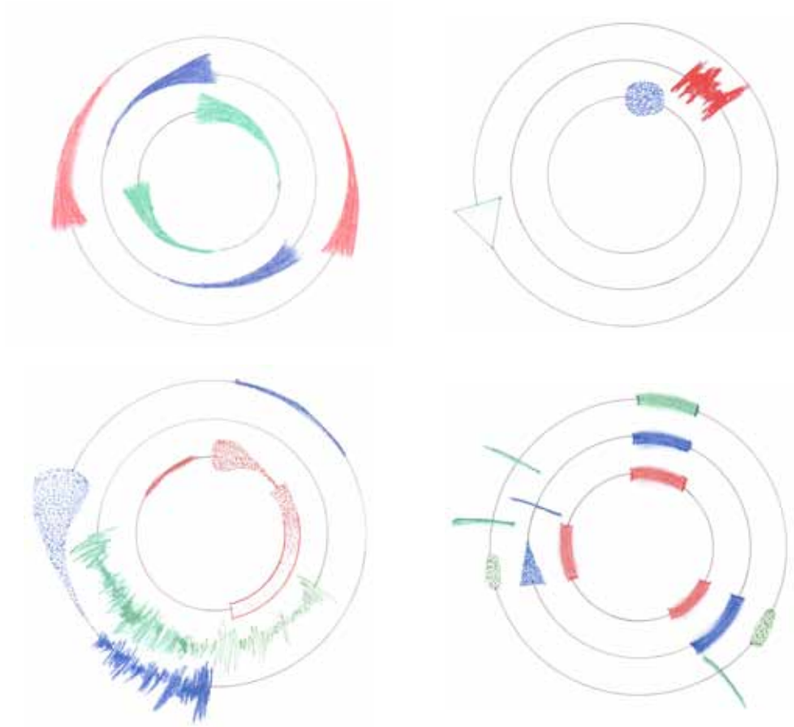
McClary, S. (1991). *Feminine endings. Music, gender and sexuality.* Minnesota: Minnesota University Press.

Muncey, T. (2010). *Creating autoethnographies.* London: Sage.

Vygotsky, L. (1978). *Mind in society.* Cambridge, Massachusetts: Harvard University Press.

Helen Papaioannou

Aspects of Rhythm in Graphic Score Improvisation



These graphic scores are one branch of a larger project which explores relationships between rhythm and the dynamics of collaboration within ensembles. This strategy considers the rhythmicity of actions and events arising from interpersonal and score-based signals, exploring how repetitive flows of motion generated by the graphics may affect musical-social communication in improvisation. Each musician moves around the circle in a clockwise motion following one ring, which corresponds to one colour in the score. Blank spaces indicate silence, while shaded areas indicate the time at which each player should sound, and the relative duration of the utterance in accordance with the layout of the score and the other performers' speed of motion. Players should strive to realise the graphics as accurately as possible, however these scores pose rather difficult challenges in the coordination of actions, pushing the limits of visual sensitivity to the score and aural attentiveness to the changing activity of the group.

These cyclical scores pressurize interpersonal negotiations of rhythmic relationships, inciting players to push and pull the speed of their motion around the scores. The graphics should be imagined as susceptible to dilation and contraction, and players are encouraged to explore the possibilities of speed change as they repeat cycles of the scores. Each part is co-dependent, therefore a change in the part of one player requires the rest of the group to reconfigure their actions to re-present the graphic layout, encouraging playful back-and-forth rhythmic interaction. This strategy pressurizes decisions of when to act, encouraging improvisers to consider the action and motion of making a sound as well as its sonic result.

Co-dependent cycles mean that changes in the nature of an individual's movement requires the rest of the group to respond in actions which may range from facilitation of the change to provocation of new courses of activity. The parts often depend upon close cueing relationships, which means that each action from a player is loaded with the possibility to significantly influence the timing, duration and character of the next player's utterance. These cueing relationships and the scores' task-like qualities colour performances with an element of game-play, depending on how much the players wish to experiment in this area.

The score therefore acts as a constraint which brings the interpersonal negotiation of rhythmic relationships to the forefront of players' activity. It may be seen as a blueprint for potential actions, rather than as representing imagined sonorities. My interest here is in the type of sonic and social interaction that this task provokes during improvisation. This applies just as much in instances of collapsing and recovering synchronization as in those moments where players 'successfully' sustain the alignment of their parts. The heightened concentration induced when attempting to realise the graphic spatialisation encourages an ethos of coincidence as participants strive to align gestures with those of others. However, the choices made by players in regard to shifts in cyclical speed and gestural content provide the potential to oscillate between modes of coincidence and rhythmic disparity. This is therefore a malleable and unstable score which requires players to push and pull the arrangement of the shaded objects whilst simultaneously taking their direction from them.

During the session at *(re)thinking improvisation*, in which I was joined by Henrik Frisk and Stefan Östersjö, the immediate difficulties that we faced in trying to play with the scores certainly highlighted the difficulties of synchronization. In our later preparation for the concert performance, these problems instigated interesting discussion over how to strategize approaches to the graphics. In the absence of more time to familiarise ourselves with the materials, this resulted in a need to define to an extent what sort of roles each player might take at problematic moments of change; factors such as which player might lead and set a tempo change, and familiarising ourselves with specific cues proved to be important here. Indeed these scores are flexible in their use as stimuli for improvisation with minimal predefined parameters, and for performances which may explore fixing rules and parameters to shape the musical activity.

In our trio performance, as well as in other instances, the problems of attaining and sustaining synchronization seems to have been a productive problem in the type of dynamic rhythmic interaction it produced. This was demonstrated in the way that, at certain points during our trio performance, individuals completely departed from the score amidst the confusion when trying to align our parts, even though we had all striven to uphold the directions for play. The tension created by such weaving in and out of the score, and to and from synchronization arguably resulted in an arresting, interesting performance.

The purpose of this type of graphic score is very much concerned with the type of mindset encouraged by the visual stimuli and the rules of play. Whilst musicians should always follow the directions that accompany the scores, the expectation is that a performance will rarely consist of seamlessly coalescing parts. Though a continuously confused atmosphere would be counter-productive, the scores themselves usually incite off-kilter patterns with a repetitive element, which is likely to entail various moments of collapse and reformation amongst periods of more stable, clearly-communicated rhythmic interaction and synchronization.

Jason Robinson

Improvising Latencies: Telematics, Improvisation, and the Paradoxes of Syncronicity[1]

In a remarkable scene in the 1972 film *Space is the Place*, Sun Ra and his Intergalactic Myth Science Arkestra arrive in an odd-shaped, pulsing spacecraft, apparently returning from the cosmos after the group had mysteriously disappeared while touring Europe in the 1960s. After disembarking to much fanfare, an awestruck reporter is offered the opportunity to try on a special intergalactic helmet of sorts brought back from their voyage. As the helmet is secured on the reporter's head, viewers hear intense electronic sounds emanating from the odd device. In a narrative twist echoing ideas from ancient Greek philosophers, we are led to believe the helmet is channeling the sounds of the cosmos, of the spheres. While the camera focuses on the reporter's overwhelmed reactions – after all, most mortals would be ill-prepared to truly hear the cosmos – we are treated to cross-cutted, parallel images of Sun Ra's fingers playing an early Moog synthesizer. Magically and wirelessly, Sun Ra sounds the cosmos through these improvisations.

Commercially available wireless technology was in its infancy in the early 1970s. It wasn't until 1973 that Martin Cooper of Motorola unveiled the world's first person-to-person mobile phone.[2] Musicians of the period were likely aware of wireless microphones, which were widely used in television during the 1950s, yet wireless technology for instruments such as electric guitar were rare and expensive until John Nady introduced his *Nasty Cordless* in 1977.[3] That Sun Ra envisioned an analog synthesizer that could wirelessly sound the cosmos in the early 1970s, complete with wireless listening helmet, attests to the imaginative science fiction elements of his work that have made him a commonly cited symbol of Afrofuturism in music. Indeed, Ra's wireless synthesizer foretells certain later developments in communication technologies also theorized by others in popular culture during the same period. For example, science fiction authors imagined cellular phones, email, and other communication technologies that transcend great geographical (and outer-space) distances. Well known author Orson Scott Card, for instance, writes about "nets" (a kind of email and web communication), and an "ansible," a real-time, faster-than-light device used to communicate synchronously across large distances.[4] These ideas foreshadow the incredible technological developments of the World Wide Web, the Internet, and new telecommunications technologies of the 1980s, 1990s, and the first decade of the twenty-first century. Like Ra's wireless analog synthesizer, the possibilities contained in these new technologies fundamentally shifts our relationship to space and time – the physical world is expanded, the human body goes virtual.

In what follows I argue that latencies, or time delays, inherent in multi-site networked music create special aesthetic and cognitive challenges for musicians and audiences. While latencies are generated by technical aspects of new communications technologies and seen by some as a limitation that will eventually be overcome, I wish to suggest that such latencies are fundamental to musical performance. Indeed, my analysis suggests that the kinds of interactivity privileged in certain modes of musical improvisation position improvisers in unique, although not exclusive, ways to contribute to the ongoing development of networked performance.

Telematics and improvising latencies

More recent developments in multi-site networked musical performance, what some call "telematics" or "distributed performance," belong to a long historical arc that has gradually and persistently offered new possibilities for music making from a distance. In 2000, Chris Chafe and a small team of researchers at Stanford University were awarded a National Science Foundation grant to support a project designed to "create a sonification tool for fine-grain flows on the Internet" (Chafe, personal interview). The project ultimately led to the creation of the SoundWIRE (*Sound Waves on the Internet from Real-time Echoes*) research group at Stanford's CCRMA (*Center for Computer Research in Music and Acoustics*), a leading academic research institute for music technology in the United States.

The project aimed to analyze feedback echoes from two locations networked in real-time by specialized audio software over the Internet. Chafe explains that "by almost a coincidence of physics, the transit times [of uncompressed, digitally encoded audio data across the Internet] are kind of in the pitch and echo range" (ibid). Interestingly, the group found that the feedback loop created by networked audio connections behaves in ways similar to physical acoustic spaces. Additionally, they found that "latency," the inherent network lag time between locations, can be identified in the frequency of the feedback generated through the networked connection. This distance-to-pitch relationship is central to the "wire" metaphor contained in the research group's name; much like the length of a string resonating on a musical instrument (the smaller the string, the higher the sounding pitch), distances between networked locations are signified in the pitch of the feedback loop. In this way, Chafe imagines that their project "literally pluck[s] the Internet" (ibid.).

A preliminary part of the project focused on building a software platform to send uncompressed, high quality audio through a full-duplex (bi-directional) networked connection across the Internet. In 2004 this tool was named "JackTrip," a contraction of "Jack," the audio software connection toolkit, and "triple," a reference to the three-location concert for which Chafe developed the final version of the software. Since then, JackTrip has become a common software of choice for a growing community of improvisers and composers forging new directions in telematic music.

Within this community, telematics often features academically-affiliated performers and composers using institutionally-mediated access to Internet2,[5] specialized performance venues outfitted for technology-heavy events, a vast array of audio, video, and computer equipment, and free or open-source audio and video networking software. Telematics performed at this level requires a tremendous amount of technical resources. In contrast to this, many musicians experiment with Skype, iChat, and other commercially available telecommunications platforms as a more "accessible" and lower cost networking alternative. Unlike JackTrip, these options usually limit audio quality (through compression) and are accompanied by much greater latencies. For many involved in telematics, the possibilities of lower latencies and higher audio quality provides a compelling reason to negotiate the increased technical dimensions and financial costs of JackTrip and Internet2.

The history of the word "telematics" traces in part to Simon Nora's and Alain Minc's 1978 report to former French president Valéry Giscard d'Estaing, published in 1980 as *The Computerization of Society*. Their sprawling account of the impact of new technologies on life and politics introduces the term "telematics" ("télématique"), which refers to the "conjunction of computers and telecommunications" (Shanken 2000, p. 65). Their predictions are reflected in the ongoing increasing interconnection of computers and communications technologies, including new forms of wireless cellular phones as well as continually evolving "voice over Internet" (VoIP) capabilities. Yet, interestingly, many current networked music practitioners seem unaware of this particular history of the term "telematics."[6] Instead, many musicians cite earlier attempts in experimental music to use analog telephone technology to link coterminous performance locations (Oliveros, personal interview). For me, however, I wish to position telematics within larger histories of technology and music making, histories that include both the imaginative ways that musicians have drawn upon technology as well as the ways that such technologies have provided

1) The author thanks several people for their valuable feedback and encouragement, especially Ellen Waterman, Michael Dessen, and Mark Dresser. An early version of this essay was presented at *The Ghost in the Machine: Technologies, Performance, Publics*, a conference that took place at McGill University in February 2011.

2) In a 2003 story for the BBC, reporter Maggie Shiels likened the physical appearance of this initial cellular phone prototype to *Noah's Ark*.

3) Although not commercially available until 1977, Nady began developing his wireless system for guitar in 1968. A Billboard Magazine advertisement from 1977 for the *Nasty Cordless* promises "total freedom without cords" and declared that the "cordless era in rock and roll has arrived" (Nady).

4) See Orson Scott Card's *Ender Series* books.

5) The technology of Internet2 goes by different names in different countries: Internet2 (United States), Canarie (Canada), GEANT2 (Western Europe), and CERNET2 (China), for example.

6) The connection of the term "telematics" with Nora's and Minc's report did not surface in the interviews conducted for this essay (see Chafe, personal interview; Dessen, personal interview; Dresser, personal interview; Oliveros, personal interview; Weaver, personal interview). If my interviewees are aware of this history, they did not mention it in our interviews.

new potentials to further preexisting interactive and improvisational practices.

Much of the prevailing discourse around telematic performance celebrates the gradual elimination of latency. This potential is articulated in a number of forms: a way to avoid increasing costs of musician travel[7], a format for continuing immersive collaborations from afar, a rehearsal tool, a way to circumvent physical disabilities or conditions that might prevent travel, and, in a broader sense, a way to build and maintain community.

At the same time, networked music is accompanied by aesthetic and technical issues that appear to differentiate it from in-the-same-room, embodied performance. These seeming differences are generated in large part by the unavoidable presence of latency in currently available networking platforms. Latency – the time it takes for sounds (or video, or any other data) to traverse the Internet from one location to another – is determined by a complex combination of the length of fiber optic cable that data must traverse over the network, "traffic" on the network, and the processing times of computers and other electronic musical equipment involved in the signal path. While latency can be minimal in networked connections between geographically close performance sites, latency is nevertheless present in almost all telematic music-making. Presumably, delays and time lags manifested in latency impact the nature of music making itself, especially in contexts that privilege interactivity, real-time decision making, finely nuanced senses of synchronicity (rhythmic, melodic, harmonic), and "expressive microtiming."[8] Namely, musics that operate through improvisation and interactivity may be especially impacted by the latencies of networked performance.

While we might assume that such latencies restrict or prevent fundamental potentials in improvisation, I contend something of the opposite. Instead, improvisative methodologies are especially poised to make creative sense of latencies and it should come as no small surprise that improvisation weaves prominently in much telematic music. Indeed, networked performance privileges the kind of interactivity and improvisation that George E. Lewis has termed the "Afrological" and what pianist and scholar Vijay Iyer calls "microtiming" (Lewis 1996; Iyer 2002). "[H]istorically emergent rather than ethnically essential," Lewis introduces the terms "Afrological" and "Eurological" to refer to historically and culturally situated "improvisative musicality" (Lewis 1996, p. 93). Among other characteristics, the "Afrological" privileges "agency, social necessity, personality, and difference" (ibid. p. 110), a kind of fundamental interactivity that positions the individual in dialogue with the collective, performers in dialogue with one another. This contrasts other notions of improvisation related more to indeterminacy, chance, or randomness.

As musicians improvise with each other from remotely located performance sites, they negotiate latencies through listening "deeply,"[9] they develop an interstitial time-space modeled after the normative influence of embodied performance. Dante Tanzi argues that "[t]he paradigms of existence on the Net make the lines of musical experience more visible, allowing them to be renamed through a perspective of decentralization" (Tanzi 2001, p. 435). Tanzi's idea of "decentralization" resonates remarkably well with common ways of describing networked performance, such as "distributed, "nodal," and "co-located." We might push this notion further by adopting saxophonist and scholar David Borgo's concept of "distributed agency" in improvised music, a compelling model for human-computer interactions. Borgo suggests that "[o]ur cognitive and creative abilities are not, nor have they ever been, achievements we reach in isolation" (Borgo 2010, p. 13). Drawn from this, we might imagine a "distributed synchronicity" that is basic to both networked performance and, more broadly, traditional in-person musical improvisation.

Inspiraling: improvising latencies in action

We can find these elements at work in a recent networked concert that took place on June 13, 2010 between locations in New York and California. Organized by trombonist, conductor, and composer Sarah Weaver and bassist and composer Mark Dresser, important advocates for networked music in the United States, *Inspiraling: Telematic Jazz Explorations* featured performers at the Steinhardt School of Culture, Education, and Human Development at New York University (NYU) and the Conrad Prebys Music Center at the University of California, San Diego (UCSD). The event was sponsored by the Music Technology Program at NYU, CalIT2 and the Center for Research and Computing in the Arts (CRCA) at UCSD, and Roulette Intermedia, Incorporated.

The concert included networked audio using JackTrip over Internet2 and HD video via LifeSize, a videoconferencing platform. Both locations featured small ensembles; trumpeter Amir ElSaffar, alto saxophonist Oliver Lake, pipa player Min Xiao-Fen, percussionist Gerry Hemingway, and conductor and event coordinator Sarah Weaver were in New York, while tenor saxophonist Hafez Modirezadeh, trombonist Michael Dessen, bassist and co-coordinator Mark Dresser, and percussionist Alex Cline were in San Diego. Projection screens placed behind the ensembles at each location included composite images of the performers at the remote venue for viewing by the audiences (see Figure 1). Video monitors were also placed strategically on and around the stages, which allowed remotely located performers to see Weaver's conducting and each other (see Figure 2).

Figure 1: View from the audience at the San Diego location of *Inspiralling: Telematic Jazz Explorations*, showing the remote performers (and conductor Sarah Weaver) on the large screen placed at the back of the stage. Courtesy of Mark Dresser and Sarah Weaver.

Figure 2: Side view of the New York location of *Inspiralling: Telematic Jazz Explorations*, showing a side-stage screen and video monitor providing easy sight-lines for the musicians. Courtesy of Mark Dresser and Sarah Weaver.

7) Bassist Mark Dresser notes the "pragmatic need to find an alternative way to perform, due to the worsening restrictions in travel with a double bass since 9/11" (Oliveros et al. 2009, p. 12).

8) For a compelling analysis of the centrality of "expressive microtiming" in African American musical traditions, see Iyer (2002).

9) See Oliveros (2005).

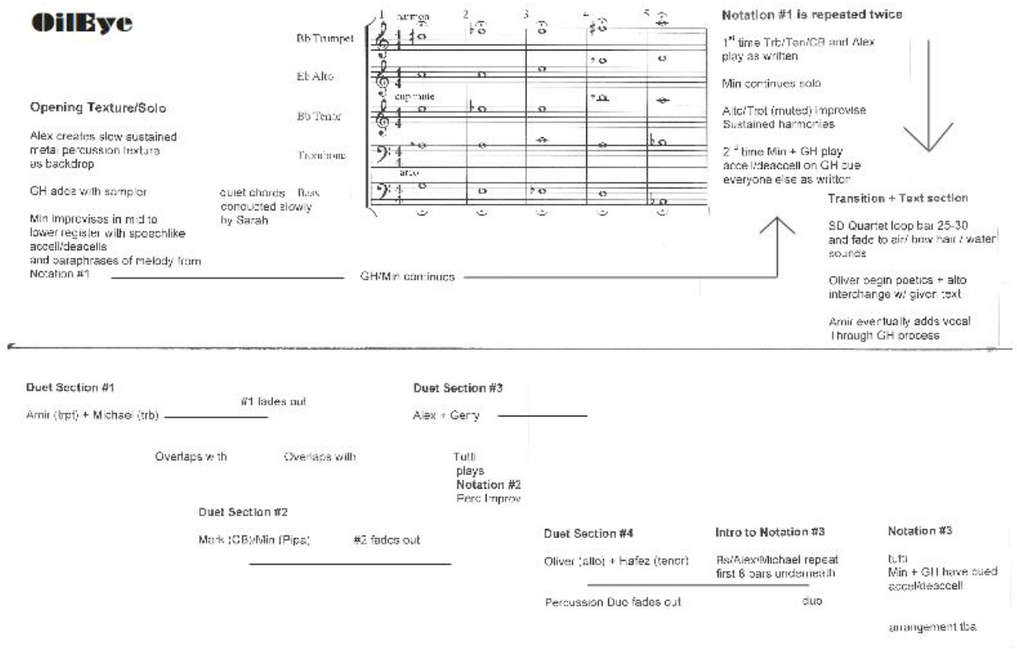


Figure 3: The "flowchart" of Gerry Hemingway's *OilEye*. Courtesy of Gerry Hemingway.

Among the four performed pieces were *Telein* by Weaver and *OilEye* by Hemingway. Weaver's piece consists of various musical figures conducted and cued by Weaver through her visible physical gestures. Largely rubato with asynchronous rhythmic figures, *Telein* negotiates network latency by making it invisible. Its rubato nature creates synchronicities through approximation rather than precise rhythmic unisons.

Hemingway's *OilEye*, on the other hand, offers different and striking strategies to negotiate network latency. *OilEye* was inspired by the catastrophic April 2010 British Petroleum oil spill in the Gulf of Mexico and plays with the juxtaposition of oil and water (Hemingway, personal interview). This emerges in the first moments of the performance, in which Hemingway, who mainly plays percussion throughout the piece, triggers various electronically enhanced samples of bird and water sounds. This surreal soundscape is gradually coupled with bowed cymbals, pipa and vocal improvisations, and other musical material (much of which is cued by Weaver, who conducts the piece). The piece is structured around three distinct notated sections, which punctuate various duo improvisations and other more openly improvised passages (see Figure 3).

Much of the piece seems aimed at negotiating the latencies of the audio networking of the concert. Based on conversations with the event coordinators, Hemingway expected a 25 ms audio delay and a 50 ms video delay between locations (Hemingway, email correspondence).[10] Based on this information, Hemingway developed several notated sections to be performed with a steady pulse shared across the distributed performance sites (see Figures 4 and 5).

The first notated section (*OilEye* Notation 1, which begins at approximately 4:14 in the online documentation video of the project), begins with Weaver conducting a recurring beat (quarter note at 72 beats per minute) visible at both locations. Heming-

10) These estimated delays are seemingly based on distance only; processing delays would surely increase the actual latencies.

Figure 4: The beginning of the first rhythmically synchronous section of Gerry Hemingway's *OilEye*. Courtesy of Gerry Hemingway.

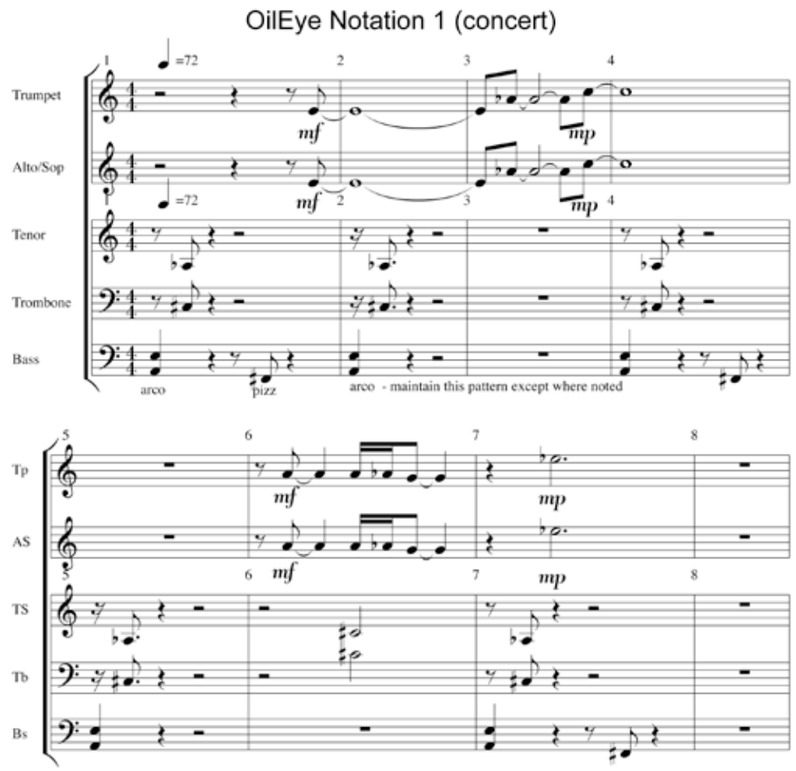
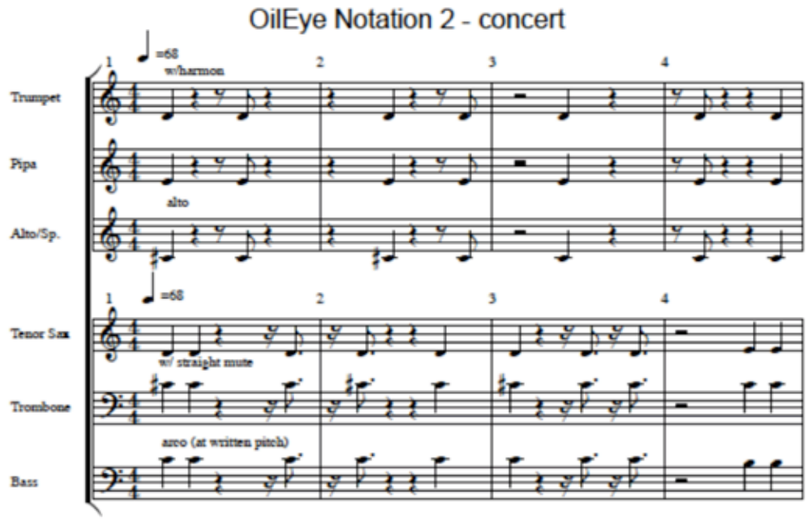


Figure 5: The beginning of the second notated section of Gerry Hemingway's *OilEye*. Courtesy of Gerry Hemingway.



way divides the networked ensemble into two units, one functioning at both locations. The horns and bass at the San Diego location play a figure in contrapuntal rhythmic synchrony with a figure played by the horns and pipa at the New York location (see Figure 4). During this, the two co-located percussionists improvise.

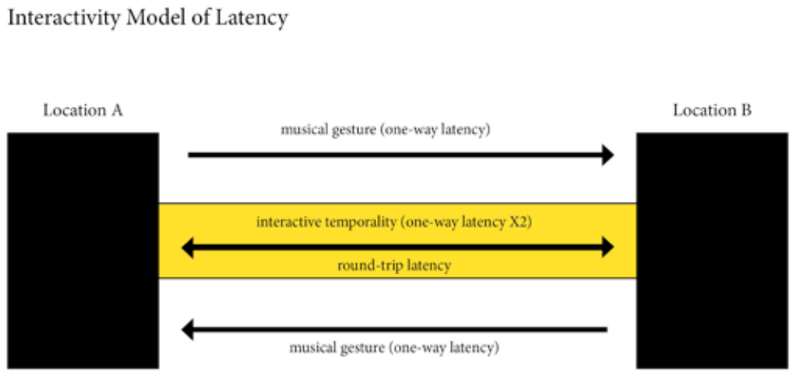
Distributed across the two performance sites, this first notated section groups musicians by location, requiring each to play in rhythmic synchrony with the other. To audiences at both locations, the combined effect produces a distinct feeling that both ensembles are playing completely in time, with no perceivable audio latency between the two locations. Bassist Mark Dresser credits this effect to a "hocketing" approach that was achieved by having a regular rhythmic pulse visibly conducted by Weaver and maintained independently at both locations (personal interview). Indeed, close analysis of the score and recording reveals that the two locations are playing at the same tempo, but are rhythmically displaced by a consistently latent interval whose temporal dissonance offers a strategic mathematical and metric relationship. Although happy with the outcome, Hemingway was nevertheless surprised that his compositional planning produced the desired rhythmic synchronicity (ibid).

Yet despite such compositional planning, I contend that the ability to "groove together" – to play in rhythmic synchrony without simply duplicating each other's rhythms – owes more to improvisational and expressive traditions associated with "Afrological" musicality than perhaps to any compositional imperative. This is certainly the case in much groove oriented music of the African diaspora, and I would argue that the boundaries and structures of rhythmic synchrony become especially apparent in networked performance where latencies exists. The indeterminate latencies of networked performance require remote performers to adjust to what Franziska Schroeder and Pedro Rebelo call "temporal granularity" (Schroeder & Rebelo 2009, p. 139). The basic units of time shift in latent spaces. The "deft manipulation of fine-scale rhythmic material," what Vijay Iyer calls "microtiming" (Iyer 2009, p. 411), positions improvisers within these traditions in remarkable ways to negotiate the latencies common in telematics. Indeed, all telematic music seems to privilege the kinds of interactivity and real-time decision making fundamental to improvisation. The "cognitive dissonances" that occur when latency is perceivable to performers and audiences, often though not always through latency differentials in audio and video networking, is managed by creative decisions of improvisers. A more nuanced understanding of the role of latency in such music making will surely influence both telematic and in-person performance practices.

Jonas Braasch of Renssalaer Polytechnic Institute divides latency into two components: "transmission delay," the amount of time it takes for digital data to be transferred across the fiber optic networks of the Internet, and "signal-processing delay," the amount of time it takes for audio and video playback machines to process the data and turn it into audible sound and visible video (Oliveros, Weaver et al.). Taken together, these two components of delay create what I call "one-way" latency. For music that focuses on interactivity and improvisation, latency might more effectively be understood as a "round-trip" or bi-directional, full duplex process. "Round-trip" refers to the combined time it takes for a musical gesture to travel from the producer to the receiver, for the receiver to respond with their own gesture, and then for the response gesture to arrive back at the original producer. I have named this process the "interactivity model of latency" (see Figure 6).

If achievable, the minimum transmission delays in this system would be governed by the speed of light. For example, let us assume that a fiber optic cable spans directly from NYU to UC San Diego at a length of somewhere around 3900 kilometers. The round-trip latency would be around 26 milliseconds. Yet we must also account for signal processing delays created by hardware features, such as switches, ethernet hubs, bandwidth, effects of "traffic" on the network, and processor speed in computers and audio interfaces. In my experience with transcontinental audio networking, it is common for roundtrip latencies to be 80 milliseconds or more.

Figure 6: *The interactivity model of latency.*



What, exactly, does this do to the music? Braasch argues that "performers tend to agree that the threshold above which it is difficult to play in sync between two remotely located sites is about 25 milliseconds" (Oliveros, Weaver et al.). The 80 milliseconds of latency common in my experience is well above this threshold. Indeed, this may account for the preponderance of compositional strategies in telematic music that utilize rubato, flexible, and free-floating tempos. Weaver's piece *Telein* is a good example of this approach. Similar to "conduction" or "soundpainting"[11] overlapping visually cued musical gestures offer a malleable rhythmic framework that work well with latencies inherent in networked performance. In contrast, Hemingway's piece challenges the limits of synchronicity in latent spaces. The performance of *OilEye* contains many moments that sound as if the distributed performers are grooving together, as if they are rhythmically synchronized. Given the latencies inherent in networked performance, how could this be possible?

Explanation number 1

To begin, let us assume for a moment that we are not able to confirm that the sounds emanating from one of the networked locations are in fact being created by an ensemble of musicians. What if, for instance, the sounds are generated by the playback of previously recorded material and no audience exists at location A? To the audience at location B, the music being made between locations A and B would sound in absolute synchrony. Performers at location B would be interacting with the sounds coming from location A in real time – interactivity would stop there.

For the *Inspiraling*-event, however, we know for a fact that musicians existed at both locations and any kinds of rhythmic synchronicities that occurred between the two locations were indeed subjected to round-trip latencies in the networked connection. How, then, did they play "in time"?

Explanation number 2 – cognitive dissonance and strategic illusions

Tanzi's notion of "decentralization" suggests that embodiment occurs through telepresence and rhythmic continuity becomes a relationship between latency and interactivity. Because of latency, rhythmic synchronicity is replaced by a lurking, fundamental asynchronicity. Through its rubato nature, Weaver's piece illuminates this decentralized, asynchronous rhythmic framework. Somehow, Hemingway's piece resists this. His piece presents a crafty illusion of synchronicity that challenges our assumptions about the aesthetics of rhythmic synchronicity. How was this synchronicity achieved? Was it intentional? Was it random?

We might presume that the affect was randomly achieved. To play "in time" together means that one-way and round-trip latencies held specific relationships to the pulse and meter of the music. For example, if roundtrip latencies were 250 milliseconds, and the audible pulse of the music was 120 beats per minute, then theoretically the musicians could perform

11) "Soundpainting" and "conduction" refer to conducting languages developed for improvising ensembles by Walter Thompson and Butch Morris. See *Soundpainting: The Universal Live Composing Sign Language* and *Lawrence D. "Butch" Morris-Conduction.*

perfectly "in time" using an underlying eighth note rhythmic grid. Could this latency-dependent rhythmic synchronicity be intentionally created? It is possible that a group of networked improvisers could feel their way toward this kind of synchronicity – they would listen to each other and gradually begin to interlock their rhythms. But would it be possible to compose these rhythmic relationships, to predetermine such rhythmic synchronicity ahead of time?

As it turns out, Hemingway did try to at least minimally predict "one-way" latencies. He was told by Weaver that these latencies would be in the range of 25 milliseconds, from which he began to formulate compositional strategies that might create the illusion of rhythmic syncronicity. Trombonist Michael Dessen, a performer at the San Diego location, described a portion of the piece as a series of overlapping repeated melodic and rhythmic figures, composed using traditional notation, that somehow "fit together" between the two locations (personal interview). Dresser describes this as a kind of "hocketing" (personal interview). Indeed, the notation corroborates this analysis.

That Hemingway or Weaver could accurately predict such latencies is questionable. For example, it is common for transcontinental networked connections using JackTrip to vary from session to session, sometimes as much as 50 milliseconds. Given that as little as 25 milliseconds of latency can have a catastrophic impact on the ability of performers to play in sync, it is highly doubtful that the exact latency could be predicted in advance of the actual performance and incorporated into the composed materials.

On certain theoretical levels, however, latency-relative compositional approaches are indeed technically possible. For example, composer, performer, and theatre sound designer Sharrokh Yadegari has developed a software instrument that performs with networked collaborators and dynamically reacts to changing network latencies. A combination of samplers, effects, and networking processes, Lila, as the instrument is named, takes incoming audio signals from remote performers, modifies their sounds, adjusts for network latencies, and plays back the processed audio. Basic to this model are specialized software tools that dynamically monitor network connection latencies. The latencies are then used to calculate strategic delays that create the illusion of synchronized musical gestures across the network.

In the case of Hemingway's piece, however, no such latency monitoring tools were present. Despite this, the music comes together as if the one-way and roundtrip latencies were built into the rhythmic structures of the piece. We might explain this synchronicity from two vantages. First, listener expectations yearn for absolute synchronicity, for a transcendence of the latencies inherent in networked audio and video connections. When latencies become too great, the conceptual nature of the performance is called into question. For example, in a performance involving networked video of percussionist Billy Mintz interacting with remotely located musicians, audience members called attention to the disconnection between musical sound and bodily movement (Dessen, email correspondence). The network video connection was significantly more latent than the network audio connection. When discrepancies are minimal, audiences tend to fill latencies through imaginative cognitive processes, what some in psychology have called cognitive dissonance. Our cognitive processes may "make up" for latency by filling gaps, by imagining synchronicity. The togetherness we encounter in Hemingway's piece may be a product of cognitive readjustments to the rhythmic framework of the performance.

A more compelling explanation of this synchronicity speaks to the ways that musicians – both telematically and traditionally – interact with each other on sophisticated rhythmic levels. Such "microtiming" is fundamental to many "Afrological" music traditions that privilege interactivity and agency in dialogic ways. The generative fissures that open in groove oriented telematic music have more in common with the kinds of "participatory discrepancies" common in more traditional in-person performance practices than we may assume otherwise. Charles Keil, J.A. Prögler, and others have argued that participatory discrepancies – minor timing differences in rhythmic placement between performers – substantially account for discernible musical qualities in groove-oriented music (Keil 1987; Pögler 1995).

That certain kinds of rhythmic discrepancies are fundamental to traditional, same-location improvisation as well as telematic performance is a profound indicator that networked music making may not be as drastically new as one might assume. At the same time, Mark Dresser argues:

> Let's be clear, telematics is not a substitute for live performance. It is another format and perhaps even another venue, with its own properties. As plug and play systems develop and the integration of video and audio quality improve, those potentials will reveal themselves (Dresser 2008).

While I agree that telematic music holds new potentials, I cannot help but see the clear linkages between traditional music making and these new technologies. And I am most excited to see how the peculiar and unique qualities of music making in the telematic context may influence embodied improvisatory practices. As telematic music becomes more common, I expect that latency will provide important insights into improvisation and interactivity.

References

Borgo, D. "The Ghost in the Music: Improvisors, Technology, and the Extended Mind." Keynote lecture presented at the *Two Thousand + Symposia Series* at the Sonic Arts Research Centre of Queen's University in Belfast, Ireland, Nov 6, 2010.

Chafe, C. Personal interview. Skype. June 8, 2011.

Dessen, M. Email correspondence. Dec 21, 2011.
Personal interview. Skype. 1 June 2011.

Dresser, M. "Mark Dresser: Telematics." *All About Jazz.* Aug 20, 2008. Web. June 1, 2011. http://www.allaboutjazz.com/php/article_print.php?id=30198.
Personal interview. Skype. June 1, 2011.

Hemingway, G. Email correspondence. June, 21, 2011.
Personal interview. June, 24, 2011.

"Inspiraling – Telematic Jazz Explorations." Networked performance. June 13, 2010. Web documentation. May 25, 2011. http://vimeo.com/15069197.

Iyer, V. "Embodied Mind, Situated Cognition, and Expressive Microtiming in African-American Music." In *Music Perception*, vol. 19, no. 3, Spring 2002, pp. 387–414.

Keil, C. "Participatory Discrepancies and the Power of Music." In *Cultural Anthropology*, vol. 2, no. 3, August 1987, pp. 275–283.

Lawrence D. "Butch" Morris – Conduction. Web. Dec 1, 2011. http://www.conduction.us.

Lewis, G. E. "Improvised Music After 1950: Afrological and Eurological Perspectives." *Black Music Research Journal, vol.* 16, no. 1, Spring 1996, pp. 91–122.

Nady, J. "John Nady | NAMM.org." Oral history interview conducted by the National Association of Music Merchants (NAMM). Web. June 5, 2011. http://www.namm.org/library/oral-history/john-nady.

Nora, S. & Alain, M. (1980) *The Computerization of Society.* Cambridge, MA; MIT Press.

Oliveros, P. (2005). *Deep Listening: A Composer's Sound Practice.* Kingston, NY: Deep Listening Publications.
Personal interview. Skype. 17 May 2011.

Oliveros, P. (et al.). "Telematic Music: Six Perspectives." Online supplement to *Leonardo Music Journal,* vol. 19, 2009.

Prögler, J. A. "Searching for Swing: Participatory Discrepancies in the Jazz Rhythm Section." In *Ethnomusicology,* vol. 39, no. 1, Winter 1995, pp. 21–54.

Schroeder, F. & Rebelo, P. "The Pontydian Performance: the performative layer." *Organized Sound,* vol. 14, no. 2, 2009, pp. 134–141.

Shanken, E. A. "Tele-Agency: Telematics, Telerobots, and the Art of Meaning." *Art Journal*, vol. 59, no. 2, Summer 2000, pp. 64–77.

Shiels, M. "A Chat with the Man Behind Mobiles." BBC News. April 21, 2003. Web. July 1, 2011. http://news.bbc.co.uk/2/hi/uk_news/2963619.stm.\

Soundpainting: The Universal Live Composing Sign Language. Web. 1 Dec 2011. http://www.soundpainting.com.

Coney, J. (Dir). (1974). *Space is the Place.* North American Star System. [filmed in 1972].

Tanzi, D. "Observations about Music and Decentralized Environments." In *Leonardo Music Journal,* vol. 34, no. 5, 2001, pp. 431-36.

Weaver, S. Personal interview. Skype. 10 May 2011.

Yadegari, S. "Lila – A Computer Music Instrument." Web. June 5, 2011. http://www.yadegari.org/index.php?option=com_content&view=article&id=97&Itemid=100006.

(re)thinking the actors, vectors and factors of improvisation

Gaelyn Aguilar & Gustavo Aguilar

Box the Compass

The intention of this brief essay is to provide a discursive addendum to our live, performative lab session at the *(re)thinking improvisation* gathering, and to attempt to illuminate, in a very cursory and limited way, how improvisation has become for us a kind of synaesthetic means by which to carry out our work as *Tug*.[1]

In existence since 2006, *Tug* is a free-range, performative research collective that serves as a platform for addressing issues of social and cultural transformation through critical creativity and energetic thinking. The projects that have engaged the collective over the years come from disparate moments and geographic locations[2] but there are several constants to each that both emanate from the collective's foundational gesture of connecting cultural production with community engagement and orbit one another as a continuum of connective tissues.[3]

For starters, although we form the core of *Tug*, we do not conceive of (or carry out) the collective's work in isolation. In other words, wherever it goes and whatever it might do, *Tug* is always two plus however many other people choose to be involved.

Second, we have oriented the collective in such as way that we are always paying attention to what Arjun Appadurai (2000) has called "globalization from below" – a kind of "grassroots globalization" in which people are able to respond to and challenge global flows "independently of the actions of corporate capital and the nation-state system."

The third constant (and this is related to why we refer to *Tug* as "free-range") is that we do consider the collective to be a laboratory for interdisciplinary creative exploration.That is to say, *Tug* is a space where there is no disciplinary hierarchy, where form transmits meaning along with content, and where there is freedom to choose the what, the why, and the how. *Tug* allows us to travel from points A, B, and C in ways that refresh the world, but to do so knowing that there must be deep engagement with one's work. We want to think critically, because to think critically is to think mindfully about the world around us.

The fourth constant (which is closely aligned with the third) is that we call upon the theory and methodology of improvisation, loosely defined in a musical sense, for the reason that we believe that there is a great deal of value inherent in the way that improvisation presents itself as a non-hierarchical (ideally), process-oriented practice, that claims no victories and is rooted in a listening self.

In summary, through the work of *Tug*, we are interested in investigating, contemplating, processing, and communicating how individuals (either acting alone or collectively) are able to exercise their agency in responding to and challenging global flows[5], and how improvisation (as both a critical musicking practice and a research methodology) might move and illuminate this agency.

Methodology

Our work is inherently cumulative; everything we do takes on a particular, significant salience that forms a research continuum of what George Lewis would call "intellectual flows."[6] That being said, we are at the beginning stages of integrating our work over the past five years into a large-scale, interdisciplinary, performative research project entitled, Borders, Corridors, and Lines of Desire: Outposts of Improvisation on the Unmarked.

Current research for this project began in 2006 when, with the help of over 50 citizen volunteers from the South Texas bordertown of Brownsville, we completed *Ah, Raza! The Making of an American Artist*, a

1) www.tugcollective.org

2) *Tug* has explored the social navigation of lived environments in Michoacán (one of México's five feeder states for migration to the United States) by walking, talking with people, recording sound, creating an interactive sound map, taking photographs, exhibiting art and poetry, and creating music. The collective has worked as a sound incubator in Windsor, Ontario, Canada recording sound levels coming off of the Ambassador Bridge – the busiest border crossing for international trade in North America – and coming up with ways to mitigate that sound through the creation of a pocket park. More recently, *Tug* organized a Borderlands Symposium at the University of Maine at Farmington (USA) that brought together interdisciplinary creative thinkers and activists from along the U.S-México/U.S.-Canadian borders with community organizers in Maine who work with migrant laborers throughout the state.

3) For an elegant, visual representation of what these connective tissues might look like in relationship to one another, see Casey Reas's *Path Prints*, a series of six prints "documenting the movement of synthetic neural systems." The series is documented at: http://reas.com/iperimage.php?section=works&work=path_p&id=0

43-minute, performative ethnography that speaks to the recuperation and expansion of what it means to be a U.S.-American of Mexican descent along the border.

Improvisation was a crucial unifying component in this ethnography; it was our will to knowledge and meaning as much as it was a critical compositional element. All along, it has been our goal to call upon the theory and methodology of improvisation to encourage dialogue and action that will seed and extend deeper readings of these themes of recuperation and expansion, given the larger social, political, and economic webs of power and significance that people along the U.S./México border are immersed in.[7]

We have identified several outposts of improvisation that will entail collaborating with a cohort of South Texas communities on a series of interactive research workshops, whose outcomes will become the sites and sounds, the jottings, the fieldnotes, the scenes, the asides, the commentaries, the bodies and memos of our interpretive ethnographic approach to thick description. These open-structured workshops, some of which might also incorporate presentations and lectures by local civic leaders and educators, could very well include:

The Panoramic "Here"
We will begin with the direct and intimate experience with place. Yi-Fu Tuan has written that a home place "is full of ordinary objects. We know them through use./../They are almost a part of ourselves, too close to be seen. Contemplate them and what happens?" (Tuan 1977, p. 144). Workshoppers will be broken into small groups; members of each group will decide on a location within their locale that they are compelled to contemplate. With our watches synchronized, we will document our respective locales according to agreed-upon themes (e.g. culture, nature, economy, resistance) via photography, audio recording, written observations, and collected artifacts.

Remapping the Terrain[8]
One cannot understand locality at any level without movement. This will be a locative media workshop that will provide workshoppers with the opportunity to explore the social navigation of lived environments. We will take historic travelers' routes significant to South Texas/Northern México, remap them onto maps that correspond to where workshoppers reside, and then walk these new routes. Just as maps "help us navigate culture," Erika Block writes, "by visualizing information that addresses those big, fat universal questions – Who are we? Where are we? Why are we here? Where are we going? How do we get there?" – remapping will encourage us to ask these questions while also calling attention to, and building, geospatial connections.[9]

Focusing on the Fuzzy
Following a performance of (and dialogue about) *Ah Raza! The Making of an American Artist*, we will gather and work together to write an essay that explores our collective identity. Using Part I of David Elliott's game activities, WE ARE A MACHINE, our writing laboratory will seek to build the mechanisms needed to understand our individuality within the collective.

Sediments and Sentiments
Our workshops will potentially culminate in the collective creation of various multi-media installations. Conscious that any potential audience member is also a co-creator of meaning, we will encourage visitors to deposit their voices into the mix via an on-site Comment Box, an e-mail message (sent through an on-site computer and/or from home), or a voice mail (sent through an on-site telephone and/or from home).

Lines of Desire

For the *(re)thinking improvisation* gathering, we decided to highlight one of the ways that we intend to work, effectively doing a test-run of David Elliott's game activities by asking willing participants to join us in performing as an improvisational ensemble. Utilizing the conceptual impulse and structure of Elliott's WE ARE A MACHINE[10], we ended up functioning as a Human Computer, in which previously-composed excerpts dealing with the question "what is improvisation?" became the catalyst for collectively responding vis-à-vis a collaboratively written essay.[11] What follows is the open-structured score (e.g. the roles, actions, and procedures) that participants were availed of prior to "booting up" the computer.[12]

Roles:
- Message Board Operator[13]
- Messengers[14]
- Computational Processors[15]
- Subjective Processors[16]

Message Board Operator
The role of the Message Board Operator is to take Products that are produced by the Subjective Processors and string them together into a story format.

Messengers
The role of the Messengers is to pass messages (Seeds and Products) between the Computational Processors and the Subjective Processors.

Computational Processors
The role of the Computational Processors is to create Seeds from Products.

1. You will receive a piece of paper from a Messenger. The piece of paper will have a sentence (Product) on it.
2. Read the Product and grasp its meaning as best as you can.
3. Transcribe to a new piece of paper three or four of the most unique words from the Product.
4. Add three of your own descriptive words to the list.Your objective is to create the most interesting collection of words that could possibly convey the sense of the Product that you are transcribing.
5. On the back of the paper, write your ID Number (Your Name).
6. Raise your right hand and wait for a Messenger to pick up the Product that you were given and the Seeds that you have created.
7. Raise your left hand to signal that you are ready to receive another Product.
8. Repeat steps 1–7.

Subjective Processors
The role of the Subjective Processors is to create Products from Seeds.[17]

1. You will receive a piece of paper from a Messenger.The piece of paper will have string of words (Seeds) on it.
2. Read the Seeds as many times as necessary until you have a sense of what the individual words might have in common and/or what meaning the words are meant to convey.
3. On a new piece of paper, write an original response (Product) to the Seeds.
4. On the back of the paper, write your ID Number (Your Name).
5. Raise your right hand and wait for a Messenger to pick up the Seeds that you were given and the Product that you have created.
6. Raise your left hand to signal that you are ready to receive new Seeds.
7. Repeat steps 1–6.

One of the reasons we are drawn to Elliott's game is that it reinforces a particularly apt metaphor for our process-driven approach – that of a desire line. A desire line is a path; a path created by movement.In nature, the erosions created by both animal and human footfall can create an understanding of safe paths and social behavior, a cleared pathway or "well-worn ribbon of dirt' down which other travelers are encouraged to follow.[18] But desire lines are also (like improvisation) about yearning or inventing one's path "without being inhibited by certain prescribed forms."[19] Think of the impulse that many of us might have to cut across a fresh patch of grass rather than remain on such a prescribed form as a concrete sidewalk.

In a sense, desire lines are an ultimate expression of natural purpose. Might this mean, Carl Mayhill argues, "[that] the optimal way to design pathways…is to not design them at all"?[20] By extension, we wonder, could we take this approach to learning (e.g. to investigating, contemplating, processing, and communicating)?"Would mayhem ensue," asks Marica Sevelj, "if we just planted seeds and waited to see what happened?"[21]

5) Appadurai delineates global flows as those processes that put people, ideas, capital, technology, and media into motion.

6) Personal communication.

7) When we speak of improvisation as having been (or continuing to be) our will to knowledge and meaning, or when we put upon improvisation the responsibility of encouraging dialogue and action, we are engendering improvisation with the ability of placing ourselves and others into a state of being and contemplation (something that we refer to as reflective thinking) that offers us the opportunity "to create and express original ideas without being inhibited by certain prescribed forms" while also allowing our resulting creations to "include the entire spectrum of space and cycle of time". Smith L. W. (1973). *Notes (8 Pieces) Source a new world music: Creative music.* Self-published).

8) We are taking this title, and hoping to evoke some resonance, from Suzanne Lacy's edited volume, *Remapping the Terrain: New Genre Public Art* (1994),

9) *The Walking Project: Desire Lines, Walking and Mapping Across Continents.* Block's article was originally available on the Community Arts Network Reading Room website. The link is no longer active, but Block's writing can still be found and accessed at: http://walksquawk.blogs.com/

10) We first came across Elliott's work while exploring the homepage of Future Farmers, an international collective of artists. *WE ARE A MACHINE* is a game that comes from a collaboration that Elliott did with Future Farmers entitled "The Reverse Ark: The Flotsam and the Jetsam." Details are available at: http://www.futurefarmers.com/reverseark/writing.html

11) These written excerpts came from Bailey, D., Borgo, D., Cardew, C., Corbett, J., Csikscentmihalyi,, M. and Whitman, T. C.

12) To watch the Human Computer in action, please see the documentation of Session 2, *(re)thinking the actors, vectors and factors of improvisation* included in the DVD version of the conference proceedings.

13) This role was carried out by Gaelyn Aguilar.

14) The Messengers were Gustavo Aguilar, Marcel Cobussen, and Henrik Frisk.

15) The Computational Processors were Ingrid Cogne, Nguyễn Thanh Thủy, Helen Papaioannou, Jason Robinson, and Tran Kim Ngoc.

16) The Subjective Processors were Sandeep Bhagwati, Anne Douglas, Cléo Palacio-Quintin, Gino Robair, and Christopher Williams.

17) Anticipating the temporal constraints that would limit what we would be able to accomplish in the time frame allotted for our live, performative lab session, we arrived to the *(re)thinking improvisation* gathering with a set of seeds from which the Subjective Processors could produce their first set of Products. These initial seeds (see below) were produced from excerpts from Peggy Phelan's *Unmarked: the politics of performance* (1996/1993), Phelan's writings on performance, and the ethics of "reading the body as the sign of identity," provide an intriguing landscape for thinking about how unmarking ourselves might contribute to shifting us out of the paradigm in which difference has no power, and into one where difference fosters the kind of critical multiculturalism that is necessary to achieve social justice.

"Exposing, frame, construct, visible, aim;
Power, unmarked, limita-

We end our brief addendum and illumination with the improvised essay that came about at the *(re)thinking improvisation* gathering as a result of boxing the compass.

What is Improvisation? A Delineation Collaboratively Written in Roughly Eight Minutes[22]

It's difficult to start only with nouns.

flower

trees *silent*

sky *river*

– political visibility helps images become culture.

What is at risk in our business of improvisation? The goal of improvisation is to destabilize power representations and create unmarked positions from where we create new structures. In some unequal moment, I attempted to make a model of how my observing me play could enhance my reflexivity, but it was not easy. Can love be sad between negotiation and disorder? If process is the soul of improvisation in the moment, the combined souls love the moment of process when improvising. When we improvise together, we actually go down a never trodden path together and adjust our spirits to stay in tune and simultaneously disturb each other.

Happiness will come
not from logicnor from any holistic conceptbut from flowing movement – a flower petal on a silent river

The failure to express body identity is a major signifier of global economics.If you feel really rich, it is hard to be hard. The disappearance of thinking in the performance, and the absence of form appearing in that moment, increase[s] the understanding of performativity. Order is never pleasurable when only codes construe the music. Any performance that is unpredictable is not necessarily creative – we must be critical of unselfconscious self-praise by performers and improvisers.

Improvisation is a rough business where the risk is that you feel blue and never understand the point of it as an entity, but when you listen you experience lightness and a mental flux. The balance of changing the attempted moment is, in itself, movement. The improvisatory energy is dependent on a continuous contact with your soul, in combination with a co-creativity in the process. Through improvisation we mend the broken state of the world and our relationships in a pleasurable way and, if it is done sincerely, it also produces order in our minds and feelings. How unpredictable we are when we are conscious, performers of interactions that are live and yet unknown to us. The imperfect equilibrium attempted creates an unequal movement of knowledge.

Blue moon, you soft me mental alone.
Without a lightness in dark.
Without a love of my own.

To express political identity in a local way is a global action when taken collectively. Once we admit the lightness of blue moods, we will experience the love that we feel and the risk of unbending. To travel together simultaneously in the unknown proposes an alternative strategy to the globalization of ways of achieving creativity.

References

Appadurai, A. (2000). "Grassroots Globalization and the Research Imagination." In *Public Culture*, vol. 12, no. 1, pp. 1–19, 2000.

Kennedy, B. & Bell, D. (Eds). (2007). *The Cybercultures Reader*. New York: Routledge.

Lacy, S. (ed.) (1994) *Remapping the Terrain: New Genre Public Art*. Seattle: Bay Press.

Phelan, P. (1996/1993). *Unmarked: The politics of performance*. London: Routledge.

Tuan, Y. (1977). *Space and Place: the perspective of experience*. Minneapolis: University of Minnesota Press.

tions, representation, goal;
Visibility, culture, ubiquity, image, political;
Identity, body, failure, express, signifier;
Attempted, reflexivity, model, observing, unequal;
Other, ourselves, gazes, subject, imaginary;
Performance, understands, generative, form, disappearance;
Failure, sure, pervades, theory, act"

18) Many of the city streets we travel on today began as desire lines; social trails that the futuristic denizens of the past studied and used to propose the transit routes around which the musculature of the urban environment could be built. Today's urban planners look to changing demographics (e.g. shifting employment patterns and projected increases in population) as a way to anticipate (and control, contain, and exploit?) future lines of desire.

19) Smith, W. L. 1973. *Notes (8 Pieces) Source a new world music: Creative music.* Self-published.

20) Taken from an essay entitled, *Commercial Success by Looking for Desire Lines.*

21) http://marica.ako.net.nz/2005/08/14/desire-lines-and-maps/

22) We have purposeful named our collaborative essay a "delineation" for reasons that David Bell articulates within an entirely different context. "To delineate marks an action. It outlines. It does not, however, represent. It is an action that is process-based and preferred over the arduous, and often questionable task of definition." Kennedy, B. & Bell, D. (Eds). (2007).

Magnus Andersson & Anne Marit Ligaard

Motivation in Tango Improvisation

Why do our[1] tango improvisations turn out as they do? Why do we choose particular elements and not others to structure and express our improvisations?[2]

We cannot ask these or any other questions without making several assumptions. Inherent in our questions will be knowledge about the answers we are searching for. Being aware of our assumptions ensures that our research is properly founded theoretically and methodologically; but the awareness could also prove to be an obstacle in our investigations. Some assumptions are accepted in research communities without further ado or discussion and it seems like there is no room for other kinds of questions. What is accepted or neglected may be a consequence of long traditions that have enriched our fields of research, or it may be a question of power of definition or even belief.

The schism between researchers and practitioners arises when incommensurable models of understanding clash. Although both parties may seemingly ask the same question, the answers can be very different. The difference lies in what was the motivation to ask the question in the first place. The question is not merely what leads up to an answer. The question is also an answer in its own right. It is the expression of what made us choose to analyse to begin with. This expression can be the result of perplexity, bewilderment, fascination, or perhaps astonishment. To ask a question about structure requires not only finding a structural element that correlates with the question, but also asking why we posed the question at all. The two opening questions of this article could therefore be stated as one: What *motivates* our tango improvisations?

Although both theoretician and practitioner may examine the structure of a particular improvisation, they will reach very different conclusions because of how different their motivations are. They might voice a question or answer, or both, in the same way, but the question or answer could still have different meaning depending on what motivated the theoretician's or practitioner's quest. Regardless of which person's side we take, a question will be incomplete unless we attempt to elucidate what initially motivated the question to be posed.

The adventurous growth of artistic research in the last decades has a problematic flip side. Unfortunately, artistic research has come to be understood as an independent field of research. It is severed from mainstream research on art; it has its own educational programmes and theories, and its own system for dissemination is severed from traditional research on the different art forms. Similarly, academic attempts at studying artistry, such as performance studies, could be critiqued for not taking into account the nature of the practitioner's activity in the methodology of the research. There is an urgent need to dissolve the rigid walls between the practitioner's and the researcher's understanding and find a common ground where they both acknowledge and inform one another.

The genre of this text may seem unclear. It may seem like a defence of artistic research against hard academic discipline, such as analysis, but it is not. Although this text is written from a practitioner's perspective, I have attempted to make it relevant to the scholar, believing that the argument must to some extent be on the traditional researcher's conditions. Differences between our approaches are nevertheless a matter of fact. By discussing those differences I hope to show a) the benefits of a first-person perspective and b) how the artist can inform the more general research community. As the practitioner informs the observer, the observer's gaze and understanding must change.

1) Everything important that I know about tango I have learned either from or with Anne Marit Ligaard. This article is the fruit of an ongoing cooperation that has lasted for years. It could not have been written without her. I do not write "we" in this article on behalf of the tango community or an attempt to speak on your behalf as a reader. The "we" always refers to the joint knowledge I have gained together with my dance partner. Speaking of "me" as a tango dancer is an absurdity. There is no "me" without my partner.

2) Argentine tango is an improvised dance. Social tango is improvised, and choreography is mainly used for shows. There are performers who always choreograph their performances and there are those who believe that even performances should have some of the risk-taking and the nerves that you get from not knowing what happens next. We are in the latter category. There are also many gradations between these two attitudes towards improvisation. The dancers can for instance have a set choreography for parts of a song whereas other sections are freely improvised. An introductory article with our take on improvisation can be found here: http://www.tangotango.no/en/2011/08/invitation-to-movement/

Consequently, the observer's analytical approach to dance should be questioned and, if the text does what it sets out to, the mainstream research community dealing with tango and dance should attain new and valuable information. Therefore, I argue that this first-person account of tango improvisation is a research account, despite the lack of references to the literature on tango, dance, and other relevant fields of research.

Finally, there is a practical matter to mention before the discussion begins. The descriptions of our tango practice are all too brief in this article. Whether you are a practicing tango dancer or you have never set foot in a milonga (a public and social dance event), you cannot be expected to understand every detail of the dance steps I use as examples. To facilitate understanding of this article, I have provided a simple video guide for reference: http://www.tangotango.no/en/rethinking/. The symbols (!1) refer to particular sections of the clips. Understanding the exact structure of the steps should not be required to make sense of this article.

Structural analysis of tango improvisation

If you were to watch my partner and me dance, you would see us perform a number of what we have chosen to call "flying colgadas" (!1). After the suspension of the colgada, a cross from the back for my partner often follows. The cross then resolves into walking by the uncrossing of my partner's front foot and by changing direction. This basic sequence will be the centre of my discussion in this article. My purpose is not to discuss the structure exhaustively with either the layman or with the tango aficionado, but to point towards a possible and very common type of structural analysis. Moreover, it is not the analysis itself that is of importance here, but rather what questions are raised by the analysis. What do we learn through structural analysis? Or, to which question does the answer reply?

Descriptions that focus on the structural elements of the dance are attractive in scholarly work due to their clarity and down-to-earth quality. They can be contested or verified. To arrive at these clear-cut descriptions, one makes a choice to focus on particular issues and not others. On the one hand, this focus is a reduction that allows us to see what is central to our understanding. On the other hand, the reduction is an active choice that ignores aspects of the practice that may be important. If you ask any spectators of a tango performance how they experienced the dancing, few would answer in terms of structures. They would rather speak in terms of emotions and relations. I believe that there is some truth to these clichés, that they in some sense resonate with how we as dancers understand the artistic and somatic value of the movement. In order to describe what is at stake in a tango performance we must look beyond the structures. The structures are of course related to expression, but they are not expressive in themselves. A cross or a colgada is as about as expressive as a C-sharp without a context. The structural elements are rather vessels through which we channel possibilities and allow our expression to arise.

Since a mere structural description of tango cannot encompass the expressive qualities of the dance, what would an analysis that takes expression into account look like? It could begin by speaking of how we as tango dancers use a technique where there is a constant negotiation of our common axis. Our axes are only parallel for fractions of seconds. (!2) We are constantly moving between compression and suspension. This movement is always fluctuating and never static. The expressive analysis could then address how I, the man or the leader in the couple, create an initial compression which gives my partner excessive energy. I stop my movement while I let my partner pursue the energy and we find ourselves in the colgada. To stay there I need to lean back to counter her weight, which leads to the suspension of the colgada. The analysis could also identify how this suspension diminishes as we move closer towards her back cross, and how we compress our embrace for an instant just after she enters the back cross.

This playing with a dynamic axis is perhaps the most fundamental quality giving tango its expression. (!3) The main factor determining how the couple moves around the floor is how the play with energies within the embrace is conducted. Many of the idiosyncratic qualities of individual couples originate from how they deal with their shared axis.

Through this type of analysis the structure of the dance has been identified. We have also described the technique we use to perform the repertoire and related this technique to our expression as we dance. Now that we have seen how structure and expression relate, what more should we demand from further analysis?

Although we agree on the findings of the analysis, we cannot accept the hierarchical relationship that structure and expression stand in. For anything to be expressive, it must be expressive *of* something else. The expression of the dance must not be seen as subordinate to structure, which is implied in the above analysis. Our improvisation, and we believe this holds true for many other kinds of art-making too, is not a situation where the structure is being expressed. It is rather the expression that is being expressed. How this happens may be difficult, if not even impossible, for an observer to describe. One reason being that we seldom have a clear idea of the expression prior to expressing it. Instead it is a consequence of how the embrace and movement is communicated/negotiated at the time of performance. This is why a first-person point of view is necessary to elaborate on the motivations for tango improvisations. Of course, "expression" is being used here as a metaphor for something that is expressed. What "expression" is expressive *of* will be elaborated on shortly.

Experience of and motivation to dance

Why do we then perform the flying colgada so often? How do we experience it? And most of all: What motivates us to perform the flying colgada? It is very simple. We do it because we love the feel of it. We love the moment where our weight is suspended, where we are fully dependent on each other, where we reciprocally hold each other and would fall unless we fully acknowledged our dependence on each other to stay in balance. We love being submissive to the movement, actively listening to care for our shared axis, where the slightest imbalance would make our movement jerky and hard or even cause us to fall. We love how this moment of suspension can allow us to "live" the music if we find a suitable musical moment to express the step.

Structural analysis posits that the repertoire and steps are the primary structural elements to be played with in the improvisation. Viewing dance in that vein relegates the play with our shared axis to a surplus added to the structure, a surplus that grants the repertoire its value and expression. Our source for motivation is, as I just tried to describe, very different.

Our motivation can be understood in at least two different fashions. We could take the previous description as a statement of our psychological state, saying that we dance because we enjoy dancing; however, that is not what I aim at elaborating in this article. The question is what in particular is at stake in the enjoyment. What is the enjoyment unveiling? In the spirit that "analysis" was not only a question but also an answer to an aesthetic question, we ought to ask: What question does "enjoyment" answer? More precisely we could ask: How does our enjoyment of dancing relate to how we negotiate communicative movement?

The description of our love for performing the flying colgada is by itself not sufficient to arrive at an answer. My description of our motivation at the beginning of this section points instead towards areas of interest dealing with *movement*. Our motivation is important because it draws attention to dynamic principles of movement that the more analytical gaze of a scholar cannot uncover. To help discuss this slippery knowledge I will isolate a singular element or moment of the sequence. I will also look into what happens right after the flying colgada, as my partner crosses her legs from the back and we enter a state of compression in the embrace. (!4)

How we come into the compression has a simple explanation. We come into the compression by increasing the distance between the two of us, i.e. we get into a position where we stand slightly farther apart from each other, forcing us to lean towards each other so as not to fall. Still, there is no rule guaranteeing that a par-

3) "Flying colgadas" is not a generally established term for the element of repertoire we have in mind here. I have written about some of the techniques discussed in this article before. You can also find ample video examples in the article: http://www.tangotango.no/en/2011/12/the-unbalanced-balance/

ticular distance will create a particular result. True, the distance will make us enter the compression, but its effects are not always clear or measurable. The effects depend on how much tension there is between us as we lean towards each other and there are many factors that influence this. With different partners the same distance might result in very different compressions but for this article I am only discussing what it is like to dance with my regular partner, who I know very well. Nevertheless, despite how familiar I am with my partner's dancing, we both respond very differently to our communication from day to day. We must never assume that we unambiguously understand how the other acts and reacts. On a stressful day or in a performance that we are particularly nervous about, our tonus will be higher and the response to the compression will have a hard and direct quality. This will have a less vigorous result, as there is less time for acceleration out of the compression. Conversely, if we are relaxed and at ease mentally the compression will be soft and smooth. The result is that the compression is resolved slower. Having more time for acceleration may result in a more energetic response.

To be able to understand the variants of compression we must enter a different mode of thinking than the logical reasoning pertaining to structural analysis. Although we believe ourselves to be intelligent dancers, our intellectual capacities are far too limited to calculate the precise effects of distances, tonus, time and the other variables involved in the compression (this applies to all other aspects of the dance too). How we think when we improvise could be described in four steps: a) think, b) execute, c) listen and evaluate, d) look back to thinking again (a). Although the model is simple, trying to calculate what to do next would be an intellectually insurmountable task. It gets even more complicated since the four stages cannot be separated temporally[4]. Our minds are not sharp enough to constantly tell our bodies what they should do, especially since we must take in other information at the same time to arrive at the decisions. Also, note how this mind-driven approach makes me write about the body as if it is external to the mind. The model of action is still valid, but as dancers our means of execution is corporeal rather than intellectual. I listen through the embrace, not by thinking about the embrace. We negotiate distances, tonus, time and more, not through thinking but by listening and actively doing. Corporeal listening is to take an initiative based on an experience of where we are within the embrace. It is only by this activity, by actually changing what is, that we can hear what is going on. With such process-based understanding, mind and body are no longer severed. For an analysis to grasp what is at stake in an improvisation, it must acknowledge this corporeal thinking. This does not exclude the mind from corporeal thinking. There is room for the intellect, although not more than the eighth of our height that the head occupies. I will deal later with how the intellect interacts in the decision-making. For now it will suffice to refer to the videos showing how the dance can have different outcomes from what, intellectually, seem like very similar situations. (!5) What may appear to be the same from an observer's perspective can be experienced as two altogether different situations from the practitioner's first-hand point of view.

As mentioned, there is no rule that a particular distance between us will result in a particular degree of compression. We respond very differently to the embrace from day to day. This may lead to our needing to change the plan for which structure to use in order to express what is at stake in the embrace. We might have one of those lazy days where our embrace is soft. The compression could take so much time to resolve that we would need twice as much time on the resolution of the compression. This surplus of time changes the character of the resolution too. With more time in the compression, we would accelerate more into the next step unless we were to actively resist this acceleration. We could also imagine that the embrace is soft to the extent that it is almost limp. In such a case there may be excessive time for acceleration but not enough energy in our embrace to gain much momentum from the compression. This and other possible scenarios could be scrutinized in detail.

The bottom line is that the interaction in the compression is far too subtle and complicated to be controlled intellectually. We must enter a corporeal negotiation in order to be able to express the compression in a lively fashion. The infinite variations represent very different expressions although they may seem structurally similar or even equal. This is why they can only be thoroughly understood and analysed from a first-person perspective.

I have written about understanding tango by actively participating through dancing with our bodies versus merely thinking about the dance. This is of course a convenient way of disregarding structural analysis as a tool to grasp the dance but it is not only a question about dancing or theorizing. The schism is prevalent also among dancers. There are many dancers, even at an ostensibly very high level, who dance more through their heads than through their listening bodies. This topic – dancing from one's mind or with a present and alert body – deserves an entire article of its own but for the purposes here it will suffice to refer to a short demonstration of what it means in practice. (!6)

Repertoire as mistakes

Discussing how the tonus of the embrace affects the quality of the compression, we see clearly how the expression is affected by qualitative changes in the communication. We could argue whether the limp quality of the embrace changed the repertoire or merely the timing (as the acceleration took twice as much time). Regardless of which conclusion we arrive at, qualities in the embrace often change the repertoire we planned on doing. Sometimes we even find ourselves doing steps that are not in our repertoire.

Although I have spoken in favour of qualities and denigrated the importance of structures, I still always have a plan for how to structurally proceed with the dance. These plans should be considered as hypotheses for what may happen and, as we have seen, the hypothesis must often be re-negotiated.

It is often said that many developments in the tango repertoire occurred due to mistakes[5]. For example, let us consider the myth around discovering the first linear boleo[6]. (!7) If I, as a leader, have the intention of leading the woman in a single backward step for her, and if I decelerate too late or slowly, there would be so much momentum in her loose leg that she would be unable to stop its movement and a linear boleo would occur. Moreover, if our embrace is firm, her torso/axis will suddenly decelerate. Her leg, on the other hand, is not as directly related to the embrace as her torso is and will not be as affected by the sudden stop. In comparison to her suddenly decelerating axis her leg will have excessive energy. This will make her leg swing backwards from the momentum it has, unless she fiercely tensions her leg to resist the energy it has been given[7]. There is a discrepancy between the movement hypotheses of her torso and her leg and this is what creates the linear boleo. Any accomplished tango dancer today is of course in command of the linear boleo and its dynamics, so there is nothing unexpected about it. Still, the principle holds fast that unexpected events may occur when the qualities of the dance are at centre stage in the communication between the dancers.

The reason the unexpected can happen is because what is negotiated within the embrace is not structures but qualities. If tango were only about structures we would have to learn each new element of the dance. We do work with building blocks as we dance, but the elements we work with are not primarily elements of repertoire I have written about increasing and decreasing energy, about creating compression through distance in the embrace, about the consequence of different degrees of suppleness in the arms, and I could add many other aspects such as how we work with points of contact in the embrace. These are our building blocks, and by combining these in new ways we arrive at repertoire that we have not performed before. From this point of view we could say that new repertoire is not an invention but a discovery of a new way of combining what we already know. That is why we do not need to learn new repertoire since the repertoire comes as a consequence of our play with and combination of the mentioned dynamic techniques.

The linear boleo is useful as an example for more than its simplicity. The compres-

4) As I act, I do it from a position of listening, and I can only listen if I at the same time act myself. There are many relations at stake in how we think and act when we dance. Discussing these we find that the cliché of the woman being submissive in the dance does not hold true. Instead, we are equals. This is not a law of the tango; it is a consequence of the techniques we have developed through our years of dancing. I have written about this topic here: http://www.tangotango.no/en/2011/08/invitation-to-movement/.

5) A more commonly acknowledged way to discover new steps is by intellectually figuring out which combinations are possible. Thanks to the work of Gustavo Naveira and Fabián Salas, we have been given a language that allows us to find new steps theoretically. To perform these steps properly we must still think qualitatively (or through our bodies rather than through our minds). The mind can only be a suggesting arbiter whereas we dance with our bodies. On a personal note, in teaching tango we often say that tango is physical. It may seem self-evident, but if you see what happens at a social dance floor, it is seldom the case. Most mediocre dancers dance with their minds.

6) No one knows when the first linear boleo was performed, but we have heard this story told many times by different teachers in their didactic effort to explain what is at stake in the linear boleo. We use it ourselves.

7) This description does not fully concur with how we communicate the linear boleo. Our voicing here is somewhat too manipulative (c.f. the article referred to in footnote two). At a higher level of tango dancing it is essential that my partner is equally responsible for the abrupt stop. In our dancing we put a lot of emphasis on the woman's responsibility to stop herself through the points of contact in the embrace. If I was solely responsible for stopping her, the movement would be both uncomfortable to her and it would look jerky.

sion previously discussed increases the energetic level between the two of us, and the linear boleo is inherent in the quality we dance with as a hypothesis. (!8) We will likely lead our improvisation into the linear boleo unless we actively make other decisions. Two easy ways of avoiding the boleo are by either walking until the energy ”wears off” or by leading my partner into a cross. There are also numerous other alternatives.

Again, how did we get into the situation of a compression that made our embrace ask for a linear boleo? Part of it is planned and part of it is a mistake. This does not mean that we are powerless to dance our own dance. We are in no sense fated to perform the linear boleo. We should instead think of the linear boleo as an inherent possibility in the energy of our bodies. We always have the choice to act on a hypothesis or we can decide to stop the energy. There are different attitudes we can take in order to make that decision.

Dancing with the mistakes

I have emphasized the necessity for the tango performer to be alert, listening and ready to act in the moment. This in no sense means that the performer turns passive. What possibilities for action does the performer have in a given situation? Let us continue discussing the compression, and let us assume that it was a mistake to create the compression or that the planned compression was of a greater magnitude than planned. (!9) We now have more energy in our embrace than we need to pursue our plan of which steps to take next. Our hypothesis for how to carry on moving must change. How do we make that change? We have at least three options:

1. We could insist on performing the planned repertoire, i.e. the backward step for the woman. Unless we deliberately change the energy as we perform that step there will be much more energy in the step than we anticipated. This will affect the hypothesis for the step after the woman’s backward step. One could say that we postpone dealing with the effect, i.e. the excessive energy resulting from the compression, to the next step. If we stop after my partner has walked her backward step, a linear boleo will occur. (!10)
2. We could deliberately try to decrease the effect of the ”mistake”. This could be done, for instance, by changing the timing and tension of the embrace to make the effects of the compression/volcada[8] less pronounced. When we arrive at my partner’s backward step the energetic position may resemble the position we tried to accomplish in the first place. In other words we have rid our embrace of the excessive energy created by the ostensible mistake. (!11)
3. We could also change our plan or hypothesis when the volcada becomes too pronounced. As the compression grows we could simply decide to indulge in it. We could make the volcada into our chief element, let my partner’s leg sweep in front of her, and resolve the volcada into a traditional forward cross for the woman (which in this context is a bit untraditional because we do it on the ”difficult” leg). (!12)

We see clearly that although the repertoire in (1) and (2) is the same, the situations are very different. How we deal with energy or dynamic tension in the embrace determines the outcome of the improvisation. This, in turn, is relative to how we work with what I have called the hypothesis of movement in our dancing. This should be understood in contrast to how dancing could be based in structural thinking. The fact that we build the dance from working with energetic hypotheses of movement becomes even clearer if we also take the music into account for our improvisations. This will shed light on the first two ways of dealing with decision making in tango improvisations.

To come into the compression where we share a common axis and balance, my partner needs to fall towards me. (!13) The time this will take is very different depending on if we are dancing to a soaring tango played by DiSarli’s orchestra or if we are dancing much faster to a quick and rhythmically elegant tune played by Roberto Firpo’s orchestra. Although the structure is the same, we are primarily preoccupied with how we negotiate the embrace. The question to ask then is: How can we reach the next structural point that we are headed towards in the dance? The qualities will differ to such an extent that I argue it is of secondary interest to use ”structure” as our tool to explain what goes on in our improvisation. Qualities are not expressional ”additions” to structure. The qualities are what we are primarily concerned with. This is similar to how we speak using grammar but grammar is seldom what is at stake in a conversation. Although we do not change the structure with which we are improvising, the structures are at centre stage. Our task is not to add expression to the dance, but to govern the hypotheses of movement in order to be able to perform what we wish to perform.

We thus see that even when we have set structures to perform, they are not what matters the most. At surface level what seemed to be a very structural way to improvise turns out not to be about structures at all. The other way of dancing (3), improvisation where the ever-changing hypothetical qualities determine the outcome of our improvisation, has a similar paradox. By fully focussing on qualities we render the repertoire, and perhaps even find structures that are new and unknown to us. The structure is still the aim in one sense, but we began with qualities as our building blocks. This is an opposite situation from the view where expression was added to structure. We begin by dealing with the expression and then we see which qualities we need to set in motion in order to give free rein to the repertoire.

No matter what approach we choose in our tango improvisation, the quality of our dance will govern the structure of our improvisation. I must also emphasize that the three models here do not exclude each other. In the course of a single improvisation we typically move between different modes of improvising. There are also other categories – altogether different from, or hybrid categories of the ones scrutinized.

Instead of a summary

We can only find the answer that we are asking for, and conversely, we can only understand answers through the questions leading up to those answers. A tango performance can be understood in an abundance of different ways but within scholarly work theory and method must and should be very important. By establishing the discussion on a theoretical and methodological field, the research can be part of a public discussion that leads the field forward. Many would also argue that this anchoring in theory and method ensures the relevance of the research.

Why, then, does this article lack references to other writing on the same topic? One reason is that I have not found any literature dealing with motivation from the performer’s perspective[9]. Most of all however, it is because a traditional methodological discussion would make the artistic research into something that it is not. Few available methodologies are suitable to discuss practical matters of performance. Many of the questions that the performer asks herself remain an enigma unaddressed within scholarly work. I propose that this is due to a lack of theoretical understanding of the practice. If the researcher does not understand the practice she will be unable to find a suitable methodology to conduct her research.

It is commonly acknowledged that methodologies within the humanities are different from scientific methodologies. In fact it is so commonly acknowledged that by constantly reiterating that difference we cement rather than disperse the established hierarchy of research methodologies. Although few would hold scientific models as paradigmatic for research within the humanities, such answers are nevertheless often highly valued. We know that different answers can be equally valid. A kiss is equally a part of a process that makes the kisser produce saliva and hormones, as it is an experience in its own right. But because the former can be measured and the latter only accounted for, do we not often grant ”more” truth to the measureable answer? Yet if you asked most people, would they not say that the account of the experience is closer to how they experience a kiss? Despite this, such an answer will always be less precise than the measure of lip pressure and the secretion of saliva. An account of an experience is less clear and may therefore be considered less certain.

Research on, with, and through artistic practice is difficult. It has traditionally

8) A volcada is the opposite of a colgada. In the colgada we lean away from each other and come into suspension. In the volcada we lean towards each other and come into compression.

9) There is ample literature within the sociology and anthropology of tango about motivation, but such research answers very different questions than the ones at stake in this article. Those methods of explanation also show how easy it is to ask a research question incorrectly. The answers all point towards motivation in performance practice, anthropology and sociology, so we may be led to believe that the questions were the same. Questioning who dances and how they build their identity through dancing is very different from what motivates my partner and I to move in a particular way.

been disregarded within academia because it is difficult to find relevant questions that one wishes to answer. Our questions deal with the experience of the kiss rather than the morphology of it. The language to grasp the experience is less developed, and it may be less attractive for scholars to focus their research on fields where answers are not only hard to get, but they must struggle to understand at all what it was that they questioned initially. The fundamental tenets of research pertain to the questions that the researcher asks, the importance assigned to the questions, and how they are answered. The schism often experienced between researchers and practitioners is about which questions are considered relevant and which methodology is considered appropriate to answer them. There is an urgent need within all art forms to ask the practitioner's questions and arrive at answers that are relevant to performers and scholars alike. Again, we must remind ourselves that there can be different answers that are equally true. Conversely, it is important to remember that although this article has been a criticism of thinking about tango improvisation in terms of structure, an analytical approach is no less correct than my first-hand account of our practice. It merely reveals other aspects of the topic.

It is important to acknowledge the differences between the scholar's and the performer's practice without setting up an avid defence against the hard sciences. We need instead to speak directly of what is most important in a practice. That is what I have tried to do with this article. What matters the most to the practitioner, and what makes her world different from the scholar's, is that the practitioner acknowledges her own motivation as the founding force responsible for her creative acts. Therefore, disinterestedness must not be our guideline to understand tango improvisation. Our interest, motivation and participation should be considered as the primary methodological assets for us as researchers.

Sven Bjerstedt

Metaphors as a Tool in Music Education: The Example of "Storytelling" in Jazz Improvisation

Aims

The usage of metaphors in music education – in order to explain or express aspects in music that are found difficult to verbalize in musical terminology – is a well-known phenomenon. When improvising solos, jazz instrumentalists have no words at their disposal. Still, 'storytelling' is arguably the most common prestige word in descriptions of jazz improvisation. Earlier studies have discussed storytelling in this context from several points of view, e.g., coherence, semantics, linear and temporal development, and performativity (Berliner 1994; Iyer 2004; Monson 1996). This poster presents some results from a PhD project in progress. This study aims to clarify the pertinence of the storytelling metaphor to music education by means of an investigation of the range of meanings ascribed to the term in artistic and educational discourse.

Methods

Explorative qualitative interviews with 15 Swedish jazz improvisers of national and international renown were carried out. Several of the interviewees have also worked extensively as educators in the field of jazz improvisation. The interviews were transcribed verbatim, analysed and then also translated from Swedish to English. A condensed representation of the results is presented in the following section.

Results

Several musicians agreed that the concept of storytelling provides an adequate, appropriate image of jazz improvisation. "A good improvisation is about the same thing as a good, captivating story when you sit at a child's bedside at night, who wants you to read or make up a story before she goes to sleep, you know," says trumpeter Peter Asplund. However, the results show that storytelling can be understood in many ways. The concept seems to function as a metaphor for a combination of several abilities and qualities. Some of these can be categorized under the headlines in the following survey.

Personal and expressive sound
Several informants associate the instrument's sound with the human voice. Bassist Anders Jormin reflects on differences between instruments, some of which may be perceived as closer to the human voice than others: "When I play my improvisations on the double bass, I probably have a human voice, I have melodiousness, dynamics, pauses, that is, the time to reflect after a phrase."

The sound that best promotes storytelling might not be best attained by conventional means. Saxophonist Roland Keijser distinguishes between credibility and technical perfection: "The storyteller sitting on a bench telling his lies, he may mispronounce a few words, or... have some technical deficiencies or something, but he's a damn good storyteller. That's just an extra spice, you know. The timing is there and all the important qualities. There are some jazz saxophonists who think they should improve their playing by taking a number of lessons for a reed teacher at some university, teaching classical playing. And then they acquire a somewhat more neutral technical approach to the instrument. To me that may sound damn weird, I must say. [...] There is no neutral technique. If your dream is to be a good jazz saxophonist, then you should play jazz."

Rich and mature humanity
To come forward as a human being in your improvisation is essential. Trumpeter Ann-Sofi Söderqvist views this as a matter

of "daring to be yourself": ”I'm not afraid of big gestures, neither of doing something that is completely bare and naked. [...] It must be true in some way.”

The saxophonist Gunnar Lindgren points out that the way a story is told depends on the storyteller. The musical story's authenticity is essential, according to Lindgren. He contrasts real-life stories from a person's own experience with those built on second-hand information: ”The difference between the best musicians and the second best is that the second ones tell... 'GP stories' [stories they read in the local newspaper], you know, and the first ones tell their own stories. Even if it is the same story.”

Physical openness and wholeness
Singer/violinist Lena Willemark views presence in the moment as intimately connected with the musician's storytelling. In her opinion, such presence is about openness and wholeness: ”It has a lot to do with being whole in your body. My body includes my brain, my heart – you know, everything. And if I don't get to know all of me, I won't have the openness. Because then some part of me is closed. [...] When I'm in openness I can feel being a part of the great. [...] The great discovery of being present. [...] That may be what it is to tell a story. And that's how it comes out. That discovery comes out. Yes.”

Simplicity
The pianist Lars Jansson points out that good jazz improvisations are often simple: ”If you transcribe a good solo, a good soloist, you can be surprised that it is so logical and inside, that it is so simple. [...] But WOW, you just get carried away. [...] Then it is the sound and the presence... and something larger.”

Aptitude for creative interplay with fellow musicians and audiences
Some informants point to the importance of pauses in jazz improvisation. The pauses of the improvised solo may provide possibilities for the fellow musicians to listen, react, and respond, thereby facilitating a kind of improvised conversation. Saxophonist Nisse Sandström describes Chet Baker's improvisations: ”He treats himself to pauses. And drummers say it was completely wonderful to play with him. So easy. He leaves something for the others to think about when he solos.”

Bassist Anders Jormin says: ”I often speak of the outward and the inward gaze. [...] It's the gaze outwards, towards the listeners, towards the fellow musicians – and inwards, to your own inner voice and vision.”

Trumpeter Peter Asplund expands on a description of how a jazz group can experience how musical interplay and extra-musical being together form parts of the same continuum: ”With my quartet there is a constant dialogue. And then we go on stage and play two full sets, and afterwards we went home to my kitchen and sat there at a round table with some nice cheese and wine, and we continued talking. And then I started to think of it like this: it's really the concert that goes on. We play the same parts, we speak in the same manner, we provide each other with the same space, we make associations, we laugh in the right places, we start talking seriously, sometimes we talk about commonplace stuff that we heard before – that is, an old standard tune – and sometimes we start talking about some new idea that someone brings up and we haven't thought about before – which would be some new tune, you know. [...] The gig went on at night, or rather the supper started on stage.”

Rhythmical awareness
Saxophonist Joakim Milder views the rhythmical aspects of the improvisation in relation to the story that is told. If the rhythmical aspects aren't developed accurately, the improviser's storytelling will suffer, in Milder's opinion: "The rhythm is a consequence of that which needed to be said."

Alertness regarding the input and output of musical and non-musical impulses
Joakim Milder also points to the importance of mental preparedness. It is not a question of being equipped with ready solutions to situations that might occur, but of adaptability: ”What we must have is the ability to listen to the now and adjust our playing to the demands that are called for right now and to be able to have that flexibility which to some extent is motorically and physically conditioned. [...] To me it's really completely a mental preparedness.”

In Ann-Sofi Söderqvist's opinion, thoughts and plans are worthless in the performance situation, since everything is about "here and now."

Conclusions

The results clarify a number of ways in which the metaphor ”storytelling” might function as a tool for education in jazz improvisation. On a general level, the ways artists and educators employ the concept ”storytelling” in discourse on jazz improvisation exemplifies the importance of metaphor in music education. This study shows how metaphor functions as an indispensable but insufficiently investigated educational tool in order to verbalize and mediate holistic views of sets of musical phenomena.

Future directions

The study of the function of metaphor in artistic and educational contexts will be expanded through (i) further interviews with practitioners in the field of spoken theatre regarding their use of the concept ”musicality” (Bjerstedt 2010), and (ii) analyses of intermedial conceptual loans in the light of theories of metaphor and conceptual blending (Fauconnier & Turner 2002; Lakoff & Johnson 1980; Zbikowski 2002).

References

Berliner, P. (1994). *Thinking in jazz: The infinite art of improvisation.* Chicago & London: University of Chicago Press.

Bjerstedt, S. (2010). *Att agera musikaliskt: Musikalitet som norm och utbildningsmål i västerländsk talteater.* (Musicality in acting: Musicality as a standard and an educational goal for Western spoken theatre.) M. A. Thesis. Lund University: Sweden.

Fauconnier, G., & Turner, M. (2002). *The way we think: Conceptual blending and the mind's hidden complexities.* New York: Basic Books.

Iyer, V. (2004). ”Exploding the narrative in jazz improvisation”. In. O'Meally, R. G., Edwards, B. H. & Griffin F. J. (Eds.). *Uptown conversation: The new jazz studies*. New York: Columbia University Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by.* Chicago; London: University of Chicago Press.

Monson, I. (1996). *Saying something: Jazz improvisation and interaction.* Chicago; London: University of Chicago Press.

Zbikowski, L. M. (2002). *Conceptualizing music: Cognitive structures, theory, and analysis.* New York: Oxford University Press.

Marcel Cobussen

Improvisation and Singularity

It is a sunny Sunday afternoon at the new BIM-Huis in Amsterdam. Scheduled is a trio, consisting of Will Holshouser on accordion, Michael Moore on clarinet and alto sax, and Han Bennink on drums. Most of the pieces they perform exhibit more or less the same structure: after a free style introduction, in which some basic materials are exposed, a theme is presented, followed by an improvisation which ends in free playing which, in turn, leads to the next piece.
This kind of music making – *mus-icking* as Christopher Small would have it (although Small emphasizes that the actual production of music is only one aspect of musicking) – rests first of all on the interactions of the musicians; the musical choices that are made are based on what the others are (not) doing. That is why the most important activity the performers need to engage in is to listen, to listen closely and actively, because they "are continually called upon to respond to and participate in an ongoing flow of musical action that can change or surprise them at any moment" (Monson 1996, p. 43). A clarinet trill is taken up by the accordion; sax and accordion develop a call and response game; an obvious miscommunication between the same two instruments turns out to be the beginning of a voyage into unknown sonic territories; accordion and drums gradually play towards each other's rhythm; extremely high pitches on sax and accordion make that any perceptible differences in timbre between the two instruments disappear. All these occurrences make clear that the three musicians are using their ears very well, thereby being able to respond to musical opportunities or to correct mistakes. This *response-ability* is crucial as to whether a particular musical idea is picked up on, developed, or ignored (ibid., p. 88).

However, this afternoon, the playing of Bennink attracts particular attention. Using an extremely limited drum set, consisting of only a snare and hi-hat, he already, during the first tune, "creates" a bass drum by stamping his feet on the wooden floor. Further on, Bennink expands his drum kit even more by playing the floor and many other objects as well with brushes and sticks. The whole venue becomes a potential instrument; Bennink reveals to the audience that in order to make music, a musical instrument in the conventional sense is not needed.

Attending this concert helped me further on my way in the process of rethinking improvisation. It assisted me in my attempt to add something to the already existing discourse around musical improvisation. Bennink's use of the whole stage and all its objects as a percussion instrument made me aware of the simple fact that improvisation is not only about interacting musicians. Of course, how Moore and Holshouser react to Bennink's input (and of course vice versa) is still a very important aspect as to how successful their performance will be. But, unlike scholars such as Paul Berliner and Ingrid Monson, I do not regard interaction as an (almost) exclusive affair between two or more humans. In addition to the musicians, more actors are at work during a musical improvisation. On this Sunday afternoon in the BIM-Huis, during this particular concert, parts of the venue, the floor, and some more or less randomly present objects, became important agents.

In more general terms, one could state that besides musicians, instruments, audience, technicians, musical or cultural background, space, acoustics, technology, et cetera, are all potential actors. Possible interactions can take place between musicians, between a musician and his instrument or between a musician and the audience, but also between instruments and acoustics or between technological devices and the architectural space. Furthermore, sometimes it might even be useful and necessary to specify a particular relationship even further, e.g. between a musician and his instrument: fingers touching the keyboard, knuckles hitting a sound board, nails plucking the piano strings, et cetera.

Bennink's interaction with the floor suddenly turned the latter into a musical instrument; Bennink somehow made the floor more visible or audible: no longer was it an unproblematic and inextricable part of a regular jazz club; instead, it became an actor in itself, reverberating in response to the movements of its player. The contact between wood and metal strings or wooden sticks led to new acoustic experiences; the contact made the floor sound, a giant surface with an enormous potential of different pitches, volumes, and timbres. In Deleuzian terms, one could say that Bennink formed a rhizome with the floor:

> The orchid deterritorializes by forming an image, a tracing of a wasp; but the wasp reterritorializes on that image. The wasp is nevertheless deterritorialized, becoming a piece in the orchid's reproductive apparatus. But it reterritorializes the orchid by transporting its pollen. Wasp and orchid, as heterogeneous elements, form a rhizome. It could be said that the orchid imitates the wasp, reproducing the image in a signifying fashion (mimesis, mimicry, lure, etc.). But this is true only on the level of the strata — a parallelism between two strata such that a plant organization on one imitates an animal organization on the other. At the same time, something else entirely is going on: not imitation at all but a capture of code, surplus value of code, an increase in valence, a veritable becoming, a becoming-wasp of the orchid and a becoming-orchid of the wasp. Each of these becomings brings about the deterritorialization of one term and the reterritorialization of the other; the two becomings interlink and form relays in a circulation of intensities. (Deleuze & Guattari 1987, p. 11).

Bennink deterritorialized the floor, turning the floor into a becoming-instrument, reterritorializing it on a percussion set, adding an extra function to it. And, in the same way as the drum kit, the floor was necessary in order to turn Bennink into a percussion player: the two actors (in)form and create one another.

In general, it is my suggestion to approach improvisation as an event of constant interactions between mind, body, and environment. It should be noted, however, that neither mind nor body nor environment is entirely pre-given here; rather, they constitute one another in endless chains of interactions. Furthermore, the relations between body and mind can take many different forms. And this goes, mutatis mutandis, for the relations between body and environment (Varela et al. 1991).

The mind, which I consider as exclusively human in this context, makes it possible to improvise, to act and react, to decide on (relevant) contributions, on the basis of rational considerations. But of course feelings, emotions, associations, memories, and all kinds of values (aesthetical, ethical, social, spiritual) have a strong influence as well on how a musician will interact with the environment. Furthermore, improvisation is certainly not always evolving from conscious decisions: many ideas and actual articulations come from the un- or subconscious, from irrational inspirations and musical intuitions.

All music making involves the body. And to say that our bodies, while performing or experiencing music, are simply doing what the mind tells them to do, is an outmoded idea. Bodies think, reflect, invent, produce; they have their own intellect or consciousness. And, especially during improvisation, the significance of the body cannot be neglected. Not only one's unconscious might (co)determine a particular improvisation; sometimes certain "decisions" are actually taken by the body: motor skills. Fingers, hand, and arm are also able to act almost independently from the mind.

However, I do not regard the body as solely human. Again I turn to Deleuze and Guattari:

> A body is not defined by the form that determines it nor as a determinate substance or subject nor by the organs it possesses or the functions it fulfills. On the plane of consistency, a body is defined only by a longitude

and a latitude: in other words the sum total of the material elements belonging to it under given relations of movement and rest, speed and slowness (longitude); the sum total of the intensive affects it is capable of at a given power or degree of potential (latitude). Nothing but affects and local movements, differential speeds. (Deleuze & Guattari 1987, p. 260).

Following Spinoza, Deleuze and Guattari distance themselves from the metaphysical and the phenomenological body; the body is defined by its capacity to affect and to be affected as well as by its relations. Regarded in this way, improvisation can be investigated from the perspective of interacting bodies: musicians, instruments, audience, amplifiers, mics, scores, peripherals, musical materials such as melodies, et cetera. All these bodies are affecting and affected by one another, all of them are defined through their relations with other bodies: the immanence of a musical improvisation.

The environment might be understood as the concrete physical environment: the architectural space where the improvisation takes place. I also consider fellow musicians and audience as part of the environment, the physical but also the social, emotional, and even spiritual environment. However, the environment can also be more dynamic and volatile: acoustics and atmosphere co-determine the milieu in which an improvisation takes place, and, conversely, they too are shaped by an improvisation. And even less visible, but often very well audible, is the socio-cultural or musical background of a musician; each musician is undeniably and inevitably interacting with his ”roots”, the musical and other knowledge he brings in.

I term this the ecological approach towards improvisation and, by emphasizing the interrelatedness between mind, body, and environment, I hope to create a counterpart to an often-practiced reductionism, to studies that limit themselves to only a few aspects, a few actors, operative during an improvisation.

The modest description of the concert above has been necessary in order to make one important methodological claim: it is very difficult, if not impossible and even inexpedient, to investigate and write about (musical) improvisation in general. First, not all of the actors mentioned determine each individual improvisation to the same extent; in certain situations (periods, styles, cultures as well as more singular circumstances), some are more prominent and active than others.

Second, it is my opinion that improvisation takes place in all musicking. Every performance, albeit one of a work meticulously notated by a composer, contains improvised elements or moments. Of course, the range of what is possible and permitted in such a written-out work differs from a piece of so-called ‘free jazz’, an Indian raga, or a Balkan folk tune. Perhaps there is less freedom for a performer of notated music than there is for a performer of music that does not primarily rely on the transfer of information through writing. But freedom is no absolute concept, and the difference is not fundamental but gradual.

However, having said this does not mean that I thereby would suggest treating all musical improvisations equally. On the contrary, each time the improvised elements and moments need to be studied anew. Each time there is a different relation between the more stable and (relatively) unstable elements of a piece. Each time specific actors and specific relations between those actors become operative. Each time the interactions between minds, bodies, and environment need to be investigated anew and with the greatest care. Instead of studying improvisation, one needs to study an improvisation.

References

Deleuze, G. & Guattari, F. (1987). *A Thousand Plateaus. Capitalism and Schizophrenia.* (Transl. by B. Massumi). Minneapolis: University of Minnesota Press.

Monson, I. (1996). *Saying Something. Jazz Improvisation and Interaction.* Chicago: The University of Chicago Press.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The Embodied Mind. Cognitive Science and Human Experience.* Cambridge: MIT Press.

David Linnros

Some Thoughts in the Direction of a Bergsonian Understanding of Improvisation

This text is concerned with the act of creating music, that practice which entangles time and confounds us as to the difference between improvisation and composition. Let us not talk anymore of freedom, choice or interaction; we need to get inside the actual doing. This is my attempt to do so, an attempt that leads towards the philosophy of Henri Bergson as the toolbox for further investigation. I conclude by mentioning some of these fertile points of departure.

Improvisation

I will start with a (perhaps controversial) proposition: If creation implies something genuinely new, then this New must also be unforeseeable, that is to say, improvised. At its purest, creation is always improvised; where there is creation, there is improvisation. But does the expression ”pure improvisation” really mean anything? Doesn’t it merge with the concept of creativity? On the other hand, composition – *com positio*, or putting together, the same as *systhema* – is the other side of creation, the assemblage of the past transcending itself into the unforeseeable future. The front line of creation is always carried forward by a certain concentration of the past, a certain composition of timelayers. Creation is always prepared but never predictable; it manifests in different forms depending on whether you’re looking ahead or behind.

The improviser turns all of his or her attention to the foremost point of the surging wave of time – at least ideally – and at the same time turns his or her back to the complex timenet that constitutes the material. That doesn’t make the past a lesser part of the actions of the improviser. The composer pays more attention to this assembly of the past, and in so doing breaks up the creation of the new into smaller parts, where the whole only appears afterwards, disconnected from its origin.

But we need to move on from the lofty ambitions of pure improvisation to its more profane appearances. The ideal of improvisation is always to strive for the proximity of attention to the frontier of events. But like all ideals it has a split relationship with reality. *Impure* improvisation is determined by *pure* intention. One intends to improvise, but then the mind cannot live up to the high expectations of pure improvisation. Real improvisation always carries its own failure, but that is also a quality that makes it vigorous and robust.

Through our intellect we have the capacity to rise above time, i.e., to disregard the unrelenting movement of the time of improvisation. But when we improvise we have the *intention* to act in this continuous time hanging over our head. And yet, while we improvise we tend to theorize, make mistakes, let reflexes rule, decide ahead, think about dinner or something else. Pure improvisation is impossible, an impossible effort, yet it remains the nucleus of every improvisation. That is why my interest is focused on this intention, or attitude, or aspiration of pure improvisation, and not what we do with it. The core of improvisation lies in its attention and not its action.

This imperative of the intention of improvisation closes improvisation to the world of daily life. Composition, on the other hand, is characterized by openness, freedom from the restrictions of *continuous* time, and the possibility of turning one’s back on one timeline and seeking out another. Improvisation wants to be *living* (in time) as much possible but can only be so by submitting to the continuity of the coming. But this also requires that it be something other than ordinary life, which consists of multiple times. By submitting itself to the intention to improvise and be free (as in letting time move without interruptions) improvisation becomes unfree

(as in being chained to the continuity). In the hunt for presence, improvisation tries to follow continuous time but at the same time shuts itself out from ordinary life. This is an important aspect of improvisation, one that is most clearly apparent in its Beginning. The Beginning is precisely this departure from ordinary time, a marker of sorts which indicates that we are leaving dry land in search of a time that is beyond the normal working methods of the human mind. Composition is closer to these methods and the ordinary relationship to time, which is a permissive switching between time levels and abstraction levels; *that* is the way our mind works.

Before I turn to Bergson, I'll say some more concerning the attitude of improvisation and other musical practices. Although the audience may listen with a high level of concentration, they nevertheless always listen with this concentration turned toward the past. They don't know what is to come and they cannot change what is coming, so their listening to the future must be informed by the progress of the past. The horizon is, at least in this way, obscured. The composer and improviser, on the other hand, direct their attention toward the coming. The audience awaits the future while the composer and improviser summon it. Once again, improvisation concerns a specific intention, and that is what separates it from *interpretation*. The concepts of interpretation and improvisation are imperatives that have to do with the direction of this attention, *and not the* concrete action. An interpretation may be completely forward-looking, but as an interpretation it is connected to the past. The opposite holds true for improvisation; it can be entirely concerned with the past, but the imperative of improvisation tells it to look towards the coming.

A summary of the first part

Creation always implies improvisation. But pure improvisation never endures more than a moment.

Concrete improvisation is affiliated with all sorts of mental processes. Its tie to pure improvisation is the *intention* to improvise, a command to focus on the foremost tip of time. This also implies a necessity to shut out ordinary time and its freedom to change focus.

Bergson

We have discussed creation, the new, attention, time, duration, and the past. I believe these are the key concepts to find a new perspective on improvisation, and they are all also central in the philosophy of Henri Bergson. So let us turn to Bergson and three examples of how music and improvisation stand close to the most important aspects of his thought.

> Let us listen to a melody, allowing ourselves to be lulled by it: do we not have the clear perception of a movement which is not attached to something mobile, of *a change without anything changing?* This change is enough, it is the thing itself. And even if it takes time, it is still indivisible; if the melody stopped sooner it would no longer be the same sonorous whole, it would be another, equally indivisible. (Bergson 2002, p. 259).

(1) Bergson is using music to describe reality, but I am using his idea of reality to describe music. To me, he lets the movement of music take form as thought and not as sound. A movement that is not attached to anything moving, a change without something changing; in the middle of the mind's constant work to structure, divide, separate and stop, there flows a river of pure change.

(2) Music can never be an external product of human activity for Bergson. Neither is it the activity itself. If we turn to the dividing line between Bergson and phenomenology, we see that while phenomenology claims that perception is always perception *of* something, Bergson means that perception is the *thing itself*. When perceiving music, the mind is the music.

Perception is at the same time connected to the subjectivity of the mind, which is its past, its memory. The surging forward of memory and its intermingling with the physical world makes up all of human activity. This intermingling must be creative since when something is added to the past, the past is changed but still preserved in its entirety, which means that something new has occurred, or rather has been created. In Bergson's philosophy change and duration – duration as the tension between past and present – are synonymous, and both presuppose creation. We recognize these concepts as the most central to improvisation.

(3) Another quote, this time from *Introduction to Metaphysics*:

> A True empiricism is the one which purposes to keep as close to the original itself as possible, to probe more deeply into its life, and by a kind of spiritual ascultation, to feel its soul palpitate; and this true empiricism is the real metaphysics. (Bergson 2002, p. 206).

Ascultation is listening through the stethoscope, a very concentrated listening to the inner rhythm of a thing, a great effort to hear the new but at the same time to keep the past, to hear the rhythm of a flow.

Listening is an openness towards an outer duration, to consciously fine-tune your mind to another movement. There are many similarities between listening and Bergson's idea of intuition, and when he says that intuition demands a great effort that is only tolerable for short periods of time, the easiest way to grasp this idea is to think about listening. This effort consists in not letting the intellect, the time-shifter, take over, not letting it interrupt the listening with the incision of abstraction. And once again, improvisation is the same activity, the same as listening but with creation added to it: listen and create. *To conclude directly, a Bergsonian concept of improvisation would be nothing but the Bergsonian concepts of perception, listening and creation put together. There lies the starting point for a Bergsonian investigation of improvisation.* Through music, and improvisation in particular, we can with Bergson see past the ordinary working methods of the mind and into its hidden constitution. At the same time, Bergson gives us sharp conceptual tools to deal with the unique and elusive character of improvisation.

References

Bergson, H. (2002). *Key Writings*. New York, Continuum.

Bergson, H. (1997). *The Creative Mind*. New Jersey, Citadel.

(re)thinking composition and interpretation

Sandeep Bhagwati

Comprovisation – Concepts and Techniques

Improvisation and Score

Just as no marriage can be reduced to the enactment of a written contract, no music ever is completely fixed - and there is no such thing as free improvisation much in the same way as there is no such thing as entirely free love. Music, especially improvised music, is a quintessentially polythetic art i.e. it cannot be understood in any convenient, conceptual overview – it must be performed one event, one moment at the time.

Thus, even the most fixed acousmatic tape music has depended for its spread on the vagaries of funding, performance space, technology development – and the contingent elements of each single, unique performance. This is why the "diffuseur sonore" has slowly gained acceptance as a special type of musical performer - and pedagogical programs to teach, think and critically examine sound diffusion are currently coming into being.

At the other extreme, it is not by chance that the ideology of free improvisation appears at the same historical moment as does the ideology of free love. But, while the latter was soon deconstructed as a naïve and often oppressive strategy in the gender wars, the incantations promoting a truly free music unfettered by rules and regulations, celebrating the incommensurable beauty of the present moment, still haunt the program brochures and the apologetic texts of its proponents. But every working musician knows that the technique of music making is inscribed into the musician's body through the ceaseless iterations of daily practice and performance, that a musician's body is the sum and phenotext of the musician's musical trajectory. In much the same way, the aesthetical affiliations we form both as musicians and as thinking and feeling human beings are the components and the genotext of all our improvisations.

all'improviso, the description of a music as unforeseen thus in reality only masks the curious fact that the extensive framework of physical constraints and aesthetic decisions, cultural expectations and social rules of interaction that has brought this music into existence has become invisible, imprevisible. When we improvise, we do not make music that is free of rules and regulations – when we improvise we make music according to rules and regulations *imperceptible to ourselves*: rules we have learnt – and forgotten… or have never understood… or have deliberately chosen to ignore… True improvisation, according to this premise, happens only at the margins of the rules, in a no man's land where conflicting rules and multilayered loyalties create an open space of indecision and contingency. How can we analyze the latent or manifest score that improvisers enact ?

Notational Perspective

Musical scores are information devices that allow a composer to lay down certain parameters of a performance. In practice, scores define what is considered context-independent by the composer or by a certain cultural tradition. Traditions and disciplines in performing arts can often be distinguished by the degree and the nature of what they consider repeatable and contingent. For example, whereas European art music traditions considered it important to notate *pitches* and their associated *durations*, Chinese art music[1] traditions considered *pitches* and their associated *playing techniques* (i.e. sound) to be the ideal pair of notated parameters, leaving the aesthetic significance and practice of *duration* largely to oral transmission and to the individual musician's "touch" – similar to the view that Western art music took towards *playing technique* until the

1) All generalizing terms such as "Chinese" or "Western" in this text are – for the purposes of this argument only – used here in a starkly simplified manner: as representing two extremes of a spectrum. All notational traditions, of course, have rich and varied, sometimes parallel histories which cannot remotely be dealt with in this text. For a good overview on musical notation across traditions, see Bent et.al. (1980) in the *New Grove Dictionary*.

mid-20th century.

In addition, many traditions closely couple certain performance parameters to fixed combinations, thereby prompting the development of Bi- or multivalent notational "objects":[2] in this view, each possible traditional western basic "note" consists of an unique and graphically unified combination of two differently graded series of symbols that taken together signify both pitch and duration of a musical event. The choice of which parameters need to be compounded into an "object" i.e. which performance parameters are considered to be inextricably linked to each other, is an aesthetic choice as much as it depends on the readability and memorizability of the chosen notational object. Each notational object enables certain aspects of music to be notated more easily while other aspects would be very difficult to notate adequately.

If a notation, for example, signifies both a temporal location within a rhythm cycle and where/how a certain finger strikes to produce a certain sound (as is the case in North Indian *tabla bol*-notation[3]) this specific association of parameters opens up many interesting options for higher-order phrasing and parsing (e.g. a swift heurism to determine which rhythm/sound combinations are physically possible at which speed), but also precludes the efficient and self-evident notation of other options ("free" or unmetered rhythms, or playing the *tabla* with drumsticks etc.) – and thus serves to limit or even prohibit their aesthetic use within the given tradition. This bias has aptly been termed the "perspective of a notation" (Gottschewski 2005).

Composition – Comprovisation – Improvisation

No score will thus ever totally determine all aspects of a musical performance: Music inventors and composers must adhere to or establish notational conventions that enable them to control certain parameters of music making – but, in this process, the very perspective of notation that they adopt in order to control certain aspects of the music has side effects: it creates a free space, a musical realm beyond their control. Some elements of music making will always be contingent – and thus improvised. But the opposite is also true – in creating music on the spur of a moment improvisers are also establishing all kinds of momentary scores – and the word "score" here explicitly includes all kinds of rule systems, embodied reflexes and inner representations that prompt a performers to play the next note…

If the urge to control individual musical events at an elementary level dominates a score, it will give rise to a kind of exploration of this free space that we usually call an "interpretation [of a fixed composition]". If, however, the score is more concerned with shaping higher-level events and flows, and leaves the control of individual musical events to stylistic conventions, traditional rule systems, and non-representational ordering systems (such as a groove), we call this process "improvisation". In fact, there is no clear line between improvised and composed music – hence my preference for another term: *comprovisation*. I use this term for all music that draws not only on the contingent moment of performance but also on context-independent rule systems or scores – and I believe that all music does both in some way.

The terms "improvisation" and "composition" can be useful as mental constructs but they can confuse and cloud the realities of music making mainly because they suggest that they are somehow dualistic, even antagonistic entities – where in reality they constitute points along a continuum. Using the term "comprovisation" can make us aware of the contingent nature of this continuum: the fact that the term is so blatantly mongrel immediately leads to the question: how much and what is composed and how much and what is improvised in a given performance? And this uncertainty may prompt us to listen – and look – more closely at the individual moment of performance.

For the past 15 years I have been working with increasingly complex *comprovisation* scores – scores that explicitly address the question of the specific mix of contingent and pre-formulated music at each moment of a performance. From the previous paragraph it can be inferred that this statement in itself does not offer much insight. Let me therefore detail my approach to *comprovisation*.

2) This use of the word "object" refers to its use in computer science where a software object is defined as a set of mutually dependent configurable transformation rules for multiple streams of input and output.

3) One prominent example of a fully developed oral i.e. until recently usually non-written notation. (cf. Wegner 2004).

Comprovisation Architextures

Comprovisation scores abound in Jazz and in New Music since the 1940s. Three main dramaturgical-architectonical-textural (fused as: "architexture") models appear to overwhelmingly dominate traditional – and large territories of contemporary – *comprovisational* practice:

1. Dramaturgically "linear" variations on a stable melodic-harmonic formula or on a rhythmic cycle – all dramaturgical developments are either of a transient nature, to be resolved in regularly recurring cadential moments - or they are placed within a "non-surprising" framework, e.g. a strict monotonic accelerando structure, as in the case of North Indian art music.
2. "Free" forms of organic growth and/or decay: isolated beginnings, slow congealing into coherence, exponential growth of density ending in a "tout-son" situation where individual contributions dissolve in the overall sound.
3. When musicians cannot understand each other's contributions, some of them drop out, revert to listening: this in turn leads to a gradual lightening of texture and density, isolation of one or a very small group of players or musical ideas. At this point the others pick up again and a resurgence to next peak follows - etc.
4. Ritualized improvisations with composed section markers, or compositions with embedded improvisations – in both certain blocks of time are set aside for improvisation [whether with an elaborated groove or drone as in Jazz and many modal improvisations, or without such a listener's lifeline, as in Lutoslawski scores]. In Free Jazz, these blocks could be as long as the entire music, in other scores they were more cadenza-like "absences" of the composer, a carnival of inverted roles between composer and performers.

Boulez and Stockhausen, in their piano pieces, introduced another model of comprovisation with blocks: structural shuffles creating an improvised order of pre-composed sequences and no improvisation on the note-to-note level. John Cage, Earle Brown and others represent another extreme: in their scores based primarily on visual stimuli everything, including the precise instructions and the composer's documented insistence on playing only what was visible, seem to serve mainly as a a social and aesthetical excuse for improvisation, an invitation for well-trained score readers to stray from the written path.

To me all these approaches were unsatisfying. Having had an emotionally close relationship to Indian art music, where *comprovisation* is an elaborate and multi-layered dance of composed sequences, rule-based modal improvisation and cyclic rhythmic improvisation, I started to look for ways to let large ensembles improvise together and yet retain some kind of structural composition, the kind of complex and richly polyphonic dramaturgy we have become used to in linearly notated scores.

Exegetic and Relational Polyphony

In *Amadeus* (the film), Peter Shaffer lets Mozart say:

> In a play, if more than one person speaks at the same time, it's just noise. No one can understand a word. But with music, with music you can have twenty individuals all talking at once, and it's not noise - it's a perfect harmony. Isn't that marvelous?

A praise of polyphony in a movie ! But Mozart, except for some his last works, is not considered to be a particularly polyphonic composer. What exactly is he talking about ?

There are two basic types of polyphony – one concerned with the unfolding of and reflections on a central idea kernel: this type could be called exegetical polyphony. It can be found in *bicinia, canons, ricercari, cantus firmus* and chorale variations, fugues etc. In all these forms, new musical realities are unfolded from or reflected in one source rather than composited from different sources.

The other type of polyphony is about creating mutually illuminating relations between previously unrelated ideas. This is a much rarer type of polyphony – it can be heard primarily in isorhythmic motets, in double and triple fugues, in some developmental sections of classical sonatas etc. One could call it relational polyphony.

Interestingly, whenever Mozart used polyphony, he tended to use it in this relational mode: in the last movement of his last symphony four different themes jostle each other and through their constantly changing relation to each other create a kind of structural harmony that is very different from that provided by exegesis.

For me, the important difference between these two approaches to polyphony lies in the way they conceive of their elements: in exegetic polyphony all elements of the musical texture are derivative, drifting apart in a kind of evolution. Metaphorically, they depict the story of the ego encountering the world. In relational polyphony, the elements of the music are independent entities converging in a kind of aesthetical consilience. Their metaphorical narrative is that of many individuals linking together towards a greater whole.

For this to happen, each layer forming a polyphony must not only have a different trajectory, they must also have different origins – they must enter the moment of music making not as an embryonic blastomere (a.k.a as "theme"), but as fully formed organism. These fully formed musical organisms, then, communicate with each other to create a relational polyphony of musical polylogues.

Encapsulated Traditions

The idea of relational polyphony is at the heart of my recent approach to *comprovisation*. While the dramaturgy of solo, duo, selected trio and even some fortuitous quartet improvisations depend only on the capacities of the performer-composer(s), the recipes for dramaturgy in improvised music for larger ensembles have remained largely simple, mostly antiphonal in structure, vehicles for alternating solo music or even, mostly, support vehicles for the benefit of one main improviser. But how could one imagine a music for 5–40 or more improvising musicians that satisifies the refined taste for dramaturgical and textural differentiation most western art music listeners have acquired by listening to written music?

From the idea that individual musical streams enter a musical work or improvised performance not as ideas in evolution but as fully-fleshed out organisms, I re-defined my concept of tradition. In my view, every improvisation style is essentially traditional in nature, as it depends on the oral and enacted transmission and conventionality of complex knowledge structures: Each improvisation style creates a rich cloud of determinants and constraints that must be enacted by many different creators.[4] An improvisation tradition thus is an organism, in itself consisting of many sub-organisms - down to essential rhythmic, gestural and textural cells. And all these elements of a style, wherever their place within the hierarchy of a style, are complete musical entities in themselves – not themes that require evolution to become music, but entities that through simple linkages – sequence, dialogue, juxtaposition and superposition – can generate a convincing performance of an improvisational style. I call these entities encapsulated traditions.

Encapsulated traditions are musical entities that can create a musical stream within the architecture of a relational polyphony. I call them "encapsulated" because they are structurally largely independent from each other, but can readily interact with other such entities. In many ways they function in a way very similar to software objects in object-oriented languages – they take input and produce output that is readily recognizable. Larger architextures arise from these encapsulations by recombination and layering.

One of the big analytical and theoretical difficulties for every observer of today's music world is the proliferation of stylistic habitats for all kinds of music. Minute differences for an outside listener translate into huge socio-aesthetical differences for the insiders of that style. The analysis of encapsulated traditions and their re-combinant mixtures within each style might afford a tool for understanding how these styles came about and relate to each other. A kind of genetical musicology, very similar to comparative genetical linguistics.

For me as a composer, though, the overwhelming interest in this concept of encapsulating traditions lay in its potential for new kinds of music making.

4) Written composition is much more limited in this aspect: while each composer who does not rely on conventions (and there are many epigonal conventionalities in most of what we falsely call new music) will aspire to universality, the most s/he can create is a personal language that others then may or may not work with – mostly not. While written composition, especially in its late 20th century incarnations, tends to produce idealistic personal esperantos, improvisation languages tend to arise from within a social and aesthetical environment that already provides nourishment and continuity for their further use.

Comprovisation Scores for Large Ensembles

Since 1996, I have conceived a number of *comprovisation* scores for larger ensembles. Since ca 2003 they are based on encapsulated traditions and work largely in the same way: Performers are given precise constraints and instructions for one or several encapsulated traditions, which they need to learn by heart and embody. These instructions can be very detailed, and are often illustrated by a written example of how a realization could look (and sometimes even by an audio example). The musicians are not given explicit music, but rather blueprints on how to improvise within a certain framework. This demands a kind of personal practice very different from learning a written score on the one hand, but also very different from learning how to improvise on new material in one's own personal style. In fact, this approach to musical embodiment is closest to that of learning a North Indian *raag*.

In almost all of my works, this learning phase for each encapsulated tradition was substantially longer than for my "conventionally written" compositions. At its end, the musicians had learned between 4 and 12 different ways of improvising music, each amounting to one encapsulated tradition.

The next phase was then to create a polyphonic score that would allow to superimpose these different encapsulated traditions within a convincing architexture. Each of my works adopts a different strategy for this step.

In *Racines Éphémères* (2008) for 8 wandering musicians, obbligato conductor and live-electronics, the architexture is comparatively trivial, leaning heavily on the principle of the character variation with a few interjections and variants: In each of the 64 variations on a theme by Claude Vivier, several of the 9 encapsulated traditions I wrote for this work are superimposed in a unique combination. Each of these encapsulations includes precise instructions on how to interact with the other musicians, and the score has a strong spatial component, the musicians changes places and thus relate to each other in very different ways throughout the piece – which is again reflected in the way the different encapsulations can interact. Traditional compositional tools are mostly absent in the score – there are no rhythmic constraints (except for those given by the encapsulation itself), the pitches are organised in a number of modes that, when superimposed, often result in a fully chromatic scale.

Nexus (2010) for five moving musicians and wireless network uses a melodic composition as a basic resource – the score is constructed in a way that each musician uses a different section of this melodic base, including its retrograde inversions. In this case, the encapsulations are confined to 5 different modes of reading through and improvising on this basic melody. These modes "read" the notes and sequences of the melody in very different ways, so that the improvised music resulting from one of the encapsulations differs considerably from the music made by someone following the other. The architexture in *Nexus* is relatively complex: the musicians are dispersed in an urban/architectonical environment and cannot hear each other. They carry small loudspeakers connected to the wireless network. A central server operates as a flexible patchbay, connecting the musicians to each other in a very dynamic and fluidly changing way, but the musicians at any time hear only one other musician from their loudspeaker. They have learnt to associate one encapsulated tradition to exactly one other musician, so when they hear this musician, they change their improv. mode to his/her encapsulated tradition. Playing on the unpredictable latency of the network, they are not linked to each other in a two-way communication, but rather in a one way transmission chain – they thus do not react dialogically but in strange feedback loops. Only at a central location is it possible to hear the entire texture of the work – mediated again by the server.

Finally, *Transience* (2008/9) is the most radical of my encapsulated tradition works

to date. While the other *comprovisations* only tacitly assume that the musicians have their own embodied tradition that they bring to the task of learning the encapsulated traditions, in *Transience* they are expected to interpret everything through the lens of their embodied tradition. The score consists of a complicated procedure that constantly and interactively recombines individual parameters of score instruction and musical behaviour and assembles them on one page: this page then is the encapsulated tradition for the musician playing. Thus, each recombined score page creates one of over a quadrillion different encapsulated traditions, in a similar way that Raymond Queneau created *Cent mille milliards de poèmes* from the 14 lines of a traditional sonnet. The musicians however must, say the instructions in the score, come from two different music making traditions, so that they will interpret the parameters that determine their newly determined encapsulated tradition according to their own musical sensibilities and preconceptions. A twist in *Transience* is that the two (groups of) musicians are constantly called upon to interact with each other in very specific ways – but since they do not have the same page in front of them, their interactions must necessarily miss each others intent. Even the best meant of jams can go astray if the traditions behind them are too alien to each other.

Conclusion

There is no music without some kind of score – not necessarily written out, but as a mental architexture necessarily present in the context of music creation and making: scores, as Lawrence Halprin understood them, "orchestrate design, participation, events and activities that visibly delineate, generate and sustain a project": (Halprin 1970) this definition makes no marked distinction between the sonic and the meta-sonic aspects of music making. If hardly any written and performed score or acousmatic soundfile functions purely on a sonic level, improvisations definitely cannot be understood without the context that shapes music making – what Christopher Small has called "musicking". (Small 1998). Traditions, contrary to their reputation in new and improv. music circles, are not old and unoriginal ways of making music, they are an innate (but mostly unacknowledged) part of every score: without a tradition, scores become unreadable objects. In embedding the concept of a music-making tradition within a score, by encapsulating aspects of tradition and re-combining them, encapsulated traditions offer a rich potential for the analysis of processes in music-creation: they become tools to understand how both in improvised and composed music, traditions of music-making inform and generate sonic material according to contextual rules and how this generated material relates to the context of listening. In doing so, they demonstrate that the concepts of composition and improvisation are extreme and unattained poles of music making, and that all music-making is in fact a *comprovisation*: a music with a score – and with a context.

References

Halprin, L. (1970). *The Rsvp Cycles: Creative Processes in the Human Environment.*

Small, C. (1998). *Musicking: The Meanings of Performing and Listening.* Middletown: Wesleyan University Press.

Sandeep Bhagwati

The City of the Invisible: *Hommage to Italo Calvino*

German version 2006, re-written English version 2011.

Nuova Musica once was a city famous in all of the northern continents, nay, all the world. Its architects aimed, with each new project, to build the most novel, most daring, most groundbreaking, most sophisticated of all palaces. Palaces so ingenious that, from the street, nothing would indicate which side of the building looked outwards; palaces, where on the inside one would never know which door would lead into which room. Palaces, where great care was taken to stylishly conceal all entrances, for obvious openings were seen as an insult to the visitor's intelligence – and, as the architects never failed to point out, low thresholds always create the risk of attracting the sonic proletariat, the uninitiated and unwanted.

Each new generation of architects felt that the work of their predecessors had been a little bit too simplistic, too straightforward, to much tied to conventions: they proudly implemented non-linear food infrastructures instead of designing ergonomic kitchens, crafted straight corridors into self-referential mazes, transformed paintings and carpets by abstractions and deviations into iconic and senso-motoric labyrinths, so as to avoid the stale solace provided by functionally harmonious ambiences – in fact, everything was stylized, quoted, ornamented and overgrown with allusions. Who on the inside cared if the palace gates were by now so well hidden that no one actually could find them? That the once so magnificent and grandiose edifices now were extremely difficult to navigate even for those using them daily – meeting each other more and more resembled a painful and testing initiation ritual, where every wrong turn of phrase could adversely affect your reputation or forever dash your hopes of being arriving anywhere at all.

Stairs soon were deemed to be outdated, windows were called sentimental crap, and maps derided as simplistic – what idiot wants to use a map, after all, when the simple excuse of not-knowing-where-you-are projects a so much more refined sensibility, a yen for structural precariosity rarely ever emulated nor, mysteriously, even desired by the more obscure denizens of their city: While some may find it unsettling, there actually is safety to be found in vagueness, so much reassurance in being inscrutable.

The palaces themselves became bigger and vaster, and more and more refined became the skills of the craftsmen who migrated here from all corners of the planet: for the people of Musica Nuova paid well and liked the finest of fineries – exotic materials, ironic subversions, finest silk and faux-sonores. The builders and the inmates of the extravagant palaces were fascinated by all things authentic, primitive, ethnic – they loved furnishing their lofty living rooms with bric-a-brac from this tribe and that tradition, relying on their consummate cultural skills (and their superior buying power) to bind all these distant diversities together – and to thus compose conceptual cornucopias, complex cabinets of curiosities unmatched by any other civilization. With so much of the world within their walls, who among them would squander any thought on the fact that, seen from the outside, the walls of these palaces where blind, without windows, self-contained and smug ?

There were now two kinds of Musica Nuovans: the elite residents in their elaborate windowless dungeons, who abhorred sun, fun, air, and the very notion of popularity (thought to be dangerous for any self-respecting Nuova musican) – and those who pursued their daily grind outside, who had moved to the suburbs where houses were simple but nice. As year after year passed, some of the palaces' inhabitants themselves slowly began to tire of their avantgardistic abodes - they wanted to again

taste the forbidden pleasures of nostalgia, the immediate connections afforded by doors and by windows, and the delight in seeing an implied anticipation actually realized. Even many of most ardent advocates of arcane architecture were obliged to give up their increasingly isolated immeubles. Death by emotional starvation, in midst of luxuriant textures and high thinking, had become a clear threat – and they, thus, too, fled the malaise that haunted their majestic mansions, and soon moved into the unrefined but pleasant huts, where the cozy cushions of convention made life so seductively easy to live.

Only sometimes, on special days, did some of them ascend to the palace quarters of yore, looked for the hidden doors and wandered through the damasked passages and serpentine labyrinths with shock, awe – and a strange kind of pride. It had been a long time since new palaces had been built, the architects spat out by the still functioning academies of Musica Nuova were forced to find their own raw materials – so they broke away stones, walls, ornaments and designs from the old palaces, plundering them to build new ones that all-too-often would quietly collapse as soon as they were built. Many of them thought nothing of this, they wrote verbose treatises in which they re-framed these structural failures as "embracing the ephemeral", or simply called it: "building-in-real-time".

But every year, a few of them would leave the city of the invisible that once had commanded the ear of the world, and emigrated, hoping to practice their advanced and refined and experimental art elsewhere, perhaps even to found a new Musica Nuova Seconda, somewhere in the desert, far beyond the fertile land.

On their long march they would sometimes encounter new types of building. These buildings were much larger, much lighter, much loftier, and much more impressive than all the palaces of Nuova Musica together. Astonished beyond measure, they would ask: ”Who lives in these shadowless palaces? And why can just about anyone go into them, people streaming through wide open portals? And all those immense windows – don't the owners get tired of always looking outwards?” The palace architects from Musica Nuova could not understand what they heard in response: that not a single person was living in them. That everyone only came here to go elsewhere, to use their own body to connect one place to another.

And the stuccaturas? They shivered in a sudden chill. The millions of brilliant windowsill frills skills we all were once drilled to fulfill back in school? And the *staccatofugatosprezzatospiccato*, the syncopated trade-fours, the negotiated individualities, the no-input-aesthetic, the extended techniques we so assiduously studied and we so dearly revere, they blurted out, indignantly and hurt. Is there really no holy sense of responsibility left, no respect for the tradition of the avantgarde, and how things grow in time, for the deep satisfaction in contemplating something well made, for inwardliness ? Is everything only a zip-zapping highway now, where we would have built a complex and rich labyrinth? ”We do not know, we just love the wind,” said the people traversing the airports, ”we ride on its tails and don't care where we die.”

The exiled architects of Musica Nuova carefully studied the airports and train stations, these palaces of the wind, for a long time. Then one of them said: ”Why does no one live in them?” The others laughed: ”Because you never know if each morning your head will be in the same spot you left it the night before – or if it has been carried away by the eddies of transience that assail everything here.” ”Fine”, said the first, ”then we must learn to build inside the wind.” ”Build inside the wind?” echoed the others. ”Yes,” said the first, ”architectures within the wind, palaces that can ceaselessly change as we wander the earth, and yet will always offer a home to our tired bodies and souls!” ”You are crazy”, said the Musica Novans. ”And do you know,” continued the first, ”What we will build them from?” asked the first. ”Tell us!” ”From a new kind of concrete, concocted from thin air. We will create our four walls, walls that will stay with us, like a bird in a storm – even when they morph every second beyond recognition.” ”You mean – with music?” asked the others after some time. ”Yes, of course,” said the first, ”with music – what else?”

Anders Ljungar-Chapelon

Det improvisatoriska, explosiva momentet i *Cassandra's Dream Song*: mimesis och ett möte mellan musik och teater

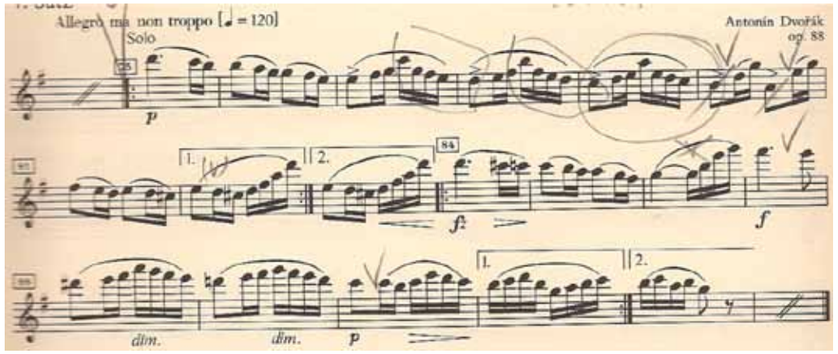
Denen, die in dieselben Flüsse hineinsteigen, strömen andere und immer wieder andere Gewässer zu... [Der Fluß] zerstreut und ... bringt zusammen ... sammelt sich und fließt fort ... nähert sich und entfernt sich.
Herakleitos, Fragment 12 (Kirk, Raven & Schofield. sid. 213, 1994/2001)

Försöket att belysa vad improvisation kan innebära i ett västerländskt konstmusikaliskt sammanhang – vilket oftast utgörs av musik som är noterad – kan hämta inspiration från Nietzsche (1886/2007). Han ansåg att forskning inom ramen för konstnärliga domäner borde ske genom att konstnärens utövande får tjäna som vetenskaplighetens lins, och att konsten utforskas med livet som lins. I detta fall är jag flöjtisten och konstnären som i kombination med att vara forskare sammanfogar flöjtistisk virtuositet och det musikaliska framförandets förståelsehorisont med forskarens och forskandets hantverk och dess specifika förståelsehorisont, för att sedan utforska det musikaliska uttrycket sprunget ur livet.

I det följande presenteras tankar kring begreppen improvisation och intuition, mimesis och musikaliskt uttryck. Utgångspunkten är en föreställning gestaltad av mig tillsammans med kollegor från Teaterhögskolan i Malmö samt musikerkollegor från Sverige och Tyskland, som framfördes i den Svenska paviljongen vid *Världsutställningen Expo* 2000 i Hannover, Tyskland. Repertoaren utgjordes av kantaten *Pan et Sirinx* (1719/1981) av Montèclair uppförd på historiska instrument från det tidiga franska 1700-talet, *Syrinx (La Flûte de Pan)* (1913/1996; Ljungar- Chapelon, 1998) av Debussy spelad i sin originalversion för soloflöjt och två skådespelerskor, samt *Cassandra's Dream Song* (1970) för soloflöjt av Ferneyhough. Beträffande Ferneyhoughs flöjtsolo hade jag bearbetat detta för el-förstärkt soloflöjt och två skådespelerskor som framförde Cassandras lyriska scen ur Aischylos tragedi *Agamemnon* (1929), där flöjtmusiken och Aischylos text tillsammans bildade en dialog. Tanken var att skildra tre stadier av musikaliskt uttryck: (i) flöjtens och musikens födelse sprungen ur längtan, sensualism och melankoli, (ii) flöjtens sensualism, (iii) flöjtens möjlighet till ett högdramatiskt och till dels aggressivt uttryck, inkluderande en estetik vilken står i bjärt kontrast till instrumentets traditionella estetik så som den gestaltar sig hos Montèclair och Debussy. En ytterligare aspekt är att Aischylos drama utmålar krigets fasor på ett ohyggligt sätt – vilket associerade till 1900-talets sista årtionde och krigshandlingarna på Balkan som avslutade ett millennium – och Cassandra som förgäves berättade om Trojas undergång (se Bild 1).

För att skapa förutsättning för ett resonemang kring begreppet improvisation och

Bild 1: Cassandra talar till trojanerna om Trojas förestående olyckor men blir inte trodd. Kopparstick från 1700-talet.



Notexempel 1: Dvorak Symfoni nr 8, flöjtsolot ur finalen.

dess implikationer i ett konstnärligt och musikaliskt sammanhang är det av intresse att undersöka dess ursprungliga betydelse. Begreppet improvisation kommer således från latinets *improvi´sus* vilket betyder *oförutsedd* och *oförmodad* (Nationalencyklopedin, 1992). Utifrån denna bestämning står begreppet i motsats till något förutsägbart, vilket ger det en allmänmänsklig karaktär. Kanske kan vi tala om improvisatoriska moment i vardagslivet som att exempelvis köra bil? En bilresa består av många oförutsägbarheter och riskmoment, vilket innebär att bilens förare måste ”improvisera”, alltså svara på moment som är oförutsedda, samt göra spontana och intuitiva handlingar.

Ofta associeras begreppet improvisation till musikstilar som inte är noterade. Frågan blir då om musik inom ramen för västerländsk konstmusik – som oftast är noterad – inte innehåller improvisatoriska moment? På denna punkt kan uppfattningarna gå isär. Dock skulle förmodligen många musiker verksamma inom västerländsk konstmusik anse att variationerna beträffande uttryck, klangfärger, dynamiker, tempi, agogik och samspel är exempel på oförutsägbara och improvisatoriska moment. Ett exempel är den pensionerade soloflöjtisten Peter Lloyd i London Symphony Orchestra, som berättade (1 juni, 2011, Manchester/England) om en episod när han var på turné med symfoni nummer 8 i G-Dur av Dvorak (1889/1991), som i sista satsen har ett berömt flöjtsolo (se Notexempel 1). Turnén bestod av åtta konserter som dirigerades av Claudio Abbado. Efter den fjärde konserten frågade Abbado varför Lloyd spelade sitt solo så olika på konserterna. Lloyd svarade att han och orkesterns solofagottist hade slagit vad om det var möjligt att improvisera en ny spontan version av flöjtsolot vid varje konsert. Svaret föll Abbado i smaken och Lloyd blev uppmanad att försöka vinna vadet. Detta är en sann historia som trots sin anekdotiska karaktär belyser en tydlig strävan efter oförutsägbarhet och improvisatoriska moment inom den noterade västerländska konstmusiktraditionen, här i ett symfoniskt sammanhang.

Begreppet *intuition* har förmodligen närhet till det improvisatoriska momentet inom ramen för västerländsk konstmusik. En vedertagen definition av intuition utgår från senlatinets *intui´tio*, vilket kommer från latinets *intu´eor* som innebär att rikta blicken på, uppmärksamt betrakta (Nationalencyklopedin, 1992). Lundafilosofen Larsson (1862–1944) i vars författarskap frågeställningar kring intuition spelar en väsentlig roll ger definitionen: ”Jag vill bestämma begreppet intuition så, att intuitiv uppfattning blir raka motsatsen till diskursiv, det och inget annat” (1912, sid. 26). Begreppet *diskursiv* ska här förstås i sin ursprungliga betydelse syftande på ett stegvis framåtskridande förlopp (Schischkoff, 1978). Ett exempel på den intuitiva handlingens hastighet och motsatsförhållande till reflektion finns i Kierkegaards roman Enten-Eller (1843/1962). I avsnittet *De umiddelbarae erotiske stadier eller det musikalsk-erotiska* analyserar Kierkegaard Mozart-operor och begreppet det *muskaliskt-erotiska*, och pekar i avsnittet om *Don Juan* på skillnaden mellan reflektion och det han benämner ”et øjeblicks Sag” (sid. 102):

> Den reflekterede *Don Juans* Forførelser er et Kunststykke, hvori hvert enkelt lille Traek har sin saerlige Betydning; den musikalske *Don Juans* Forførelse er en Haandvendning, et Øjebliks Sag, hurtigere gjort end sagt. (sid. 102).

Detta kan tolkas som att förförelsens moment omfattar ett intuitivt moment, och att det är känslan för det omedelbara och den blixtsnabba sammanfattningen som utgör intuitionens essens. Ett musikaliskt exempel på processer med närhet till intuition och improvisation finns i *Observations sur notre instinct pour la musique* (1754/2004) av Rameau. Här beskrivs hur musikern under det musikaliska framförandet bör låta sig dras med spontant i det musikaliska nuflödet, utan intellektualiserande och reflektion, för att på detta sätt låta det Rameau kallar naturens egen metod bli aktiv. Måhända syftar Rameau här på ett improvisatoriskt förhållningssätt? Sådana tankar leder tanken till Marcel Proust (1913–1927/1987) och hans estetik apropå intuitiva processer och the emotionella minnet, som uttrycks bland annat i hans berömda Madeleinekake-metafor.

Ibland förbises betydelsen av improvisatoriska moment inom den västerländska konstmusiktraditionen. Dock är det ur praktiskt såväl som filosofiskt perspektiv så att varje gång exempelvis nämnda symfoni av Dvorak framförs (såväl som hela repertoaren den representerar) är det som med Herakleitos berömda flodmetafor: varje gång man går ner i floden strömmar det fram nytt vatten. Vid varje nytt framförande av musik (noterad eller inte) uppstår ett nytt och oförutsägbart musikaliskt flöde. Utifrån filosofisk ståndpunkt framstår omöjligheten att upprepa ett skeende som naturlagsliknande, och det är denna upprepningens omöjlighet som Kierkegaardbeskriver i *Gjentagelsen* (1843/1963). I ett musikaliskt sammanhang är detta en självklarhet som innebär att det är omöjligt att framföra ett stycke musik två gånger på samma sätt.

Diskussioner kring musikaliskt framförande har anknytning till tankar och praktiker kring musikaliskt uttryck och relationer till begreppet improvisation. Musiken har som de övriga konstarterna under lång tid sammankopplats med begreppet mimesis så som detta beskrevs i Aristoteles Poetik (1927). Dessa tankar har under århundraden kommenterats, utvecklats och satts i relation till sin respektive tidsepok. Ur ett perspektiv med utgångspunkt i musikalisk tolkning, framförande och komposition har bland andra Schopenhauer (1818/1960) fått betydelse genom att hävda att musiken gestaltar glädje, sorg och andra emotioner i koncentrerad form. Denna tankegång har påverkat kompositörer som Wagner och hans epokgörande operor vilka fått mycket stort inflytande både på sin samtid och idag. Symfonisk- och operarepertoar från 1700- talet fram till 1900-talet har en central position för dagens symfoniorkestrar, operahus och kammarmusik, detta innebär att resonemang vilka belyser musikens uttryck och estetik från dessa århundraden inom ramen för västerländsk konstmusik har bäring på en musikers praktik som idag verkar inom ramen för nämnda repertoarområden.

Filosofen och filologen Ast (1778–1841) författade *System der Kunstlehre oder Lehr- und Handbuch der Aesthetik* (1805), vilken åtnjutit betydelse och kommenterats ända fram till Gadamer (1960/1990). Ast hävdar att musik är den inre känslans konstart, vars essens uttrycks i klingande toner. Han beskriver detta med att på samma sätt som ett ljud är resultatet av när en klangkropp sätts i svängning, blir känslan i människans inre sinnesrörelses centrum och tyngdpunkt som uttrycker sig i de rörliga och hänförande tonerna:

> Die Musik, als Kunst des inneren Sinnes oder der Empfindung und Leidenschaft..., stellt die Regungen des Inneren durch innerlich vernehmbare, d. h., hörbare Bewegungen und Schwingungen, also durch Töne, objektiv dar. Denn der Schall oder Klang ist der Ausdruck der erregten Kraft eines erschütterten Körpers, und so thut auch das erregte Gemüth, das Centrum und der Schwerpunkt der inneren Kraft im Menschen, seine Bewegungen durch des bewegliche, schwungreiche Element der Töne kund. (sid. 90–91)

Ur ett perspektiv med utgångspunkt i mimesisprocesser är C.P.E. Bach (1753/1981) betydelsefull eftersom han hävdar att musikern som framför ett stycke musik själv måste vara emotionellt gripen av den framförda musiken, för att lyssnaren i sin

tur ska bli rörd av musikens emotionella uttryck (*Ausdruck*). Den klingande musiken är följden av en metamorfos av den inre känslan, så som detta beskrivs av Ast (1805). Bach beskriver musikern i framförandeögonblicket. På liknande sätt menar Boehm (1871/1980) att flöjtisten bör studera in sånger och arior av Mozart, Beethoven, Schubert såväl som folkvisor. Genom att studera sångtexterna klargörs vilket uttryck som är sångens interpretatoriska och emotionella utgångspunkt. Flöjtistens uppgift blir att förvandla textens emotion till klingande flöjtmusik, och därigenom levandegöra det emotionella innehållet i sångtexterna. Detta innebär att flöjtisten använder mimesisprocesser. Flöjtvirtuosen och pedagogen Moyse (1973) skriver om hur han under studietiden i Paris kring år 1900 brukade lyssna på framstående operasångare för att sedan själv öva in operaariorna utifrån vad han hört, vilket kan tolkas som en metod med närhet till Boehm.

Den tidigare nämnda kantaten *Pan et Sirinx* (1719/1981) av Montèclair är en tonsättning av Ovidius metamorfos (1708; 1820), som skildrar när Pan ser nymfen Syrinx för första gången, hur han blir förälskad och förföljer nymfen som låter sig förvandlas till vass i samma ögonblick Pan försöker omfamna henne. Arian *Pans klagan* är gripande skildringar där flöjten och sångaren uttrycker sensuell längtan och melankoli. För att tala med Ast framstår det som självklart att Montèclair använder texten på ett mimetiskt sätt för att låta musiken uttrycka textens emotionella essens.

En parallell till förda resonemang kring musik finns angående skådespelare i Ideen zu einer Mimik (1785–86/1804) av författaren och filosofen Engel (1741–1802). Begreppet Mimik är i detta sammanhang ensbetydande med skådespelare (Rosenberger, 1952). Engels text och illustrationer behandlar utförligt mimesisprocesser av hur emotioner gestaltas i relation till teater och skådespelarkonsten. Resonemangen har stora likheter med hur Ast inringar mimesisprocesser vilka syftar till att inre känslotillstånd tar sig olika uttryck yttre uttryck:

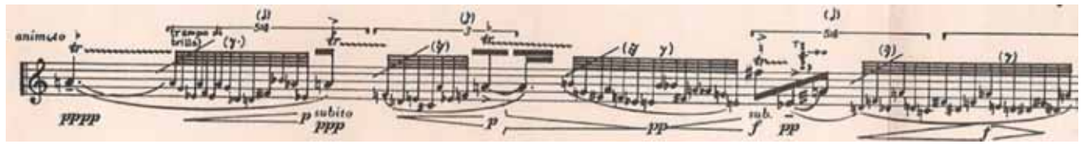
> [Mimik] beschäftigen sich damit, den Ausdruck der Seele im Körper zu beobachten… und diese [Mimik] die vorübergehende körperlichen Bewegungen undersucht, einen solchen und solchen einzelnen Zustand der Seele ankündigen. (1804, Band I, sid. 7–8)

Ast beskriver hur det inre känslotillståndet genomgår en metamorfos och uttrycks i toner, Engel beskriver på samma sätt hur skådespelarens inre emotioner uttrycks i gestik och agerande (se Bild 2).

Under lång tid har således mimesisprocesser varit en metod av central betydelse för hur inre känslotillstånd används som utgångspunkt för konstnärligt uttryck av bland andra skådespelare, dansare, författare, kompositörer, sångare och instrumentalister. De inre känslotillstånden menas genomgå en metamorfos vid musikerns eller skådespelarens tolkning och framförandets ögonblick, för att därmed förvandlas till klingande musik eller teater, i denna process har intuition och improvisatoriska moment betydelse.

Bild 2: Illustration 24 och 25 ur *Engel Ideen zu einer Mimik* (1785–86/1804). Figurerna är exempel på hur sinnestillstånden skräck och fruktan tar sig fysiska uttryck.

Även om det ur ett filosofiskt perspektiv framstår som oklart huruvida mimesisprocesser har samma självklara position sedan mellankrigstiden som under föregående århundraden (Serauky, 1929), är det troligen så att många musiker inte desto mindre känner igen sig i dessa processer. Ett skäl är troligen att den västerländska konstmusiktraditionen och dess repertoar under lång tid genomsyrats av praktiker och tankegods baserade på mimesisprocesser – med målet att skapa förutsättning för ett emotionellt äkthetskriterium – vilket innebär att musikern också idag har en närhet till mimesisprocesser eftersom dessa legat till grund för de kompositioner som ofta framförs.



Notexempel 2. *Cassandra's Dream Song* (1970), Fragment 5 från *Sheet 1*. Här spelar flöjtisten genomgående helt utifrån en klassisk estetik såsom i exempelvis *Syrinx (La Flûte de Pan)* (1913/1996) av Debussy.

Cassandra's Dream Song (1970) av Brian Ferneyhough (1943) är en av 1900-talets centrala kompositioner för soloflöjt med en speltid på cirka nio minuter. Det är ett verk som integrerar en mycket komplex notation i kombination med ett uttryck som spänner från det närmast ohörbara till extremt expressiv musik, som tvingar flöjtisten till gränslandet av det instrumentalt och emotionellt möjliga. Partituret omfattar en mängd nya speltekniker – *extended techniques* – som i kombination med verkets formella konstruktion förenar: a) linjärt musikaliskt flöde; b) improvisatoriska element som bryter det linjära flödet:

- The six numbered section (1–6) on sheet one must be played in the given numerical order. The piece therefore invariably begins with 1.
- In between each of these sections is interspersed one or other of the five sections (A-E) to be found on sheet two. These may be played in any order.
- The piece thus ends with 6 on sheet one.
- No section may be played more than once. (Ferneyhough, 1970)

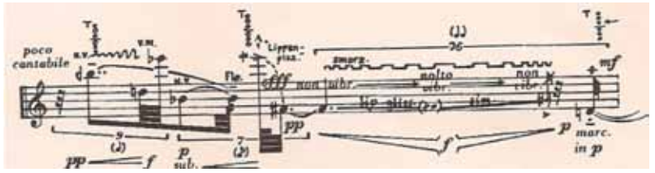
Kompositionens fragment och konstruktion möjliggör 120 versioner och därmed mångfaldiga improvisatoriska möjligheter.

Cassandra's Dream Song kombinerar flöjtens klassiska spelsätt och estetik (se Notexempel 2), med nya speltekniker, ett skulpterande av flöjtklangen och aggressiva uppslitande moment som enbart är möjligt att gestalta med hjälp av nya speltekniker (se Notexempel 3). Ju tydligare kontrasten utmejslas mellan en flöjtistisk estetik baserad på *Le son naturel* och *Le Beau Son* (Altès, 1880; Ljungar-Chapelon, 2008), och speltekniker som *whistle tones, pizzicato, percussiva effekter, vibrato, smorzato, Flatterzunge*, sjunga och spela samtidigt, mikrotonala förändringar, extrema klangfärgsförändringar och dynamiker som lagras över varandra och i olika kombinationer förvandlas flöjtklangen till oigenkännlighet, desto starkare blir det musikaliska uttrycket. Tillsammans med styckets virtuositet, nya speltekniker och formella konstruktion skapar Ferneyhough en plattform för oförutsägbarhet, improvisation och intuition.

Ferneyhough har vid ett seminarium (28 februari, 2011, Royal Northern College of Music Manchester/England) uppmärksammat att *Cassandra's Dream Song* kan tolkas med utgångspunkten i Cassandras förtvivlan och desperation över att inte kunna övertyga trojanerna om Trojas nära förestående förstörelse, vilket kanske kunde ha räddat staden. Det konstnärliga målet blir utifrån en sådan interpretation att skapa ett extremt intensivt expressivo. Frågan blir då hur flöjtisten kan uttrycka detta för instrumentet mycket ovanliga uttryck, vilken i princip inte förekommer i någon flöjtmusik skriven före *Cassandra's Dream Song* (Ljungar-Chapelon, 2008). En idé hos kompositören var att styckets "ospelbarhet" ur tekniskt hänseende skulle vara en emotionellt utlösande faktor och att flöjtistens försök att bryta igenom "ospelbarheten" skulle skapa ett extremt intensivt uttryck. Dock är det med mycket

övning helt realistiskt att framföra stycket med en perfektion som motsvarar exempelvis en flöjtkonsert av Mozart, vilket därmed på avgörande sätt neutraliserar Ferneyhoughs intention. Ett sätt för att kombinera långt driven teknisk behärskning med ”ospelbarheten” är att öva stycket med målet att kunna genomföra ett ur virtuost hänseende perfekt framförande fram till kanske en vecka före givet konsert datum, och sedan inte förbereda stycket överhuvudtaget alls den sista veckan före konserten. Görs detta uppstår en situation där *viljan* att framföra stycket perfekt så som det var möjligt en vecka tidigare kolliderar mot den praktiska omöjligheten att lyckas, och stycket blir ur perfektions hänseende ”ospelbart”. Flöjtistens intensiva försök att spela ”perfekt” skapar i konsertsituationen ett spänningstillstånd och risktagande sprunget ur omöjligheten att spela så komplicerade passager och nutida speltekniker utan permanent övning vilket då utlöser improvisatoriska och intuitiva moment.

Vid instuderingsarbetet tillsammans med de två skådespelerskorna användes Aischylos text på samma sätt som en instrumentalist använder ett partitur, därtill inskränktes åthävor och gester till ett minimum för att ytterligare förstärka den inre känslan på ett sätt som har starka drag av hur Ast karaktäriserade musiken som den inre känslans konstart *par excellence*. Den improvisatoriska interaktionen förstärktes av de möjligheter som den elförstärka flöjten gav genom att kunna växla mellan olika förprogrammerade extrema klanger och dynamiker inspirerad utifrån skådespelerskornas spel. Samspelet mellan skådespelerskornas gestaltande av Aischylos text, flöjtens spel av Ferneyhoughs musik skapade tillsammans en dynamik som med associationen till krigshandlingarna på Balkan under det sista årtiondet av 1900-talet blev mycket kraftfull. Sammanfattningsvis utgick tolkningen på ett intuitivt plan från mimesisprocesser så som dessa beskrivits av Ast (1805) och Engel (1804), med en strävan att inspireras av de emotioner som Aischylos text framkallar i kombination med Ferneyhoughs partitur. Själva framförandet fick därmed – inte minst på grund av Aischylos och Ferneyhoughs starka uttryck – drag av berusning på det sätt som beskrivs av Platon i dialogen *Ion* (1921). Här skildras hur en rapsod vid framförandet av exempelvis *Iliaden* (1711) blir ”besatt” eller ”berusad” av muserna/gudarna/konsten och därför inte är helt medveten om hur och varför framförandet får sin slutgiltiga emotionella form, som i sin tur leder tankar kring den magnetism som ett konstverk utstrålar och som fortplantar sig från dess upphovsman via musiker, skådespelare och dansare till åhörare och betraktare. En liknande berusning och *magnetism* uppstod vid framförandet av Cassandra’s Dream Song i kombination med Aischylos *Agamemnon*.



Notexempel 3: *Cassandra’s Dream Song* (1970), Fragment D från *Sheet 2*. Här ska flöjtisten samtidigt spela smorzato, moderera vibratot och dynamiken och samtidigt göra ett glissande mellan F#1 till en kvarts ton lägre G1, vilket innebär att överlagringarna av teknikerna kräver att flöjtisten ”skulpterar” klangen till oigenkännlighet i jämförelse med *Le Son Naturel*.

För att avslutningsvis lyfta fram livsnödvändigheten av ett improvisatoriskt och intuitivt förhållningssätt också inom ramen för västerländsk konstmusik är några ord av flöjtvirtuosen Rampal (1989) inspirerande och tankeväckande:

> You have to keep life and vitality in the music, and whenever you play a piece, even if it is for the hundredth time, you must play it as if you are just discovering its beauty and are filled with the joy of that discovery. (Rampal, 1989, sid. 15)

Källförteckning

Aischylos. (1929). *Agamemnon.* (övers Emil Zilliacus). Stockholm: Hugo Gebers Förlag.

Altès, H. (1880). *Méthode pour Flûte Systeme Boehm Contenant la Théorie complète de la Musique.* Œuvre 31. Paris: Millerau.

Aristoteles. (1927). *Aristoteles om diktkonsten.* (övers. Wilhelm Norlind). Lund: Gleerups Förlag.

Ast, F. (1805). *System der Kunstlehre oder Lehr- und Handbuch der Aesthetik.* Leipzig: J. C. Heinrichs.

Bach, C. P. E. (1753/1981). *Versuch über die wahre Art, das Clavier zu spielen.* Wiesbaden: Breitkopf & Härtel. (facsimile)

Boehm, T. (1871/1980). *Die Flöte und das Flötenspiel.* Frankfurt: Zimmerman. (facsimile)

Debussy, C. (1913/1996). *Syrinx* (La Flûte de Pan) für Flöte solo. Edition by Stegemann/Ljungar-Chapelon. Wien: Wiener Urtext Edition.

Dvorak, A. (1889/1991). *Sinfonie Nr. 8 G-dur, Op. 88.* Frankfurt: C. F. Peters.

Engel, J. J. (1785-86/1804). *Ideen zu einer Mimik.* Berlin: Myliussischen Buchhandlung.

Ferneyhough, B. (1970). *Cassandra’s Dream Song for solo flute.* London: Edition Peters No. 7197.

Gadamer, H-G. (1960/1990). *Wahrheit und Methode. Grundzüge einer philosophischen Hermeneutik.* Gesammelte Werke Band 1 & 2. Tübingen: J. C. B. Mohr (Paul Siebeck).

Homer. (1711). *L’Iliade.* (övers. Madame Dacier). Paris: Rigaud.

Kierkegaard, S. (1843/1963). *Gjentagelsen. Et Forsøg i den experimenterende Psychologi af Constantin Constantius.* Köpenhamn: Gyldendal.

Kierkegaard, S. (1843/1962). *Enten – Eller.* København: Gyldendal.

Kirk, G. S. & Raven, J. E. & Schofield, M. (1994/2001). *Die Vorsokratische Philosophen. Einführung, Texte und Kommentare.* (övers. Karlheinz Hülser). Stuttgart: Verlag J. B. Metzler.

Larsson, H. (1912). *Intuitionsproblemet. Med hänsyn till Bergson.* Stockholm: Bonniers

Ljungar-Chapelon, A. (2008). *Le respect de la tradition. Om den franska flöjtkonsten: dess lärande, hantverk och estetik i ett hermeneutiskt perspektiv.* Malmö: Lund University, Malmö Academy of Music, Sweden.

Ljungar-Chapelon, A. (1998). *Kring 1900. Om fransk flöjtkonst kring 1900.* Symposier på Krapperups Borg 4. Lund: Gyllenstiernska Krapperupstiftelsen. (sid. 65–90)

Montèclair de, M. P. (1719/1981). *Pan et Sirinx. Cantate IV a Voix seule avec un dessus de Violon, de Haubois, ou de Flute.* Firenze: SPES. (facsimile)

Moyse, M. (1973). T*he flute and its problems. Tone development through interpretation for the flute.* Tokyo: Muramatsu. (facsimile)

Nationalencyclopedin. (1992). Höganäs: Bra Böcker AB.

Nietzsche, F. (1886/2007). *Die Geburt der Tragödie.* Stuttgart: Reclams Universal-Bibliothek.

Ovidius, P. N. (1820). *Metamorphoser.* (övers. Gudmund Jöran Adlerbeth). Stockholm: Gadelii Sterbhus.

Ovidius, P. N. (1708). *Några Fabler av Ovidii Metamorphoses Förswenskade* (af J. Reenstierna). Stockholm: Julius G. Matthiæ.

Platon. (1921). *Ion.* (övers. Claes Lindskog). Stockholm: Hugo Gebers Förlag.

Proust, M. (1913-1927/1987). *À la recherche du temps perdu.* Paris: Gallimard, La Pleiade.

Rameau, J-P. (1754/2004). *Observations sur notre instinct pour la musique.* Courlay: Fuzeau. (facsimile)

Rampal, J-P. (1989). *Music, My Love.* New York: Random House.

Rosenberger, G. (1952). *Tysk-Svensk ordbok.* Stockholm: Svenska Bokförlaget, Nordstedts.

Schischkoff, G. (1978). *Philosophisches Wörterbuch.* Stuttgart: Alfred Kröner Verlag.

Schopenhauer, A. (1818/1960). *Die Welt als Wille und Vorstellung.* Frankfurt am Main: Cotta-Insel Verlag.

Serauky, W. (1929). *Die musikalische Nachahmungsästhetik im Zeitraum von 1700 bis 1850.* Münster. Helios-Verlag G. M. B. H.

Christopher Williams

Situated Cognition and Notation for Improvisors

Background

Though it can be found in the music of many times and cultures – from the Guqin tradition and Baroque viol consorts, to large ensemble pieces by Duke Ellington – from the perspective of much contemporary music and discourse, the notion of ”notation for improvisors” might seem analogous to ”vegan cheesecake” or ”feminine masculinity”: an oxymoron. ”What is the advantage of notating music for performers who already have their own highly developed material?”, one might ask. ”Where do the the 'top-down' social structures of notated contemporary music performance and the 'fluid' interpersonal relations of free improvisation meet?” ”Aren't the temporal bird's-eye-view of score-based music and the 'in-time' contingencies of improvised music mutually exclusive?”

Over the last fifty years a considerable number of artists have provided answers to such questions in music that not only employs notation for improvisors, but makes a compositional feature of the interface itself. This work runs the gamut, from Cornelius Cardew's iconic graphic score Treatise, and Pauline Oliveros' collections of meditative prose, to the elegant layerings of detailed conventional notation and free improvisation in Richard Barrett's CONSTRUCTION, and the zany psychodrama of John Zorn's game pieces. In such pieces, notation is not merely ”open” or ”indeterminate”; it directly engages with the here-and-now, entangling complex networks of individual instruments and bodies, changing group dynamics, physical and social temperatures, and spatial acoustics outside the score – the improvisor's bread and butter – with information stored inside the score. The ways in which this work criss-crosses genres, compositional techniques, and cultural spheres has inspired a wide variety of musicians, and has in recent years become an increasingly important topic for researchers as well[1].

Theorizing notation for improvisors as such, however, remains problematic. On the one hand, the scores of individual pieces are inherently ”leaky”: their tight connections too external, local, and variable factors resist conventional structural analysis. On the other hand, the wild diversity among this body of work as a whole renders a comparative bottom-up approach of limited use. Despite a certain amount of geographical, aesthetic, and historical overlap, the music falling under this umbrella does not constitute a single tradition, nor does the the interface of notation and improvisation alone necessarily represent a shared methodology.
Concepts borrowed from the field of Situated Cognition (SC) may provide a way in. SC is a family of ideas in cognitive science which centers on the view that:

> Landmarks, tools, shared places and practices, belong to the machinery of our being. We are partly constituted by a flow of activity with the world around us. We are partly constituted by the world around us. Which is just to say that, in an important sense, we are not separate from the world, we are of it, part of it. (Noë 2009, p. 95).

The trend has informed scholars such as Armstrong (2007), Borgo (2005), Iyer (2002), and Sudnow (1978), who have explored the dynamic structure of improvisation with respect to themes as diverse as digital instrument design, group interplay, rhythm, and the acquisition of instrumental skill. Let us look at how three specific notions can help to explain a cross-section of notation for improvisors.

1) See Feisst (2002); Iyer (2004); Lock (2008); Rebelo (2010) and Waterman et al. (2007).

Embodiment

Much of this work taps directly into performers' embodied sound worlds: ways of hearing, feeling, understanding, and producing music that cannot be extricated from the improvisor's physical connection to her instrument.

For the improviser, the physicality of producing sound (the hardware) is not a separate activity from the thoughts, emotions and ideas in music (the software). In the act of creation, there is a constant loop between the hierarchy of factors involved in the process. My lungs, lips, fingers, voice box and their working together with the potentials of sound are dialoguing with other levels which I might call mind and perception. The thoughts and decisions are sustained and modified by my physical potentials and visa versa, but as soon as I try to define these separately I run into problems. (Denley (1991).

... how you categorize the world arises together with processes that are coordinating physical activity. To be perceiving the world is to be acting in it – not in a linear input-output relation (act/observe/change) – but dialectically, so that what I am perceiving and how I am moving co-determine each other. (Clancey (1993, p. 95).

... adaptive behavior is the result of the continuous interaction between the nervous system, the body, and the environment... The role of the nervous system is not so much to direct or to program behavior as to shape it and evoke the appropriate patterns of dynamics from the entire coupled system. (Chiel & Beer 1997, p. 555).

In *Jade Mountain Soundings* by Malcolm Goldstein (1988, pp. 63–67), notation does not merely prescribe sounds to be produced or actions to be executed, but figures a complex coupling of body and instrument to be explored in in real-time.

A calligraphic web (Figure 1), explained in several pages of performance notes, contains lines of constantly shifting thickness and direction indicating the bow speed, placement, and pressure applied to long notes played on a given string. The performer may begin and end anywhere, following the lines where they may lead. By listening inside the sound, and striving for continuity through a breath-like approach to phrasing, the performer is drawn into a delicate dance with the instrument where subtle shifts of body and bow can bring about multiphonics, pitched noise from the hair, subtones, high partials, or any number of unpredictable interferences. Sometimes the bow may get stuck in the string, breaking up the phrase. Hearing this in the moment affects not only the event underway, but what happens next in the score: how to find a way back into the line th-

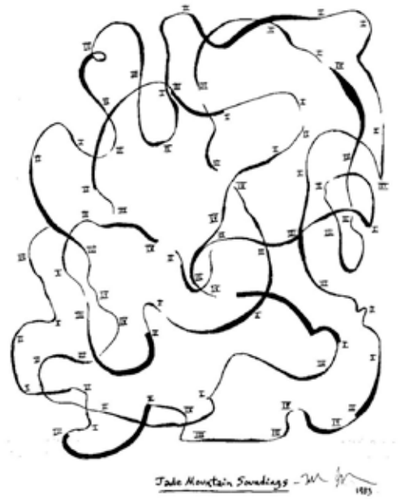
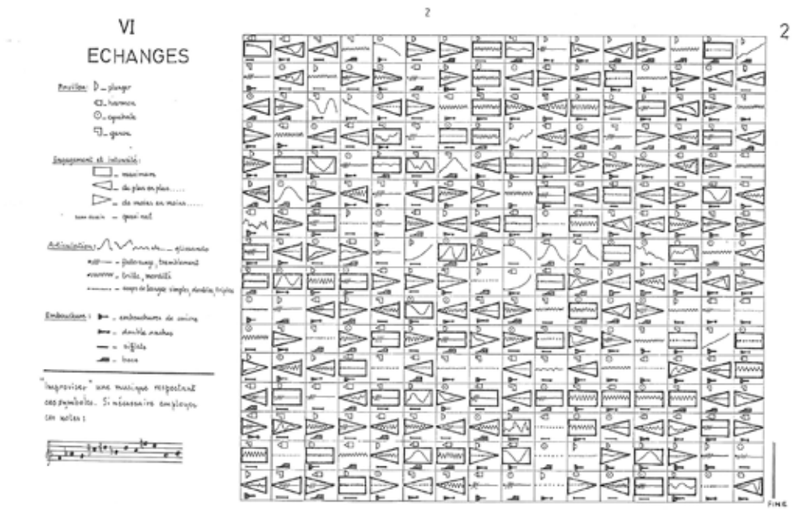


Figure 1: *Jade Mountain Soundings*, Malcolm Goldstein

rough these apparent disruptions? Which path to follow at the fork in the road? In the act of performance, there is no time to for such questions to become articulate, much less for the performer to deliberate them. Rather, they work themselves out through the hands, on the instrument, in the space. The text, the instrument, and the performer become mutually dependent.

We find something similar in Pauline Oliveros' *Environmental Dialogue* (1974), where the performers' attention to breath, biorythmic cycles, and the environment creates a "fresh receptivity to external sound," in which "the discovery of unused vocal or instrumental range and qualities seem primary" (1984, p. 18). Though performers are unlikely to read the score in performance, the focus brought to subtle aspects of the meditation by the written

Figure 2: *Echanges*, Vinko Globokar



text provides an ever-present backdrop for exploring the rich structure of one's elemental physical connection to a given space.

Each person finds a place to be, either near to or distant from the others, either indoors or out-of-doors. Begin the meditation by observing your own breathing. As you become aware of sounds from the environment, gradually begin to reinforce the pitch of the sound source.

Reinforce either vocally, mentally or with an instrument. If you lose touch with the source, wait quietly for another. Reinforce means to strengthen or sustain. If the pitch of the sound source is out of your range, reinforce it mentally. (Oliveros (1974).

Vinko Globokar's *Echanges* (1973) for solo brass instrument also foregrounds the connection of notation to mind-body to instrument, albeit to a very different end. Here, the performer must negotiate relentless and often paradoxical layerings of actions with the lips, tongue, breath and instrument that create continuities, confusions, and gaps between modular actions. As the performer is instructed not to leave any silences, she is soon fatigued, and her "improvised" path through these modules comes to depend as much on the immediate physical demands of the actions as on the score itself.

Cognitive Distribution

A similar sort of coupling can be found in ensembles, where individuals mutually depend on each other, as well as on their instruments and the score. The multi-level distribution of music-making over a social group creates a situation in which

One can focus on the processes of an individual, on an individual in coordination with a set of tools or on a group of individuals in interaction with each other and a set of tools. At each level of description of a cognitive system, a set of cognitive properties can be identified; these properties can be explained by reference to processes that transform states inside the system. The structured representational media in the system interact in the conduct of the activity. (Hutchins (1997, p. 373).

Werner Dafeldecker's *Mirror* (2005), written for 4 members of the band Polwechsel, reads like a MAX/MSP patch, in which an initial "sender" transmits a "signal" of freely chosen material along a given path through other players who reflect and transform it. Each performer's entry and exit is tethered to others' entries and exits, creating a flexible chain of solos, duos, and/or trios. When the signal reaches the last stage, the process is begun anew by a different sender, the whole of which simultaneously sharpens and problematizes the local transmissions' importance to the global shape of the piece. Polwechsel's

predilection for noisy, static textures that blur the identity of individual players gives this recursive variation structure its kick: a dynamic push and pull between complex individual and block sonorities that expand and contract with shifting player groupings.

Anthony Braxton's quartet music with pianist Marilyn Crispell, bassist Mark Dresser, and percussionist Gerry Hemingway couples musicians in the superposition of multiple compositions. "Pulse tracks", or notated rhythmic materials interspersed with windows for free improvisation (see Compositions 105, 108, 124, et al) are often assigned to the bass and drums while the piano and reeds play another composition in unfixed counterpoint. Dresser and Hemingway, linked at the hip after years of working together, stretch the tempo of the pulse tracks freely, setting up highly charged, unprescripted intersections with Braxton and Crispell in the improvised windows. These moments accrue their own momentum, opening up longer free interludes that shape how the band as a whole progresses through the set. Hemingway says of this meta-compositional process, "The kick of it is we're usually figuring out how to do these things right on stage. We talked about it when we first played it, but since then we don't articulate to each other directly, we're doing it right there in the moment, being quick with each other, each understanding what the other is doing" (Lock 1988, pp. 261–262).

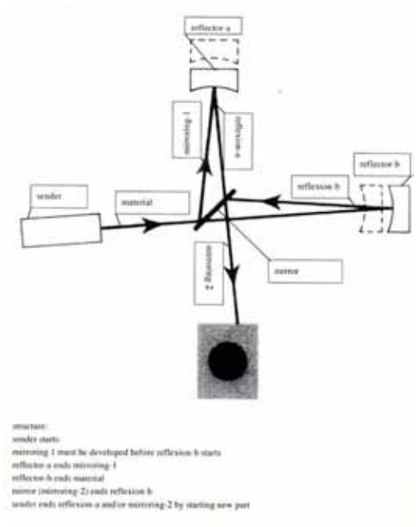


Figure 3: *Mirror,* Werner Dafeldecker.

Situated Action

This last example is also a case of situated action: the score flaps its wings, and sets off a storm in performance. The printed notation may be fixed in a superficial sense, but in the context of time-based processes, it moves in unpredictable ways.

> ...the efficiency of plans as representations comes precisely from the fact that they do not represent those practices and circumstances in all of their concrete detail. So, for example, in planning to run a series of rapids in a canoe, one is very likely to sit for a while above the falls and plan one's descent. The plan might go something like "I'll get as far over to the left as possible, try to make it between those two large rocks, then backferry hard to the right to make it around that next bunch." A great deal of deliberation, discussion, simulation, and reconstruction may go into such a plan. But however detailed, the plan stops short of the actual business of getting your canoe through the falls. When it really comes down to the details of responding to currents and handling a canoe, you effectively abandon the plan and fall back on whatever embodied skills are available to you. (Suchman 1987, p. 72).

Other pieces that achieve similar effects include Christian Wolff's *For 1, 2, or 3 People* (1964), in which performers follow modular graphic symbols according to an explicit legend, but must precisely coordinate sequences of events with their own actions, the ensemble, or the space. Such dependencies are represented by "ties" before or after an event, or diagonal lines preceding or following an event (with or without numbers). Because of the wide scale of specificity among the events themselves (which include everything from fixed pitches, to x = "anything"), and inevitable differences in perception between the players as to what consitutes a certain type or number of event, a structural tension shapes the music in fundamental but unforeseeable ways. This can bring about extreme stasis, rapid unprepared flurries of events, and awkward repetitions, as well as conditioning overall duration.

By contrast, Ishmael Wadada Leo Smith's *Ankhrasmation* notation shapes real-time contingency by asking performers to define elaborate, abstract color images through their own "scientific, biological, and imaginary" (2007) associations, instead of decoding it in a legend or seeking ensemble consensus. Smith assembles a unique combination of these images shortly before each performance with no rehearsal, requiring even the best-prepared performer to reevaluate the meaning of the notation on the fly in counterpoint with other musicians. Short of describing a one-to-one correspondence between the score and recordings of pieces such as Smith's *Luminous Axis*, one can sense how the presence of something more than meets the ear provides resistance to the ensemble's interactions.

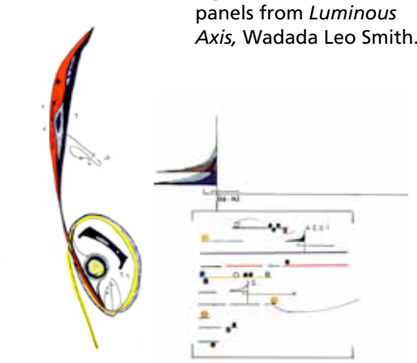


Figure 5: Four panels from *Luminous Axis,* Wadada Leo Smith.

Figure 4: *For 1, 2, or 3 People* (p. II), Christian Wolff.

John Zorn's legendary game piece *Cobra* provides perhaps the clearest example of a score's potential to provoke real-time contingencies, by embedding written symbols in a parody of guerilla warfare. The prompter improvises the symbol sequences, the players improvise the content, and each decides for him- or herself when and if to respond to either. Consider how the notational format – a prompter open to real-time coersion – allows for tenuous gestures, a guitar slide mishap, and countless other details at the "periphery" of a single notated event ("SX" = substitute crossfade) to feed back directly into the structure of the performative situation between 7:25 and 8:46 of the following video: www.youtube.com/watch?v=DjzYF6r587M.

Conclusion

In all these cases notation depends on different factors in the musical environment, which in turn depend on each other. Scores, instruments, individuals, groups, and the performative occasion thus form a dynamic network. When seen as part of this expanded context, notation thus negotiates processes of which it is itself a part. Over-time and in-time approaches are mapped in both directions. "The music itself" is on the stand, in the performers, and of course in listeners' own imaginations, cultures, and surroundings.

Softening the distinctions between a piece's ”inside” and ”outside” in this way takes us away from conventional notions of composition, interpretation, and improvisation, and closer to the actual experience of listeners and practitioners. Beyond putting into words what fans and musicians already know, the relevance of SC to notation for improvisors also seem to hold the potential for something more: to formalize extremely subtle, yet essential aspects of creative music-making across stylistic, technical, and historical boundaries.

References

Armstrong, N. (2007). *An Enactive Approach to Digital Instrument Design.* Saarbrücken: VDM Verlag Dr. Müller.

Borgo, D. (2005). *Sync or Swarm: Improvising Music in a Complex Age.* New York: Continuum.

Brackett, J. (2010). ”Some Notes on John Zorn’s Cobra,” In *American Music,* vol. 28, no. 1, Spring 2010, pp. 44–75.

Braxton, A.(1988). *Composition Notes*. Oakland: Synthesis Music.

Cardew, C. (1970). *Treatise.* New York: C.F. Peters.

Chiel, H.J. and Beer, R.D. (1997). ”The brain has a body: Adaptive behavior emerges from interactions of nervous system, body and environment,” In*Trends in Neurosciences* 20, pp. 553–557.

Clancey, W. J. (1993), ”Situated Action: A Neuropsychological Interpretation Response to Vera and Simon,” In *Cognitive Science*, vol. 17, no. 1, pp. 87–116.

Dafeldecker, W. (2005). *Mirror*, unpublished manuscript.

Denley, J.(1991), ”Improvisation: The Entanglement of Awareness and Physicality,” In *Sounds Australian*, Summer 1991.

Feisst, S. (2002), ”Losing Control: Indeterminacy and Improvisation in Music Since 1950,” In *New Music Box American Music Center Web Magazine*, vol. 3, no. 11. http://newmusicbox.org/page.nmbx?id=35tp00 (accessed 20 March 2010).

Globokar, V. (1973). *Echanges*. Frankfurt am Main: C.F. Peters.

Goldstein, M. (1988). *Sounding the Full Circle.* www.frogpeak.org/unbound/goldstein/goldstein_fullcircle.pdf (accessed 15 March 2010).

Hutchins, E. (1995). *Cognition in the Wild*, Cambridge, MA: MIT Press.

Iyer, V. (2002), "Embodied Mind, Situated Cognition, and Expressive Microtiming in African-American Music." *Music Perception*. vol. 19, no. 3, pp. 387–414.

Iyer, V.(2004). ”Navigation through Form: Composing for improvisors.” Program notes for *Improvise!* 2004, http://www.americancomposers.org/iyer_essay_new.htm (accessed 16 August 2010).

Lock, G. (1988). *Forces in motion : Anthony Braxton and the meta-reality of creative music : interviews and tour notes, England 1985.* New York: Quartet.

Lock, G. (2008), ”What I Call a Sound: Anthony Braxton’s Synaesthetic Ideal and Notations for Improvisers.” In *Critical Studies in Improvisation / Études Critiques en Improvisation* 4, http://journal.lib.uoguelph.ca/index.php/csieci/article/view/462 (accessed 20 November 2011).

Noë, A. (2004). *Action in perception*. Cambridge, MA: MIT Press.

Oliveros, P. (1984). *Software for People*. Baltimore: Smith Publications.

Oliveros, P. (1974). *Sonic Meditations*. Baltimore: Smith Publications.

Rebelo, P. (2010). ”Notating the Unpredictable.” In *Contemporary Music Review*, vol. 29, no. 1, pp. 17–27.

Smith, W. L. (2007), *Wadada Leo Smith at Improv 21, San Francisco – Part 4: Ankhrasmation: Luminous Axis*, http://adagio.calarts.edu/~wls/pages/video_WLS_in_SF.html (accessed 18 January 2012).

Smith, W. L. (n.d.). *Luminous Axis,* http://adagio.calarts.edu/~wls/pages/recent.html (accessed 18 January 2012).

Suchman, L. A. (2007). *Human-Machine Reconfigurations: Plans and Situated Actions*. 2nd ed. New York: Cambridge University Press.

Sudnow, D. (1978). *Ways Of The Hand: The Organization of Improvised Conduct*. Cambridge: Harvard University Press.

Waterman, A., Singer D. & Lyons M. (2007). *Between thought and sound: graphic notation in contemporary music*. New York: The Kitchen.

Wolff, C. (1964). *For 1, 2, or 3 People*. New York: C.F. Peters.

Discography

Braxton, A. *Quartet (Coventry)*. London: Leo Records CD LR 204–205, 1993.

Cardew, C. *Treatise*. Basel: hat[now]ART 2–122, 1999.

Goldstein, M. *Jade Mountain Soundings*. Toronto: Musicworks 64, 1996.

Polwechsel. *Archives of the North.* Basel: hatOLOGY 633, 2006.

Smith, W. L. *Luminous Axis*. New York: Tzadik TZ 7803, 2003.

(re)thinking text and action

Erik Rynell

Improvisation in Theatre

Like music, theatre is an art form where improvisation plays an important part. It could even be argued that acting in theatre is fundamentally based on improvisation. And not only in such obvious examples as theatre sport and stand up comedy, but also in the more traditional form that is based on a written script, as well as in theatrical forms of performance art. In this paper, I will first give a brief outline of the origin of the improvisational element in modern acting. I am then going to illuminate the role of improvisation in theatre in relation to a concept, situatedness, that was originally introduced within cognitive science but which corresponds to an idea about the significance of context and situation that has a long history in connection with theatre and acting

Extensively, acting in its Western form, including most film acting, draws its origin from an entirely improvisational theatre, *Commedia dell Arte*, which emerged in Italy in the 16th century and reached its pinnacle in terms of sophistication and public esteem in France in the 17th. Improvisation in *Commedia dell Arte* was based on a canvas, or *canovaccio*, a rudimentary plot on which the actors would improvise as the performance went along. At the time when the popularity of commedia dell arte raised, the most prestigious form of theatre consisted in classical or classicist tragedies that were played according to the formulae of oratorical acting, where every passion was associated with its own set of corporeal expressions. In contrast to this, acting in *Commedia dell arte* mirrored human behaviour as it takes place in every day life, albeit the way this was done was in the form of mockery and grotesque. *Commedia dell Arte* was later to be transformed into a more serious form of comedy, and in the course of this process the actors' improvisations were also replaced by a dialogue that had been written out beforehand by a playwright. It was this kind of comedy that gradually developed into the traditional form of drama we know today, created by writers such as Ibsen, Strindberg and Norén. But, instead of drawing on the fixed formulae of oratorical acting, acting in the new, serious, 18th century comedy retained important traits of the situation-based acting of *Commedia dell arte*. Despite the fact that the dialogue now was given to the actors in the written form, the actor's work in the first case consisted of justifying their lines in relation to situations that were implied in the narrative. From now on, acting was no more a matter of reciting a written, literary text, in the first hand, but of researching relations between words and actions in a given context, in accordance with a "new aesthetics of sensitivity" (Chaouche 2001, p. 12).

The emphasis on situation that originated in the improvised *commedia* and became typical of the new comedy as well was also reflected in some influential writings on the art of acting, such as a book named *l'Acteur*, written by the French Rémond de Sainte-Albine and issued in 1747. In this book, the author insisted that good acting is based on the way in which the actor conforms to every situation suggested for the part by the playwright (Sainte-Albine 1995, p. 232).

The book soon became translated into German and English and exerted great influence on acting in Europe and America in a very formative period of Western theatre.

l'Acteur was one of the first modern written works on the practice of acting. The observation that acting is primarily a matter of response to situational context was later to be echoed in the probably most significant body of writings on the actor's art, the work of Konstantin Stanislavski,

which he commenced during the first decades of the 20th century.

The central idea in Stanislavski's teaching is not about realistic depiction, as is often assumed, or about external similitude, but rather he stresses the element of the *real* in a theatre performance, the way an actor, despite playing in a fictional narrative, in the first hand responds to actions and events that take place in the here and now of the performance. And that the justification of the text in relation to its given circumstances starts when the actor physically places him/herself in the assumed situation (Benedetti pp. 64–68). This assumed situation does not have to be fictional. Thus a clown who interacts with the audience also responds to given circumstances. In this understanding acting according to given circumstances is not confined to realistic acting but exists in many theatre forms and has done so long before the notion of "realism" was coined in the 19th century (Rynell 2008, p. 282).

In the era of modernism many attempts were made to reform the actor's art, as part of the general endeavour to reform theatre as a whole. One of the most important persons in this context was Bertolt Brecht who opposed himself to identification with the role and launched his own idea about enstrangement, *Verfremdung*. Other influential writers on the actor's art were Antonin Artaud and Jerzy Grotowski. Acting in the 20th century was also affected by the tendency of merging different art forms and a strive for performativity in other art forms than theatre that lies behind the development of performance art and which has made its imprint on modern theatre in many other ways, too. Many prominent directors have ventured into theatre from other art forms, Tadeusz Kantor from the visual arts, Robert Wilson from dance, Heiner Goebbels and Christoph Marthaler from music, to mention some of them.

Situatedness and improvisation

However, this multitude of different influences on modern theatre has not brought with it a corresponding number of new acting forms. Acting has remained a difficult art form to reform, and the attempts that have been made have often followed a rather limited number of trajectories (Rynell 2008, p. 263f). I am not going to delve much deeper into this issue here, but will restrict myself to asserting the following:

Situatedness in acting is always mapped upon a conception of situations in real life. It can take on many forms, realistic, naturalistic, grotesque, clownish, absurd, and so on. What matters is whether or not the actor crucially responds to fictional and/or actual circumstances given or assumed in the here and now of the performance, and which also include the constantly shifting circumstances produced by the actor's interaction with his co-actors. Situated acting is acting that is based on understandings of contexts that are real (as is fundamentally the case in performance art) and/or are conceived as real in an "as if" setting, which is the case in theatre based on a fictional drama, or a scenario of the kind exemplified by the *canovaccio* in Commedia dell Arte. Acting that is not situated in this way is based on other structuring means, most frequently, from an historical point of view, on choreography of some kind, which frequently is the case in modern and post-modern theatre (Rynell 2008, p. 263 ff). Theatrical situatedness in various theatre forms is basically very similar, which makes it possible for the actor who has undergone an appropriate training for this to perform in very different kinds of plays. Situatedness is also the element in acting that is closely connected with improvisation.

Given the fundamental difference between situated acting in its many forms and non-situated acting according to the above definition, it could be argued that the main divide in modern acting does not go between psychological realism, on the one hand, and forms of "theatrical", non-realistic theatre forms on the other, but between such acting that is situated in a fictional narrative, or in similar assumed constraints, and such acting that is not.

The way meaning is produced within theatre is to great extent analogous to how meaning is produced in real life. It could therefore be illuminating to mention a few words about how situatedness has been studied within contemporary cognitive science, which is where the notion "situated" and "situatedness" actually come from, whereas the word "situation" since long has been a grounding concept in acting method.

Situatedness and its application to action, "situated actions", and to cognition, "situated cognition" is a term that was introduced within cognitive science in the nineteen eighties. It originates in a criticism of the earlier, "first generation" cognitive science in which cognitive processes were first of all viewed as a matter of symbol processing, and where the computer was the standard metaphor for human thinking. In contrast, Lucy A Suchman, who specializes in Anthropology of Science and Technology, pointed out, in a study of prevailing differences between human and artificial intelligence that the specificity of human thinking primarily resides in its advanced capacity for interaction with the environment in the situation, a capacity that machines still are very far from duplicating (Suchman, 1990). A similar turn to the importance of the situation has also taken place in cognitive linguistics. Influential scholars within this field, such as Ronald Langacker with his *Cognitive grammar* (Langacker 1987–1991) and Simon C. Dik with his *Functional Grammar* (Dik 1978, 1997) stress the importance of language use in the specific context for the emergence of meaning in language. In this way they develop an idea that was crucial also to the late Wittgenstein who insisted on the importance of the context in which something is uttered for the understanding of its meaning. In this vein Wittgenstein also makes the following statement about theatre:

> The contexts of a sentence are best portrayed in a play. Therefore the best example for a sentence with a particular meaning is a quotation from the play. (Wittgenstein, p. 6e)

Wittgenstein's observation is consistent with experiences from acting and actor training according to which acting is a way to investigate how meaning occurs in language, and in human action, in relation to specific contexts, or situations. For the actor, an important means to carry out such an investigation is by means of improvisation. How then should one describe the specifics of theatrical improvisation? Independently of whether the actor's work is based on a scenic script or not, he or she has to perform according to circumstances presented in the here and now of the performance, and which do not remain exactly the same but undergo slight changes from one performance to the other (Rynell 2008).

In a recent work, John Lutterbie (2011) provides some poignant formulations about the nature of improvisation in theatre, which stand out as highly consistent with experience from the practical field of actor training. Here is one of them: "An improvisation is an open-ended exercise, set within limits that define a situation but do not determine an outcome" (2011, p. 162). Another passage reads as follows: "Improvisations extend from personal explorations to collective actions. They can take the form of organized events, or they can occur any time an actor opens herself to respond without expectation to what is happening around her. They engage cognitive processes that allow the performer to explore her interactions with the environment and provide experiences that can shape a performance in profound ways." (2011, p. 163).

Frequently, for students and professional actors alike, a substantial part of the rehearsing process consists of text analysis. An actor investigates, not only what his lines mean semantically, but how they integrate with the non-verbal actions of the character and those of the co-actors. Thus, the main goal of the actor's hermeneutic process with the text is an understanding of what actions, what reactions, motives, and goals lie behind the lines of the script. A suitable guiding line for this work could be the question: "But why say this now exactly?"(Donnellan 2005, p. 221). The actor's text analysis can be carried out "at the table", through close reading of the script. But our way to understand a text that we just read is very different from such understanding that goes via physical involvement. Thus, frequently, an actor's investigation of the text does not only take place "at the table" but "on the floor" in interplay with his co-actors. And an important way to carry this out is in the form of improvisation, whereby different

ways of understanding the circumstances given in the text are tested out and assessed in action.

This is how a practitioner of the actor's art and a scholar, Bella Merlin (2007, p. 197) describes what she calls the *Active Analysis*:

1. you read a scene
2. you discuss the scene
3. you improvise the scene without further reference to the script
4. you discuss the improvisation, before returning to the script
5. you compare whatever happened in your improvisation with the words and incidents of the actual text.
6. You then repeat this 5-step sequence until the entire play is staged and the lines are learnt. It's as simple as that.

Finally, there is always an element of improvisation present in the performance itself. For even though every actor knows what is going to happen, how the story unfolds itself, and even though he/she has his own "score", an elaborated pathway for his doings onstage, even slight changes, often unconscious, can bring with them sudden shifts in the meanings of the situations that call for new responses.

Non-fictional theatre, such as performance art, could also extensively fit into my description of how situatedness takes place in the acting of a written drama. The difference between a play based on a written text and a performance based on situations that are structured otherwise does not lie in that one is based on given circumstances and the other not, but only in the way the circumstances are conceived.

Improvisation in music and theatre

I will end this paper with a few words on the relationship between improvisation in theatre and in music.
The improvisational element is something theatre has in common with music.
The most important difference between how improvisation is applied in the two art forms is of course the presence of a semantic content in theatre and its affinity to everyday pragmatics. But in both art forms context is crucial. Just like playing a role in a theatre production, playing an instrument, or singing, in a musical performance could perhaps also be described as a matter of situatedness in relation to constraints, but to constraints that are specific to music. In this way, the idea of musical and theatrical improvisation as two approaches to the phenomenon of situatedness could in fact be a fruitful departing point for discussions about traits that music and theatre have in common.

References

Benedetti, J. (1985). *Stanislavski. An Introduction*. London: Methuen.

Chaouche S., Paris, H. C. (Eds.) (2001). *Sept traités sur le jeu du comédien et autres textes. De l'action oratoire à l'art dramatique (1657–1750).* Paris.

Dik, S. C. (1978). *Functional Grammar.* Amsterdam: North-Holland.

Dik, S. C. (1997). *The theory of functional grammar.* Kees Hengeveld (Ed.). 2nd ed. Dordrecht: Foris.

Donnelan, D. (2005). *The Actor and the Target*. London: Nick Hern.

Langacker, R. W. (1987). *Foundations of Cognitive Grammar.* Stanford CA: Stanford University Press.

Lutterbie, J. (2011). *Toward a General Theory of Acting. Cognitive Science and Performance*. New York: Palgrave Macmillan.

Merlin, B. (2007). *The Complete Stanislavsky Toolkit.* London: Nick Hern.

Rynell, E. (2008). *Action reconsidered, Cognitive aspects of the relation between Script and Scenic Action.* Helsinki: Acta Scenica.

de Sainte-Albine, P. R. (1995). *Le comédien. Diderot et le théâtre II Les acteurs.* Paris: Agora Les Classiques.

Suchman, L. A. (1987/1990). *Plans and situated actions. The problem of human-machine communication.* Cambridge: Cambridge University Press.

Wittgenstein, L. (1990). *Last Writings on the Philosophy of Psychology. Vol. 1.* In von Wright, G.H. & Nyman, H. (Eds.). Chicago: The University of Chicago Press.

Gino Robair

I, Norton: An Opera In Real Time

At the peremptory request of a large majority of the citizens of these United States, I, Joshua Norton, formerly of Algoa Bay, Cape of Good Hope, and now for the past nine years and ten months of San Francisco, California, declare and proclaim myself Emperor…

So began the proclamation by which Joshua Norton, on September 17, 1859, became Norton I, Emperor of the United States and Protector of Mexico. The first of many proclamations, it was published nearly 10 years after Norton landed in San Francisco to make his fortune from the Gold Rush. During his 20-year reign, Norton I abolished Congress and political parties, decreed that a bridge be built between Oakland and San Francisco, enjoyed free passage by rail and ship, printed and used his own money, and corresponded with kings, queens, and presidents. Among the literary works to immortalize Norton I are Mark Twain's *Huckleberry Finn* and Robert Louis Stevenson's *The Wrecker*. He even captured the imagination of Hollywood in the 1960s as the subject of an episode of *Bonanza*. Yet few people remember the one and only Emperor of the United States.

The Score

I, Norton is a collection of materials in the form of a kit that can be assembled in a unique way for each performance and performed by any number of people. Although the score includes texts for speakers and singers, a realization of the opera can be completely instrumental. The piece does not require staging, sets, lights, or costumes. It is meant to be performed anywhere, anytime.

The literary elements behind the work are the writings attributed to Norton I, as well as "fraudulent decrees" published in contemporary newspapers to cash in on the Emperor's notoriety. The words, letters, rhythms, and structure of the texts are prepared in a variety of ways and used as source material by each performer.
In performance, *I, Norton* takes the shape of an improvised collage that combines hand cues, graphic scores, memory-based improvisational structures, and traditionally notated music. The opera is an open-ended project – a perpetual work-in-progress – with additions made for each performance.

Mise-en-scène

The opera takes place during the Emperor's final moments, as he lay dying on a rain-soaked street. The sound and images in each performance act as a metaphor for his life flashing before his eyes – events overlap and appear in fragments, often repeated and exaggerated. As a result, there is no linear storytelling involved; portions of the Emperor's life are revealed through each realization of the piece.

Some comments on the production in (re)thinking improvisation

In *I, Norton*, the original texts – the Emperor's proclamations – were used to create the entire score. The concept is that, even if there are no singers or actors to sing/read the words, the libretto is still present. The story can still be told, although in a fully instrumental version it is encoded in the sounds and actions themselves.

It was very interesting for me that the version we performed at (re)thinking improvisation had more actors/singers than instrumentalists. That completely changed the dynamic of the performance and made the singers/actors work harder, but in an exciting and inspiring way.

Each realization/performance gives me something to consider, and this event was no different. For example, the exceptio-

nal level of singing by this particular cast inspired me to compose more vocal pieces using traditional notation. It is interesting to hear how a section that is strictly notated stands out against the improvisational parts of the work. And it is always exciting to work with singers who are trained in the operatic tradition, because very often they do not have experience with free improvisation. However, the singers involved in this realization of *I, Norton* are seasoned improvisers, so it was just a matter of explaining the concept of the piece and then finding a direction for the performance. This unusual situation resulted in an unusual performance.

We had so little time to rehearse that it was most important to inspire the performers to take ownership of the performance. Although the piece often uses a conductor, that's not a requirement. In this case, I encouraged the musicians, actors, and singers to explore the hand cues between themselves; to use them to further the perceived storyline, and to make this performance their own. Although I influenced the performance with various cues, the ensemble was responsible in large part for the final realization and success of the performance.

Sara Wilén

Singing in Action – Intertextual and Interperformative Play in Opera Improvisation

This paper is a further discussion that relates to the contents, themes and notions of my presentation *Singing in action: Creating music, text, and action in opera improvisation* from the session *Text and Action* during the International Sessions on Artistic Research within the research project (re)thinking improvisation in Malmö. The roundtable discussion that followed sparked ideas that, together with other tracks that were already present in the presentation I made, has directed my ongoing work on this text.

At the centre of my PhD project is my own practice as a classical singer and vocal improviser, doing interactive performances in different contexts, mainly opera improvisation. The research material consists of documentation and experiences from rehearsals, performances and documented discussions that are analyzed and/or discussed in relation to literature and performances from different fields, such as music, opera, theatre, cultural theory, anthropology, music education, literary studies and fiction. The research studies give way to an intertwining between artistic work and literary studies that create new lines of action and ideas that are fruitful in the artistic processes and innovation of opera improvisation techniques.

During the first year of my research studies, my main focus has been to examine and describe my own opera improvisational practice by working with what I call analytic etudes. I have made etudes of analysis in action as seen from an actor's perspective, from a rhetorical perspective (by comparing an improvised song, *impromans*, with the structure of a rhetorical speech), and of circumstances of the speech situations and initiatives taken among the performers in opera improvisation performances. In order to contextualize the practice, I have also begun a historic overview of uses of vocal improvisation in European opera and poetry. The present paper is concerned with establishing a theoretical framework that can situate my practice in contemporary thought. The analytical focus on my practice will also be guided by theoretical concepts from cultural theory. I will argue that the concepts of intertextuality (Kristeva 1992) and interperformativity (Parks 1988) suggest a highly relevant theoretical set of concepts for a better understanding of opera improvisation as a postmodern phenomenon.

Historical context of vocal improvisation in Europe

According to Esterhammer (2008) poetic improvisation1 reached its peak in Italy through the artistic practice of *improvvisatrici* (female vocal improvisers) and *improvvisatori* (male vocal improvisers) during the 18th century. The tradition has been noted in different variants in other European countries, such as Greece, Spain, Germany, Great Britain (Wales) and the former Yugoslavia (Esterhammer 2008). Improvisation was also a part of the practice for opera singers of 18th century *opera seria* (Somerset-Ward 2004) as well as during the 19th century (Damoureau, 1997), practices that were mirrored also in instrumental music in Europe until the mid-1850s.

In Italy, the practice of poetic lyrical improvisation was widely spread among both women and men in different social classes of the community, while the *improvvisatori* and *improvvisatrici* performed in theatres and salons as well as in the taverns and on the streets (Esterhammer 2008). Writers and composers have depicted vocal improvisers in their works,

1) The genre is perhaps better described as 'poetic lyrical improvisation', which may be performed in verse or in prose, song or declamation, often with instrumental accompaniment.

among them Germaine de Staël (1807) and H. C. Andersen (1835). To illustrate the practice of poetic lyrical improvisation, I have chosen a section to quote from the novel *Corinne*, by de Staël. The main character, Corinne, is an Italian *improvvisatrice* and poet, who improvises words and music in interaction with her audience to her own accompaniment on the lyre. In the beginning of the book, when the heroine is asked if she prefers works of reflection or works of sudden improvisation, she returns the question in the following manner:

> To me, improvisation is like a lively conversation. I don't let myself be bound by any particular subject, I go along with the impression that my listener's interest make on me, and it is to my friends that I owe the greatest part of my talent in this field. Sometimes the passionate interest aroused in me by a conversation […] raises me above my powers, enables me to discover in nature, in my own heart, bold truths expressions full of life, which solitary reflection would not have produced. (De Staël, 2008, pp. 45–46),

By the mid 19th century, this practice had begun to fade in Italy, as had the improvisational practice of classically trained musicians (Bailey 1992). According to Goehr (2007) this change occurred as a consequence of the development of the work concept and the change of the role of the composer.

Opera improvisation as an artistic practice

Opera improvisation as an artistic and pedagogic practice is found today in countries such as Sweden, England and the U.S.A. My artistic research focuses on my own practice as a performer in different ensembles and contexts, such as Operaimprovisatörerna (an ensemble founded in 2007 with 10 singers and 2 pianists) and Impromans[2] (a voice/piano duo improvising with inspiration from Lied and other classical vocal traditions). I describe opera improvisation and *impromans* in terms of extemporization, or instantaneous composing, performed by classical singers and musicians. In each performance, new musical and dramatic material is created as a result of the situated interactive processes. During my research studies, I have identified a number of factors that are important in order to understand the basis for this genre of improvised vocal music. First, we are all classically trained singers and musicians working with idiomatic improvisation[3] building on conventions in Western opera and classical or contemporary art music and drawing inspiration from different styles and individual composers. Second, we have the outspoken intention not to repeat any previously performed material, be it words, music or action. The vocal, musical and scenic interaction and dialogues and the intentions of the opera improvisers create the sounding and visual emerging contents. We rehearse and elaborate techniques and forms for improvisation in terms of communicational and dramaturgical structures, but very rarely by deciding on harmonic patterns or other musical forms.

Third, costume is always neutral in terms of gender since we work from the conviction that the gender of the performer on stage is created through performative interaction. The ambition is also to work from a flat structure, where the singers have equal possibilities to take on different roles in a drama. Fourth, the structure of the performances is decided by the interaction within the group of performers but also very specifically in the co-creative role that is given to the audience. Fifth, the stage design is also improvised in interaction between a lighting designer and the actors.

Music, text and meaning: structuralism, poststructuralism and deconstruction

What then are the intertextual layers in opera improvisation? Is opera improvisation, with its focus on performativity, not in direct opposition to the conception of music as text? According to the organist Adrian Cyprian Love (2008), the focus of referring to music only as written text, thereby neglecting the aspect of time, is an example of the "the Platonic urge to dehistoricize musical experience into a timeless essence of itself"(p. 51).

2) Romans is Swedish for art song , hence, *impromans* is a pun with improvisation and "romans".

3) My understanding of idiomatic improvisation is closely related to the discussion of Tandberg (2007), who emphasizes the considered play with musical form, be it in historic or contemporary style, as a key feature of such practices.

In his discussion of myth as a semiologic, structural system of ideology used in society, Barthes (1973/2009) claims that any material can be given meaning wherein, for example, pictures become "a kind of writing as soon as they are meaningful: like writing they call for a *lexis*"(p. 262, author's emphasis). He argues that different forms of cultural utterances, or units of significance, both verbal and visual, could be defined as speech, discourse or language. Barker (2008) argues along the same lines that "the concept of text suggests not simply the written word, though it is one of its senses, but all practices that signify" (p. 11). Lönnroth (2011), in a discussion of oral poetry, suggests the notion of "oral text", referring not only to words but also the human voice, gestures, music, facial expressions, acting, interaction with the audience and the relationship to the place of the performance. It is in this understanding of "text" that an intertextual perspective on opera improvisation becomes useful.

Dialogism

By the 1920s, Bakhtin had already argued that Saussure's concept of language as a definite, abstract system ignored the fact that language embodies and reflects social class, values, positions and interests (Allen 2011). Utterances show a dialogical feature: "All utterances are dialogic, their meaning and logic dependent upon how they will be received by others" (p. 19). Allen argues that in Dostoyevsky's work, Bakhtin found that characters were presenting individual, different, coexistent, and sometimes contradictory worldviews or ideas in a polyphony of speech, echoing of transformations and sometimes parodies of existing speech genres. Bakhtin came to create a theory of literature, which can be defined as a dialogical discourse, set in contrast to monologic discourses, in which the writer's own voice predominates (Dyndahl 2005b).

Barthes (1977/2009) perceives an overwhelming focus on the author as a person and refutes this monological writing, claiming the death of the author. He even refutes the term "writing" for the creation of a text, instead emphasizing the performative aspect, pointing out that the utterance "has no other content (contains no other propositions) than the act by which it is uttered…" (p. 146). He describes the writer as a "scriptor" or a copyist, although with a vast dictionary and a power to "mix writings, to counter the ones with the other, in such a way as never to rest on any one of them" (p. 146). All this is done in order to put focus on the reader, as he sees the reader as a destination, a space where all the different quotations that the text consists of are written, creating a unity. Allen (2011) claims that poststructuralists refer to a general loss of subject in language, a fact which Dyndahl (2005b) sees as somewhat negative, as different subjects could thereby remain invisible while still affecting the text.

Intertextuality, bricolage and hypertext

Poststructuralists claim that literary as well as non-literary texts lack independent meaning, since they are constructed on existing systems with traditions and codes from earlier literature, which in turn have a decisive role in the process of deciphering the texts (Allen 2011). Meaning is grasped within a web of textual relations between a new text and pre-existing texts: "the text becomes the intertext" (p. 1). Julia Kristeva (1992) coined the term intertextuality, where text "is perceived as a productive combination and transformation of semiotic codes, discursive genres, materials, and meaning…" (Dyndahl 2008, p. 131). Kristeva was one of the writers of the French journal *Tel Quel*, together with Barthes, Derrida and Foucault. Allen (2011) outlines how she transformed the dialogism of Bakhtin into two-dimensional semiotics, where the horizontal dimension of a word belongs to both reader and writer, and the vertical dimension is oriented toward an existing corpus of literature. Thus, the text became intertextual, both in the way in which the author communicated with readers, and in the way it relates to texts of the past inside the space of the work's text. Kristeva identified two contrasting forces in a text: the *genotext*, which aims to transcend boundaries, and the *phenotext*, which wants to be perceived as unified (Dyndahl 2005b). It may be noted that this could

refer to Bakhtin, who, according to Allen (2011), also described two forces within language: the ”unofficial” and the ”official” interests respectively. The unofficial interests are represented, for instance, by a carnival, which ”celebrates the unofficial collective body of the people and stands against the official ideology and discourse of religious and state power” (Allen 2011, p. 21).

Allen (2011) claims that intertextuality today is found in discussions regarding all different art forms and productions, such as music, architecture and film. Different art forms produce patterns of complexity that are comparable to languages in the manner in which they need to be coded and decoded. He describes how we, in order to interpret an artwork, use our previous knowledge to relate it to other art works of the kind. Berger (1999) points out that the cultural context is of great importance to creators of artistic texts, these creators being heavily influenced, whether consciously or unconsciously, by their own social and cultural environment.

Bricolage is a key concept in postmodernism referring to the self-aware citation of one text within another, indicating a bigger cultural self-consciousness, since ”postmodern culture is marked by a self-conscious intertextuality” (Allen 2008, p. 203). It is also a sign of a historical blurring, where the past and the present are presented together. Allen (2011) refers to postmodern architecture as intertextual, in mixing styles from different times and social contexts, high and low culture, celebrating pluralism. He also gives several examples of how intertextuality is present in the popular remaking of novels by writers such as Shakespeare and Austen into film.

Genette defines hypertext as connections between texts where text B, or the ”hypertext”, uses text A, or the ”hypotext”, as a point of departure (Dyndahl 2005a). Dyndahl writes about hypertext and musical spatio-temporality and notes how the practice of sampling cultures relies on intertextuality. Here you encounter a common global, intermedial supply of cultural utterances to reuse in terms of esthetical cultural fragments, or recontextualizing existing music pieces in new, polyphonic montages. The culture of sampling, according to Dyndahl, is to be seen as a manifestation of a dialogical principle that, as a result, decentres the closed work, or the text.

Intertextuality and genre in performance

Bauman (2004) describes a contemporary Icelandic storyteller’s (re)telling of an old story as a ”part of the discursive work by which he accomplishes his performance” (p. 2). The relation that links the storyteller’s story to the ancient story is a kind of intertextual interaction, a part of the narrative performance. Bauman defines intertextuality as ”the relational orientation of a text to other texts”(p. 4). He sees it as a key element in oral poetics since the 17th century, when it comes to describing the juncture between premodern and modern epochs in language and culture. Bauman hence claims that intertextuality refers not only to the mediation of a pre-existing text, but also to the communicative practice through which the text is produced and received. Social life is constituted and reproduced by discourse through signifying practices such as acts of speaking that are ”simultaneously anchored in their situational contexts of use and transcendent of them, linked by interdiscursive relationships to other situations, other acts, other utterances” (p. 4). He says that these interdiscursive ties are generated throughout history into cultural repertoires which function as established ”orienting frameworks for the production, reception, and circulation of discourse” (p. 2).

Bauman (2004) defines genre as ”one order of speech style, a constellation of systematically related, co-occurrent formal features and structures that serves as a conventionalized orienting framework for the production and reception of discourse” (p. 3), such as a certain kind of text. In a situated production, these conventionalized frameworks implicitly refer to prior situational contexts, thereby presenting a generic intertextuality. A genre in this way evokes certain associations and expectations about fundamental parts of the situational context. In performance, these parts may constitute settings, scenarios, structures or roles for the participants and goals. Bauman argues that genre is a primary means ”for the expressive enactment of subjectivity” (p. 6), whereas different genres lead to various subject positions and formations.

The intertextual gap in parody

Parody is described by Berger (1999) as an example of intertextuality, a conscious quotation of a text, a genre or a style, from someone else’s work. Hutcheon (2000) describes parody as a genre that both debunks and implies strength, defining it ”as a form of repetition with ironic critical distance, marking difference rather than similarity” (p. xii). She sees parody as a key concept when describing the postmodern use of reproduction as a means of critically problematising the representational process whereby the notions of artistic originality, ownership and values are questioned.

Hutcheon (2000) addresses parody in music as a means of commenting on itself from within ”through parodious reworkings of previous music” (p. 3). Irony implies both involvement and distance, requiring a shared set of codes to be understood. Hutcheon lists two different kinds of parody in music. The first mainly concerns the transformation of existing musical forms by using previous material, often without irony, which is close to the Renaissance practice of imitation. This kind of parody is used by composers such as Stravinsky who employ another musical style, though from a distance, to create a ”repetition with difference” (p. 65) which Hutcheon finds to result in a stylistic dichotomy. The second, more traditional or conservative kind of parody, is described as a composition coloured by a humorous intent, for instance, by using themes or phrases in inappropriate contexts, as in Debussy’s recalling of Tristan and Isolde in his piece *Golliwog’s Cakewalk*.

Bauman (2004) focuses mainly on the communication of pre-existent texts, or source utterances, in different genres of oral poetry and uses the term mediation in order to describe the ”relaying of spoken messages through intermediaries” (p. 129). These messages can also have written sources, such as in the Mexican coloquio, a form of extensive traditional drama performed in festivals. The actors are supported by individual prompters, who are situated outside the stage and are fully audible to the audience, often prompting with whole lines, which are then repeated by the actor. The Hermit is a burlesque character who, by making contradictory puns of the lines given to him, has the role of challenging and inverting the textual authority in terms of the written text (the source utterance). In this way, an intertextual gap is created between the source utterance and the intermediary, which can be seen as a use of parody, a playful inversion of a prior text or genre, here symbolizing authority.

Identity and subjectivity in musical performance

The field of cultural studies from the 1990s explores issues of subjectivity and identity from an anti-essentialist perspective, where identities are created as products of discourses, or discursive constructions (Barker 2008). Subjectivity defines the cultural and biological processes of becoming a person, as well as how the subject experiences herself. Identity may be divided into two concepts: self-identity, which encompasses both how we describe ourselves to other persons and the emotional identification with those descriptions, and social identity, which refers to other people’s expectations and opinions of us. Hall (1996) describes a discrepancy between the descriptions made by the subject from within and the descriptive identity provided by the Other. He discusses a meeting point, the ”point of *suture*” (p. 5, author’s emphasis), between the two as a temporary attachment to a subject position (as a social subject) allotted for an individual by a particular discursive practice.

Dyndahl and Ellefsen (2009) discuss a Foucauldian perspective of creating identity in contrast to a postmodern way of daily life. They state that identity both ”denotes the subjectivizing, discursively constructed ’truth about ourselves’” and relates to different mobile connections in terms of ”available social positions, roles and patterns of behaviour within a field of power regulations and structures” (p. 12). In this way they mean that an articulation of the identity will lead to the construction

of subjectivity as well as discourse, thereby possibly questioning certain categories. This performative stance is embraced also by Frith (1996), who argues that making or listening to music is best understood as a self in process, referring to identity as ”an experiential process which is most vividly grasped as music” (p. 110). Social groups, on the other hand, ”get to know themselves and values as groups” (p. 111) making aesthetic judgements. ”Music, like identity, is both performance and story” (p. 109). Cone (2008) distinguishes between the ”vocal persona” of the singer as being in the situated fiction of the role and the ”musical persona”, where the singer herself is aware of all the aspects of singing, but I find that these notions do not cover all the other perspectives detected above. How then can the various ”texts” at play in an opera improvisation be understood?

The fluid identities in opera improvisation

The approach for an opera improviser in a scene is, first, to define the situation and her own role and function in this situation, and second, to sense how the scene emerges by blending the intentions and wills of the improvisers as well as ”her” subjective aims and goals. Needless to say, the improvising performer is constantly shifting between various perspectives on identity. As the opera improviser is present as a character in the situational context, negotiating the nature of these relations in the moment, she is at the same time present as an individual, perceiving the other individuals as colleagues. There is also a multiple perception of musical time and the demand to reflect upon how the choices made in this situation will affect the story as a whole. Examples of other roles or perspectives include tuning in the audience’s reactions and sometimes making asides, or ”lyrical bubbles” as they are referred to in the ensemble Operaimprovisatörerna, as well as the intra-musical perspective of a professional singer, focusing on musical interaction with others inspired by a certain style or idiom.

The suture and interperformativity in musical interaction

I would like to argue that the perspectives of the opera improviser refer to many parallel processes of subjectivity and identity that are enacted/constructed simultaneously or quickly in succession (Dyndahl & Ellefsen, 2009). The relationships between fictive characters are defined in a dialogic interaction, sometimes internally within one improviser and sometimes in collaboration with other improvisers. An important communication code in opera improvisation is that the subject position chosen by the improviser herself should stand behind the one given to her from outside. This can be seen as the *suture* described by Hall (1996) (as mentioned above), where the processes of the subject differ from the identity given to her by others. This corresponds with Sawyer’s (2003) description of the improvisational processes in theatre and jazz, where the improvising group evaluates an individual member’s contribution in terms of how it affects the emerging improvisation. Oscillating between different perspectives in interaction is an example of how an opera improviser decentres herself, as well as being decentred by others, as she takes part in different parallel, and sometimes clashing, discourses.

Haring (1988) coined the term ”interperformance” to describe the relation of entailment between different genres of folklore performance, such as imitations, parodies and homages, and the different discourses that create them. Looking at literary texts he assigns and compares the term interperformance to intertextuality. To me, the term appears to bring together many of the concepts discussed above with features characteristic of opera improvisation.

Literary researcher Parks (1988) makes a similar comparison as he discusses the relationship between text and performance in the oral tradition of the tale Beowulf. He claims that intertextuality focuses mainly on text as a materialized object, and argues that the concept of *interperformativity* is therefore more relevant when it comes to oral literature that is being performed:

> Authors and readers, in standard written communication, do not encounter one another directly. Rather they encounter physical texts, usually (in the present era) in the form of visible signs in dark ink on a light paper background. The oral performance, by contrast, unfolds more fluidly in time, subsists more in the relationship between communication principals than as an individuated object term. To reduce interperformativity to intertextuality, then, would be to presuppose the very thing (the text) that has not yet happened. (Parks 1988, p. 27).

Following Parks (1988) and Haring (1988), I refer to the interaction between performative discourses of opera in opera-improvisation as interperformativity. The specific kind of intertextuality, with the many layers of performativity that it brings to play, is indeed better described in terms of *interperformativity*. The opera-improvisers sing and play in and through action, and thus take part in constant intertextual and interperformative play, commenting on both musical and performative aspects of opera and classical music as genres.

Opera improvisation in a postmodern perspective

Barker (2008) points out different traits of postmodernism, such as aesthetic self-consciousness, self-reflexiveness and the blurring of the boundaries of genre, history, style, culture and art, and high and low culture. He defines postmodernism as the end of epistemology, since all truths are created within discourse and are culture-specific. He delineates four main features that are central to a postmodern attitude. I list them here, followed by my own reflections in relation to opera improvisational practice. (Barker 2008, p. 200)

A sense of the fragmentary, ambiguous and uncertain nature of living
The improvised nature of opera improvisation does indeed give it a sense of uncertainty, ambiguity and fragmentation. Paradoxically it also creates a feeling of safety in that the opera improvisation is not able to be enacted by way of control, but only through listening to and communicating with the other performers and with the audience. But what is it really? Is it contemporary performance art, entertainment or simply a continuation of a classical tradition? This ambiguity is part and parcel of the practice of idiomatic improvisation in a postmodern context.

An awareness of the centrality of contingency
The presence of contingency, or the absence of content, also provides a feeling of security, as we as performers are prepared in terms of pragmatic, musico-dramatic and communicational strategies. We don’t know what to say but we know how. We do not know the message but we know the media.

A recognition of cultural difference
Since opera improvisation is performed in many different contexts, an awareness of and openness to the audience is necessary. One of the goals of opera improvisation is to communicate opera as a genre to new audiences that are not accustomed to opera or classical music. Sometimes this results in performances in the audience’s own working places or schools. As opera improvisers we represent the traditions of classical music and may therefore be in minority, a cultural difference in relation to the preferences of the general audience. It is necessary to be open and prepared, to meet and sometimes improvise on themes and topics of which you know very little, in order to bridge these gaps. Communication with the audience is essential in opera improvisation, and it is vital to create a generous and positive environment in order to invite the individuals of the audience to speak in a public setting, making suggestions for the content of the improvisations.

An acceleration in the pace of living
The creative and interactive processes in opera improvisation are very swift. Often you have only a couple of seconds to decide on matters of great importance to the improvisation as a whole, or in communication with the audience. Compared to opera composition, where a piece can take several years to complete, opera improvisation can be said to accelerate the process to the absurd. We should, however, bear in mind that a composed opera cannot be

compared to opera improvisation. After all, the opera (a musico-dramatic work, fixed in a libretto and a musical score) is created to be repeated, hopefully for many years, whereas opera improvisation evaporates after a single performance and should never be repeated.

Intertextuality, interperformativity and parody in opera improvisation

I find that Bauman's (2004) description of how genres, through different kinds of invocations of generic, intertextual framing, bring certain expectations of how the following discourse will develop, is immediately connected to how I work as an opera improviser. Although different genres lead to various subject positions and formations according to the conventions of discourse connected to a genre, the play with idioms within and indeed juxtapositions of stylistic traits that characterize entire genres is one of the strongest characteristics of our improvisatory practice. Bauman argues that genre is a primary means "for the expressive enactment of subjectivity" (p. 6). This is also how I experience opera improvisation, as a playground for a spontaneous dialogue with genres that also become a vehicle for immediate expressions of different layers of subjectivity.

In a field where preparedness for the unexpected is crucial, performing extemporised opera and *impromans* becomes the interface between inner and external impulses, where the opera improvisers gain access to their own knowledge and experience on a deeper level through the interaction with the other performers and the idioms of the genres at play. These interactions become musico-dramatic gestalts that connect to the opera genre(s) by way of the singers' and musicians' own knowledge and experience of vocal and instrumental techniques, idiomatic features in the music and musical dramaturgy, as well as for the creation of the fictive characters of the performance. This is what I, referring to Parks (1988) and Haring (1988), would call interperformativity, being an expansion of Bauman's discussion of parody and the play with genres.

Is opera improvisation then a postmodern phenomenon? It is very common that the audience laughs during our performances of opera improvisation, even when the dramatic situation on stage is serious. From my experience, this may happen for a lot of reasons, such as:

- the audience's expectations of repertoire opera singers and opera repertoire are not being fulfilled,
- the audience feels insecure about what is going to happen, or
- the audience is hearing their own and others' suggestions, images and fantasies become integrated and decisive to the emergency of a live stage performance.

According to Allen (2001), many theorists connect postmodernism with concepts of imitation, mixing of existing styles and practices, and pastiche. He claims that the postmodern cultural climate requires a distance or irony in the utterances or representations to be taken seriously. I do believe that the practice of opera improvisation, though drawing on many improvisational practices of the past, is indeed a highly postmodern artistic expression.

I suggest that the examples above illustrate how some of the audience's discursive formations are being subverted, thereby creating a space for release and reorientation towards new discourses and subject positions. In terms of expectations for the characters and their aims, as well as the situational context, a discourse is constructed based on the singers' and audience's experiences of how opera repertoire in different styles is performed. The improvisers can invert this discourse and create a gap in the performance through ironical distance, while still using the vocal techniques of opera and thereby identifying and conveying themselves (partly) as opera singers. In opera improvisation, the audience regularly perceives the improvised lyrics, or the sung lines, directly. I think this has to do with the fact that the sung words are performed in action and with intention, and that the understanding of the situational context emerges simultaneously to the audience and the improvisers. These musical and performative discourses, transformed by improvisational strategies, can relate to several of the descriptions of parody above: Berger (1999) by transforming genre or style, Hutcheon (1988) as transforming pre-existent forms, mostly without irony, and Bauman (2004), where the intertextual gap is widened when inverting the authority of the prior genre.

The play with performative discourses of opera and vocal classical music as it has been discussed here and the interaction between the multiple expressions of subjectivity makes the term "interperformativity" (Parks 1988) a highly relevant figure of thought in the discussion of this postmodern phenomenon. The opera improvisers, while singing in action, take part in a constant intertextual and interperformative play – in interaction with each other and with the audience – as the improvised opera continuously emerges and eventually evaporates. Thus, the musical and performative discourses of opera and classical music are transformed, or deconstructed, through these improvisational strategies.

References

Allen, G. (2011). *Intertextuality.* Routledge.

Andersen, H.C. (2005). *Improvisatoren.* Viborg: Gyldendal.

Bailey, D. (1992). *Improvisation.* New York: Da Capo press.

Barker, C. (2008) *Cultural studies, theory and practice.* Los Angeles: Sage Publications.

Bauman, R. (2004). *World of other's words: Cross cultural Perspectives on Intertextuality.* Blackwell Publishers.

Barthes, R. (1973). Mytohologies. In Storey, J. (ed.) (2009). *Cultural Theory and Popular Culture: A Reader,* 4th ed. Harlow: Pearson Education.

Barthes, R. (1977). *Image, music, text.* London: Fontana Press.

Berger, A. (1999). *Kulturstudier, nyckelbegrepp för nybörjare.* Lund: Studentlitteratur.

Cone, E. (2008). Song and performance. In M. Clayton (ed.), *Music, words and voice, a reader.* Manchester University Press.

Damoureau, L. (1997). *Classic bel canto technique.* New York: Dover Publications Inc.

Derrida, J. (2001). Structure, Sign, and Play in the Discourse of the Human Sciences. In Derrida, J., *Writing and Difference.* London: Routledge, pp. 278–294.

Dyndahl. P. (2005a). Hypertekst og musikalsk spatio-temporalitet. In Furuseth, S. (ed.), *Kunstens rytmer i tid og rom* pp. 89–104. Trondheim: Tapir Akademisk forlag.

Dyndahl, P. (2005b). Kulturens xerox-grad eller remixet autentisitet? Gjenbruk og orignialitet i hiphop og samplingkultur. In Dyndahl, P. & Kulbrandstad, L. A. (ed.), *High fidelity eller rein jalla?: Purisme som problem i kultur, språk og estetikk*, pp. 201–228. Vallset: Oplandske bokforlag

Dyndahl, P. (2008). Music Education in the Sign of Deconstruction. *Philosophy of Music Education Review,* vol. 16, no. 2, Fall 2008, pp. 124–144.

Dyndahl, P. & L. W. Ellefsen (2009). Music Didactics as a Multifaceted Field of Cultural Didactic Studies. In Nielsen, F.V., Holgersen S-E. & Nielsen, S. G. (ed.), *Nordic Research in Music Education Yearbook,* vol. 11, pp. 3–26.

Esterhammer, A. (2008). *Romanticism and improvisation, 1750–1850.* Cambridge: Cambridge University Press.

Frith, S. (1996). Music and Identity. In Hall, S. & du Gay, P. (ed.), *Questions of Cultural Identity,* pp. 108–127, London: Sage.

Goehr, L. (2007). *The imaginary museum of musical works.* New York: Oxford University Press.

Hall, S. (1996). Introduction: Who Needs "Identity"? In Hall, S. & du Gay, P. (ed.), *Questions of Cultural Identity,* pp. 1–17, London: Sage,

Haring, L. (1988). Interperformance. In de Gruyter (ed.), *Fabula,* vol. 29, no. 1, pp. 365–372.

Hutcheon, L. (2000). *A theory of parody, the teachings of twentieth century art forms.* Library of congress

Kristeva, J. (1992). Modern literature theory: from Russian formalism to deconstruction. In Entzenberg, C. & Hansson, C. (ed.), *Modern literaturteori : från rysk formalism till dekonstruktion*, pp. 287–321, Lund: Studentlitteratur.

Love, A. C. (2008). Process and product in theology and musical aesthetics: Improvisation as Interdisciplinary topos. *Nineteenth-Century Music Review*, vol. 5, no. 1, pp. 47–65.

Lönnroth, L. (2011). Vem sjöng, vem lyssnade, vem skrev?, *Svenska Dagbladet* [webb], 13 Jan 2011. Available: http://www.svd.se/kultur/understrecket/vem-sjong-vem-lyssnade-vem-skrev_5861435.svd [7 Apr 2013].

Parks, W. (1988). Interperformativity and Beowulf. In *Narodna Umjetnost, Croatian Journal of Ethnology and Folklore Research*, 1989, vol. 26, no. 1, pp. 25–34. Available: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=98757&lang=en. [7 Apr 2013]

Sawyer, R. K. (2003). *Group creativity. Music, theater, collaboration.* Mahwah: Lawrence Erlbaum Associates, Inc.

Somerset-Ward, R. (2004). A*ngels and monsters: male and female sopranos in the story of opera.* New Haven: Yale University Press.

De Staël, G. (2008). *Corinne, or Italy.* New York: Oxford University Press.

Tandberg, S-E. (2008). I*magination, form, movement and sound.* Göteborgs Universitet: Art Monitor.

Sten Sandell

Borduna Heterotopia

> Here we are not dealing with a succession of instants in time, nor with the plurality of thinking subjects; what is concerned are those caessurae breaking the instant and dispersing the subject in a multiplicity of possible positions and functions. Such a discontinuity strikes and invalidates the smallest units, traditionally recognised and the least readily contested: the instant and the subject.
> (Foucault 1972, p. 231)

A thunderstorm I seized the opportunity to record on a day in July some years ago, illustrated the whole picture of how rhythmical patterns can be transparent, swarming, chiseled, and amazingly exciting in all their complexity! It began as a shower of hail. But in fact, the drops, landing on the roof, were so incredibly big and heavy, that it sounded like pebbles falling from the sky. This then evolved into full-scale rain, whose sound was a big chaos, containing a great number of quickly changing structures that could only be perceived as a big organic flow of sounds and rhythms. All these structures created their own small cells, in which each pattern was as unique as each snow flake is different. From this swarm a great many sounds and chords emerged. While writing this, I listen to a new recording of ”Eonta”[1] for piano, 2 trumpets and 3 trombones by Iannis Xenakis, from 1963 (Xenakis 2010). When I first heard this piece in 1976, it was a turning point in my way of playing the piano and how I view my instrument. I then realized piano playing has just as much to do with architectonic principles, blocks, levels, different constructions in layers that partly cover each other, in varying half-penetrable sound-block structures. Behind and over each other, Xenakis's different stochastic clouds form new backgrounds. After the first introductory piano part, the brass sound arises out of the ringing pedal of Aki Takahashi's masterful piano playing. Time stops for a moment, and hovers. It was no longer the linear narrative that was important. Instead, it was the big architectonic structures, in different sharp shades of gray, that described densities in the music. States became as important as progress. A new world opened up to me, which I haven't left ever since that moment. To be able to combine the narrative of music drama with space occupied by various sound columns has since been my predominating vision. Different stories come and go and twine round sound pillars of varying states of character. These sounding pillars of states have everything gathered in one distillate. All that does not have to be said is there; however, the surrounding gestures are needed in order to build a thrilling musical space that brings the story to life. The monolithic meets the mobile, the plastic. Sound columns as States in a space, hovering or firmly anchored to something. Fragments of something. Displacements. Shifts. Friction sounds. The July rain went on and on and on, like a sound wall with an infinite number of inner, intricate, rapid motions and sound changes. Rhythm – right on, right after, in between and right before.

> The fundamental conditions for this kind of normalization of difference is blindness to the in-between space that lies between the own and the unfamiliar, and above all also already within the own and the unfamiliar. That which does not get to speak is precisely this ”in-between” that constitutes the life of transition, or the place and time of self- transformation.
> (Cavalcante Schuback 2006, p. 158)

To examine this ”in-between”, I arrived at the Kalv festival[2] and the church in Kalv in the summer of 2010 to do a first performance of a composition for organ, voice, live-electronics, reed instruments, groups of loudspeakers and drones.[3] The process

1) A homage to Greek philosopher and poet Parmenides.

2) Nordic meeting place, festival and workshop for developing new music, in the village of Kalv, in Svenljunga, Sweden. *The Kalv festival* is now in its seventh year, with enthusiasts such as Max Käck a.o. making this festival possible, where new music, performances, dance, pilgrimages and other art installations are presented in close cooperation with, and the participation of, the village's inhabitants. This year's theme was Music for Reflection.

3) Sten Sandell – organ, voice, electronics and composition (00′–38′23′′ solo), Per-Anders Nilsson – live-electronics (38′23′′-55′10′′), Mats Gustafsson – reed instruments (38′23′′-55′10′′).

of work for this performance was that two days before the concert, I recorded site-specific sounds both inside and outside the organ, as well as in the actual church space, which I later brought together with a composition for the above-mentioned instruments.

The church in Kalv is found to have excellent acoustics owing to the wooden ceiling having been restored in the fifties. The ceiling had not been restored according to the historical architecture of the church but instead in a way that the new structure of the arched ceiling removes the distance between musicians and audience. Groups of speakers up at the chancel, and speakers on each side of the pews, meet the organ and my voice from the rear of the church.

An interplay arises between the groups, and sounds move about as the music's main focus shifts from pre-recorded sounds to voice and organ sounds. In the second act Per-Anders Nilsson – live-electronics, and Mats Gustafsson – reed instruments, are added and strengthen the movements in this space, by reacting to the already sounding material.

And now back to my thunderstorm. What happens when I bring these seemingly completely different places and spaces together?

We are in an epoch in which space is given to us in the form of relations between emplacements. […] But what interests me, among all these sites, are the ones that have the curious property of being in relation with all other sites, but in such a way as to suspend, neutralize, or invert the set of relations designated, mirrored, or reflected by them. These spaces, as it were, that are linked with all the others, that nevertheless contradict all the other emplacements, are of two main types. First there are the utopias. Utopias are emplacements with no real place. […] There are also, and this probably in all culture, in all civilization, real places, effective places, places that are written into the institution of society itself, and that are a sort of counter-emplacements, a sort of effectively realized utopias in which the real emplacements, all the other real emplacements that can be found within culture, are simultaneously represented, contested and inverted. (Foucault 1967/2008, pp. 15–17).

These are the places Michel Foucault terms heterotopias. A new body of sound appears where motion in the space that has been brought together creates a story, in which the enclosed organ sounds from inside the pipes meet a new concentrated sound-site made up of those heavy rain drops hitting the plastic roof of the terrace. High, very insistent leaking organ notes meet low drones with murmuring and hissing columns of air, meeting piercing water drops sounding like pebbles. The high notes shift in sound and pitch if you move around the room while listening, and the murmur makes the space more tangible. White noise enhances the sense of space. Through quick shifts of registration on the organ, the flow of air constantly changes course. Hence, the jerking, kind of stumbling air sounds from the organ pipes. The complex sound structure of the thunderstorm consists of very high, percussive sounds, interfering with each other and forming new diffuse motions, in a low slightly undefined register. The low frequencies are amplified by the resonance in the thin plastic roof. Together with my voiced comments in the form of breathing, overtone singing and cries, this creates a seemingly obvious organic unity, where a state of confinement is evident.

And I believe that between utopias and these absolutely other emplacements, these heterotopias, there might be a sort of mixed, in-between experience, which would be the mirror. The mirror is, after all, a utopia, since it is a place without place. In the mirror, I see myself there where I am not, in an unreal space that virtually opens up behind the surface; I am over there, there where I am not, a sort of shadow that gives me my own visibility, that enables me to see myself there where I am absent. Utopia of the mirror. But it is also a heterotopia in so far that the mirror does really exist, and as it exerts on the place I occupy a sort of return effect; it is with the mirror as my starting point that I discover my absence in the place where I am, since I see myself over there. Starting from this gaze that is, as it were, cast upon me, from the depth of this virtual space that is on the other side of the looking glass, I come back towards myself and I begin again to direct my eyes towards myself and to reconstitute myself there where I am. The mirror functions as a heterotopia in the respect that it renders this place that I occupy at the moment when I look at myself in the looking glass at once absolutely real, connected with all the space that surrounds it, and absolutely unreal, since, in order to be perceived, it has to pass through this virtual point, which is over there. (Foucault 1967/2008, p. 17)

Box for standing is a wooden frame meant to house the artist. By referring to the dimensionality of the artist's body, the frame enacts the very space that surrounds that body. It points to it as performing subjects articulating and articulated by space. (Labelle 2006, p. 75)

A fictional dream sequence:

I find myself in a room just over 2 m high and 1 m wide.
Bearing the size of the room in mind, one's ability to move is severely limited. The room is fitted up with (a) soft and sound-absorbing material. The room has neither doors nor windows. I hear agitated voices outside the room, somebody or some people are crying. I begin to call out, but nobody seems to react to my call. I start to feel shut in and realize it is impossible for me to get out.

She went on growing, and growing, and very soon had to kneel down on the floor: in another minute there was not even room for this, and she tried the effect of lying down with one elbow against the door, and the other arm curled round her head. Still she went on growing, and, as a last resource, she put one arm out of the window, and one foot up the chimney, and said to herself "Now I can do no more, whatever happens. What will become of me? (Caroll, n.p).

To find myself and the sound of my own body in relation to the space I am in right now. Where do I stand and what does it sound like?

Då ligga
på min obäddade säng och kunna se,
länge och långt in på förmiddan ligga som jag
såg då allt,
Som då
plötsligt och liksom oväntat se
allt det där jag förut inte sett
bara kunnat ana att jag någon gång hört
i små mikrosmå knäpp från fingrar.
Then lying
on my unmade bed and being able to see,
for long, and far into the morn', lying as
though then seeing it all,
As then
suddenly and like unexpectedly seeing
all that I before had not seen
only had suspected that I once had heard
in small micro-small snaps of fingers.
(Larsson 1993, n.p.)

Sitting in my childhood home in a big room, and suddenly discovering, in an act of seeing, the entire room at one and the same time. Seeing the whole room, without glancing to one side or the other, with its ceiling, walls, windows, light and furniture. A strange feeling of being in a state of total seeing occurs, a state that begins when flow arises in the music, and I just *am* in the space with all its sounds and impressions. Is there a sounding language in front of, behind, beneath, over, and between us?

References

Caroll, L. *Alice's Adventures In Wonderland.*

Cavalcante Schuback, M. (2006). "Lovtal till intet. Essäer om filosofisk hermeneutik." *Logos, Pathos,* no. 5, Glänta Produktion. (Transl. here by Emil Strandberg).

Foucault, M. (1967/2008). "Of other spaces." In Dehaene, M. & DeCauter, L. (Eds.). *Heteretopia and the City. Public space in a postcivil society.* London: Routledge.

Foucault, M. (1972). *The Archaeology of Knowledge & The Discourse on Language.* (Transl. by A. M. Sheridan Smith). Pantheon Books.

Labelle, B. (2006) *Background Noise: A History of Sound.* ArtBrice, Continuum.

Larsson, S. (1993). "Min mor är en ros." Ur *Likar.* Bonnier Alba. (Transl. here by Emil Strandberg).

Xenakis, I. (2010). *Works with Piano (mode 217).*

(re)thinking instrumental and computer interaction

Henrik Frisk

The (un)necessary Self

Introduction

The focus of this essay revolves around the understanding of the self in improvisation and interaction in the context of an artistic musical practice. The ambition is to further understand the meaning and impact of the self in this practice. The key agents are freedom, identity and originality.

The background, and in a sense also the foreground, of these thoughts is to be found in my artistic practice, exemplified by three recollections of experiences from my work. My background in jazz and free improvised music and my otherwise fairly diverse artistic practice, including composition, electronic and interactive music and sound art, has obviously shaped my understanding of the work I do. My principle artistic and aesthetic interests are questions pertaining to open contribution and the fields discussed in this paper, such as freedom, interaction and self. This work is furthermore a continuation of some of the central topics developed in my thesis (Frisk, 2008), such as:

- *Work-in-movement.* This is a concept established by Umberto Eco (1968) that I introduced as a work type encompassing radically open works. It requires different modes of representation, as the traditional musical score is too restrictive and is not able to communicate its most central aspects: the collaboration, negotiation and interaction in the conception, realization and documentation of the work. Work-in-movement does not necessarily distinguish between composition and improvisation, although for the latter, some kind of frame is needed for the concept to be meaningful. As a specification it is geared towards modes of interaction and openness involved in all phases of the work.
- *Interaction-as-difference.* I proposed that in human-computer interaction (HCI) the methodology of control (interaction-as-control) in certain cases should be abandoned in favour of a more dynamic and reciprocal mode of interaction, interaction-as-difference. This kind of interaction is an activity concerned with inducing differences that make a difference (Bateson, 1972) and suggests parallelism rather than the typical click-and-response mode of HCI. In essence, the movement from control to difference is a result of rediscovering the power of improvisation as a method for organizing and constructing musical content. Interaction-as-difference is to be understood as an alteration of the more common paradigm of direct manipulation in HCI.
- *Giving up of the self.* I suggested the notion of giving up of the self as the common denominator between the two previous concepts and as one of the important conditions for an improvisatory and self-organizing attitude towards musical practice that allows for interaction-as-difference. Only if one is able and willing to accept the loss of priority of interpretation, if one is willing to give up or disregard faithfulness to ideology or idiomatics, is the idea of interaction-as-difference conceivable. Hence, the giving up of the self is not to succumb to someone else but is rather contingent on the degree to which one is willing to engage in a dialogue on the creative process and to allow others to influence it. I.e., by giving up compositional control and replacing it with an interactive negotiation in the form of collaboration, the process realizes all of these three topics.

These ideas were eye-openers for me during my work on my thesis, but also, as is commonly the case, they posed new questions and demanded further study. In the romantic tradition of creativity, neither the freedom of the artist nor the autonomy of the work, is negotiatiable. The giving up of the self was an idea that departed from that concept and from the understanding of the artistic self as a strong and defined subjectivity with a clear and organized apprehension of what the artistic output should consist of, what its form and shape should be, and how its general means of operation should be conceived. To give up the self is not to abandon these qualities but to always be willing and prepared to negotiate them.

Although very difficult to define, freedom in general is a recurring concept in the discussion of improvisation. On the surface improvisation may seem like a means to create music that is free from the chains of the formal structures that notation or idiomatics imposes on the expressive possibilities of the musician, one that opens it up to the immediate and unmediated influence of the individual, music that may be created on the spot and whose substance is defined not so much by external factors as by the will of the improviser(s). Ornette Coleman's important 1959 recording *Free Jazz* has contributed significantly to the idea that improvisation and freedom are coupled. It gave name to the free jazz movement that evolved in the US, closely followed by Europe, where the demand for social freedom in the civil rights movement found a parallel in the music.

Whether or not improvisation can be said to be free as such, or can be considered an expression of freedom, is not my main interest here. Rather, my focus is on the significance of the concept of freedom in the practice and discourse on improvisation. How can this notion of freedom, whether negative as in "free-from" or positive as in "free-to" (Peters 2009), operate alongside other important agents in the improvisatory practice, such as interaction, tradition, context and technique? Neither is it my objective to enter into a discussion of the value of a particular means for organisation of artistic work, or specific aesthetic attitudes in artistic practice. I am, however, interested in how subconscious and embodied knowledge, or intuitive action, is given significance in the creative act, how this significance influences the self and, conversely, how the self is influenced by these aspects. The trajectories of the self may be drawn further and will influence, and be influenced by, much larger systems in the sociopolitical domain.

The iconified Western auteur mentioned above has been under attack at least since the sixties. The mythical creator behind nonnegotiable works of art enjoys a natural freedom of expression and does not have to answer to criticism. My argument (Frisk 2008) is that the view of this Kantian genius is still very influential to how we teach and present art. For myself, however, merely realizing this was not enough. I needed to more profoundly understand what problems I had with this role in relation to my own artistic practice, and in what ways I could neutralize the expectation of being in control. The decisive moment occurred when I was working on the interactive sound installation *etherSound*, where I was forced to accept that a large part of the compositional decisions had to be made by the users of the system rather than myself. In order to fulfil the idea behind the piece I had to come to terms with the fact that I was not able to restrain the input of the flow of users. I had to give up that which Boulez (1964) refers to as "the 'finished' aspect of the Occidental work, its closed cycle" (p. 51) and approach the "open work" that Eco (1968) discusses, to further attempt "to reach that point where only language acts, 'performs', and not 'me" (Barthes 1977). Obviously, as an improviser the notion of the open work was familiar to me, but the dynamically open work that I was now approaching was not something I had experience with. Furthermore, the view of the authoritative creator is also something improvisers are often confronted with, and the view of musicians and composers as being absolutely clear about all details of their work is as prominent in improvised music as it is anywhere else.

My project was a pursuit to move further away from the kinds of composers, works and authors that Boulez (1964) discusses in his 1964 article Alea, and to instead move towards the convergence point of creation and interaction. This radicalization of the role of the creator asked for a new work concept and an altered view on interaction1, but as a consequence it also called for a review of the self, even after the notion of giving up of the self was staged. The questions that were raised as a result of these ideas in my thesis and that I approach in this text relate to the position of self and other: How can the self enable or discourage interaction? What aspects of the self and of expression should be open for influence from the other? What are the factors that set boundaries on my individual expression, and how may this individuality be manifested without inhibiting the other? What is the meaning of freedom and how can it affect the other? These are inquiries that engage social and political discussion as well as aesthetic positioning.

1) This was however not a linear process. The different ideas grew simultaneously and influenced each other. The control methodology of human-technology interaction gave rise to thoughts on an ethics of technology. Questioning my own ambitions in my use of technology inspired a reevaluation and appreciation of the complexity of human and artistic interaction.

I or Eye

In Stockholm about ten years ago, a venue with a long tradition of presenting improvised music was promoting a concert with a group that I was part of. At the time the group was doing a small tour in Scandinavia and it featured a few improvisers and one classically trained musician. This was a group where we communicated well and always found ways to deal with the obstacles and issues that came up in the performances Despite the fairly low number of visitors in the first set this particular concert was no exception. After intermission there was a bigger crowd and halfway through the second set I thought I recognized a person coming into the room, walking past the stage. As a consequence my playing changed. It was a fairly radical change and even when listening back to the recording I can hear the difference. I also managed to pull my fellow musicians along in this new direction. At the moment I was surprised by the effect the episode had on my playing and listening back to the concert I find it odd that the change occurred so abruptly. I was embarrassed. I had been taught that my expression and my artistic choices should come from the inside. To be a strong musician meant not letting external factors have an influence, but instead being in control of oneself. Hence, according to my view at the time, I should be the master of my own playing and I myself should make the choices, regardless what happens around me. Only those with whom I play may influence me.[2]

2) As an example of an extreme application of this posture is Sonny Rollins' performance at the Opus 40 quarry garden in upstate New York where he falls off the stage in the middle of his solo and breaks his heel, all while he continues to play. After the fall, lying down (Rollins, 1986).

To listen to the other is a central concept in ethics. To meet the other with respect and understanding regardless of how the other is approaching oneself is intrinsic to the Christian message. In the teaching of jazz and improvised music, the concept of listening to the other is absolutely essential, although there are many important accounts of the opposite attitude, to consciously not listen. What and who is it that we are listening to when we listen? Should our listening be limited to our fellow musicians or should we also listen to our audiences? When we listen, what is it we allow ourselves to be influenced by, and what part of our own expression should remain untouched by our listening? Obviously, the point of listening to the other in performance is not to completely give up the self and become the other but to attune to, or find a resonance with the other. It is in the interaction that the open and unbound improvisation is unfolding, between adjusting to the other while hanging on to the possibility for taking the initiative. Only in the instantaneous moment can one decide what path to take. In one instance there may be a demand for absolute and unconditioned control and in the next it may be necessary to completely give in to the other. What is the position of the self when listening is at the centre?

In the following I will attempt to elaborate on these questions and the idea of the projecting, autonomous performer for whom the individual will is the sole guideline. There are countless stories of intransigent musicians whose artistic and expressive choices are exclusively their own, even when this means they suffer economic loss. Pierre Boulez (1964) describes how structure is what dictates and constrains the compositional process. The composer alone is in control of this structure. The antagonist in this argument is the American experimental tradition in general and John Cage in particular. If Pierre Boulez is the emblematic representation of the Kantian notion of the true creative genius whose genuinely individual and enigmatic inspiration constitutes the creative force,

the American experimental tradition can truly be said to stand in its opposition. The European composer, according to Boulez, takes responsibility for the work and does not neglect the ”the choice inherent in every kind of creation” (p. 55). He does not give way to become ”meticulous in imprecision” (ibid. p. 44), as Boulez claims the indeterminist does. With its focus on chance and repetition, this American reaction to several trends in the 20th-century European music is clearly a rewarding scapegoat for Boulez the serialist.

In the book *Silencing the Sounding Self* Christopher Shultis (1998) is primarily concerned with the difference between making process-oriented rather than goal-oriented art within American music and literature, but his argument can also be seen as an illustration of the more radical difference between serialism and chance operations. The question asked as a point of departure is whether the artist is controlling the process or whether he or she coexists as part of it (p. XVI). With Ralph Waldo Emerson and Charles Ives on one side[3] and Henry David Thoreau and John Cage on the other, he argues that in the work of the former, the self controls the process, whereas in that of the latter, the self coexists with it. The dualist–nondualist dichotomy is what Shultis uses to mark the important change that first Thoreau, and later John Cage, brought to American art. They both embraced a view in which the self and nature were united.

In *Walden* Thoreau (2004) carries out a two-year-long stay in the New England woods pursuing the exploration of the role of the self in solitude–a project with some interesting kinship to artistic research in that it probes a hypothesis using an experimental method which renders not answers but new questions. The Cartesian notion of dualism, on the other hand, is the idea that mind and matter belong to ontologically different classes. Though they may unite through a transcendental correspondence, nature and humanism are separate from one another. ”For Emerson the human self is in control” writes Shultis (1998, p. 14). The abstract symbolism and extensive use of references and quotations are identifying marks of Ives’ music and one of the reasons they were dismissed by Cage. I am not convinced that an artist with such great variation and massive output may be successfully exploited as an example of a single aesthetic theory, but it is undeniably so that *Central park in the dark*, for example, is a form of program music that paints a representational sound picture only possible if nature is seen as distinct from the self. Shultis, however, goes further and claims that Ives through his music is ”symbolizing not what was observed but a translation of the observation into something else: a symbol of that something that corresponds to the memory of what happened rather than its actual occurrence” (Shultis 1998, p. 27).

Was my own idea of giving up the self a move towards a nondual view of the act of creation? I am attracted to Thoreau’s writings and his philosophy, which I read as a move towards the reinvention of ethical listening and understanding, as well as an attempt to turn to sources of knowledge other than text based. Its somewhat romantic appearance is nonetheless very radical, proved by the fact that he conceptually anticipated one of the more controversial composers of the 20th century by some eighty years. As intriguing as the two poles of the continuum from dual to nondual are, my interest is what happens in the zone in between. In his investigation of literary criticism and music, Christopher Shultis further categorizes Emerson and Thoreau as belonging to the projectionists and objectivists respectively: ”The active ’eye’ is the projective ‘I’ […] On the other hand there is the objective ’I’ which observes rather than projects” (Shultis 1998, p. 61–62). According to Shultis, for Thoreau the artist, writer or speaker is merely a medium, not a subject. This idea holds a strong intertextual relation to Cage’s aesthetics of indeterminacy and non-intention. Artistic expression is not a means to convey a message; if anything, it is a method to create resonances in certain contexts. This seemingly objective and transparent ”I” is precisely the critical point that upsets Boulez’s systematic and structural agency of production: To avoid or even neglect the qualified projection of the self in determination is simply irresponsible.[4] As powerful, engaging and pedagogic as the homophones Eye and I may seem, I will contest that the dividing line may not be so clear. As an expression of the transcendental movement, Emerson’s exposition of the transparent eye-ball advocates nature and accentuates nature mysticism much in the same ways that Thoreau did in Walden:

> I become a transparent eye-ball; I am nothing; I see all; the currents of the Universal Being circulate through me; I am part or particle of God. The name of the nearest friend sounds then foreign and accidental: to be brothers, to be acquaintances,–master or servant, is then a trifle and a disturbance. I am the lover of uncontained and immortal beauty. In the wilderness, I find something more dear and connate than in streets or villages. In the tranquil landscape, and especially in the distant line of the horizon, man beholds somewhat as beautiful as his own nature. (Emerson 2001, p. 8)

Even if there is a distinction between the ideas in Nature and Thoreau’s famous absent speaker[5] what is most interesting to me is not the differences in kind but the altered perspective and the movement ”in between”. For Emerson, ”transparency remains within the concrete ‘I’ of the self” (Shultis 1998, p. 61), whereas Thoreau sought to make the self transparent. These two methods of approaching the world, as the transparent eye or the transparent self, are not mutually exclusive. It is possible that both the projective eye and the objective I will at times become unstable, and that one may coalesce into the other. Exploring this continuum allows me to reposition within any imaginable listening position and listen to the audience, the critic or myself without the self getting lost: giving up the self in order to retain it.

Creation or discovery. Freedom

Ten years ago I was preparing for a concert on a tour arranged by the Swedish National Concert Institute. On this tour I was playing with a free jazz quartet (saxophone, guitar, bass and home-built instruments, and drums), and for varoius reasons I found it very difficult to find my way into the music of this group. Among the members of the group there were different opinions about aesthetics and about the way in which we should approach our task. The problems grew throughout the tour and by the time we arrived to the small town where we were playing the night in question I felt like the situation was getting out of hand. I had no code to follow except for my own, which I felt was quite inappropriate in the present context. We were at a venue that had a long tradition of presenting national and international jazz; for the most part, somewhat more traditional acts than ours were represented. This only added to my frustration and my feeling of being outside of my own comfort zone. About an hour before the show a senior amateur saxophonist came into the backroom to chat with me. I had met him before, and he was very keen on talking to me about mouthpieces, saxophones and reeds. We chatted for a while but I started to feel the panic; how could I possibly satisfy the expectations of this man, the other members of the band and the rest of the audience at the same time? Their expectations, I felt, represented three very different attitudes towards music making. What artistic method could I employ to solve this dilemma without losing myself in the process? By the time I was going up on the bandstand I was so confused and hindered that I started to doubt whether I could at all play. In a moment of clairvoyance, however, it occurred to me that the only option I had was to try to play as if I had never seen a saxophone before. I played as if I had no real conception of what a saxophone should sound like, let alone how it should be played: to play as if I did not know how to play.

This recollection is in one sense the opposite of the previous one. Rather than making an attempt to fulfil the expectations of my acquaintance, I did what he least expected. His presence contributed to the stressfulness of the situation, but in my response I was not primarily addressing him. I believe that the clue to understand the behaviour that led to the choices I made is to look at the negative impact that habit can have on expressive freedom. By forcefully breaking my habitual musical and instrumental responses, I was able to communicate.

Drawing the distinction between the projective and the objective self has some correspondence in the idea of artistic work, such as improvisation, as either an act of creation or an act of discovery. The dividing line between these two poles is blur-

3) Emerson, who was familiar with Hegel and inspired by the Swedish mystic Emanuel Swedenborg, did promote dualism in Nature (e.g. ch. 6, ”Idealism” Emerson, 2001): ”In these cases,–by mechanical means, is suggested the difference between the observer and the spectacle,–between man and nature” (ibid.) and his influence on American metaphysics was substantial. But he is commonly known to have communicated a nondualistic view as well, as in the essay The Over-Soul: ”[The soul] is not wise, but it sees through all things. Then is it glad, young and nimble. It is not called religious, but it is innocent. It calls the light its own, and feels that the grass grows and the stone falls by a law inferior to, and dependent on, its nature. Behold, it saith, I am born into the great, the universal mind” (Emerson 2000, p. 250).

4) However, I am in doubt that he would embrace the idea of the projective self as promoted in works by Emerson and Ezra Pound, either.

5) ”The peculiarity of a work of genius is the absence of the speaker from his speech” (Thoreau & Blake 1891, p. 264).

red, to say the least. More than perhaps anyone else, Kant has provided us with the image of the genius artist whose powers of creation remain mystical and hidden. For him, the difference between discovery and creation was exemplified by the difference between the sciences and the arts:

> Thus we can readily learn all that Newton has set forth in his immortal work on the Principles of Natural Philosophy, however great a head was required to discover it; but we cannot learn to write spirited poetry, however express may be the precepts of the art and however excellent its models. The reason is that Newton could make all his steps, from the first elements of geometry to his own great and profound discoveries, intuitively plain and definite as regards consequence, not only to himself but to everyone else. But a Homer or a Wieland cannot show how his Ideas, so rich in fance and yet so full of thought, come together in his head, simply because he does not know and therefore cannot teach others.
> (Kant 2007, p. 113)

According to Kant not even the artists themselves can understand what the nature of creation consists of.[6] At best we can reject Kant's description of artistic and scientific creativity as dated, but it is difficult not to see it as a crude pastiche of the processes involved.

Though it is possible to analyze my frustration in the situation described above, in which everything I had learned suddenly lost meaning, I find it difficult to describe it as an act of pure creation. I lacked conscious access to the method that could provide me with a possible solution, and it is plausible to assume that the key came to me in a moment of (unconscious) inspiration. This, however, does not make it into a pure act of creativity; it was much closer to a discovery, albeit a negative one: the discovery of how not to play the saxophone. In reality it is not very difficult to deconstruct the dichotomy of discovery and creation in creative work, be it artistic or scientific. This is what Benson (2003) successfully does when he introduces context as one of the primary agents, explaining that the important factor that often seems to be neglected is that any artistic activity takes place within, and is related to, a practice, tradition or community. In music, as well as in many other art forms, the practices, or discourses, and traditions are layered and create complex structures. To a certain extent the practices are self-regulative in that they constantly develop, sometimes by leaps and bounds. Furthermore, "discourses (or practices) have certain texts […] that are taken to be authoritative" (p. 42), which acts as a kind of dynamic resistance that allows for commentaries to be made–commentaries that may later form the basis for new texts. The versatility of these structures makes it difficult, perhaps not even meaningful, to attempt to understand an artistic practice such as improvisation as either discovery or creation. As it relates to context and practice, one's own as well as that of one's co-musicians and that of the venue, the tradition and the idiom, there is room for both discovery and creation. Benson turns to Shakespeare and, in the light of the discussion on discovery versus creation, asks about the famous line "To be or not to be..." from Hamlet: "So what exactly was involved when writing that memorable line? " (p. 44). Shakespeare certainly did not invent the English language, and it is very likely that someone had, at some time, formulated a similar or even identical phrase before him. What he did, however–and this is what is significant in this discussion–is he "took that line (whatever its origin) and imbued it with a certain significance by placing it within a particular context" (ibid.). Following this line of thought and in this limited example we can conclude that one of the most famous lines from one of the greatest geniuses of western literature does not fulfil the first requirement of Kant's definition of a genius: To be original in the sense that what is created has not existed before. The comparison may seem unfair but I strongly believe that the requirement for originality *in general* needs to be contested and rethought.

Closely connected to this discussion on context, creation, discovery and practice is the concept of freedom. That freedom is a difficult topic is no news. Hanna Arendt points to the political domain, which we will return to in the next section. Without freedom, she claims, political life would be meaningless:

6) Were this true, all and any artistic education, not to mention artistic research, would obviously be utterly pointless. Although now on the decline, I believe that some of the resistance against artistic research that we have seen over the years has its roots in Kant's romantic view on the arcane acts of artistic creation. Widely regarded as futile, should it somehow succeed in uncovering some parts of its hidden layers, artistic practice would forever be transfigured.

> And even today, whether we know it or not, the question of politics and the fact that man is a being endowed with the gift of action must always be present to our mind when we speak of the problem of freedom; for action and politics, among all the capabilities and potentialities of human life, are the only things of which we could not even conceive without at least assuming that freedom exists, and we can hardly touch a single political issue without, implicitly or explicitly, touching upon an issue of man's liberty. (Arendt 1993)

Musical notation and the division of labour into composer and performer is a relatively recent invention in the history of music, and improvisation as an expression of musical freedom is often seen as the exception. Could we perhaps say that it is not so much that improvisation is free, but that music based on preconceived and composed structures is constrained and absent of freedom? In that case, would it not be more appropriate to talk about reinstating freedom in all aspects of musical creation and abandon what are seen by many as a problematic dichotomy between improvised and composed music?[7] In fact, improvisation as such is no guarantee for achieving expressive freedom. In some improvising genres and musical cultures, the freedom of improvisation may be defined by completely different standards, and sometimes improvisers are so strictly tied to a particular aesthetics or style that on the surface freedom may not appear to be a strong agent.[8] But even in improvised music that is strongly identified with freedom, its stylistic qualities may be so prominent that the meaning and impact of freedom may be debated. Looking at it from the other side, however, even in music with a strong idiomatic identity, such as bebop, in which performers are musically and socially tied to a defined and, in a sense, limited set of phrases, the organization of the material is still freely decided by the musician. And if we approach the idiom from a slightly wider angle, and on a greater time scale, we can clearly see that there is a huge difference between the stylistic interpretation made by Charlie Parker and that made by Thelonius Monk. Both are exponents for bebop but have approached the idiom freely, with exceptional individuality, and with a greatly varied aesthetics as a consequence.

The claim on jazz musicians to be both strongly individual and free improvisers at the same time quickly becomes problematic, as the first requirement influences or limits the second. To attempt to do both at the same time, one may end up using one's freedom to claim the right to control the situation at the expense of the freedom of the other. In essence this is interaction-as-control, and it is a surprisingly common mode in jazz improvisation. In his book, *The Philosophy of Improvisation*, Gary Peters (2009) discusses the phenemenon as the "aporia of freedom". Freedom is generally thought of as something positive, deliberating and emancipatory, but it is a mistake, according to Peters, to neglect "freedom's questionable duality" (p. 21). In an interview by Roger Dean in the book *New Structures in Jazz and Improvised Music*, saxophonist and composer Anthony Braxton gives a remarkable account of his doubts concerning the interpretation that the idea of musical "freedom that was being perpetrated in the sixties might not have been the healthiest notion" (Peters 2009, p. 22). Consequently, in his book on the emergence of AACM[9], of which Braxton became a member in 1966, George Lewis points out that they rarely spoke of their music as "free jazz", "avant-garde" or even "black music", though the association had a lot in common with the other black grassroots organizations that were being formed at the time (p. 98 Lewis, 2008). The balance between the individual and the collective[10], between freedom and adaptation to the collective, and between composer and performer have likely contributed to the internal freedom from freedom itself (Peters 2009). It is again the context that needs to be considered. For the Chicago musicians that started AACM in the 60s, they created a frame within which individuality, as well as freedom and collectiveness, could manifest themselves as agents of creativity. In the paper *Negotiating the Musical Work* we discussed the notion of subculture as a means to develop and better understand the ideas that arise in our collaboration:

> We might try to approach this symbolic system in relation to a common context, or subcul-

7) Which, I should add, I strongly believe is an erroneous model. There is no opposition between composition and improvisation, these are two very different processes and one can effortlessly exist within the other at any time. I suspect the reason there is a persistent desire to keep them in opposition has to do with social and political issues.

8) Some of these expressions could be referred to as idiomatic improvisation, as labeled by Derek Bailey (1992).

9) The Association for the Advancement of Creative Musicians. A still active, nonprofit organization for creative music, collectively run by musicians, that was initiated in 1965 in Chicago, USA but which can now be found in several cities throughout the US.

10) Muhal Richard Abrams claimed that AACM was a collection of individuals (Lewis 2008, p. 498).

ture created by the agents involved in it. Both composer and performer are working within the frame of their own cultural contexts which defines their respective understandings of the evolving work. The subculture is a result of interaction, and negotiation ('What is it we are developing? ', 'How are we talking about it? ', etc.), between the two agents and their inherent cultural contexts. Their mutual expectations and their understanding or imagination of the work in progress is of importance when they attempt at co-coordinating their actions, for instance towards a definition of the performance instructions.

Is it possible to suggest that this subculture may develop a sense of freedom both in relation to the surrounding context and between its members? In this field a symbolic system may emerge that can freely redefine itself in the course of the artistic work, both in its preparation and its execution. In the text cited above we discuss the context of an emerging collaborative composition, and we were observing how our understanding of it was shaped both by the work itself but also by our individual interpretations of what was going on. I.e., in the work process the practice as well as our understanding of the practice was evolving at the same time. Would this be a working definition of freedom? That the concepts are being formed and reshaped in the work process? In this case the effect would be that freedom in improvisation is not the freedom of one musician at the expense of that of another, but rather is something that takes place in the context of the artistic practice and that has to be constantly renegotiated.

If now we return to the situation in the concert described above: What was the significance of my non-playing of the saxophone that evening? Was I giving myself too much freedom, i.e., did my co-musicians suffer? I think, in a way, I was. What is more, rather than acting out my own frustration, I could have acted more sensibly to the other members of the group. Instead of looking at my dilemma as a personal problem I should have realized that it was a collective one. In that dialogue, provided all members shared a kind of sensibility, we as a group could have become much freer, and in that earned freedom we could have communicated better among ourselves and with our listeners. Meanwhile, when I forgot how to play the saxophone I created a commentary to the musical discourse that we were engaged with in the group. This commentary could have provided us with a recreated "text" which may also have boosted our collective freedom and development.[11] Although I was not aware of it at the time, the act of forgetting is a common technique to short-circuit the habits of playing. Ornette Coleman wanted to "create as spontaneously as possible—'without memory,' as he has often been quoted as saying" (Litzweiler 1992, p. 117) and without any "real" training he started playing the violin and the trumpet. In the process his memory and meta-knowledge about saxophone playing was neutralized, and he felt he could approach a truer expression.[12]

The answer to the question of the significance of the rupture created in the performance above may lie in the way the self and the body interoperates. Creation and discovery alike are activities that rely on the way also our tactile senses function, and in an embodied process the "I" and the "Eye" are inseparable. In Roland Barthes seminal essay *The Death of the Author* we find many interesting ideas that parallel the concepts of embodiment, de-individualization and habit destruction as "abrupt disappointment of expectations of meaning" (Barthes 1977). The importance of individuality in many expressions and the ego-centered view on artistic production mentioned in the beginning of this text are in many respects related to the role and significance of the author brilliantly interrogated by Barthes. Although my discussion has been focused on the role of the improvising musician, Barthes's discussion revolves around the literary author, a role significantly different. In a live improvised performance of music it becomes difficult, if not impossible, to separate the creator from the music as Barthes suggests we do with the creator and the writing.[13] However, the way in which the artistic 19th century genius has been shaped has created a mythology so powerful that it has had an impact on much of our understanding of any artistic figure, authors, composers and musicians alike. The creative act is so strongly soldered to this romantic image that even the understanding of an improvising musician, whose creativity depends not on work creation, but on the real-time impulses in performance, which are very volatile by nature, is informed by this notion. In opposition this romantic view Barthes claims that:

> Writing is the destruction of every voice, of every point of origin. Writing is that neutral, composite, oblique space where our subject slips away, the negative where all identity is lost, starting with the very identity of the body writing. (Barthes 1977, p. 142)

Furthermore, the preoccupation with the author is a consequence of the view of the work as emanating from its creator. Hence, the only relevant way to understand the work is through understanding the author's background, life, and context: "The author still reigns in histories of literature, biographies of writers, interviews, magazines, as in the very consciousness of men of letters anxious to unite their person and their work through diaries and memoires (Barthes 1977, p. 143)." The reading in the larger sense of the word is the process of decoding the message, not in an act of critique but an act based on a reconstruction of the author, recombining the parts that he constitutes and, through this structure, being able to understand the true meaning of the work. As we know, this is in essence the focus of traditional musicology, to reveal the composer bit by bit and understand his work through the history of his life: Where did he live? Who was his maid? What did he eat? Where did he study? Though these questions may well be relevant for the study of our cultural and social history, the extreme focus on the individuality of the composer has had a strong influence on the interpretation and reading of his work at the expense of the position of the listener and that of the performer.

If we transfer Barthes's statement that "a text's unity lies not in its origin but in its destination" (Barthes 1977, p. 148) to the domain of music, the subjectivity of the performer would not be operative in the act of listening to an improvisation. Its unity is instead in the destination, the listener. Even today, almost a half century after the text was first published, this notion is still provocative, but Jean-Luc Nancy (2007) go even further:

> It is not a hearer, then, who listens, and it matters little whether or not he is musical. Listening is musical when it is music that listens to itself. It returns to itself, it reminds itself of itself, and it feels itself as resonance itself: a relationship to self, stripped of all egoism and all ipseity. Not 'itself', or the other, or identity, or difference, but alteration and variation[…] (p. 67)

Self and other

In 2005 Stefan Östersjö and I initiated a long and still standing collaboration with two Vietnamese musicians, eventually named The Six Tones. The dean of the artistic faculty of Lund University had helped us to get in touch with Nguyễn Thanh Thủy and Ngo Tra My, two master musicians whose primary musical interests up until then had been traditional Vietnamese music. They played Dan Tranh, a Vietnamese zither, and Dan Bau, an electrically amplified mono-chord, respectively. Neither Stefan nor I had any previous experience of playing Vietnamese music and Thanh Thuy and Tra My had very little experience playing contemporary Western music. The first time all four of us met in the composition studio at the Malmö Academy of Music to play, Stefan on guitars and I on laptop, we set out to try some sketches of mine. It was a set of loosely structured improvisations and the ambition was that these would provide input for a piece for the quartet that I would compose. One of Stefan's and my primary interests in initiating this project was to understand more about the way improvisation is used in traditional Vietnamese music and explore ways in which we could create a common platform between our respective traditions. In the session, and with these goals in mind, I became incredibly self aware of the dissymmetry between Stefan and I, the two western men, and our Vietnamese female colleagues. Given the history of Vietnam in particular, and the history of the white man in general, I was afraid that simply because of my identity and cultural background, my activities and my ideas would get in the way of Thuy's and My's origin and mask the culture they carried with them. I believe this was a relevant concern, but the problem was

11) The reason was not realized was due to the fact that the group was discontinued soon after this tour, for reasons not specifically related to the events described here.

12) There are many other examples. Marcel Duchamp talked about forgetting with his hand, DJ Spooky has talked about forgetting with his turntables and it all leads us back to Nietsche's concept of "active forgetting".

13) The disengagement of the work from the author is a hermeneutic thought brought forward also by Paul Ricœur (1991) among others. The author is not the one-way sender of a message the way we often want to see it, because in the act of writing he is removed from the work (See also Frisk and Östersjö, 2006). What Barthes instead suggests is to sacrifice the author in order to reinstate the position of the reader.

that I only had awareness of the inequality and, no knowledge of what to do about it. The purpose of the project would easily have been defeated if we had not found a way to deal with the imbalance. However, the consequence of my misguided concern was that I became so hesitant to take any kind of initiative that the session almost collapsed. Thuy and My told me in hindsight that, more than anything, they were confused and wondered whether I knew what I wanted at all or what I was after. In fact, that was not the problem – I had a very clear idea about what it was I was after musically – but out of fear for appearing as an authoritarian leader, I lost the ability to express my intentions clearly. My self-consciousness concerning the general idea of the power relations in the group got in the way of my abilities to communicate.

As we may observe in this incidence, the particularity of the self can get in the way. Simon Emmerson reconsiders Trevor Wishart's ideas on sonic masking (Wishart 1985), applying them on the meeting between two musical traditions. Aspects of one sound from one tradition may mask those of another; or, slightly rephrased, one "self", e.g., the conscious, may mask another, e.g. the unconscious. Emmerson, furthermore, goes on to discuss the different modes of exchange that we may have access to when different musical cultures collide, and the "particular mix of these may result in a range of outcomes: on the one extreme, appropriation with no exchange or understanding–for example, a composer 'plundering local colour for sampling'–through to true exchange with the possibility of real mutual understanding" (Emmerson 2006). Even if we were not interested in a merging of the musical traditions we were certainly clear about wanting to avoid appropriation. So was I appropriating Vietnamese music when I applied electronics to the acoustic performance? Or was Stefan doing so when he played the 10-stringed guitar with a slide in order to make it sound like an idiomatic Vietnamese instrument? According to Emmerson the unsuccessful exchange between two or more idioms is one where properties of one hide properties of another:

> [A] situation where two sounds are played together and one masks the other (or a perceptual aspect of the other) such that it can no longer be perceived. We can generalize this from sound, to performance and even to aesthetic aspects of music. Throw two traditions of music making together and aspects of one may mask aspects of the other (sound subtlety, performance practice tradition and aesthetic intent). This may be inevitable in any intercultural work as there are bound to be incompatibilities. But we must ask–have we masked something 'significant' as seen from within the culture? (Emmerson 2006)

Masking will probably occur to a certain extent in any kind of music, but the question asked by Emmerson at the end of the quote is material: It is not so much if something is lost as *what* is lost, and what the importance of the property is. The ambition to avoid masking my new Vietnamese friends resulted in a collapse in which nearly everything was masked.

Acknowledging or questioning a system of domination or an unequal relationship is not in itself a means to transform it. To move beyond merely describing it and in order to politicize and defy despotism, it is necessary to question the self and assume an altered perspective because the social impact of the Eurocentric view of the world should not be underestimated. Stefan and I belong to what Mark Slobin (1987) labels "the superculture" (p. 31), and the complex political and economic imbalance between East and West plays an important role in our understanding of the other in our multi layered work with traditional Vietnamese music in general, and with The Six Tones in particular. From the outset the idea with the project was to aim to create a music whose identity was neither Vietnamese, nor Swedish or European, but both at the same time, or, preferably, music with its own distinct character. We wanted to avoid the simple superimposition of one tradition on top of the other, instead aiming for the co-existence of the two elements on equal grounds. Slobodin defines three categories of intercultural work:

1. *Industrial interculture*, which evokes the notion of a commodified system whose main function is to project the first world order, spiced with an unobtrusive element of difference (p. 61).
2. *Diasporic interculture*, which emerges from the subcultural interactions across the borders of nations (p. 64).
3. *Affinity interculture*, which describes a "global, political, highly musical network" in which musicians are interacting and communicating through a negotiated musical space (p. 68).

At the time we were not fully aware of the implications of our ambitions, nor had we thought much about the political dimension of our endeavour, but our process was most closely related to the above category of affinity interculture category above. Our network has grown significantly since the start, both in Vietnam and in Europe, and the context for the group is now multidimensional both geographically and stylistically. Social activist Gloria Jean Watkins, also known as bell hooks, approaches her own background in racist America in the significant *Marginality as site of resistance* (hooks , aka G. J. Watkins). Describing the railway tracks as the demarcation between her home ground and the centre she identifies marginality as "the site of radical possibility, a space of resistance" (p. 341). The first mistake, as is shown by hooks, is to think of marginality as a space one wishes to surrender and give up to instead gravitate towards the centre. hooks and her friends and relatives would at times trespass into the other domain, to work "as maids, as janitors, as prostitutes", and when they did, "there were laws to ensure our return". To refuse to give in to the expectation of wanting to relocate from the margin to the centre is to invalidate these laws and dismantle their meaning. Vietnam, being both politically and economically in the periphery, is in every respect marginalized as the other, the foreign, the different and the obscure. And, just as there were laws for bell hooks and her friends to ensure their return when they trespassed, our Vietnamese co-musicians have learned that there are laws to ensure their return to Vietnam from Sweden as well. We may think that the global perspective has broadened our view on the world and blurred the boundaries, but in the eyes of the legislators in the West there is no doubt as to what the centre is, and what the periphery is. Furthermore, though we may think that the regions demarcating the inside and the outside are large continents and political systems such as East versus West, or democracy versus dictatorship, the many uprisings in the suburbs of cities in countries such as Sweden, Great Britain and France show us that the local territories are also disunited and parted.

What bell hooks is referring to in the text cited above is an institutionalized oppression and marginalization that has been going on for centuries and clearly operates on a completely different scale compared to The Six Tones. Although merely reading about will not let us understand the experiences described. What it does allow us to do, however, is to understand that the effects and the processes in the development within the The Six Tones are similar to those operating on a larger scale. It is in this sense that artistic activity also has the potential to engage in a political consideration, reflection and introspection, not in the meaning that the artistic expression itself needs to be politically imbued, but rather that the site for artistic practice and artistic research can be taken advantage of as a site also for politically oriented questions.

The response to the unevenness in the relatively innocent context of this first rehearsal with The Six Tones was based on the thesis that, rather than stepping back and allowing social interaction to take place, I evaded the uneasiness by action, thereby disallowing change to take place. In his reading of Lacan, Slavoj Žižek (2011) points to interpassivity as: "I am passive through the Other" (p. 26). And further: "In a group situation in which some tension threatens to explode, the obsessional talks all the time in order to prevent the awkward moment of silence that would compel the participants to openly confront the underlying tension" (p. 26). Eventually, according to Žižek, we move from the "the contemporary redefinition of politics as the art of expert administration as politics without politics, up to today's tolerant liberal multiculturalism

as an experience of Other deprived of its Otherness" (p. 38). Though it is important to remember that once we started playing in the session described above, we relatively quickly approached a working situation in which some of the issues discussed here were resolved, it is equally as important to recognize that political topics also may infringe on artistic practice unless they are properly identified. Furthermore, my main point is that the practice may effectively provide a contingent unfolding of the same topics.

Discussion

The world is not legible, it is audible, announces Jacques Attali (1985, p. 3). Despite the extreme focus on visual communication in the hyper-capitalism of the early 21st century the chasm, as it is referred to by Marcel Cobussen (2008) in his excursion in musical spirituality, between what is the seeing subject and the seen object has no equivalent in sound: "The ocular subjectivity implies a not-involved witnessing, a necessary distance, an external relationship: the seeing subject can be located at the edge of the world. Conversely, the ear has no opposite".[14] The ear is immersed in sound and has no way to 'shut its eyes'. One may speculate if it is this possibility of detachment from what we see that is being exploited by media; is it possible for us to consume images without getting fully involved, making way for unconscious influence? When listening I am within the sound, captivated in it, as we are reminded by Nancy. What would inevitably restrain the potential for openness towards the other in listening is the desire for autonomy, although musical practice the dividing line between openness towards the other and the autonomy of the subject is considerably more complicated, as we have seen in the three examples from my own practice presented here.

A lot can be said about these stories. They are perhaps not very original; many musicians and artists may have had similar experiences. My main concern, however, has been to attempt to understand the ways in which the self can, and will, interact with my creativity and my interaction with the other: the self as *I* or *Eye*, as a vehicle or inhibitor of freedom, and as obstructing social and political power structures. The common denominator in these stories is the way in which the self, and consciousness about the self and other, alters the planned artistic and expressive trajectories, and the focus of this essay is how the impact and meaning of these intersections between the internal and external worlds of artistic expression can be discussed. Looking at the different positions, or perspectives, of the self, the subconscious activities and choices made in performance become accessible and possible to penetrate. Approaching a critical view on freedom reveals its dual nature, and the dynamics and destruction of habit formation allows for an improvisation that may also be non-free. I agree with Griffiths (2010) that "understanding the self and its place in research is crucial in the carrying out and presentation of arts-based, practice-based research" (p. 185). Griffiths also points to how artistic research may become an important counterpart to the way that neoliberalism valorises the impersonal (though it is always referred to as the personal choice). I would like to go even further and argue that through artistic practice, with the help of artistic research, we are able to approach difficult socio-political issues and become aware of the necessary transformations needed within the domains of self and of society.

We are reminded by Deleuze (1994) that "self-consciousness in recognition appears as the faculty of the future or the function of the future, the function of the new" (pp. 14–15) and part of my argument here has been that self-consciousness in recognition is also the first instance that will allow the new. In all three recollections my failure to recognize my instant responses as valid made me analyze my behaviour as irrational and flawed. Instead of seeing the self as capable of responding soundly to a given situation, its reactions were seen in relation to the socially or culturally moulded reference image of the performer or composer. This image is ruled by the awareness of culturally defined roles and may be seen as the faculty of the past, the opposite of self-consciousness in recognition. The improvising musician is in many cases as crammed with artistic codes as is the composer or the writer, and the concept of freedom often associated with improvisation makes it even more complex. To be free and authoritative are central properties of the jazz musician, problematic in themselves, and together they may become plain confusing. Both of the first two stories are related to these concepts and possible solutions lie in regarding the group as a dynamic subculture and changing the focus from the origin to the destination. Barthes' claim that writing is not the creation of a voice but its destruction, a space where all identity is lost may seem counterproductive to my case, but the loss of identity is where the self may be found. This is a claim initself exemplified by the third story where identity was the obstruction in the first phase of our intercultural project.

The self in artistic practice is constituted by a complex weave of interrelated aspects including, apart from the psychological, the social, cultural, political, aesthetic and philosophical. In a globalized world, not limited to the intercultural context, it is useful to attempt to deconstruct common binaries central to most Western artistic production, and decisive to the way our cultural understanding of the role of creation has been shaped. These include producer/consumer, performer/listener, improvised/composed[15] and dual/non-dual. When the impact of these, and similar, concepts are penetrated, the self can be informed by what is now going on in the process rather than by what has traditionally shaped the it, e.g. the self as a composer is defined by the particular needs imposed by the context and not by what is culturally or aesthetically expected of that role. The subsequent reciprocal effect is that a new opening for examining the potential consequence in the political dimension is revealed. The first instance of change, of the future, is to determine what needs to be changed, and artistic practice is a location where this may be aptly established.

14) For an artistic research project with a focus on seeing and being seen, see the PhD dissertation Leiderstam (2006).

15) Though this is not a binary opposition I include it here for the reason that it is so commonly discussed as a dichotomy.

References

Arendt, H. (1993). *Between Past and Future: Eight Exercises in Political Thought.* Penguin Classics. Penguin Group (USA) Incorporated.

Attali, J. (1985). "Noise: The Political Economy of Music." In *Theory and History of Literature.* vol 16. University of Minnesota Press.

Bailey, D. (1992). *Improvisation: its nature and in music,* 2nd ed. Camebridge: Da Capo Press, Inc.

Barthes, R. (1977). *Image, Music, Text.* Fontana Pres.

Bateson. G. (1972). *Steps to an Ecology of Mind.* 2nd ed. University of Chicago Press.

Benson, B. E. (2003). *The Improvisation of Musical Dialogue: A Phenomenology of Music.* Cambridge University Press.

Biggs, M. & Karlsson, H. (Eds.). (2010). *The Routledge Companion to Research in the Arts.* Routledge.

Boulez, P. (1964). "Alea". In *Perspectives of New Music*. vol. 3, no. 1, p. 42–53.

Cobussen, M. (2008). *Thresholds: Rethinking Sprituality in Music.* Ashgate Pub. Ltd.

Eco, U. (1968/1989). *The Open Work. Hutchinson Radius, 1968*.

Emerson, R. (2000). *The Essential wirtings.* Modern Library.

Emerson, R. (2001). *Nature, Addresses and Lectures.* University Press of the Pacific.

Emmerson, S. (2006). "Appropriation, exchange, understanding". In *Proceedings of EMS -06, Beijing*. Terminology and Translation." Electroacoustic Music Studies, EMS, 2006. http://www.ems-network.org/spip.php? article292.

Frisk, H. (2008). *Improvisation, Computers, and Interaction: Rethinking Human-Computer Interaction Through Music.* Ph. D. Thesis. Lund University: Sweden.

Frisk, H. & Östersjö, S. (2006). "Negotiating the musical work. An empirical study on the inter-relation between composition, interpretation and performance". In *Proceedings of EMS -06, Beijing*. Terminology

and Translation. Electroacoustic Music Studies, EMS, 2006. http://www.ems-network.org/spip.php?article245.

Griffiths, M. (2010). ”Research and the Self”. In Biggs, M. & Karlsson, H. (Eds.). *The Routledge Companion to Research in the Arts.* pp. 167–85. Routledge.

Hooks, B. (aka G. J. Watkins). (1990). ”Marginality as site of resistance”. In Ferguson, R. (Ed.). *Out There: Marginalization and Contemporary Cultures*, pp. 341–3. Cambridge: MIT.

Kant, I. (2007). *Critique of Judgment.* Cosimo, Incorporated.

Leiderstam, M. (2006). *See and Seen*. PhD thesis, Malmö Art Academy, Lund University. http://www.seeandseen.net.

Lewis, G. (2008). *A Power Stronger Than Itself: The AACM and American Experimental Music.* The Kenneth Nebenzahl, Jr., Lectures in the History of Cartography Series. University of Chicago Press.

Litzweiler, J. (1992). *Ornette Coleman: A Harmolodic Life.* (USA ed.). New York: Morrow Inc.

Nancy, J. (2007). *Listening.* (Transl. by Mandell, C.). Fordham University Press Series. Fordham University Press.

Peters, G. (2009). *The Philosophy of Improvisation.* University of Chicago Press.

Ricœur, P. (1991). *From Text to Action.* Transl. by Blamey, K. & Thompson, J. Northwestern University Press.

Rollins, S. (1986). *Saxophone colossus.* DVD. Film by Mugge, R.

Shultis, C (1998). *Silencing the sounded self: John Cage and the American experimental tradition.* Northeastern University Press.

Slobin, M. (1987). *Subcultural Sounds: Micromusics of the West. (Music Culture).* Wesleyan University Press.

Thoreau, H. (2004). *Walden and Other Writings.* Bantam classic. Random House Publishing Group.

Thoreau, H. & Blake, H. (1891). *Winter: From the Journal of Henry D. Thoreau.* Boston: Houghton, Mifflin.

Žižek, S. (2011). *How To Read Lacan.* Granta Publications.

Wishart, T. (1985). *On Sonic Art.* York: Imagineering Press.

Magali Ljungar-Chapelon

Interactivity as an Improvisatory Moment in a Virtual Reality Arts Play

What does interactivity mean in relation to improvisation when one creates an immersive Virtual Reality-based work of art that draws the audience as actor-spectator in a play?

With a multidisciplinary production team within the arts, architecture and digital media I have created an artwork in the virtual reality Cube, a kind of virtual reality theatre at Chalmers University of Technology in Gothenburg. Using virtual reality it is possible to create three-dimensional virtual imaginary worlds where audiences become physically immersed as actor/participants ”on stage” and can influence what happens. In my doctoral dissertation I coin the term virtual reality arts play to characterize this kind of artistic experience in between illusion and reality. Within the frame of *(re)thinking improvisation* and under poster sessions we have focused on improvisatory moments and discussed them in this specific context and at two different levels:

- During the creative process where improvisation materializes through the trial and error method: By experimenting with 3D-modelling, interaction design and musical composition for interactive sound-environments the production team works in an improvisatory manner. Also the Hazard factor becomes a creative, improvisatory tool when unforeseen technical, musical and visual effects get integrated into the artistic creative process.

- During the audience experience inside the VR-Cube where improvisation can be seen as a rule of play: The link between interactivity and improvisation builds upon the collision between the predictable and unpredictable, between, on the one hand, planned and thoroughly programmed events and, on the other hand, their unforeseen encounters with the audience. The artist opens up for the various ways that the audience can choose to navigate into the work and interact with artefacts. However, it is not possible to anticipate how the audience will move, act or not act and how the group dynamics will influence the experience. The virtual reality arts play, the realization of the work of art itself can only materialize through these improvisatory interactive encounters between the audience and visual, musical stimuli and artefacts.

Why not then carry out the experiment by driving it to an extreme and improvise an outing in the countryside, a real picnic in a virtual world? That is what one spectator did, a bold initiative that we discussed after looking at digital material and a film made in collaboration with photographer Sandra Andersson. See the *(re)thinking improvisation* DVD with the corresponding powerpoint presentation as well as film excerpts on http://gupea.ub.gu.se/dspace/handle/2077/18849.

Matthew Ostrowski & George Cremaschi

Minding the Gap: Notes towards Managing Competing Technologies in Improvised music

Mechanics vs. Electronics

Let us begin by working backwards, so to speak, from what is the final result of any musical endeavor: the movement of air in space. On this most basic level, there is quite a difference between the resonating body that creates the sound of the contrabass and the vibrating cone of the loudspeaker, the final output of any computer-generated music. The most obvious aspects of this are differences in coloration and position. However good they may be, loudspeakers themselves cannot be mistaken for anything other than loudspeakers, single point sources broadcasting sound from an often fictionally reverberant space. Musical ensembles of whatever size have historically been engineered to form a single acoustic gestalt, and as many failed acoustic-instrument-and-tape pieces will attest, achieving some kind of unity between electronic and acoustic sources, regardless of the actual audio material, can be quite a challenge. Without some kind of unity, or at least parity, in this respect, it can be difficult to perceive the interactive energy of an improvisational performance, as the relevance of one player's behavior vis-à-vis-the other can be disproportionately obscured by the simple mechanics of sound quality and location.

In order to bring both instruments into the same realm, the most obvious first step is to amplify the bass. By moving its sound into the universe of loudspeakers and thereby concealing to some extent its mechanical origin, the two sources are placed on the same level: for most of the audience, the bass sound is, like the electronics, coming from a point source with the kind of coloration that we expect from loudspeakers, thus turning the acoustic instrument into an electronic one. (There are also volume issues which may require amplification; this is discussed further below.)

This is one point of compromise that can be particularly frustrating for an acoustic musician, and a string player in particular. As string instruments do not radiate a sound from a point (as do loudspeakers, or wind and most percussion instruments), but rather from the entire resonating body, any microphone placement is inevitably going to sound better with some playing techniques than others, and thus creates limits in terms of style. Pickups, although not having issues such as feedback that can come from amplifying the relatively soft sound of a bass to acceptable levels, amplify vibration, not sound, which, in its emphasis on higher harmonics, again tends to drive the player towards certain techniques.

The bass, like most acoustic instruments, is quiet relative to amplified electronics, which requires adjustments in the playing style on the parts of both players. The timbral orientation of much electronic music is often best heard at a fairly loud volume, the better to make audible the micro-changes and interior structures of synthesized or processed sound, but the bass is not a loud instrument, and pushing its dynamics can lead to poor tone quality, particularly when using more traditional playing techniques. Thus we have found it best to both play towards the middle, or even by reversing the volume ratios one might expect, the computer playing pianissimo while the bass plays forte.

Thus both performers are operating in what can be considered a predominantly electronic sound field, with a stereo environment created by the electronics, and the bass in the middle, somewhat subject to a performative 'compression' of dynamic range.

Sources of power

Another key difference between mechanical and electronic means of generating sound is that of the power source. For an acoustic musician, sound is always created by a physical action of the body, whereas for the laptop player, sound ultimately comes from the infinite source of a power plant, not subject to any of the limitations associated with the body such as lung capacity, arm length, or fatigue. This can be clearly heard in the vast body of both live and fixed-media electronic work which is primarily engaged in creating a flowing and shifting timbral field, in which the notion of a musical event such as a note or phrase is largely irrelevant. In the context of an electroacoustic duo, a lack of awareness of these different energy sources can lead to two pitfalls: One, in which the electronics create a bed or background, over which the acoustic player layers phrasal material, leading to a traditional background/soloist situation; or secondly, a scenario where the electronic material is so dense and spectrum-filling that the acoustic instrument can become lost, giving the performance an overly dominant 'electronic' quality which overwhelms the unique contributions of an acoustic instrument.

In order to maintain the dynamism of equally-balanced voices that is the hallmark of a good improvisation, we have chosen to limit the sound-creating algorithms used by the computer to ones which do not run indefinitely, more in keeping with the limitations of traditional instrumental technique. As the bass is moved into the electronic realm by the use of amplification, the computer is in some way moved into the realm of the acoustic by the kinds of phrasing and gesture built into both the hardware and software of the electronic instrument itself. This does not necessarily imply that the sound palette of the computer is oriented towards sampling or acoustically-modeled timbres, but that the short-term time structures (What James Tenney, in *meta-hodos*, would call a klang) are designed to be commensurate with the capacities of an acoustic instrument. Conversely, we also work a great deal with textural approaches to bass playing, so the roles of background and foreground, texture versus event, remain in a constant state of flux between the players.

Interfaces and extended technique

We have been discussing a situation in which one of our main aesthetic goals is to have both players, with their very different performing technologies, come together so that they can share a soundworld where their interactions are musically meaningful. In order to find this common ground, both players must use extended technique, in the largest sense of the word. What this means for the two instruments is naturally very different, given their disparate functions and histories, but in both cases, one can speak of extended technique as interfacing in a non-customary way at the human-machine boundary point.

In the case of the contrabass, primarily designed to transmit pitch information in the company of other string instruments which also transmit pitch information, techniques of interfacing which emphasize musical parameters other than pitch have been extensively developed by improvisers and composers over the past generations. In tandem with some of the issues regarding amplification mentioned previously, there are a wealth of possibilities available that allow the artist to push the bass toward the more timbrally and texturally oriented sound universe traditionally considered the domain of electronic instruments. However, in our view, it is important that extended technique not become an end in itself: for it to be meaningful, and not merely an accumulation of more or less difficult tricks, it is important to express the relationship between extended and more orthodox techniques, and not to discard outright the entire history of the bass as a pitch and melody producing device. Part of the excitement and tension in an electroacoustic ensemble is precisely the evocation of the musical history inscribed in acoustic instruments as an axis of meaningful sound-bearing. To treat the bass as a box one can make noises with is to lose too much of its sonic capability, not to mention deeper cultural implications, particularly when paired with a computer, which has an infinite supply of non-traditional sounds instantly available.

Although use of extended technique adds another powerful dimension to the acoustic player's armamentarium, we believe they work best when played off the more traditional instrumental range.

While it is not common to think of a computer as something that can be played with "extended technique", since there is not a long and hallowed history of how a computer should be played, it is worthwhile to take the idea into consideration. Since the personal computer is first and foremost designed to increase the efficiency of office workers, one could consider any real-time musical application of the computer as an extended technique, but there is more to it than that. The interface the computer offers – the keyboard and mouse – is poorly designed for real-time musical use, as is most music software. As the bass has been developed with a particular set of musical interactions in mind, computer instruments have been as well, primarily along the axes of parameterization and modulation. (Here is where we see musical history, in the form of analog circuit designers and Bell Labs engineers, leaving its mark on musical computation.) By parameterization we mean the model of conceiving sound as a measurable set of specifics such as pitch, volume, spectral weight, etc., and assigning to each of these some kind of one-dimensional value. Modulation, deeply rooted in the technologies of the analog synthesizer and the mixing desk, is the technique of creating new sounds by blending and altering those atomized parameters. This approach, which in many respects is the easiest way to tackle the problem of making music with a computer, will tend to produce certain aesthetic results, much as the "easiest" way of playing a bass is to bow out a melody. Such an isolation of sonic parameters tends to lead to virtual or physical interfaces built on the same model: that of sets of independent parameters which are "synthesized" to form a musical sound. (The mechanical interface of an acoustic instrument, on the other hand, leads to viewing sounds as gestalts, whose parameters are far more closely interrelated. For example, increasing pressure on the bow creates changes in both volume and timbre.) Such interfaces, controlled by mouse or fader box, make rapid musical shifts difficult, if not impossible, creating a situation in which the computer player is either constantly playing catch-up with the fast changes, both macro and micro, that an acoustic instrument can easily realize, or forcing the acoustic player, by the sheer momentum created by the electronic sounds, to lose flexibility by restricting him to the rather leisurely rate of change offered by a parameter-based interface.

We have attempted to tackle this problem, and extend conventional computer technique by using a combination of hardware and software instruments which are oriented towards creating human-driven musical gestalts, consciously modeled after mechanical methods of sound production. A glove-based controller is used, and tied into a variety of algorithms which are designed to only produce sound when the performer is taking some kind of action with his body. This goes a long way to creating musical parity in several respects: by limiting computer-based sound production to physical movement, it puts both players on the same plane of effort, reducing the predilection of the computer player to leverage the infinite power of electricity; by using gestural gestalts, which are felt (unlike parameters, which are observed), the computer player is more present with the other player than with the computer screen, which is sadly all too often the case; and finally, for the audience to see physical action causing sound on the part of both musicians creates a theatrical environment in which the performers are seen to be reacting to each other as well as being heard. It is important not to underestimate this final point – energy is created on a stage and transmitted to an audience as much by the presence and actions of the performers themselves as by the sound they produce.

To process or not to process

It is very common for small electroacoustic ensembles to focus on electronic processing of acoustic instruments as an approach to creating a unified sound between the two realms. The richness of the acoustic instrument, so the thinking goes, can be extended and augmented by techniques of electronic manipulation, while at the same time avoiding the overly synthetic character of purely electronic sounds. We have largely rejected this way of thinking: this is not to say that we never use any real-time processing, but we keep it in a very limited role. Our interest is in keeping the individual voices of both players in a vigorous state of interaction, and we have found that most processing procedures result in a sound which may be timbrally dominated by the acoustic instrument, but whose structure and overall feel is too overwhelmingly electronic. Delays, time-stretching, granulation – most of these strategies break down any but the most gross time structures created by the acoustic player, while at the same time tying the hands of the computer player in his choice of materials. When we are interested in working with a more or less identical set of sounds, we have found it to be far more fruitful to sample them in advance, leaving our independent voices and decision-making capacities intact.

Some final thoughts

Aside from the purely concrete differences between modes of sound production we have discussed, there are some intangible aspects worth mentioning of what it means for something to be a "musical instrument," or '"electronic" or "acoustic" in the social and aesthetic context of contemporary improvisation. For the acoustic improviser, an instrument brings with it a certain set of demands: an understanding of traditional music theory, thousands of practice hours to develop the required manual skills, and knowledge of music history and the traditions that come with it. All of this is an incredibly rich lode from which the musician can draw, but which can also be a source of oppression. Although no serious improvisers are feeling guilty, or particularly radical, by using techniques that were unthinkable a generation or two ago, or by giving up nineteenth-century ideas of harmony or rhythm, the very existence of that history, and the powerful new presence of computers in the field, can make playing an instrument seem almost anachronistic. Why drag around an enormous wooden resonator when every sound it can make, and more, can emerge from a 3-kilo laptop?

Conversely, for the computer player, all the demands an acoustic instrument brings with it are strictly optional – no one will be surprised to read that only one of the authors of this paper can read music, and no one will guess wrongly as to which one it is. For the computer player, this creates the freedom of a completely open field free of many musical preconceptions, but that very state of untetheredness can leave one feeling both like something of a charlatan, and without any justification other than intuition for making one musical decision over another. The leveling of all sounds under the play button can make any decision feel arbitrary.

These issues are further emphasized by their presence in front of each other on stage. All-computer or all-acoustic ensembles are not faced with this dilemma so intensely, and thus the electroacoustic performance environment, especially in a duo context, can be particularly high-risk for both players. That risk is part of the excitement of improvisational music, and although we have only succeeded in revealing the tip of the iceberg here, these strategic starting points constitute important first steps in the full development of vocabulary and understanding between electronic and acoustic improvisers.

Cléo Palacio-Quintin

Improvising with Live Electronics: a Hyper-Flutist's Perspective

As a flutist-improviser-composer, the integration of technology for interactive performances has been one of my main interests throughout my artistic career. Since 1999, I have been performing on the hyper-flute. Interfaced with a computer via electronic sensors, the extended flute enables the direct control of various digital processing parameters that affect the flute's sound while performing, and allows the composition of innovative electroacoustic soundscapes. Recently, my prototype of a hyper-bass-flute has been developed in collaboration with researchers at IDMIL (Input Devices for Musical Interaction Laboratory, Music Technology Area of the Schulich School of Music at McGill University).

My computer programming strategies for the hyper-flutes have been largely influenced by my improvised music practice, as well as by the works and writings of Joel Chadabe and Georges Lewis among others. Building a computer-based improvisation environment involves important reflection about the needs and wishes of the performer in an improvisational context.

Diemo Schwarz & Victoria Johnson

Improvising with Corpus-Based Concatenative Synthesis

Introduction

This article tries to give an account and an appreciation of the use of live interactive corpus-based concatenative synthesis (CBCS) to improvisation, and of improvising with live electronics in general, from the point of view of an electric violinist and a laptop performer.

The principle of live corpus-based synthesis (Schwarz 2007) is the following: Starting from an empty corpus, the CataRT software (Schwarz et al. 2008) builds up a database of the sound played live by segmenting the instrument sound into notes and short phrases and analysing it for a number of sound descriptors, which describe their sonic characteristics. The laptop performer then re-combines the sound events into new harmonic, melodic and timbral structures, simultaneously proposing novel combinations and evolutions of the source material according to proximity to a target position in the descriptor space that he controls. The metaphor for musical playing is here an explorative navigation through the ever-changing sonic landscape of the corpus being built-up from live recording.

After a review and critical analysis of improvisation and interaction with live-electronics in general by Victoria Johnson, we give an account of the technology and intention behind CBCS for improvisation. We finish by a conclusion and personal appreciations by the two authors.

Improvisation and Interaction

The term improvisation originates in latin *improvisus*, which can be translated as "not before seen". The field extends from improvisation within given frames to free improvisation. Improvisation exists within many genres, from early music, jazz, folk music to experimental contemporary music and others. The different genres have their own rules and aesthetic preferences. In baroque music the framework can be a figured bass line, in mainstream jazz a standard tune. Within improvised electronic music, the electronics itself may constitute the framework, and Roger Dean (2003) denotes this as the "referent" in improvisation. The framework for this project is the electronics and the interaction with it.

Bailey (1992) speaks about two categories of improvised activities; idiomatic and non-idiomatic improvisation. Idiomatic improvisation relates to specific codes, and to the style you play within (for instance jazz or baroque). Non-idiomatic improvisation relates to other issues, and is defined as free improvisation or freer improvised music.

Lisa Dillan (2008) from the Norwegian Academy of Music has schematized improvised activities, with foue graded categories:

1. Interpretation
2. Improvisation within a piece of music or a tune
3. Improvisation over indicated premises/a module/freer improvised music
4. Free improvisation

We find this model useful, because we consider interpretation a possibly improvised activity.

Within improvised music, borders between genres are more and more erased. The field accommodates musicians from many genres, both jazz musicians, classically trained people and others are active. Arve Henriksen, in his sound world, mixes elements from Japanese folk music, medieval music, electronica and jazz. The singer Sidsel Endresen integrates sound material from different genres, and uses extended vocal techniques and electronics.

Musical interaction may be understood as cooperation, interplay, mutual influence, feedback and communication. Interacting is all about musical communication, either with other musicians, or with the electronics as a partner. Interaction may take place both in improvisational and compositional settings. In this connection we talk about it as improvisation. The relation between performer and computer and the choices done in real-time define the landscape of improvisation, both in terms of progress and sound.

Practising Improvisation

An improvisation can be seen as consisting of the following core elements: time, pitch/tonal activity, volume/intensity, timbre/sonic landscape and form. From the point where you have chosen the computer as a musical partner, its limitations and possibilities will be important. Sometimes we experience these properties as ”human”. As a result the machine may be perceived as a living and compatible partner. In the interaction with the computer, the controller used, and its tactility, also play an important role for the playability.

Palacio-Quintin (2008) speaks about three levels of interactivity: Sound processing or the changing of acoustic sound, sound synthesis, and pre-recorded sound material. These three categories make the performer act and interact in different ways during improvisation. The use of sampling, for instance, demands completely different musical choices than sound processing.

Sidsel Endresen is one of the world’s leading improvisation musicians, and she has developed a good methodological system within the field. The following points are picked from her supervision. Improvisations may easily form into the same shape (a curve), and you easily run into repeating the same musical clichés. The problem of repeating oneself is a common one, and limitation can be a cure against this. Creativity may be sparked through narrowing the frames, for instance by making etudes that give you specific tasks: limiting the amount of elements and considering the degree of sonic density and the extent of continuity of activity (whether you are active or passive). This is all about creating resistance for yourself, through awareness of musical inclinations and habits, and having to break these. You should also learn to put yourself in zero position, to be here and now and listen to what is. In the end you also form a sonic and formal framework as the backbone of your playing.

It is a challenge to find out what you actually do behind the electronics. What is the quality of the playing when the sound is not processed? This question can be quite to the point when you work with electronic sound. Hiding behind different effects can be easy, not producing ”normal sound” with any musical content. To challenge yourself it is possible to create the different improvisation etudes without electronic processing.

The Impro-Animal

Accepting faults of your own and of your musical partners is also an important part of the process. One has to let go. You should think before and after playing, but not in the middle of the flow, then ”the improvisation animal” takes control, so that you are at one with what you do. You don’t criticise yourself on the way, you let the musical energy and presence fill you up. What you do can be seen as an extension of the now by learning to choose for it again and again, and not look back on what you have been doing. In the performance you will have to just go for it, stop thinking and let your musical intuition take over. The term ”impro-animal” is Sidsel Endresen’s invention. You are not thinking anymore, you act instinctively as an animal, in each musical situation.

Corpus-Based Improvisation

Corpus-based concatenative synthesis is a new method of sound synthesis used in various contexts of composition, sound design, performance or installations, that allows to take advantage of the richness and fine details of recorded sound, while still being able to control it by the use of perceptually relevant sound descriptors. A real-time interactive implementation of this principle is the CataRT software,

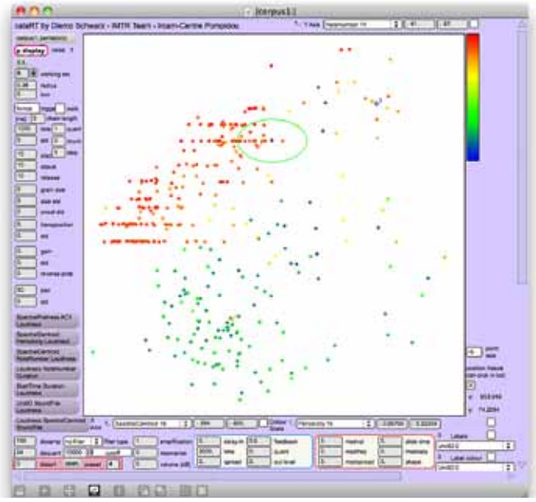


Figure 1: Screenshot of CataRT’s 2.5D navigational interface with a corpus of mostly tonal violin improvisation. Each dot represents a grain of live-recorded violin sound of half a second, plotted on a coordinate corresponding to its mean spectral centroid (x-axis), logarithmic pitch in MIDI note number (y-axis), and periodicity (colour scale).

developed at the Real-Time Music Interaction Team (IMTR)[1] at Ircam–Centre Pompidou, Paris. CataRT is a modular system released as free software, running in Max/MSP using the FTM & Co. extensions[2] developed by Norbert Schnell et. al.

Technically, CataRT splits the incoming sound stream (or any number of prerecorded sound files) into short segments, and analyses each segment in terms of a number of sound descriptors such as pitch, loudness, brilliance, noisiness, spectral shape, etc., or higher level descriptors attributed to them. These sound units are then stored in a database (the corpus). For synthesis, units are selected from the database that are closest to given target values for some of the descriptors. The rate and target values of the selection are typically controlled by a 2D representation of the corpus, where each unit is a point that takes up a place according to its descriptor coordinates, i.e., its sonic character. Other control possibilities are external controllers, or analysis of live audio input. The selected units are then concatenated and played, possibly after some transformations.

Note that corpus-based concatenative synthesis can also be seen as a content-based extension to granular synthesis providing direct access to grains with specific sound characteristics in real-time, thus surpassing its limited selection possibilities, where the only control is position in one single sound file.

The controllers used in this improvisation setup (se Figure 1) are a pressure-sensitive XY-pad for giving the target position and dynamics, the accelerometers in a multi-touch tablet that also serves as a fader box to control the granular playback parameters, and piezo pickups on various surfaces that allow to hit, scratch, and strum the corpus of sound, exploiting all its nuances according to the gestural interaction, the sound of which is analysed and mapped to the 2D navigation space of CataRT. Especially this latter mode of gestural control creates a gestural analogy to the violin playing.

Conclusion

The performance using live corpus-based concatenative synthesis is an improvisation with two brains and four hands controlling one shared symbolic instrument, the sound space, built-up from nothing and nourished in unplanned ways by the sound of the instrument, explored and consumed with whatever the live instant filled it with. It creates a symbiotic relationship between the player of the instrument and that of the software.

1) http://imtr.ircam.fr

2) http://ftm.ircam.fr

Directness of Coupling

We can argue that using live corpus-based concatenative synthesis creates a stronger and more direct coupling between the instrument and the laptop performer, compared to traditional acoustic improvisation. Whereas in the latter the coupling takes place in an abstract space of musical intentions and actions, live CBCS creates a situation where both performers share the same sound corpus as an instrument. Thus, the coupling takes place in a concrete space of sound, since the very timbral variation of the instrument player directly constitutes the instrument from which the laptop player creates music by navigation and recontextualisation.

Improvising on Electric Violin with CataRT

The intention is to achieve a shared musical body, which starts off from nothing. The sound body is fed with sounds from the electric violin. The advantages of the electricviolin are cleanness of the signal, no feedback and little acoustic sound. The fact that all the sounds come from the loudspeakers both from the electricviolin and the electronics contributes to the aesthetics of the shared musical body.

Playing with CataRT gives you an elastic musical landscape to work in. The program can sample, playback, change and recall musical material in very flexible ways. Therefore, I have chosen just to colour my violin sound with different guitar-effects. My aim is to be as free as possible so that I feel in control of the whole sound palette during improvisation, so the latency from thought to action is minimal. For me, total musical freedom in improvisation is to be able to react intuitively in the musical dialogue. I want to be completely natural with the electronics and my instrument, to the extent that it feels totally integrated. It should turn into a tactile, embodied knowledge, as described by Polyani (2000).

How is it possible to play with and against the technology in CataRT? It all has to do with creating resistances for each other, making contrasts, developing the material, speaking together, picking up anything that comes, thinking with the ears – all of this being common features in any musical interaction.

References

Bailey, D. (1992): *Improvisation: Its Nature and Practice in Music.* Cambridge, Massachusetts: MIT Press.

Dean, R. (2003). Hyperimprovisation: Computer-Interactive Sound Improvisations. In *The Computer Music and Digital Audio Series*, vol. 19, Middleton, Wisconsin: AR Edition.

Dillan, L. (2008). I*mprovisasjon – kunsten å øve på noe som ikke eksisterer.* Master thesis, Norwegian Academy of Music. Oslo: NMH.

Endresen, S., personal communication.

Johnson, V. (2011). Electric violin in digital space. *Critical reflection in Norwegian Artistic Resarch Fellowship Programme.* Oslo: NMH. Available pdf: http://victoria-johnson.no/writings.html.

Palacio-Quintin, C. (2008). *Eight Years of Practice on the Hyper-Flute: Technological and Musical Perspectives.* Proceedings of the 2008 Conference on New Interfaces for Musical Expression (NIME w08).

Polyani, M. (2000). *Den tause dimensjonen. En introduksjon til taus kunnskap.* Oslo: Spartacus forlag.

Schwarz, D. (2007). Corpus-Based Concatenative Synthesis: Assembling Sounds by Content-Based Selection of Units from Large Sound Databases. *IEEE Signal Processing Magazine,* March, vol. 24, no. 2, pp. 92–104.

Schwarz, D., Cahen, R. & Britton, S. (2008). "Principles and Applications of Interactive Corpus-Based Concatenative Synthesis". *Journées d'Informatique Musicale (JIM)*, March 2008, Albi, France.

(re)thinking idioms, conventions and tradition

James Gordon Williams

Improvising on Feedback Piano: Aesthetic Discourses behind Music Technology and Sound

*The invention of the Feedback Piano by Chris Warren made this paper possible.

Contextualizing Feedback in Musical Performance

For many of us, the popular notion of feedback[1] in music is represented by the 1969 Woodstock Jimi Hendrix performance[2] of the United States' National Anthem, *Star Spangled Banner*. In Hendrix's iconic, live electric guitar performance – which captured that zeitgeist's popular imagination through the semiotic display of counterculture – Hendrix performed the well-known phrases of the anthem interspersed with an ebullient, complex array of loud distortion and levels of musical feedback. Hendrix's live experimentation with sound, the deliberately slow, sliding blue notes, the electronic wailing of the guitar was not experimentation for experimentation's sake. Similar to his live performance of *Machine Gun*[3], which was an explicit protest against the Vietnam War, guitar feedback is central to Hendrix's commentary on American politics. The social implications and consequences of feedback go beyond the physical.

Experimental musical sounds are used by musicians to represent various modes of thinking about music. Musical sounds are texts that can be read as representations of musicians' thoughts about gender, race, and class. Sound can even represent the idea that music has universal rules and qualities. I disagree with such arguments. Feedback is a text. Feedback is not only an experimental music text but feedback is a text that is historical, socio-cultural, and political. Musicians are invested in different notions of feedback and create from those various definitions. I think of feedback as a musical weapon: a radical, sonic assault on hegemony manifested in the musical, cultural, political, and spiritual realms. In a tradition of innovation by musicians who fight an unequal society feedback represents sonic manifestations of agency. When I was invited to improvise on University of California San Diego computer musician and instrument maker Chris Warren's Feedback Piano (from here on, FBP), I was not only curious about the musical experiment. I was curious to see where our notions of feedback aligned and where they possible diverged.

This project documents the collaboration of two music scholars/practitioners coming together from two different musical traditions. Christopher Warren and I were joined in our goals to push the acoustic piano into new and different spheres. Warren would extend the instrument through technology and I would find new ways to improvise. Warren is a computer musician and experimental instrument maker whereas my background is in composition, improvisation and critical theory. Our collaboration provoked me to answer the following questions: What are the contrasts in the way we understand and relate to notions of technology and improvisation? How might our collaboration reveal our belief systems about music? How do our philosophical approaches to feedback reveal tensions in discourses on music? The significance of this study is furthering the scholarly conversation about how both technology and improvisation are texts that reveal complex worldviews.

Interdisciplinary studies often help scholars understand their work in new and surprising ways. Performing on FBP has forced me to rethink my improvisational practice in the context of new instrumental technology. Both the vast Afro-diasporic improvising traditions – from which I derive my identity as a performer – and the theoretical discourses that extend from that tradition of performance have also been rethought in the new context of experimenting on FBP. The concept of Diaspora, which has both established Black Studies and has enabled new conceptions

1) The common definition of feedback in music is the cycle of an output sonic signal from an amplified system back into the input. For example, feedback often happens when microphone is placed directly in front of a sound system, which creates feedback.

2) Jimi Hendrix *Star Spangled Banner* (Woodstock). http://www.youtube.com/watch?v=wyGGG1l_rf8 (accessed January 19, 2012).

3) Jimi Hendrix. *Band of Gypsys.* CD. 1970

of musical essentialism (Edwards 2001) will be useful in interrogating how my performance on the Feedback Piano might represent tension between lesser-known notions of black aesthetics and the dominating discourses of Euro-American music experimentalism.

Brief Definition of Feedback Piano

Chris Warren's Feedback Piano is a software program connected to an acoustic piano through complex wiring. The wiring is connected to several electromagnetic transducers that are attached to the soundboard of the piano. The transducers facilitate amplification of the feedback loop, which creates the sound. The complex technological concept behind the creation of the Feedback Piano is best expressed in Warren's own words:

> Without a soundboard, a piano would be very quiet. Strings, though capable of containing and dispersing energy, lack the surface area necessary to efficiently transmit this energy into the air to be heard; the large surface area of the soundboard is far better suited for this task. To this end, piano designers and builders aim to tightly couple the strings to the soundboard, making energy transfer between them efficient. The feedback piano exploits this rigid coupling by using it to circulate energy in the reverse direction, from soundboard to string. Electromagnetic transducers are clamped to the braces of the soundboard, transforming it into a large speaker; any sound played into these transducers will be sent to the strings (as well as the air). Electromagnetic pickups are placed beneath the strings and a microphone nearby, their signals fed into a computer. An algorithm acts to further disperse the sound, and it is then sent to an amplifier and then the transducers, completing a feedback loop.[4]

Chris Warren's primary goal is to make an intervention into the limitations of the piano, through software and amplification devices that allow sound to extend rather than decay. Warren also provides a definition of the inherent limitations in the design of the piano.

> Musical instruments are tools we use to shape mechanical energy into specific patterns. The passing of time inevitably decays these patterns, destroying their order. The Feedback Piano is intended to represent a sonic memory, retaining these patterns as long as the player wishes and allowing for chords and timbres that are more complex and layered than a piano typically affords.[5]

Warren is interested in the complex musical textures that result from the initial performance of a pianist. What Warren defines as sonic memory are those resonances and tones that go into the feedback loop and are preserved in complex textures for as long as the performer wants. What do instruments teach us about their inventors?

Feedback Piano as a Text

Notions of what a text can be expanded to include musical instruments. Musical instruments are textual in the way they become speaking archives of histories or eras. Musical instruments become textual in the way they are sometimes transformed to show resistance to ideological regimes. The Feedback Piano, like all instruments, embodies complex intentionality and mediates "social agency" (Dawe 2009, p. 156). For example, South African musician Thomas Mapfumo applied ancient *Shona Mbira* melodic and rhythm patterns to the electric guitar (Lazarus 2001, p. 240). These ancient *Shona* patterns combined coded lyrics in a way that awakened Zimbabwean cultural pride and fostered a collective resistance that helped overthrow the oppressive Rhodesian government. While the Feedback Piano has never been used as a form of resistance to oppressive governments, this example underscores how musical instruments become extensions of political ideas (Dawe 2009, p. 156). This idea is important for understanding how Feedback Piano technology represents belief systems of the inventor. George Lewis argues:

> Musical computer programs, like any texts, are not "objective" or "universal," but instead represent the particular ideas of their creators. As notions about the nature and function of music become embedded into the structure of software-based musical systems and compositions, interactions with these systems tend to reveal characteristics of the community of thought and culture that produced them. (Lewis 2000, p. 33).

My improvisations on the Feedback Piano are also texts. In the same way that compositions develop in various social contexts that are invested in certain affiliations (McClary 1992), improvised performances also create meaning through shared cultural codes and the social contexts in which the improvisation is performed and received by audiences. Improvising on feedback piano is an opportunity to "say something"[6] in the form of musical ideas. Neither instrument makers nor improvisers create apolitical artifacts or performances. Belief systems are expressed both in the creation of experimental instruments and in improvised performances on those instruments.

Belief Systems Behind Concepts of Sonic Memory

Warren and I work from two different definitions of sonic memory in our collaboration. The preservation and enveloping of altered pitches in a separate feedback loop reflects Warren's notions of what music is, how it should sound, and how sound should inhabit space. Perhaps Warren's creation of the feedback loop in the FBP is linked to dominant discourses of what experimental music is and how sound itself should be preserved. I define sonic memory as the active performance of Afro-diasporic improvisational tendencies that happen in unfixed, but specific musical ways. These improvisations extend from a socio-cultural vocabulary that represents melodic phrasing, chord constructions, the use of space, etc., in peculiar ways.
Many scholars have applied rigid criteria in their definitions of improvisation. Some scholars argue improvisation must sound a certain way to be identified as "black." Gilroy identifies such definitions of Afro-diasporic music as ethnic absolutism. Gilroy asserts that ethnic absolutism has resulted in the construction of a narrative about an uninterrupted historical flow of pure black musical–from African to the New World– that has been untouched by different musical traditions and historical changes in the world (Gilroy 1993). This discourse of absolutism is critical of African-American musicians who challenge the binary thinking of many who associate the use of technology, graphic scores, extended notation, multi-media, electronics and computers with European modernism (Borgo 2005). George Lewis's "Afrological' and "Eurological" categories illustrate how belief systems about improvisation emerge from different socio-cultural locations (Lewis 1996). Lewis's theoretical paradigm is useful for illustrating the tension between belief systems that are encoded both in the invention of FBP technology. Notwithstanding Gilroy's critique of essentialism in musical discourses, thinking about improvisations on FBP within the context of diasporic sonic memory is important. The conceptual tension between the two different definitions of sonic memory encoded in the technology of FBP and in my improvised performance will be the focus of my analysis.

An Analysis of Feedback Piano Performance

New musical discoveries on the FBP were my primary motivation for joining this project. The following were all interesting prospects: The possibility of exploiting a new vocabulary of FBP sounds in my improvisation, the creation of exciting musical textures that would reflect undiscovered aspects of my musical identity, and the opportunity to challenge my beliefs about improvisation. In my analysis, six areas of Feedback performance will be discussed. The use of FBP controls, the creation of harmony, the performance of rhythms, and the challenges of latency in sound, the construction of individual sound and the creation of sonic narrative will all be discussed.

Playing FBP presented opportunities to learn how to play piano in a different way. The main controls of the Feedback Piano are two large adjacent, pedals on the right side. The furthest pedal to the right controls the volume of the feedback loop. The volume of this pedal depends on whether the pedal is completely down to the heel, which is the lowest volume and

4) University of California, San Diego PhD Candidate Christopher Warren, interview by author. San Diego, CA, November 2011.

5) ibid.

6) Monson, I. T. (1996). *Saying Something: Jazz Improvisation and Interaction.* Chicago: University of Chicago Press. "Saying Something" refers to the essence of an improviser's creative practice: the desire to make decisions in real time on what to play and when to play it, whether they are in a performance with other musicians or experimenting with new technologies.

would make the feedback loop inaudible, or all the way to the toe that is the highest volume of the feedback loop. The pedal immediately left of the feedback volume pedal controls input to the feedback loop. When this pedal is pressed all the way down to the heel, my improvisations on the piano do not go into the feedback loop. My improvisations go completely into the feedback loop when the pedal is pressed all the way to the toe. This pedal plays a central role in creating a connection between the improvisation and the technology. This input pedal is used to both begin and end an improvisation cycle. My sense of flow in the improvisation relied on the mastery of this pedal.

There are ten vertical rectangular buttons on a two-tier board in addition to the two main pedals. Button number five is the Clear button. Its function is to clear what Warren calls "delay lines" or the feedback loop and will give the improviser two seconds where the feedback loop is completely off. Warren recommended that button be used sparingly. This button is crucial for the restarting of a new feedback loop. Since foot pedals control the FBP, I had to determine the best location for the pedal board. The feedback pedal controls are on a larger separate platform and had to be placed where my feet would normally rest. Should I put the feedback controls directly in front of me, should I put them on the left side or should I place them on the right side? Should I operate the pedal controls with two feet or use one foot?

The Feedback Piano pedal board is adapted from the pedal board designed for guitarists to access different sound effects in a performance. Guitarists typically use the pedal boards while standing up. Controlling these pedals as a pianist is physically awkward. The pedals are difficult to manipulate because they cannot be clearly seen. The protruding fingerboard of the piano blocks the view of the pedal board. As a result, the pedal board had to be brought further into view for it to be seen. My body position became less ergonomic with this placement. Being cognizant of this logistical problem interrupted my attempts at creating flow during improvisation. The primary challenge was discovering ways to make improvisation on Feedback Piano fluid in sound notwithstanding the awkwardness of using a pedal board designed for guitarists.

Improvising Harmony on Feedback Piano

The spontaneous construction of improvised harmonies was more challenging in the FBP loop. In an improvisation on an acoustic piano I typically experiment with constructing complex harmonies. Each chord is complex but sounds different. Playing different complex chords into the feedback loop meant that those chords were changed and dissolved into even more complex textures. The feedback piano's design, which is to explicitly take the individual notes and the chords and create complex harmonic textures, seemed to be a usurpation of my harmonic choice. This harmonic usurpation is built into Warren's concept of the feedback piano. The idea is that the human body cannot produce chords that are complex enough on the instrument. The feedback piano loop is intended to create even more dissonant harmonies that are beyond human capability.

Part of the challenge of improvising harmonies on the feedback piano was the willingness to surrender the final sound of my complex chords to the feedback loop. It felt as though I was giving creative control to the loop or final say on how my harmonies would sound. In other words, the sounding chords no longer represented my initial creative choices. How could I adapt to this cycle of improvising harmonies and having those harmonies altered? What would be an effective strategy? What if I viewed the pocketed sounds as a source of improvisation that could potentially push my improvisation in unexpected directions instead of a constricting loop?

Improvising Rhythms On FBP

Distinguishing the sound of complex rhythms on the FBP was a technical challenge. The vocabulary of rhythms I have cultivated over many years have been facilitated on having a range of finger techniques that include a range of staccato attacks, legato approaches and a range of various intensities of touches. Every finger can be an independent rhythmic voice that provides different rhythmic textures. These subtle ranges of finger attacks on the piano were neutralized and enveloped in the grainy overtones of the FBP loop.

The rhythmic shapes I improvised on the FBP were harder to communicate. The volume of the pitch shifting timbre overwhelmed the rhythms. Complex divisions of rhythms create the asymmetrical, rhythmic shapes in my improvisation. As I played these rhythmic shapes into the feedback loop I found that the distinction between complex rhythmic values and the metric modulations between different rhythms were harder to discern. The interfacing of feedback technology and acoustic piano to extend the possibilities of the piano was the primary goal of the inventor. Creating advanced harmonic textures in a feedback loop was a desired byproduct for the inventor. However, the interfacing of real time improvisation with complex rhythms and feedback piano technology was not likely an a priori consideration. In other words, the distinction between rhythms of an improviser into the feedback loop was likely never an aesthetic goal. The overwhelming sound of the feedback loop had to be cleared to create new distinct rhythms. Playing melodic lines in octaves was the only way to create a semi distinct sound. This is because unison melodic lines do not create harmony. Ultimately the FBP did not give me the rhythmic feedback I wanted.

Latency During Improvisation and Feedback Piano

Playing FBP brought the challenge of dealing with delayed sound. The main idea of the FBP is about extending notes into a feedback loop where they are preserved until ended. The idea behind FBP is wonderful in the sense where music could be thought of as a meditation. But much of what has characterized the Afro-diasporic improvisational practices is the inevitable decay of sound linked to the technological limitations of the acoustic piano and many other instruments. These technical limitations of an instrument are typically not seen as a hurdle in making Afro-diasporic music. They are instead central to the innovative sound of many improvisers. In fact, the way an improviser deals with the unavoidable decay of sound on their instrument has been linked with developing their own personal style. There is poetry in the death of sound; in the decay of an improviser's phrasing that mimics the literal and metaphorical aspirations of our imaginations. The luminance of an improviser's woven melodic line is connected to the geometry of rhythms that occur between the sunrise and sunset of a spontaneous composition. Moreover, the surpassing of technical limitations signifies the creative resolve of the "subhuman condition", or what Fred Moten calls "Magic of the Object" (Moten 2003a, p. 110).[7] For example, think of what trumpeter Miles Davis creates with two consecutive long phrases on the note A flat in the first 3 minutes of his live 1964 performance of the well-worn standard, *My Funny Valentine*.[8] Or perhaps the way Davis blurs the notes G natural, A flat and D flat, extending his blues aura. Any of pianist Ahmad Jamal's improvisations are a "textbook example" of surpassing the technical limitations of an instrument. The Auto-tune improvisations of Rapper/Producer T-Pain on Chopped and Screwed[9] signify the importance of sonic decay to his musical style even when he has the technological ability to extend the sound longer than is possible with an unaltered voice. Without sonic decay, there would be no break; no signification of resistance in music. Moten explains:

> To ask this is to think what's at stake in the music: the universalization or socialization of the surplus, the generative force of a venerable phonic propulsion, the ontological and historical priority of resistance to power and objection to subjection, the old-new thing, the freedom drive that animates black performances. (Moten 2003b, p. 12).

The freedom drive that Moten speaks of is often signified in the improvisatory triumph by improvisers over the technical limitations of all instruments. This triumph is what we define as innovative, inspiring music.

Musical choices during an improvisation are built on a succession of prior musical choices. During an improvisation

7) I bring Moten in to discuss the concept of "surplus effect". The object is the human who is thought of as an object. Surplus effect is defined here as the materiality of race, class, sexuality and gender in relation to the object. It is precisely this materiality, this substandard life condition brought on by oppression of the object, that there is the possibility of "black magic" in Black cultural production. I think its important to quote Moten directly: "And, if we understand race, class, gender, and sexuality as the materiality of social identity, as the surplus effect and condition of possibility of production, then we can also understand the ongoing, resistive force of such materiality as it plays itself out in and as the work of art." And so the surpassing of technical limitations on a musical instrument is the demonstration of that surplus effect or the magic of objects.

8) Miles Davis. *My Funny Valentine concert.* Columbia 1964.

9) T-Pain. *Thr33 Ringz.* CD. 2008.

I am reacting to prior musical choices in real time.

There is an inherent impermanence in the process of improvisation. Waiting for a musical response from the feedback technology was disturbing to the process of improvisation. Waiting to hear sounds in the loop creates a potential interruption in the feeling of creative flow. The feeling of flow in creating is defined as entering a musical space that seems timeless.

The feeling of temporal disconnection between what I played on the piano and the final sound in the feedback loop produced questions about how latency affects a performance. The delay between action and response transformed what is normally felt as a visceral, musical experience into something that felt quite mechanical. The intervallic relationships in the chords became unclear in the loop. For example, an interval of a perfect fourth or major second became less distinct. There was a grainy sound from the feedback loop when I played melodic ideas. This grainy loop was the shifting pitches of melodic ideas suspended in the loop. It required elimination of an ongoing loop with the clear pedal to start new harmonic, melodic and rhythmic ideas. The lack of feeling of synchronicity between my improvisational gestures and how they were ultimately transformed in the feedback loop attenuated my feeling of creating in real time. I felt as though I had to manage the sonic latency between what I improvised and what ultimately happened to the sound in the end. Waiting to hear how the Feedback loop interpreted my melodic, harmonic, and rhythmical performance was a difficult adaptation and I think the most direct challenge to my improvisational process.

Individual Sound and Feedback Piano

Playing FBP means giving up control over my signature piano sound. Improvisers are identified by their ability to make a personal sound on their instrument. The most beloved improvisers are instantly recognized by their own sound. Developing one's own personal sound is part of an Afro-diasporic improvisational practice. Agency is represented in the creation of a sonic signature that is a "carrier for history and cultural identity (Lewis 2000, p. 37). In other words, an improviser is someone who has her own compositional and performance style: the peculiar touch or "feel" on the piano, the individual timbre of a saxophone or drum, the way improvised melodic lines are phrased; the trademark rhythmic motifs that comprise a familiar music language of an improviser but still surprise us when those motifs vary in permutation; the harmonic clusters in a pianist chords that are instantly identifiable. These stylistic markers have been used as criteria for identifying innovation in music.

Limitations of Sonic Narrative in Feedback Piano

Creating a personal narrative in an improvisation through developing a unique vocal or instrumental sound, or "telling a story" has long been part of a black aesthetic in music(Lewis 1996, p. 241). Vocalist's Billie Holidays lyrical phrasing and T-Pain's use of Auto-Tune are only two examples of this phenomenon. The creation of an improviser's individual sound is linked to the limitations of the player's instrument. For example, many jazz pianists play octave tremolos in the right hand to create and emphasize a singing tone on the piano. The way a trumpet player uses mutes is meant to create new options of timbre within the context of a music culture. As stated before, FBP is takes the quick decay of sound of the acoustic piano and preserves the sound through the technological intervention of feedback loops that extends the initial sound. It is a technological intervention based on a perceived structural deficiency of an acoustic piano. An important part of creating an individualized sound on an instrument is the creative exploitation of the technical limitations of an instrument. The limitations of the piano may not have been considered an integral part of the creative process-and specifically an integral part of creating one's own sound-by the inventor of FBP. Therefore the extension of an improvisers sound by a feedback loop is not necessarily conducive to the creative needs of an improviser. I had never considered that technical limitations of the acoustic piano was not only crucial to the sound I developed as an improviser, but that my proclivity towards the acoustic piano sound would be now be challenged by the timbre of the feedback loop.

Taking It To The Bridge

In conclusion, improvising on FBP has provided opportunities to understand my process of improvisation in new ways. The advantages and limitations in the interaction with Feedback Piano technology caused me to take a closer look at how I thought about improvisation. The interaction with Feedback Piano also created opportunities for me to rethink my music improvisation process by asking a set of crucial questions about the process. Questions included: Where was the appropriate time in an improvisation to "clear" or temporarily end a feedback loop? How could I use the Feedback pedal board in a way that would result in a fluid performance on FBP? How can cadential patterns in improvisations be clearly represented without clearing the feedback loop? How can sections or movements in an improvisation be represented with an ongoing feedback loop? How can the complex and unstable harmonies of the feedback loop be used as inspiration for more improvisation? How can I navigate the new sense of temporality existing in the feedback loop? Whether or not I could answer these questions was not the point. These important questions about improvisation and technology were raised in the process of experimentation with FBP.

Improvising on Feedback Piano has also taught me about the nature of improvisation. I contend that improvisation works best when it can flow in unexpected directions and where there is no isolated sonic destination. Improvisers make music that builds upon itself through time and space. Improvisation flows from a generative life force based on immediate musical choices that occur in cycles. Feedback Piano is regenerative. Feedback piano technology does expand harmonic textures but that involves the confinement of collected musical notes in a loop. This storage of what were initially my improvisations in a loop blocks the inherent cyclical and liberating nature of improvisation. And while it is possible to play in what pianist/composer Paul Bley call's "no time" or non metric improvisation, the intention of improvising non metrically must be clear and distinct as if one was deliberately establishing a tempo in a performance. Therefore, establishing any tempo was not possible on the FBP.

Improvising on FBP also highlighted the difference in belief systems encoded in the invention of the FBP technology and the aesthetic philosophies that motivate my improvised performances. Notwithstanding that belief systems in music are not pure and often represent complex musical hybridities, belief systems do extend from socio-cultural contexts. Musicians can represent those contexts in the way they create instruments or create music. I define my improvised performances on Feedback Piano within a broader definition of aesthetics. My improvisation with Feedback Piano is defined by a tradition of aesthetics that is about using music as a strategy to occupy new spaces in strategic locations.[10] Experimenting with the new Feedback technology created challenges to rethink improvisational techniques and the discourse of aesthetics behind my creative practice.

10) See bell hooks, "An Aesthetic of Blackness: Strange and Oppositional".

References

Borgo, D. (2005). *Sync or Swarm: Improvising Music in a Complex Age.* New York: Continuum.

Dawe, K. (2009). *The New Guitarscape in Critical Theory, Cultural Practice and Musical Performance.* England: Ashgate.

Edwards, B. H. (2001). "The Uses of Diaspora". In *Social Text*, vol. 19, no. 1

Gilroy, P. (1993). *The Black Atlantic: Modernity and Double Consciousness.* Cambridge, MA: Harvard University Press.

hooks, h. (1995). "An Aesthetic of Blackness: Strange and Oppositional". In *Lenox Avenue: A Journal of Interarts Inquiry*, vol. 1, 1995.

Lazarus, N. (2001). "Unsystematic Fingers at the Conditions of the Time: Afropop and the Paradoxes of Imperialism". In Castle , G. (Ed.). *Postcolonial Discourses: An Anthology*. Oxford. UK: Malden, MA.

Lewis, G. E. (1996). ”Improvised Music After 1950: Afrological and Eurological Perspectives”. In *Black Music Research Journal*, vol. 16, no. 1.

Lewis, G. E. (2000). ”Too Many Notes: Computers, Complexity and Culture in Voyager”. In *Leonardo Music Journal*, vol. 10.

McClary, S. (1992). G*eorges Bizet, Carmen*. Cambridge: New York: Cambridge University Press

Moten, F. (2003a). ”Magic of The Object”. In *Callaloo*, vol. 26, no. 1.

Moten, F. (2003b). *In the Break: The Aesthetics of the Black Radical Tradition*. Minneapolis: University of Minnesota Press.

Olof Misgeld

On Variation and Melodic Improvisation in Swedish Folk Music

As a fiddle player, folk musician and teacher of folk music, my interest in the traditional playing of dance tunes –”låtspel” in Swedish – has continued to grow over the years. My fascination emerged from the basic things: how to learn tunes, to play them and hopefully be able to do it in a traditional but personal and innovative way. But the tunes have been played for generations and cultured and perfected by a long list of musicians. How can a player add something or create something unique within such a framework?

A ”låt”, a traditional tune, could be described as a melody consisting of musical ideas that have been orally transmitted through a chain of different individuals, and therefore exist in a large number of variants. There is usually no original or final version of a tune and most tunes share features with other closely related tunes in a way that you can't really tell where one tune ends and the next one begin. You could argue with the Danish folklorist Thorkild Knudsen that a tune or melody ”kun eksisterer som summen af samtlige varianter” (Knudsen, 1961) – only exists as the sum of all variants. This is a common feature of most oral music traditions in Sweden – and around the world.

Many accounts from players involve stories on how they have changed and varied tunes – sometimes in older times to avoid a competing musician to get hold of it! In spite of that – the tunes that fiddlers like myself learn and play, often come from a very specific source; sometimes from a certain musician and in many cases from one specific recording.

Transcription

A method often used for getting into how tunes have previously been played is through transcription. Since notation has a longer history than recording technology there is an extensive body of folk music transcribed into musical notation that goes back over 400 years. Sometimes notation is used for remembering tunes – but for music that belongs to a living oral tradition detailed notation is usually a tool for description, collection and analysis. A notation is often seen as a representation of how a tune was played once by one specific player – but not necessarily how another player, or even the same player, would play it at another moment in time or place and certainly not as the only correct version of the tune.

To transcribe or notate a piece of music is to translate something sounding into a written language. Thus it involves translating from one medium (recording, live performance) to another (into writing) – but also from a temporal mode (in progress, in the present) to another (static, independent of time) and from one sense (hearing) to another (vision). Walter J. Ong has written in depth about this in his book *Oral and written culture* (1982). The auditory impression of music or judgement by ear differs from the visual impact of sheet music or reading written text. While hearing puts the listener in the centre of an event, reading and writing places the reader outside in a specifically distanced relation.

The translation of sound into writing means to divide something perceived as a whole into parts. To delineate and generalize, to denote certain sounds as belonging to specific musical categories defined by a specific musical discourse and technology (i.e. the technology of notation).

Models on meter and tonality in Swedish traditional music

To describe the metrical structure and tonality of older Swedish folk music the

fiddle player, and Professor of folk music Sven Ahlbäck, has suggested models (Ahlbäck, 1995) that I will shortly recapitulate here.

One of the dominant dance tune types of older Swedish folk music is the ”polska”. References to *polska* in Sweden goes back to the 16th century and since then *polska* has developed into a great number of variants in Sweden. The ways to play a *polska* can differ in meter and groove as well as in tonality, melody and variations on ornamentation, articulation and microtonal intonations.

In order to describe what creates the meter and the specific groove in a certain kind of *polska*, transcriptions of individual tunes might not be enough. Unless you get the context behind the specific you might miss what the scope of the variation is. You need to understand what's behind the specific means of expressions. One way to avoid this is to make a graphic model based on pulse, pulse layering, the marking of pulse in the music and rhythmic patterns and articulation. How is the groove created in the music – how is the meter varied?

A graphical description of the musical pulse and how it is articulated together with a precise rhythmic notation gives a symbolic representation of the groove in a tune.

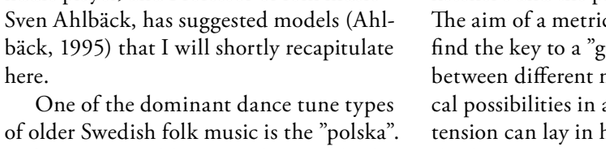


Figure 1: metrical articulation in *Polska* efter Peckos Per.

The model may look like this (Ahlbäck 1995:16): Below the staff with the transcription of the melody – in this case a *polska* played by the fiddle player Hjorth Anders Olsson (1865–1952) – are two different pulse layers represented by graphic notation. Both layers exist simultaneously and are implemented differently by rhythms and articulations in the melody as two different ways of expressing the meter. By alternately playing on either one of the two pulse layers both are kept alive in the listener's and the player's consciousness. The aim of a metric model can be to find the key to a ”groove” in the tension between different metrical and rhythmical possibilities in a metric context. The tension can lay in how the tune is put into rhythm – one example is to play in between even eighths and triplets. It may be found in the polymetrical layering- like in the *polska* above – or by various pulse markings. Metric groove emerges from challenging and stretching the boundaries of the meter.

The above model of metrical layers represents the underlying context to which the surface – melody – refers. The built-in tension in the model – different possible pulse layers and pulse markings – give way for endless opportunities to create variations by applying the model to tunes in different ways and to alternate between the various layers in the structure.

Another example is from a polska with the fiddle player Gössa Anders Andersson (1878–1963) from Orsa in county Dalarna in central Sweden. This is a transcription

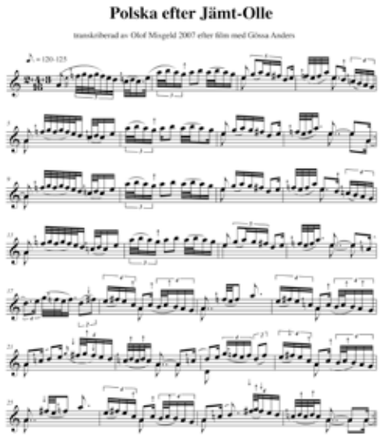


Figure 2: *Polska efter Jämt-Olle* representing the asymmetry of the beats.

of one of his polskas from a film by the Swedish Radio from the 1960s:
In many of Gössa Anders' *polskas* there are asymmetric pulse variations typical for polska styles in these parts of Sweden (as in many parts of Norway). This means that the first beat is sometimes shorter, and the second beat longer – giving the impression of an ”early” second beat. The relative duration of the three beats are often close to the ratio 2:4:3 (see also figure 3). Sometimes though there are symmetric measures too - with three equally long pulse beats 1:1:1. In the transcription the time signature 2+4+3/16 is used, but in some measures the note beaming of 3+3+3/16 is used to show when the pulse is symmetric. The relative beat durations are not fixed – but subject to variation of expression. The same phrase can sometimes be played both in

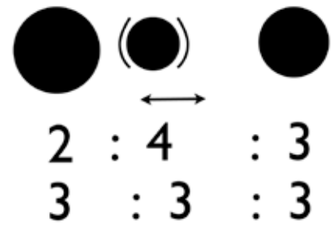


Figure 3: A representation of the general asymmetry of the beats.

a ”straight” and ”asymmetric” way in the same tune.

Microtonal variation

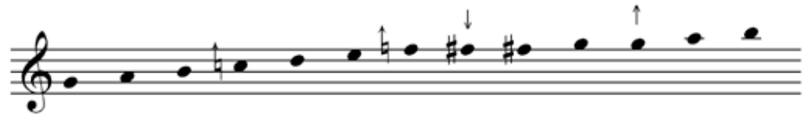
The tonality of the polska by Gössa Anders has some typical features of older Swedish folk music. One is the variable intonation and micro intonation of certain scale degrees. These different intonations are represented in the transcription above. This (figure 4) shows that in Gössa Anders' playing the scale degree represented by ”f” has the largest variants of micro intonations – a quartertone between f and f#, a slightly lower f# and an f#.
The ”g” is also varied by Gössa and the ”c” is generally played as a quartertone between c and c#.

If the tonic centre is perceived as ”d”, the variable scale categories are the mediant (3), the subdominant (4) and the subtonic (-2). This conforms with the tonality of a lot of older Swedish folk music connected to the herding practise – a tonality that by Ahlbäck is referred to as the ”Vallåtsmodus” – the mode of the herding music (Ahlbäck, 1995). The mode is found to be typical of herding calls and herding music – vocal as well as played on instruments like cow horns, flutes etc - but also for the older instrumental dance music where the fiddle was the dominant instrument.

The use of micro intonation is an important part of the tonal colour palette in this music. As both notated and recorded material indicates it has been a common and widely spread practice. How different musicians use micro intonation is something that's dependent on and can be indicative of a players personal style. The same tune played by different players can present different micro intonation variations.

From this I would conclude that a very untraditional way of playing a traditional tune would be to reproduce a previous version by another performer. To actually play in the tradition means to create one's

Figure 4: The scale with the microtonal inflections.



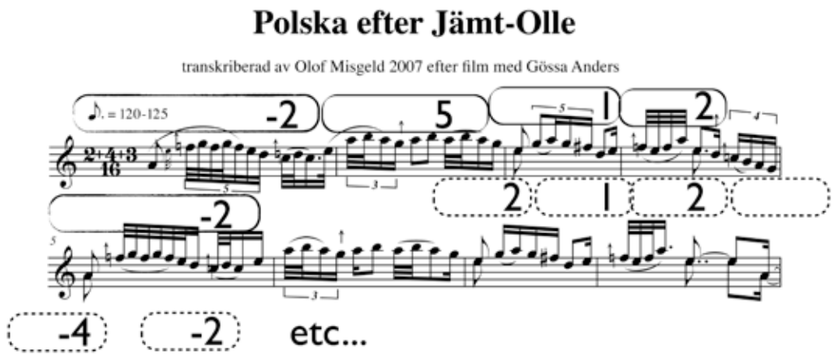


Figure 5: Analysis of the opening bars of Polska efter Jämt-Olle.

own variants – in dialogue with the tradition. Music researcher and singer Susanne Rosenberg has studied how songs inevitably change when passed along orally and/or are varied by singers over time (Rosenberg, 2009). In an oral tradition, pieces of music exist only through the people that remember, sing or play them, and are subject to those people's memory and modes of expressions. However, traditional musicians who lack direct contact with living performers from an older tradition often spend a tremendous amount of time trying to learn every detail of older player's versions from recordings – and by that inevitably creating fixed versions of tunes. So the question is how to "unfix" fixed versions of tunes in a more conscious way – in order to paradoxically play in a more traditional way.

Improvising on structural frameworks

In this sectionI will describe a method of melodic improvisation created by Sven Ahlbäck that could an approach to traditional tunes that moves beyond copying the surface structure of the music. The basic idea of the method is to reduce a melody into a skeletal form consisting of the structurally most important notes of the melody, along with the basic form and phrase structure. The analysis also addresses the tonality including global or local modal shifts. The skeletal form could have different "resolutions" – from modules of single measures to longer sections of the melody. Each module has a structurally important note as final note – which is represented by a scale degree number. Scale degree numbering is positive above the tonic centre and negative below. -2c means that the tone has an intonation of a quartertone. (-2a would be c# and -2e would be c). The tonic centre (1) is assumed to be d.

The beginning of an analysis of the 'skeletal form' of the Gössa Anders polska could look like this:
The music is here divided into phrase modules and shows the final note and its beat/measure position in each module. This particular form offers two different interpretations of the metrical structure – one that sticks to the three-beat metric structure, and another with two-beat melodic phrases – both being possible interpretations of the skeleton form.

An overview of the entire structure (for simplicity I'm sticking to the three-beat metrical structure) could look like this:

Mode: D – vallåtsmodus (herding call mode in "d")

A
/ -2c/ 5/ 1/ 2 /
/ -2c/ 5/ 1/ 2 / (repeat)

B
/ 1/ -4 / 5/ -4 / 3c/ -4 /
/ 1/ -4 / 5/ -4 / 3c/ -4 :// (repeat)

Important to note is the role of the 4 (a), the forth below the tonic, which is to be perceived modally as a second tonic centre – and as such a resting point. The A-part could be perceived as having a more dominant character by ending on scale degree 2, while the B-part is more conclusive with its movements towards scale degree -4 where the piece also ends (in many recordings of this tune with Gössa Anders though the last note is replaced by a "d" – in the last round only).

The skeletal form can than be "dressed up" with improvised material – new motifs or variations. Like described above, the new material could be variations in the meter or tonality, but it could also be new material: new melodic lines or rhythmical figures. A skeletal form can also serve as base for a piece in a completely different style, type or genre.

By analysing the most common melodic patterns in the tunes and songs of the herding music, "vallåtar", of central Sweden Ahlbäck has put together a collection of common melodic patterns or melodic phrases representing different ways of arriving at different scale degrees. These can be regarded as a vocabulary or a set of building blocks. They can be pinned onto the 'skeleton forms' giving way for smaller variations but also completely independent versions - in the style of the herding music.

Instead of sticking to the learned, fixed version, using this method for improvisation when playing tunes offers the challenge to make variations in the moment that will more or less differ from the original. The more this is practised, the more "un-fixed tunes" will appear, and the more one will find oneself shaping lines over a reduced form instead of delivering a melody predetermined in all is details. More successful variations often stick to – and gradually becomes variants of – the tune, creating alternative routes of the starting version. The tune transforms from a fixed melodic sequence to a more open form or shape that holds something untouched about it – an open playground.
In addition to the improvisational freedom in shaping the tunes as a soloist, the aim is of course toward greater freedom in the interplay with other musicians and/or dancers, and to have possibility for increased subtleness for musical impulses and communication through the flow of music. Getting into the field of stylistic and idiomatic variations creates a space for improvisation – but also underlines the notion that playing in the tradition implies rethinking, recreating and creating variations – acknowledging that the music only really exists in the moment it is played!

References

Ahlbäck, S. (1995). *Tonspråket i äldre svensk folkmusik.* Stockholm.

Ahlbäck, S. (1995). *Låtpuls.* Stockholm.

Knudsen, T. (1961): "Model, type og variant". In *Dansk Musikktidsskrift*. vol 36. København.

Ong, W. J., (2002). *Orality and literacy: the technologizing of the word.* 2nd ed. London: Routledge.

Rosenberg, S. (2007). "Variation – ett sätt att tänka". In Halskov Hansen, L., Ressem, A. N. & Åkesson, I. (ed.) T*radisjonell sang som levende process*. Oslo: Novus.

Susanne Rosenberg

ReBoot/OmStart and Kurbits-Koral: Exploring Improvisation and Variation in Folk Singing

In my folk song performance *ReBoot/OmStart* (2008) I have explored details of variation and improvisation in traditional folk singing. The artistic motivation for this was an urge to return to what I conceive of as the fundament of folk singing and to further develop presence and flow in my performance. By studying different types of variation and improvisation within Scandinavian folk singing (through academic research done by myself and others) and also by applying models for variation and memorizing found in *Orality and Literacy. Technologizing of the Word* by Walter Ong I arrived at a concert/performance of about 50 minutes. This artistic outcome of the research merged songs, calls, rhymes etc. into one long ”song” in which also the venue and the stage performance were important parameters.

I will in the following sections outline some of the different approaches that I adopted in the course of the project, emerging from the differrent nature of the songs I worked with. In the song *Vallerman*, which I composed and arranged, I tried to find ways to improvise duo-singing with myself (without using live-electronics), by oscillating between different ”layers” in the music while singing. I used melodic ostinatos, tongue-clicks, hand-clicks and claps, different sounds, to create a musical structure that continues in my own and the audience’s mind. And simultaneously, as I created this structure, I improvised the ”song” as yet another layer within this structure. I also used small body- and hand movements to enhance the musical structure. Hopefully the audience experienced the different layers and by their own listening they themselves contributed to the multilayered structure that I created, so that the text, sounds, intonation, movement and silence appeared to be performed simultaneously. *Vallerman* has a specific timing and tempo, and one of the most effective elements was actually the silence ”in between” that by its presence emphasized the timing.

In *Kyrie/Oh Death* I combined two different themes that I improvised over: a 1000 years old Kyrie and a traditional lament from the Appalachian mountain. In this piece I tried to focus on the fact that the two songs, though a 1000 years apart, really felt like they where derived from the same musical idea. I combined these two melody-lines and lyrics seamlessly, going from one to the other in the middle of phrases, without making stops or breaks or taking new starts. The lyrics contain only a couple of words: ”Kyrie Eleison”, ”Oh death, won’t you spare me over to another year”. To me it seemed perfectly natural to go inbetween the lines in the texts and the musical material without stops. On top of this vocal structure I also improvised on small bells. The piece starts with a long improvisation over just one word – Kyrie – on one pitch. Creating a small universe with one pitch, with different sounds, rhythm, timing, dynamics, vocal qualities, ornament: to me it could have gone on for ever.

In the ballad of *Storebror* – an extended medieval ballad – I used the story itself as a starting point for my improvisation, telling the story in a different way each time and building on the larger structure of the tale rather than on the explicit order or the words, or the verses, of the original ballad. A medieval ballad always contains a lot of specific metaphors like the use of recurring refrains such as ”the green meadow”, ”the blue sky”, etc. that also signals dramaturgically specific expressions of how to tell the story. Since I am a folk singer I can rely on my experiences of this way of telling and memorizing a story. Walter Ong talks about different ways of memorizing a story in oral traditions and I tried to employ these traditional ways of improvising, along the same lines as in Jan Ling’s discussion of the performances of the 18th century singer Anna Brown. There is no ”original”, but rather a framework from which ever new versions are created (Ling 1997, p. 95). According to Bronson, Brown represents the type of singer who gives birth to a new work of art at every performance, combining given models of lyrics and music differently each time. The story and the musical materials were conceived of as ”a fluid entity that was integrated into her intellect, and could be called to mind as words and music when she wished” (Bronson 1969, p. 71).

In *Kurbits-Koral, The Spirit of the Moment* (2010) I continued my exploration into these issues, but instead of a solo performance I chose to work with a larger group of singers, including amateurs as well as professional singers – both folk singers and others. Here my main interest was improvisation crossing the boundaries between solo, unison and polyphonic singing based on traditional folk singing techniques – joint voices in the spirit of the moment. This was performed as a seamless hour long piece.

In *Kurbits-Koral, The Spirit of the Moment* I explored the methods for improvisation in the spirit of the moment when learning melodic structures by ear and trying to challenge the way of teaching and learning when you give opportunity to improvise and give space for the singers (without them thinking about it). It would have been near impossible to perform such complex structures that the singers improvised from a score. Instead of a score I had, for this purpose, created small ”cells” and musical phrases, melismatic melodies, ostinatos with rudimentary performance instructions, without, however, specifying the exact way to perform or sing these phrases. Through this process, improvised melodies and polyphonic structures emerged. In concert I wanted to create a setting more similar to that of a congregation.
The singers were placed in the audience or around it and had more individual freedom and greater responsibility than had they been singing in a traditional choir.
The audience was also invited to take part in the performance.
In both of these projects the room in which the music was performed in has been of utter importance for the artistic result. In the case of *ReBoot/Omstart* I have continued to explore how the setting influences the performance, from performing outdoors in a small grove to indoors in rooms which are not usually used for musical performances as well as typical concert venues.

It has been an interesting experience to find that my experiment with what was originally a tool for myself to find more flow and presence in my performance (using improvisation) – also has had the same effect on the audience as it has had on myself. When doing a survey after each of the two concerts asking ”Please give your experience of the concert in your own words”, I received a lot of responses such as ”presence”, ”meditation”, ”variation”, ”experience”, ”being in a now”, ”concentration”, ”sacred”, ”intriguing”, ”timing”, ”flow”, ”peaceful”, ”restful” and other words that indicate that parts of the audience, like myself, experienced the feeling of e.g. presence.

These two projects has been part of the examinations in my artistic doctoral studies *Kurbits – ReBoot – Exploring Scandinavian folk singing style in new artistic and academic contexts*. The studies has it’s focus on how the use of traditional artistic expressions can challenge and conquer/capture/find new musical spaces and places for folk singing. The concerts mentioned above are the second and third, out of in all five, examination concerts. The first was *Kulning – the singing and the technique*, the fourth, performed in march 2012, *Getens horn*, (The Goat’s horn), and the last one, yet to be produced in spring 2013, has the working title *Voice Space*. The studies are a collaboration between the Royal College of Music in Stockholm, Sweden and The Sibelius Academy in Helsingfors, Finland.

References

Bronson, B. (1969). *Mrs Brown and the Ballad: The Ballad as Song.* Berkley and Los Angeles: University of California Press.

Ling, J. (1997). *A history of European folk music.* University Rochester Press.

Rosenberg, S. (2010/2011). *Kurbits Koral, The Spirit of The Moment, en blogg om att skapa en musikhändelse.* Retrieved from http://kurbitskoral.wordpress.com

Stefan Östersjö & Nguyễn Thanh Thủy

Traditions in Transformation: the Function of Openness in the Interaction between Musicians

Introduction: difference, sameness and mutual learning

This text summarizes some results from the international artistic research project *(re)thinking improvisation*, headed by the Malmö Academy of Music. The subproject we represent involves the two authors of this text and a series of other performers from Vietnam and Sweden and is a study of the evolving work in the Vietnamese/Swedish group The Six Tones. It draws on material from rehearsals, studio sessions and concert performances in which we were involved as musicians.

(re)thinking improvisation brings artists and researchers from different musical traditions and from different continents together. With the aim of identifying new manners in which musical improvisation can be understood and discussed, the project has three key objectives:

1. to delineate the field,
2. to research the social and musical interaction between improvising performers, and
3. to provide a cross-cultural perspective.

The studies we have carried out have been focussed on the topic of interaction between musicians situated in a particular cross-cultural context. The musician's listening, understood as the site for musical creation, has been a point of departure for our studies on musical interaction. We develop a line of reasoning around this topic starting in the second section. However, the third objective cited above also demands a further discussion. While it may be obvious that a group bringing performers together from two different continents immediately provides a "cross-cultural perspective", we find that the foundations for cross-cultural research need to be seriously considered. What are the epistemological and methodological foundations for cross-cultural artistic research in music? Does a cross-cultural study imply a method built on comparative analysis? If so, how can a critical and postcolonial perspective inform the methodology?

Following Agawu (2003) we wish to contest the construction of difference that claims the a priori existence of a radical divide between cultures. Agawu discusses the political implications of the ethnomusicological project and the Eurocentric assumption of otherness as the point of departure for comparative research into the music of other cultures. Martin Clayton (2003) reminds us of the problematic nature of the translation from one discourse to the other in cross-cultural studies. The language and cultural tools of musicology are anything but culturally neutral. One cannot merely translate terminology from Indian classical music into English musicological language, no more than one can transcribe an improvised performance into Western staff notation without radically changing the identity of the music. The relation between a theoretical discourse like Western musicology and a musical practice is indeed complex, and Clayton argues that "any theoretical system must itself be considered critically, alongside the music with which it is associated" (Clayton 2003, p. 60). The heart of the matter is the complex interrelations between the musical practice and the surrounding discourse. This critical examination must of course be directed not only towards the discourse of the non-European "other" but also towards Western thinking about music. In our research, the focus in this respect is directed towards three main features of Western art music and culture: 1) the analytical thinking about music that emerges from the technology of musical notation (Butt 2002; Wishart 1985; Östersjö 2008); 2) the hegemony of the Western composer and the hierarchies created by way of this conception, not only in the interaction between musicians but also in our ways of listening (Wishart 1985); 3) the concept of difference as the dividing line between the (Western) norm and the "other". Agawu Agawu proposes an ethnography which embraces sameness as the basis for a "theory of translation that aims to show how the materiality of culture constrains musical practice in specific ways. The idea would be to unearth the impulses that motivate acts of performance, and to seek to interpret them in terms of broader, even generic, cultural impulses" (Agawu 2003, p. 235). Though we are not specifically concerned with identifying generic components in our practices, we find the notion of taking the "impulses that motivate acts of performance" (ibid) to be an excellent counter image to the old ways of comparative analysis. What is essential here is the denial of a referential entity (the Eurocentric idea of a norm) that can be used for comparison.

On a similar note, The Six Tones have been working on a long-term basis on the amalgamation of art music from Vietnam and Europe. We play traditional Vietnamese music in hybrid settings for Western stringed instruments and traditional Vietnamese instruments, we improvise in traditional and experimental Western idioms and we also commission new music by composers in Asia as well as in Western countries. The Six Tones are Nguyễn Thanh Thủy (who plays *đàn tranh*) and Ngô Trà My (who plays *đàn bầu*), two Vietnamese performers, and the Swedish guitarist Stefan Östersjö (also playing many other stringed instruments). Since the project started, we have been collaborating with the composer and improviser Henrik Frisk, who has both composed works for the ensemble as well as toured with the group as a laptop improviser. The name of the group, emanating from a composition by Henrik Frisk, relates to the fact that the Vietnamese language is a tonal language using six tones or intonations. Our main point of departure has been to create a foundation for a meeting between two distinct musical cultures on equal terms. This practice implies the questioning of what is "centre" and what is "periphery": is the Western art music the norm (centre) and the traditional Vietnamese music an exotic other'? For a long time after the world had been found to rotate around the sun, the world, in the mind of a Westerner, continued to be centred "around" Europe. In music, we find a parallel in the conception of differences of a hierarchic nature between notated and orally transmitted music. What can our distinct musical cultures learn from each other? How can Western art music adopt a listening role? Through our artistic practice we wish to question the conception of difference emanating from Western thought (and from the violence of colonial politics). The mutual learning that forms the basis for our work is concerned with the creative sparks drawn both from the creative friction between our respective traditions and from the sense of sameness that has motivated so many acts of performance up to this day.

The Musical Ear

The composer Roger Sessions, in his book *The Musical Experience of Composer, Performer, Listener* (1971), reminds us how the musical ear can be understood as the source of musical imagination and thus how it constitutes a starting point for creative interaction in musical dialogue:

> The musical ear, then, discriminates; and this is one of its functions, a basic and indispensable one. […] It identifies sound in all its aspects: their pitch, their tone quality, their relative intensity, their mode of production, their duration. It becomes […] a more than purely auditory function, in identifying and responding to the basic rhythmic facts; tempo, meter, and that alternation of tension and release which is the essence of rhythm proper. […] [T]he real role of the musical ear is to organize musical sensations. The ear not only discriminates; it associates and coordinates musical impressions. It creates, discovers, or becomes and remains aware of relationships between sounds, between musical ideas, and between rhythmic accents, motifs, phrases, periods, sections, movements. In the largest sense it develops into […] musical imagination. (Sessions 1971, pp. 31–32)

It is exactly at this moment – when listening transcends the fundamental auditory functions it also affords and becomes a creative tool for the imagination of a performer – that our interest in the musician's listening is sparked. Through listening we not only organize our perceptions but transform and appropriate them, making the sonorous event a vehicle for our creativity. The musical ear is the venue where we make creative choices in the sonic domain. All listening involves a choice of how to make use of our hearing. Listening is always a matter of sharing. The sound waves are echoed through the bodies of all beings in a given space. This re-sounding could perhaps be understood as a passive sharing of sonic space, but this is not at all that we intend. Jean-Luc Nancy finds this musical communication to be a matter not of transmission but of sharing. Following Nancy we may say that this communication appears in the sound itself, "that thing by which a subject makes an echo – of self, of the other, it's all one – it's all one in the plural" (Nancy 2007, p. 41). When our listening develops into musical creation, it also becomes a vehicle for communication. It has been essential for our analysis of the interaction between the players in the group to develop an understanding of how our listening constitutes the space in which the impulses for creation emerges. But what are the conditions for the creation of such a space for mutual learning and creative interaction?

Openness

Taking Heidegger's rethinking of the origins of Western reason as point of departure, Gemma Corradi Fiumara counters what she calls "logocratic thinking" by a "philosophy of listening". The unlimited openness of listening is found to be a prerequisite more fundamental than the question itself (Fiumara 1990, pp. 33–34). The concept of openness emerges from the thinking of Gadamer. In his discussion of the fundamental conditions for the hermeneutic experience, a radical kind of openness is advocated: an openness that is the result of listening.

> Anyone who listens is fundamentally open. Without this kind of openness to one another there is no genuine human relationship. Belonging together always also means being able to listen to one another (Gadamer 2004, p. 355).

Corradi Fiumara identifies a fundamental problem in Gadamer's line of thinking, situated in the link between what he calls the "logical structure of openness" on the one hand and the "primacy of the question" on the other. Rather than elaborating on this primary state of openness through listening, Gadamer continues by asserting that the essence of the question is what constitutes the identity of this radical openness.

However, it is essential here to bear in mind that for Gadamer there is an immediate link between language and our thinking. He regards the linguistic level of communication as a universal mystery which precedes everything else. Hence, through this movement into the verbal domain, the hermeneutic experience is directed into a specific perspective, what he calls the "horizon of the question" (2004, p. 357). The interpretative processes at play in the fusion of horizons are bound to the mystery of this communion:

> [T]he fusion of horizons that takes place in understanding is actually the achievement of language. [...] Language is so uncannily near our thinking, and when it functions it is so little an object, that it seems to conceal its own being from us. (Gadamer 2004, p.370)

Contemporary epistemologies counter this assertion, grounded in a Cartesian mind-body split that has been questioned by the development of an understanding of knowledge as situated in the body's interactions with the world. Lakoff and Johnson launch the opposite claim, that "the very structure of reason itself comes from the details of our embodiment" (Lakoff 1999, p. 4). Listening to, and interacting with, the environment through sound is a fundamental of human life that precedes language. In a discussion of musical interpretation, Gadamer's conception of the linguistic as a fundamental of all thinking must be put in doubt. Trinh Minh-ha reminds us of how this other side of language also emerges from migration, from being a foreigner in a new language, and points to how contemporary society demands of post-colonial thinking to move beyond logos. She argues that musical listening is, for the attuned ear, the first language:

> But with what ear does one receive the other side of speech? Already there, never gone. Neither out-side nor in-side, the music of alterity has been playing on without interruption – if only one can hear it. Sight, crossing over, is not merely sight, but speech freed from the limitations of speech. (Trinh 2010, p. 14)

But perhaps the structure of the hermeneutic process that Gadamer proposes may still be relevant outside of the verbal domain. If the question comes to us through listening, why does it have to take shape as a verbal utterance? Is not the core of the matter rather the nature of this question and how it comes to us?

Thinking-in-music

Maurice Merleau-Ponty reminds us of how our thinking is also situated in the body. He finds the visual arts to be a domain in which a specific kind of nonverbal thinking, in which the painter lends his body to the world in order to transubstantiate it into painting, takes place:

> [T]his philosophy still to be done is that which animates the painter – not when he expresses his opinions about the world but in that instant when his vision becomes gesture, when, in Cézanne's words, he "thinks in painting". (Merleau-Ponty 1964, p. 178)

The painter brings vision and movement together in an artistic formation which is independent of words. To Merleau-Ponty it comes naturally to identify a certain kind of thinking in the way in which the visual and the conceptual are surpassed (not molded together) in painting.

In knowledge production specific to the sonic domain we encounter the notion of a second species of musical interpretation, of a *thinking-through-listening*. This kind of thinking may often interact with analytic interpretation and verbal discourse, but equally importantly, it can also develop along independent lines, sometimes even in ways that counter our verbalized (and verbalizable) ideas (Östersjö 2008). What does this imply for Gadamer's discussion of the primacy of the question? Are we looking at a hermeneutic experience which at times may develop along lines distinct from the verbal domain of the question?

Listening to the question: A philosophy of musical listening

We may now return to the moment at which Corradi Fiumara fires off her critique of Gadamer's line of thought. She argues that Gadamer sidesteps the field of listening that he had himself introduced by turning his gaze away from the "fundamental openness" of listening and moving towards the logocratic realm of the question:

> The possibility of exercising a dominant contractual power over the natural world and thus distinguishing us from other living beings is certainly appealing. But there is also an insidious, all-pervading risk: we can see from the ecological history of our coexistence upon earth that it consists of an uninterrupted series of acts of domination which have been performed by means of a symbolic superiority expressed through the cogent questions we know how to pose. These relations, however, based as they are on the possibility of symbolic control, are bursting with the immense power that lies within their jurisdiction; a linguistic power that in the long run becomes an end in itself and that ultimately stiffens and becomes inertial, thus impeding an equilibrium of survival and coexistence. In the absence of listening the symbolic function whereby we construct and interact with 'reality' may turn out to be diabolic. (Corradi Fiumara 1990, p. 39)

But is not the core of the matter rather the nature of this question and how it comes to us? In our reading of Gadamer, the way in which the question poses itself to the interpreter is intimately linked to the kind of listening that Heidegger advocated saying that "the authentic attitude of thinking is not a putting of questions – rather it is listening to the grant, the promise of what is to be put in question" (Heidegger 1971, p. 71). Rather than contributing by putting questions, we interact by an active "listening to the question". Could one imagine a question that is posed outside of the

verbal domain, outside of *logos*?

Is not the ”question” that emerges through musical listening – that, as it were, poses itself to the one who is listening – a factor of action and perception? Can we connect Gadamer’s concept of the openness of listening and the primacy of the question also to a *thinking-through-listening*? Ecological psychology suggests that our perception is deeply grounded in action (Clarke 2005; Gibson 1979; Windsor 1995). If the musician’s listening is the site for musical creation, ”listening to the question” in the musical domain may then be expressed as a contribution to the musical discourse. Hence, the ”primacy of the question” in the encounter with the other does not necessarily have to lead us into verbal discourse; this conception deals with the necessity for us to contribute in the hermeneutical experience, be it in the form of musical performance or in analytical thinking. But this contribution cannot be a matter of what Gemma Corradi Fiumara terms ”talking without listening”. Only when we have learnt the fundamental openness of listening can we contribute by ”listening to the question”.

The question of vibrato playing

In Western art music, the term vibrato has had several different meanings, and furthermore, what is today understood as vibrato has had many different names. Only during the 20th century have we arrived at a consensus on the use of the term as referring to periodic differentiations in pitch and/or intensity, and even today there is an overlap between the meaning of tremolo and vibrato (Moens-Haenen 2012). But more importantly, vibrato has been employed as an ornament during the greater part of history (Brown 1999). David Hurwitz reminds us of the danger in oversimplifying the function of vibrato and making it out as a single ornament (Hurwitz 2012, p. 35). Vibrato has always served multiple functions, for instance, related to emotional expression, timbral variation or the articulation of accentuated beats. Towards the end of the 19th century, the present-day practice of continuous vibrato saw the light of day, and during the early 20th century it gradually became an established practice[1] (Moens-Haenen 2012). The 20th century also saw the rise of research into historical performance practice. The concept of historical listening (Kivy 1995, p. 71) has made a profound difference in Western musical culture, introducing the coexistence of distinct musical idioms in a manner unthinkable only a hundred years earlier. Simultaneously with the reintroduction of non-vibrato playing (i.e., the return of the ornamental vibrato) in early music performance, the same manner of playing appeared in modernist music and has since the mid 20th century been an important aspect of many stylistic directions within contemporary classical music. However, vibrato has rarely, if ever, been understood as what Stephen Davies would call a ”work-identifying” parameter of Western art music (Davies 2004). Regardless of whether it has had an ornamental function or whether it has been a continuous element of the sound production, vibrato in Western art music is a surface-level phenomenon, although one that stirs up the feelings both of ordinary listeners and music scholars.

Vibrato playing in traditional Vietnamese music is a different matter. In these traditions it is an essential structural component. These traditions of various kinds of chamber music and music for theatre have brought forth a complex spectrum of articulation that makes for a subtlety of expression very similar to that of Western baroque music. But vibrato is not merely a means of expression but a factor that defines the identity of the music. The Vietnamese modal scales, or *điệu*, can be divided into two main systems, the *bắc* system and the nam system, which can be translated as ”North” and ”South” respectively. These terms do not simply represent music from these geographical regions, but rather they refer to emotional types not unlike those of the Western cultural construct of major and minor scales, hence *nam* modes are ”sad” and *bắc* modes are ”happy”. However, the way these types are distinguished is equally dependent on the articulation and vibrato types stipulated by the mode and not always by different pitch shapes. For instance, the *Ai* and *Xuân* modes (see Figure 1) have identical pitch structures, but by the way the ornamentation is shaped, the modes afford clearly distinct musical materials. It is a common feature in exam concerts to have pieces in these two modes on the program in order to display the ability to properly master these crucial differences. If you know this music, the function of vibrato in the different modes is as strongly bound to the musical material as ever the distinction between major and minor tonality in Western music.

1) The exact dating of this change is of no relevance for our discussion though it may be noted that the view of historically informed vibrato playing in early 20th Century music is currently a hot topic. Much of the debate is centred around the recordings and writings of Roger Norrington and Clive Brown (1999) arguing for non vibrato performance of Romantic orchestral music and authors like Hurwitz (2012) who claim opposite positions, also with reference to historical evidence.

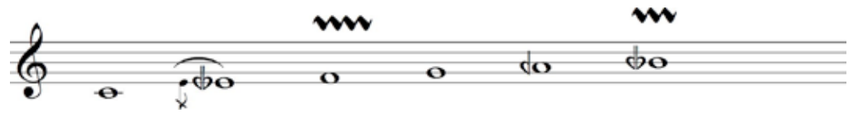


Figure 1a: The Ai mode with its characteristic articulation-types.

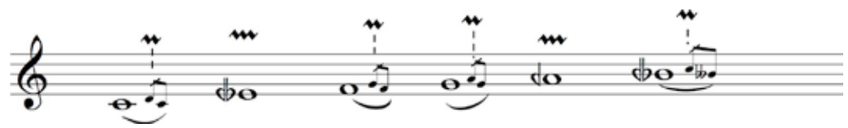


Figure 1b: The Xuân mode, with different vibrato but all pitches identical to the Ai mode.

Hence, the different kinds of vibrato of Vietnamese music were constantly present in the interaction between the musicians in the project, whether we were in a workshop with a composer, performing traditional Vietnamese music or in the midst of an improvisation in Western experimental style. Of course, equally present has been the layers of different approaches to vibrato in Western music. In addition to the above overview, it is worth noting how vibrato in Western popular music differs from the classical idioms and how these instrumental styles have permeated contemporary art music as well. In addition to the strong presence of the characteristic articulation of Vietnamese music, the vibrato types of classical and electric guitar technique all make their way into the musical dialogue in the group. One may say that the encounter between these traditions can be understood as a ”question” in the way Gadamer discusses it: a question in the musical domain that has posed itself to us in many different ways over the past few years and continues to contribute to the ongoing changes in the ways in which we interact through listening in the context of the group. Listening to the ”question of vibrato’” implies a movement from perception to action; outside of the verbal domain, the ”question” may take shape as a musical response from one performer to the other. Reading Gadamer through Nancy (2007), listening to the question then is all about sharing, about becoming resonant subjects in a musical dialogue in which we interact in the shaping of the musical question around which a common understanding can be negotiated.

Viken

One instance of when the ”question of vibrato” came to the fore was when were transcribing *Viken*, a piece by the Swedish composer Love Mangs. This is originally a composition for guitar, banjo, e-bow and electronics (2004–2005) and was commissioned by the Swedish Arts Grants Committee. The transcription for trio was made by The Six Tones without involving the composer. We did not produce a new score and did not change the pitch structures in the parts of the piece that are fixed in musical notation. The transcription expands the original guitar part with novel sonorities and modes of articulation brought into the piece by the Vietnamese performers. The question of vibrato as it posed itself to Thủy in this work was concerned with the relation between the personal authenticity of a traditional performer and the identity of the composition. But it is also a reflection of the ways in which we have constantly been negotiating musical meaning throughout the course of the project.

When the new version had been premiered, we had a Skype conversation in summer 2008 about the making of this transcription. It has surprised us to find how the greater part of the conversation points to a common concern about difference in a manner that we have come to question more and more over the years. We felt that the best way to attempt to understand the processes that were ongoing

at the time and, furthermore, what the development has been over the last few years was to continue with a new dialogue that comments on the first. This is the section we wish to revisit:

Stefan: Was there any 'friction' or influence from Vietnamese traditions in the making of the transcription, apart from the fact that you bring the sonorities of your instruments into the piece?

Thủy: I think of course there was a lot of friction and influence from Vietnamese traditions in the making of the transcription.

By Vietnamese traditions here I mean the way I think, the way I feel about the melodies in Viken; the way I usually play on my instrument; the way I extemporize when I meet a strange, unknown situation. I am sure what I felt of Viken was different from you. Of course we found many things in Viken that is common to both traditions. I mean, for instance, you know, many melodies in *Viken* appear as very Vietnamese to us, very familiar to us. So even if I tried on purpose to refuse the influence of Vietnamese traditions, I think they are still there, like I couldn't refuse that I am Vietnamese.

I was conscious of that, so that is why I sometimes had this sense of friction. When I played *Viken* with you, I often asked myself, should I put something Vietnamese in here or not? I wondered whether this glissando was too Vietnamese. Should I play something strange, not Vietnamese here? Was it good if the audience could feel that there was something Vietnamese in *Viken*, or it is better they can feel a music without barriers... I know normally people like to hear something Vietnamese from us. Sometimes I think I could do something that is not Vietnamese and still make people like it.

Stefan: I am a bit surprised to read my question. In retrospect, the way I phrase the second half of the sentence seems a bit naïve and somewhat ignorant of the complexities of the project. But I also seem to lead you into the track of thinking in terms of difference as a major factor in the work we did.

Thủy: Yes, I reply with an entire catalogue of ways in which difference between our musical traditions create this friction. I seem to be very aware of what is perceived as "Vietnamese" in my playing. I believe I was myself quite constantly aware of this difference when we worked.

Stefan: It seems to me that the perception of this difference is also projected from outside, your identity as a performer when playing to a Western audience appears to be built on the expectations from the audience on this 'otherness'.

Thủy: That is different today. I think I am not as concerned with the expectations on my being Vietnamese when I play to an audience outside of Vietnam. In fact, instead I seem to more often reflect on how my playing is changing; now it seems to be less and less shaped by my background in traditional music.
Stefan: To me, that seems like a positive turn. I always found the final sentences above quite disturbing, like when you say, "I know normally people like to hear something Vietnamese from us. Sometimes I think I could do something that is not Vietnamese and still make people like it." So do you think it has become possible for you to create a hybrid identity as a performer in later years?

Thủy: For many years, my identity as a performer was completely rooted in the idea of being shaped by tradition. I grew up in a family of actors and started my training to be a *đàn tranh* player at early age. I am not sure if it is right to speak of a hybrid identity, but I do believe that my perspective on myself as a performer has changed through the work in the group. Perhaps sensing the expectations to be "representative" of a culture, when playing in Europe, started that process. And of course, that I began to resist this expectation. Today, I feel more free to include influence in my playing from anywhere that I myself find artistically relevant.

Stefan: Those changes seem to be directed towards the community outside of Vietnam. How do you then think that this shifting identity is perceived from the 'inside' of your culture?

Thủy: I think, even if I always try to be aware how my identity might change, I cannot refuse its influence in my work. It doesn't mean that I change my identity, but the way I see my tradition is different. For instance, the way I see the vibrato in Vietnam music is more clear and feel it stronger when I can see how that works in Western music, like I try to see my tradition from outside. So my identity might not change, but my perception is changed somehow, so I am not sure how much it might affect my identity. And I think the audience in Vietnam can "feel" that change in my work.
Stefan: In what ways have you seen this in the reaction from audiences?

Thủy: Well, for instance, last year I premiered my first composition for *đàn tranh* called *Lost in Vibration* in which I use the traditional vibrato as a theme and material. Many people in the audience who knew my performances of traditional music had trouble to see the connection to tradition in the piece. To them it was just new music.

Stefan: On a completely different note, I wonder if there is a kernel somewhere inside all of us that refuses the transparency that is presumed by Agawu when he contests the notion of difference. Is there an opaque corner of our musical and cultural identity that cannot be understood and analyzed from the outside? Of course, I am thinking here of the writings of Édouard Glissant and his claim for the right to opacity.

Thủy: This is still unknown ground to me. I mean, I cannot discern within myself – or in what I see of our work – how to think of the poles of opacity and transparence. I sympathize with Agawu's line of reasoning but I can see the danger of reduction also.

Stefan: I am very much attracted by some individual lines in Glissant's text: "Opacities can coexist and converge, weaving fabrics. To understand these truly one must focus on the texture of the weave and not on the nature of its components" (Glissant 1989, p. 190).

Thủy: Coexistence instead of explanation? That could be a way to understand what is going on in a group like The Six Tones.
Stefan: Yes, a bit like creating an ecology where different traditions can weave these fabrics that Glissant speaks of.

Thủy: Perhaps one can also understand my concern with difference as a temporary constraint. I was preoccupied with these issues, trying to resolve internal questions of identity. So there is no simple grid for difference or sameness as inhibiting or creative factors. I think we have experienced both in the course of our work.

Stefan: Indeed we have. But in the making of the transcription of *Viken*, would you agree that this perception of sameness, of a sense of common ground in some materials in the piece – like when you found the (mainly pentatonic) melodic material in Viken to be "common to both traditions" – perhaps this was an impulse that '"motivates acts of performance" as Agawu would put it? (Agawu 2003, p. 235).

Thủy: In order to "work with" opacity, we need some kind of trust. At that time, when we worked for the first time together on Viken, maybe I needed to find those moments of sameness. But now I think we can work together while also recognising the opaque areas of our respective musical identities.

Move

The collaboration between The Six Tones and the Vietnamese composer and vocal artist Kim Ngọc Trần Thị started in autumn 2009 during *Hanoi New Music Meeting*. This event, curated by Kim Ngọc, brought performers from several countries in Europe together with performers of traditional and experimental music in Vietnam for a series of workshops that resulted in two productions of improvised music and composed works. In 2010, Kim Ngọc was invited to recording sessions with the group for the recording of a double CD[2] that also involved several other artists from the scene in Hanoi. The process of making the piece could be understood as yet another example of how listening to the "question of vibrato" has been central to our practice. In this case we find a listening composer with her ear bent not only to the performers in dialogical working sessions but, more specifically, to the performance traditions of Tài Tử[3] and eventually creating a work in which the decomposition of characteristic ornamentation in this style is the structural building block. As is obvious, the work we did rested firmly on the ground of an already ongoing collaboration as improvisers. Not only was Kim Ngọc familiar with the playing of all three musicians in the group, but we had already shared musical ideas and interacted as performers in several different contexts. The first working sessions on the piece took place in Hanoi in October 2010, but it was in a workshop in Hanoi a year later that the piece received its final shape, a month before the premiere during *(re)thinking improvisation*[4] at the Inter Arts Center in Malmö.

2) This double CD titled *Signal Noise* is due for release on db-Productions, Sweden in October 2013.

3) *Tài Tử* is a form of chamber music that was developed in the south of Vietnam. *Tứ Đại Oán*, a piece discussed in the next section of the text, is one of the most famous pieces in this tradition (Le 1998).

4) The recording of the premiere is found on the audio CDs in the present publication.

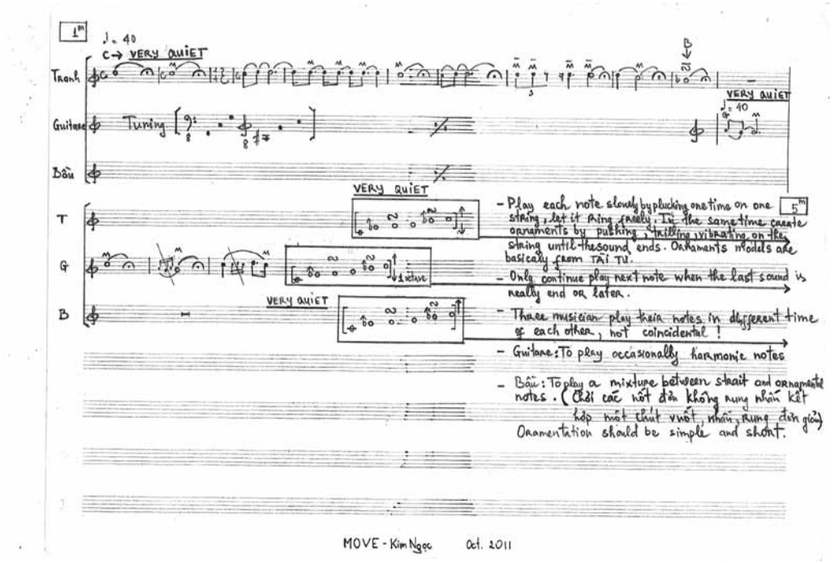
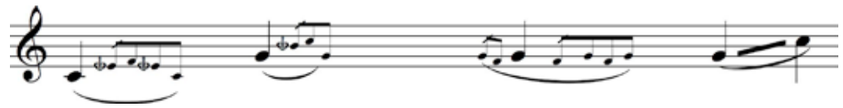


Figure 2: The first page of the score to Kim Ngoc's *Move*.

When we met to work in October 2010, Kim had already found a title for the piece. It was to be called *Chuyển Dịch (Move)* but the way in which it would relate to movement was exactly what she wanted us to test. In this first session we tried different possible interrelations between physical movement and instrumental playing, including improvisations that move from high to low register or slide gradually from one register to another. Most of the music we played was quite dynamic and full of momentum. When we met again a year later, Kim presented a concept based on how in traditional Vietnamese music a single note is often set in elaborate movement through ornamentation and vibrato playing. We worked from the composer's abstract notion of music that starts out with single plucked notes and never leaves this meditative state of complete stillness but still consists of elaborate movement. Kim explicitly claimed inspiration from the non-dualist concept of yin and yang. In contradistinction to Western dualism, stillness and movement in the piece are understood as complementary entities that "permeate each other, emerging as two extreme aspects of the constant transformation of the Đạo [the "Way" of the universe]" (Dualism, Encyclopedia Britannica 2012). The working sessions in Hanoi in October 2011 were very much about searching for ways in which this paradox could be translated into sounding music. There was also a second guiding principle: though building on the traditions of Tài Tử, the ornamentation should gradually become distorted and transformed. The nature of this transformation was also an element that we experimented with in the sessions.

The score to the piece was produced during the sessions in October 2011. It is part descriptive, reflecting the playing we did in the sessions, and part prescriptive, defining elements that Kim brought into the discourse. The score consists of a single page with a series of verbal instructions and a single line of the opening in the *đàn tranh* part in staff notation (see Figure 2). The *đàn tranh* leads up to the first phrase in the electric guitar in which the first notes are also notated. The primary instruction is that consistently through the piece, a single note should be plucked and ornamented until the sound dies out. No new notes may be played before the first sound has died out. The ornamentation should be in Tài Tử style, and in fact based on the same scale as quoted in figure 1a. In addition, the large scale form of the piece is fixed by the score, with the precise timing of sections in an arch form starting in the

Figure 3: Some traditional ornamental types from *Tài Tử* that in that are used in Move.



higher register of all three instruments, gradually moving down and eventually returning to the same single pitches in the high register in the end.

The notated opening line raises questions concerning the relation between tradition and the identity of the composition. Kim went home after a working session to write this opening phrase, frustrated with the way the opening was (or was not) taking shape in our improvisations. Starting out on C, the first note is plucked and then rings until it dies out, without any ornamentation. What is striking is how the phrase develops from here, and specifically how the vibrato is distributed.

The phrase continues from C to D, with vibrato indicated on every D except the first. As can be seen in figure 1, in *Ai* and *Oán* modes, there should be no vibrato on D. (Moreover, D is not even mentioned as a possible ornamental note in the table of the scale in the score to *Move*.) This is one of the crucial differences between the *Xuân* and *Ai* modes discussed above. Hence, it is only on the last note in the *đàn tranh* part that the piece moves into the vibrato characteristic of *Tài Tử*. As a model for how to play the rest of the piece, the opening line would serve very badly. However, it was a crucial moment in the working process when this scored opening was written, since it creates the beginning of a transition from single notes that are gradually more and more ornamented, a development which is the core identity of the composition and a characteristic that also demands some violation of the traditional rules.

Though on a level of fine detail, this departure from tradition is soon to be taken much further over the course of the piece. While the music moves down in register, the ornamentation and the pitch material goes further and further astray from the traditions of *Tài Tử*. At this point, the affordances of the Vietnamese electric guitar come to the fore in two ways: first, in the introduction of the bottom register as the guitar enters a dramatic extra octave below the normal electric guitar, and second, in big chords in which multiple glissandi can be played on the carved out frets which afford bending up to a fourth just like on a *đàn tranh*. It is also at this point that the *đàn tranh* starts playing double stops. Gradually the music ascends from this low register and simultaneously makes a gradual transition back to the ornamental figurations of the opening. The piece closes with figurations around the opening C, but now two octaves higher.

Although this is not specified in the score, we have up till now been playing the piece in the *Oán* mode. Some examples of typical ornamentation in *Oán* can be found in figure 3 above. As can be seen in those examples, the *Oán* mode is very closely connected to *Ai*, but the characteristic expression is even more profound. In *Oán*, the same scale as in figure 1a becomes the point of departure for the most elaborate ornamentation that you find in Vietnamese traditional music. The music of Kim Ngọc's Move gravitates towards the same core expression as this severe tradition of *Tài Tử*.

Interestingly, with the way the identity of the composition is communicated, performing this music is not unlike playing a traditional Vietnamese piece. It is hard to see how it could be possible to play this piece without having a fundamental understanding of *Tài Tử*. But also, the transformations that this material is subject to would be equally impossible to create without reference to experimental Western music. In Move, Kim Ngọc does not only create a gradual dissolution of the traditional modes of expression in traditional Vietnamese music. She also creates a dialogue between Western experimental music and the traditions of *Tài Tử*, and eventually returns to the original point of departure. This movement between distinct musical traditions could not happen without listening in the Gadamerian sense, without the sharing in a sonic space that transforms not only the music but in some important

ways as well the individuals involved. In the course of these working sessions, a common understanding was created in negotiations between the musicians and the composer: a shared language that also constitutes the identity of the composition, without which the instructions in the score would have very limited relevance.

Tứ Đại Oán

A central approach to the work within the group has been to bring improvisation in Vietnamese traditional music together with experimental Western modes of expression in the performance of traditional pieces. One of the first traditional tunes that we started working on is called *Tứ Đại* Oán (a famous piece in the *Oán* mode discussed above). We played it for first time in concerts in Sweden in 2007. In the first versions we decided on a simple formal structure, dividing the piece in the middle with a free improvisation in between sections of the piece played in traditional style. At this time, we were well aware of the experimental nature of this approach. *Tứ Đại Oán* is a piece that belongs to a firmly established tradition, in which the ornamentation and the sequence of melodic patterns are quite clearly defined. Hence, the identity of this music is in many ways as fixed as that of any composition in Western art music. How can hybrid identities be negotiated in a cross-cultural collaboration like ours? How can we define musical meaning in music that redefines the fundamental building blocks of a certain musical tradition? No doubt, these questions remained unresolved after the tour we gave in 2007. But we were quite enthusiastic about having started this exploration, and when planning a tour in Scandinavia in winter and spring 2009, we decided to continue the work we had done on that same piece.

We rehearsed for the tour in a studio at EMS (The Electronic Music Studios) in Stockholm. In *Tứ Đại Oán*, we specifically wanted to find better ways of creating transitions between the different styles of music. Of course, we were also constantly negotiating a shared language in the encounter between our different idioms. In these sessions, Henrik and I were quite reserved, leaving the initiative much to Thủy, since we felt that we were intruding into her territory in this piece. Since she also seemed unsure of what to do with the piece, we were all quite hesitant of how to move ahead. The insecurity of all three of us can be seen in our stiff body language but is also heard in much of the music in the first rehearsals, as we were often searching for ways to connect quite disparate elements. However, following Thủy's suggestion, we tried more complex approaches to large-scale distribution of the traditional and experimental elements and grew more confident with the way the piece developed. Ever since the tour, the ways in which we worked with this piece has served as a model for approaching other Vietnamese music.

Though we have tried to distribute the traditional material and the layers of experimental improvisation differently over the years, the opening improvisation has remained the same, always drawing on traditional models. Still, the question of vibrato has remained highly resonant. Even though the melodic structure in this first part is drawn from idiomatic Vietnamese improvisation, what emerges has been a hybrid music that brings the vibrato of traditional Vietnamese music together with bottleneck playing typical of popular Western music guitar traditions. This encounter comes out clearly in recordings from the tour in 2009[5] but what are perhaps more important are the ways in which these vibrato types have become shared between the players in the group. In later performances, for instance, the extensive slow vibrato on the third and sixth scale degrees in *Oán* have come to serve as material for bottleneck improvisations on the 10-string guitar.

After the tour in 2009 we coded the video from working sessions at EMS and recordings of concerts. We worked mainly in pairs from a model of stimulated recall[6] involving all four players that were part of the tour. The aim of this research was to look for ways of analysing the interaction between us. Roger Sessions reminds us of how the site for musical creation is the musician's ear (see p. 184). Our analysis was built on this understanding of musical dialogue, looking at the interaction in terms of different ways of listening. In the coding of the video we identified a series of modalities of listening. The most prominent codes were the following:

Attentive listening, a way of being in which all or some of the players are in tune with the others and with the ongoing music. By this we also understand a state of mind in which new directions can be found at any moment. More than many other modalities, the state of attentive listening presupposes the fundamental openness of listening that Gadamer discusses.

Structural listening, by which we did not at all intend the kind of analytic listening advocated by, e.g., Adorno which is closely bound to the listening cultures of Western art music. Rather, by "structural" we seek to describe the kind of being-in-listening that creates an understanding of the past while also shaping the further direction of the music, a kind of listening reminiscent of Husserl's concept of the "living present" also discussed by Jean-Luc Nancy and Granel (Nancy 2007, pp. 18–19). Nancy calls this evocation: "It anticipates its arrival and remembers its departure, itself remaining suspended and straining between the two: time and sonority, sonority as time and as meaning" (ibid. p. 20).

Integrated listening refers to a specific kind of attentiveness when several players become resonant to the other. It is a state in which the playing of two or more performers is integrated and works towards a similar direction.

Searching listening, a state that often occurs in the beginning of an improvisation, or at a transitional point. One may say that the listening is attentive but the musical means in the individual playing has not yet been identified. This is a vitally important and also difficult state in which one may find a conflict between the openness of listening and the search for musical material and tools that will allow the performer to contribute to the ongoing music.

Failed listening is how we have characterised moments in which musical intentions in the ongoing music have not been fulfilled, when individual initiatives have been contrary or disregarded.

Listening and interaction

When we started out the research within (re)thinking improvisation, the work in the group had been ongoing for three years, but with a cross-cultural exchange like this, three years is just about enough time to create a platform from which to start. Every time we finished a production we would feel that we had taken enormous steps forward. The next time we met, we would normally have the feeling that we had been so ignorant and superficial. Hence, at this time we did not feel that we had a lot of experience and material to draw on in the analysis, and our perspective was very much to build a preliminary understanding of the ongoing work. In 2011, with a series of more large-scale projects behind us, we became aware of the need to adopt a different approach to our documentation of the working process and to look at the development of our work over time. While maintaining the ambition to look at our interaction from the analytical perspective of our listening, we now wanted to come to a better understanding of how the work in the group had not only developed but perhaps also transformed us as participators over the years.

A longitudinal perspective

After adopting this more longitudinal perspective on the development of the interaction between us, one study was carried out by coding[7] video recordings of free improvisations in two performances of *Tứ Đại Oán*: one in 2007 in the Rosenberg Hall at the Malmö Academy of Music and the other from 2011 in the Red Room at the Inter Arts Center during *(re)thinking improvisation*. The material was coded using two grids: first, a very simple mapping of individual initiative and response, and second, an analysis of the modes of interaction through our understanding of different modalities of listening as described above. The first grid calls for a further discussion. When taking Gadamer's insistence on the "primacy of the question" into the musical domain, what is really the meaning of "initiative" and "response"? In musical listening and performance, action

5) For an example of how these different kinds of vibrato can be merged in the work of the group, see the opening of *Tứ Đại Oán*, for instance in a video from a concert at Atalante in Gothenburg in 2009. This video can be found on youtube.com/ostersjo or following this link: http://www.youtube.com/watch?v=PbVN0VgBKfw&list=UUweb61pVe0p_HwFK85CTAdw&index=16&feature=plcp

6) "Stimulated recall" is the overarching term for similar introspective research procedures through which cognitive processes can be investigated by inviting subjects to recall their concurrent thinking during an event when prompted by a video sequence. Many writers accredit Benjamin Bloom with the first description of 'stimulated recall' in 1953 which he described as a method for retrieving memories: "The basic idea underlying the method of stimulated recall is that a subject may be enabled to relive an original situation with vividness and accuracy if he is presented with a large number of cues or stimuli which occured during the original situation" (Bloom 1953, p. 161). In our research, stimulated recall was applied in the form of joint sessions in which we reviewed video from rehearsals and concerts and made joint coding of this material.

7) Though most of the coding we have been doing over the years has been carried out as negotiations between two performers at a time, in this study, the third performer, Henrik Frisk, was not involved in the coding process. However, the results have been further discussed with him and the analytical framework was also highly dependent on the joint work of all players in the group over the past years.

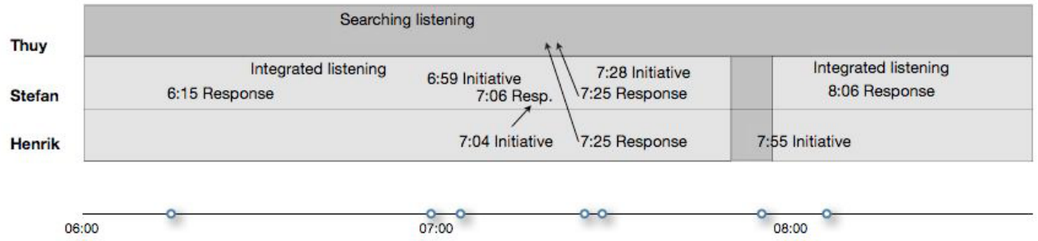


Figure 4: A graph of the interaction coded in modalities of listening and instances of response and initiative.

and perception are tightly interwoven. If the point of departure need be a common fundamental openness of listening, we believe that the distinction between initiative and response is in many ways a superficial one. Both emerge from the same listening, from subjects that are resonant to the question of the unfolding music. The distinction intended with this coding is related to the creative output; ”initiative” denotes a ”listening to the question”” that results in new material, and ”response” is how we refer to output that continues to develop already existing material.

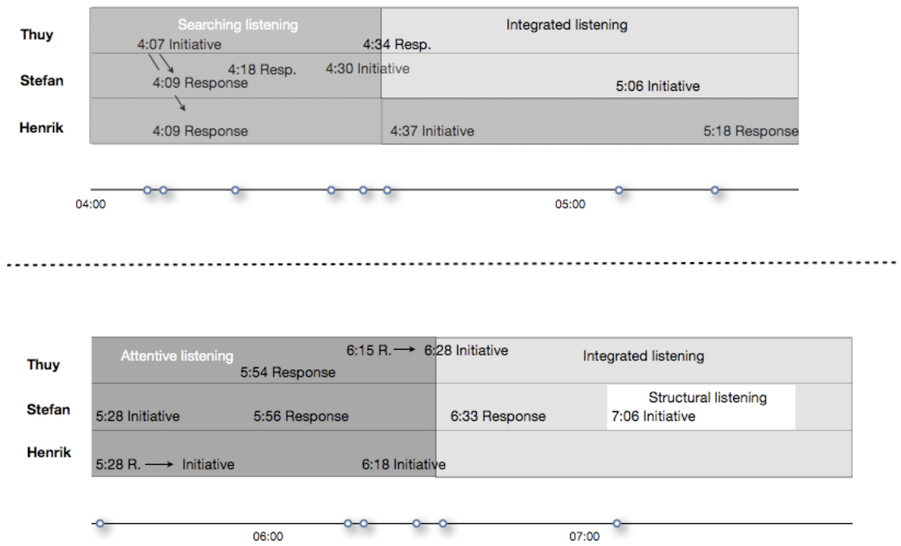
In contradistinction to the earlier studies we conducted, in which the focus was on extremely local aspects of the musical interaction, in this cross-reference study between performances in 2007 and 2011 we specifically wanted to address questions concerning long-term change in our playing and development of our interaction.

Initiative and response

In the recording from 2007, the most striking aspect of the interaction is the way it is distributed between the players. While Henrik and Stefan develop a series of initiatives and responses, Thủy neither responds nor takes any clear initiative throughout the entire section. She was following the agreements made about this improvisation and remained in a traditional mode of improvising in the *Oán* scale of *Tứ Đại Oán* (see Figure 3). But with the constraints on playing techniques and gesture that followed from this agreement, her playing never dynamically interacted with the other two. In Stefan’s playing we find four instances of responses and one of a new initiative. These initiatives and responses have much to do with attempts to merge Thủy’s playing with the texture created by the guitar and the electronics. Henrik takes the initiative twice, both times by introducing faster and louder electronic materials. In these two instances, Thủy is at the same time more alienated since the texture moves further away from her idiomatic traditional improvisation. This is also a moment when which Stefan chooses to integrate with Henrik rather than stretching towards the layer of *đàn tranh* music. Since the electronics consists of processing of the live-input, it is difficult to discuss Henrik’s performance in terms of response; every moment in the electronics literally responds to the ongoing performance. This also applies to the second performance in 2012. However, this is only at a technical, surface layer. Musically speaking, of course, he is also able to respond and, perhaps in this case more importantly, not to respond.

In the 2011 take, the dynamics of the group interaction are strikingly different. Moments of response and initiative are distributed between all three players. One feature found in all parts is a movement from response to initiative (see Figure 4) identified the first time in Stefan’s playing in 4:18 and onwards, in Henrik’s part in 5:28 and in Thủy’s playing in 6:15. Thủy moves from response to initiative when Henrik and Stefan have developed some duo phrases in the low register. Thủy responds with an echo in a high register of Stefan’s last phrase. The introduction of this higher register in turn leads to the arpeggio material that characterizes the next section. A similar process is seen in both Stefan’s and Henrik’s playing. First, a response is presented in a manner that becomes a resonance of the previous initiative. When the material is twisted in a new way, this movement from response to initiative takes place.

Figure 5: A graph of the interaction coded in modalities of listening and instances of response and initiative.



Modalities of listening

In the 2007 recording, Thủy appears to remain in a mode of searching listening throughout the clip. We sense a conflict in her listening, and we believe that the restrictions in the material she was using were reflected also in a lesser sense of openness. Thus, even if her listening is surely attentive, she is neither fully open to the ongoing musical discourse, nor does she have the tools to truly contribute. At this point we were all affected by the ongoing negotiation of how the identity of the original piece could be modified in the course of a ”free” improvisation. The strongest factor delimiting the openness in Thủy’s listening is certainly to be found in this conflict between musical traditions.

Henrik and Stefan build a duo music that starts out from percussive clicking sounds that were part of the sound world of *Tứ Đại Oán*. The duo structure is tight, and Stefan and Henrik remain in a mode of integrated listening throughout the improvisation, apart from a moment of searching listening at 11:36 when Stefan has introduced more material that relates to Thủy’s playing and Henrik also brings in more active material. At this point it appears to take a while before these new materials are integrated into their duo. Again, in the 2011 recording, the coding reflects a more dynamic interaction. The opening is characterized by searching listening in all three parts. When Thủy responds to Stefan’s first initiative they both move into a section of integrated listening. Henrik takes the next initiative but remains in a state of searching listening until Stefan enters with new material, and all three move into attentive listening at 5:28. (It may be worth noting here that Thủy at first responds with silence, a response that should perhaps have been coded as structural listening. Silence is often a highly active contribution. Here, it allows for the reintroduction of material from the first section.) During the last two minutes of the piece, all three remain in a state of integrated listening, building a common texture from the arpeggio introduced by Thủy in 6:28.

Summary and discussion

Listening

The analytical approach to musical interaction in this study builds on the conception of listening as the primary site for musical creation (Sessions 1971). Obviously, we cannot hear ourselves listening, but the traces of our listening can be observed in the musical (inter)action. From this starting point we coded the video documentation of performances and rehearsals in terms of different ways of listening. In order to move into a further discussion of this analysis, we must first assert that the

modalities of listening presented are not an attempt to identify absolute characteristics of musical listening. The intention is quite contrary to the prescriptive typology of listeners that Adorno provided (Adorno 1989, p. 5). What we intended when defining these codes was to map our embodied knowing as performers and listeners. One may wonder if it would even be possible, much less relevant or meaningful, to set out to define a generic typology of listening taking these modalities as points of departure. This would demand an entirely different research project and is not within the scope of our work. The series of modalities of listening that form the basis for the analysis refer to our own subjective understandings and do not have an aim beyond constituting a description of the musical interaction.

Having said this, we find that the way in which these modalities of listening refer to the musical interaction is that they become part of an analytical framework that is relevant for our understanding of musical creativity. The different modes of listening revealed by the analysis can be helpful in tracing both the large-scale trajectory of an improvisation as well as underlying factors in the interaction in a specific moment in the performance. At times, we bend our ears towards the greater form of the unfolding music, sometimes towards integrating the finest detail of the sound production. We may blend in integrative listening or activate critical listening, such as discussed by Peter Szendy in his book *Listen* (2008). The particular polemology[8] of listening he suggests lies in the open the way in which the larger discourse of a musical work or the interaction between improvising performers can take shape as a ”battlefield: a theatre of operations of listening where various camps clash with each other” (Szendy 2008, p. 114).

In order to create a platform for interaction between musicians we find that, below the various modalities of listening discussed above, a certain openness of listening is called for (Gadamer 2004). We have seen, in the dialogue about the transcription of Viken, how preoccupied Thủy was in the early parts of the project with ”difference”. If we look back also to the video of the 2007 performance of *Tứ Đại Oán*, we believe that a similar focus on difference underlies the searching listening that we found characteristic of her interaction with the other players in this performance. Is this not also likely to inhibit the openness of listening? How can a self that is preoccupied with difference adopt this openness? When looking at the large-scale picture of the interaction, in the two graphic representations in figure 4 (see p. 195) and figure 5 (see p. 196), we find the change in the interaction – both in terms of the density of initiative and response and in the dynamic shifts between different modalities of listening – to be dependent on the development of this openness of listening. And furthermore, this ”listening to the question” has also developed into a much more dynamic and intense interaction between action and perception as represented in the coding of initiative and response in these two graphs. What then has made this openness emerge throughout the years? We believe it has to do with developing trust, finding how we can live with the element of risk that is part of all true listening and with the fact that our identities are not fixed. When we dare to face the other and to contribute in a musical dialogue built on this openness of listening, we also invite the possibility of change, a change that underlines the fluid identities that constitute our selves. Or, returning to Gadamer: ”To reach an understanding in a dialogue is not merely a matter of putting oneself forward and successfully asserting one’s own point of view, but being transformed into a communion in which we do not remain what we were” (Gadamer 2004, p. 371).

Transformations: towards a politics-of-listening

This study has brought many concepts together that all deal with listening, learning and interaction in a globalized context. We have also seen how common concepts in Western thought concerned with how we relate to the (non-European) other tend to collide, often in the space where philosophical thinking encounters the political nature of human existence. Our intention in this final section is to discuss these conflicts in relation to our artistic practice. There are many possible perspectives on trans-cultural interactions. One may adopt an aerial perspective and consider the migratory movements between continents. This does not necessarily mean that global forces are blurred. It can instead make us see, for instance, the closed borders of the European community, the too little discussed fences that divide Greece, and hereby also the EU, from the Arab world, keeping out refugees who should be allowed entry according to international law. But one may also study the local situation for migrating individuals at any given site. Here, the conditions for the individual who is negotiating identity in a society with multiple layers of cultural and social paradigms are in focus. While not adopting an explicitly political perspective in the case studies, we have been looking at both minute negotiations of identity and the confrontations with difference and sameness that are part and parcel of this, but also from a more longitudinal perspective on our work. For instance, in Thủy’s reflections on the way she perceived the work on Love Mangs’s *Viken* in 2008, we can see how Glissant’s claim for the right to opacity destabilizes the poles of difference and sameness. It appears that the sense of sameness that emerged from the encounter between traditional Vietnamese performance practice and the musical structures of the composition was instrumental in the making of the transcription. However, Thủy’s present-day reflections on her preoccupation with difference in this process points to another factor which perhaps could be understood as a weaving together of sometimes opaque elements. In order to create a cross-cultural understanding based on the concept of sameness, we would need to embrace the Western trust in transparency. If there are zones that remain opaque, despite our attempts at dialogue and mutual learning, we need to work beyond a simplistic belief in cross-cultural understanding and aim towards a concept of interaction in a space where difference and sameness are not mutually exclusive.

The question of vibrato was strong in the making of Viken. It forced Thủy into reflections concerned with her identity as a performer and with the identity of the work we were transcribing. However, this ”question” became more elaborate and multidimensional in the process of creating Kim Ngọc’s Move. Here, the demand for individual contributions in the process of ”listening to the question” became apparent. Also, the presence of both Western and Asian concepts of vibrato was further accentuated. The specific merging of traditions that takes place in the piece is highly dependent on the individual knowledge and practices of the performers. Hence, the composition makes itself dependent on the identity of the performers, but also of the ongoing transformation, on the hybridity, of these identities and on the tension in the transformation between them. In music, just as in everyday life, the other is not transparent. Furthermore, there exists no stable point of reference, no fixed ‘self’ that remains untouched by the encounter with the other. The trajectory of Kim Ngọc’s Move – the transformation from the performance practices of *Tài Tử* towards an experimental paradigm and the gradual return – is relative to the embodied traditions that we represent. Hence, the identity of the composition is no more fixed than our personal selves. But if opaque corners of our respective selves remain, what are the conditions in cross-cultural practices for the fundamental openness of listening that Gadamer proposes in his hermeneutics? What is the relation between opacity and openness in these artistic processes?

First, Glissant shifts the Gadamerian viewpoint of a philosophy of listening towards the politics involved in the act of bending the ear towards the other. Second, we believe that such a politics-of-listening will have to shift the focus from models based on fixed cultural and social identities towards a play with fluid identities in states of transition. By problematizing the concept of mutual learning that constituted the starting point for our artistic work in the group, we wish to suggest that this politics-of-listening goes beyond the logocentric concept of learning, beyond the polarities of sameness and difference. This is a point where our analysis may benefit from a more longitudinal perspective on the work carried out in the group. Not only may the identity of a musical work change, like in the transcription of Viken or in the renderings we have made over the years of pieces like *Tứ Đại Oán*, but the identity of a performer also can be equally

8) Polemology normally denotes studies in war and human conflict but in Szendy’s case it refers to animated debates of musical aesthetics.

fluid. One trace of these transformations can be seen in the interaction between us. The dynamics of this change are reflected in the graphs of the coding in figures 4 (see p. 195) and 5 (see p. 196) in which not only the amount of initiative and response has increased and spread over all parties in the group, but one can also see that there is a new platform for creating more integrated sound worlds and musical structures, as seen in the analysis of the 2011 performance of *Tứ Đại Oán* and the tendency towards integrated listening in that improvisation. But does this integrated listening emerge from transparency? Does the concept of mutual learning involve a movement beyond opacity? We believe that this is not the case. The concept of transparency is a Eurocentric concept built on the privileged perspective of the Western gaze (always from above). This is one aspect of what Corradi Fiumara calls an "act of domination" (1990, p. 39). Rather than this "symbolic superiority" (ibid.) we embrace a different kind of listening, evading the transparency of logos[9] and instead building trust that can also embrace the opaque corners of the other. Corradi Fiumara reminds us of the danger of "thinking without listening". Do we need to "rethink" improvisation in order to bend an open ear towards a politics-of-listening? Perhaps we do. While bearing in mind the necessity not to blur the boundaries between art and everyday life, we wish to assert that all human action has a political significance. Musical improvisation is no exception. The openness of listening that we advocate is, in our understanding, not only the constitutive grounds for successful intercultural musical performance but also for dialogue that stretches beyond the domain of art. Just as social interaction is essential when bringing performers together from different cultures, the reverse is also true: social change should also be the outcome of true listening. Not only traditions may change but also the individuals involved in the dialogue. In a further trajectory, these transformations also signal the dissolution of the hierarchies of the old world and the dominating gaze of the Western eye (and, as it were, of the ways of listening, instead bending the ear towards the other).

References

Adorno, T. W. (1989). *Introduction to the sociology of music.* New York: Continuum.

Agawu, K. (2003). "Contesting Difference: A Critique of Africanist Ethnomusicology". In Clayton, M., Herbert, T. & Middleton, R. (Eds.). *The Cultural Study of Music.* London: Routledge.

Brown, C. (1999). *Classical and Romantic Performing Practice 1750–1900.* Oxford: Oxford University Press.

Butt, J. (2002). *Playing with history: the historical approach to musical performance.* Cambridge: Cambridge University Press.

Clarke, E. (2005). *Ways of listening : an ecological approach to the perception of musical meaning.* New York, N.Y.: Oxford University Press.

Clayton, M. (2003). "Comparing Music, Comparing Musicology". In Clayton, M., Herbert, T. & Middleton, R. (Eds.). *The Cultural Study of Music.* London: Routledge.

Corradi Fiumara, G. (1990). *The Other Side of Language: A Philosophy of Listening.* London: Routledge.

Davies, S. (2004). *Musical works and performances: a philosophical exploration.* Oxford: Clarendon.

Gadamer, H.-G. (2004). *Truth and method*. 2nd ed. London; New York: Continuum.

Gibson, J. J. (1979). *The ecological approach to visual perception.* Boston: Houghton Mifflin Company.

Glissant, É. (1989). *Poetics of Relation.* (transl. B. Wing). University of Michigan Press.

Heidegger, M. (1971). *On the Way to Language.* (Transl. by P. D. Hertz). New York: Harper & Row.

Hurwitz, D. (2012). "'So klingt Wien': Conductors, Orchestras, and Vibrato in the Nineteenth and Early Twentieth Centuries". *Music and Letters*, vol. 93, no. 1, pp. 29–60.

9) Is this what one might call "thinking improvisation"?

Kivy, P. (1995). *Authenticities : philosophical reflections on musical performance.* Ithaca, N.Y.: Cornell University Press.

Lakoff, G. & Johnson, M. (1999). *Philosophy in the flesh. The embodied mind and its challenge to western thought.* New York: Basic Books.

Le, H. T. (1998). *Dan Tranh Music of Vietnam: Traditions and Innovations.* Melbourne: Australia Asia Foundation.

Merleau-Ponty, M. (1964). "Eye and Mind". (Transl. by C. Dallery). In Edie, J. M. (Ed.). *The Primacy of Perception.* Evanston: Northwestern University Press.

Moens-Haenen, G. (2012). "Vibrato" [Electronic Version]. *Grove Music Online.* Retrieved 22 Sep. 2012 from <http://www.oxfordmusiconline.com.ludwig.lub.lu.se/subscriber/article/grove/music/29287>.

Nancy, J.-L. (2007). *Listening.* (transl. C. Madell). New York: Fordham University Press.

Sessions, R. (1971). *The Musical Experience of Composer, Performer, Listener.* Princeton: Princeton University Press.

Szendy, P. (2008). *Listen. A history of our ears.* (Transl. by C. Mandell). New York: Fordham University Press.

Trinh, M.-h. (2010). *Elsewhere Within Here: Immigration, Refugeeism and the Boundary Event*. http://site.ebrary.com/lib/lund/Doc?id=10433319&ppg=14.

Windsor, L. (1995). *A Perceptual Approach to the Description and Analysis of Acousmatic Music.* City University, London.

Wishart, T. (1985). *On sonic art.* York: Imagineering Press.

Östersjö, S. (2008). *SHUT UP 'N' PLAY! Negotiating the Musical Work.* Ph.D. Thesis. Lund University: Sweden.

LUND UNIVERSITY

Malmö Academy of Music