



Natural Patterns

**Music making with an ensemble
of improvisers**

Per Zanussi

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2017

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Accessing audio and video material:

Documentation of the artistic results, video and audio examples and documentation can be found at www.naturalpatterns.no : Example numbers from each chapter correspond to the example numbers on the website.

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1. Introduction

I have always had an interest in creating music alone. Writing notes on paper, imagining music, writing down my ideas, refining them and have them materialize later on by others. At the same time, I've also found great pleasure in improvising on double bass, making music in a group, interacting with the input of the others, and contributing to spontaneous music making.

Playing professionally in many different styles of music for the past 20 years, almost all have involved some kind of improvisation and predetermined composition. I have also composed music for my own groups, for chamber ensembles, jazz ensembles, film and contemporary dance.

Even though I feel most comfortable while improvising, these two different ways of creating music are equally important to me, yet I have somehow, most of the time, kept the activities of notating compositions and free improvisation separate in my mind. When I, a few times, have tried to combine the two in my own projects, I have never been quite satisfied with the results. It has always felt like my two ways of making music have not melded into a unified expression, but rather obstructed each other in the process.

My main motivation for embarking on this project, was to try to find a common ground for these two sides of my musical personality, and possibly reconcile them: The pre-planning, more intellectual, slow moving and solitary composer side, and my other, more intuitive, social side as an improviser. I was curious if my music making could feel more like one whole approach, my methods of composition and improvisation more unified. To be able to achieve this, I felt like I needed to start from scratch, so to speak, by introducing elements into my music that felt new to me. I wanted to break up my established ways of composing and mix or replace them with new ones, and also allow myself to change in the process.

I have aimed to construct a new method of making music for myself, blending and balancing the two dimensions of predetermined, written material and free improvisation. My music oscillates along an axis or continuum between the predetermined and the improvised, and my process deals to a large degree with finding the point where my compositional ideas blend well with my own and the other musicians' improvisation.

The goal has been to find a space where the composed music feels successful to me, while the improvisers (including myself) feel comfortable enough to be able to contribute in a meaningful way.

During my fellowship period, I have started a large ensemble, The Per Zanussi Ensemble, which normally consists of eleven musicians from a pool of about twenty. This ensemble is dedicated to exploring the field between improvisation and predetermined composition, and I've been lucky enough to have some of the best improvisers in Scandinavia join me in this endeavour.

The two practices of improvisation and composing predetermined material are in a constant state of dialogue within myself, tacitly influencing my web of artistic practice. This dialogue is brought to the surface and into the real world through my work with the musicians of the ensemble. My role as the leader of the ensemble, and composer in dialogue with the improvisers, lets me explore, in a more concrete way, my own struggles with uniting the two sides of my practice.

Through working with the ensemble I have taken the first steps towards developing a flexible, personal method and vocabulary for composing with improvisers, which can hopefully be of use to others as well.

Using this "toolbox", and through collaboration with the other musicians, I have attempted to encourage the development of a musical "culture" or identity within the ensemble. Instead of composing finished works for the ensemble, the ensemble has, in my mind, become a changing organism with its own particular practices, utilizing a specific collection of approaches and materials.

Research Questions

I have focused on exploring areas of the continuum between composition and improvisation, through artistic research, hopefully illuminating this "in-between" field of music and my processes and methods for creating within it.

My main question throughout the period has been the following:

-How can composition help us improvise in a large improvising ensemble, and how can working with free improvisation help me compose?

This question has been interrogated through practice, meaning playing and composing, and is related to several other questions, such as:

-How can the improvising musicians relate to my predetermined material in a way that feels comfortable and meaningful for both me and them?

-How do my methods for composition and notation develop through interaction with free improvisers?

-How can I find a balance between my compositional voice and identity, and the musical identities of the improvisers?

-How do I use inspiration from other musics and ideas in my work with free improvisers?

In this text I will try to give some tentative answers to these and other questions that have appeared during my fellowship.

Artistic Research

This research is not of a traditional academic nature, and not only looking at the process and results from the outside: My own experience, both as a composer and as an improviser interacting with the other musicians, has been a focal point of the research: Instead of research *on* art, I have aimed to do research *through* art, closer to the art I have produced, in a more subjective way.

The complex web of influences, experiences, tacit and explicit knowledge behind an artistic practice, has been described by Kathleen Coessens in her article "The Web of Artistic Practice". (Coessens, 2014) Coessens describes a "zone of exploration" within an artist, which consists of five tacit dimensions that, when blended and developed, result in an artistic practice:

-Embodied Artistic Knowledge

This dimension deals with "combining different skills, perceptual capacities, and sensorimotor coordination":

- Embodied know-how, meaning acquired skills and other attitudes and skills absorbed from society and environment.
- Interaction with the tools and materials, for example my instrument and the tools I use to compose.
- A "Multi-sensory interaction of different perceptual modalities".

-Personal Knowledge

"Personal expertise, previous experiences, education, embeddedness in a culture and a community of artists, and his or her cultural stock, as well as the influence of the artist's own character and temperament".

-Ecological Environment-Cues

For example physical conditions in concert, in rehearsal, within the institution.

-Cultural-Semiotic Codes

"Choice, articulation, and arrangement of semiotic meanings and symbolic codes in the artistic space."

In my case for example working with scores, recordings, the aesthetics and tacit codes of free improvisation and composition.

-Interactivity

My interaction with the improvisers in the ensemble, the audience, other research fellows and supervisors, other artists and critics.

We can see a "web of artistic practice" emerging, through idiosyncratic development, interconnections and blending of these dimensions. This web results in the artistic work and practice, and is often hidden from the listener experiencing the art from the outside. Revealing and reflecting on this web of artistic practice is an important part of what I think about as artistic research.

In this text I will try to illuminate how my own web has developed throughout the project, not necessarily referencing Coessen's categories, but touching upon them along the way. It is not intended as an academic thesis, but rather as a companion text to the music I create with my ensemble, illustrating some of the underlying ideas, influences, processes and methods at work in my artistic practice.

I will sometimes seem to speak for the whole ensemble, but I'm not sure all the musicians will agree with my assessments. I want to stress that this investigation is mainly into *my* experiences with working with the ensemble, and *my* process and choices.

I will try to describe how I have both subconsciously and consciously developed my own web, in an attempt to find some tentative answers to my questions. The point for me in doing this research, as a musician, not a scholar, is to try to share the knowledge about my art which is only possible for me to reveal through practice, creating music, and going through the creative process myself.

Methods

The aim of this research has been to develop a "toolbox" of musical material and methods, which can help me compose music and to establish a musical "culture" in a large ensemble relatively quickly. To investigate the web of my own artistic practice, and build my toolbox, I have used a cyclical method, which consists of preparation, execution and reflection:

Preparation

It starts with creation of predetermined structures and material. In this part of the cycle, I study scores and techniques that may be interesting to use, and I create new material, either in the form of etudes or other smaller ideas, or more developed forms (in later cycles). I also plan how to approach working with this material in the ensemble. In the first cycles I also study the musicians, their personalities, musical voices, skills and attitudes. I do this by listening to them in recordings or in concert, and by talking to them informally.

Execution

The next part of the cycle goes on to working with the musicians, improvising together and trying out new material. I test my musical ideas, as well as trying out ways of improvising together, ways of organizing and leading the group etc. In the beginning of the project I worked in smaller formats, starting with duos (to get to know the musicians in an intimate format), and gradually increased the number of musicians over the first year, until the large ensemble was assembled in early 2014. I also work on the material myself, practicing and playing solo concerts.

Reflection

The cycle ends with reflecting on and refining my working methods and research questions, informed by the previous point of the cycle, before it starts over. Here I listen to recordings and video and reflect on how to approach the preparation in the next cycle, assessing whether I have found any answers to my questions and which new questions have come up.

These cycles have been of varying length, depending on how much time I felt I needed to prepare, where the project was moving, availability of musicians and economy. After the first year, several cycles started going in parallel, with different groups of musicians from the pool in addition to the 10-11 piece ensemble. There are currently about 20 musicians involved in various groups within the project.

This is an overarching method for the work, and a more detailed description of my methods will be appear throughout later chapters.

Structure

The text consists of 8 sections and an appendix:

1. This introduction, where I have written about my motives for undertaking the research, research aims, my views on artistic research and my overarching method.
2. Free improvisation, where i explain why I choose to work within this field, discuss some questions regarding free improvisation and how it functions, and how we improvise in the Per Zanussi Ensemble.
3. Composition and improvisation, where I look at some aspects of integrating composition and improvisation, and how this relates to a large ensemble like the PZE.
4. Gugak, where I look at my inspiration from Korean traditional music.

5. Natural Patterns, where I explain more about how I have used inspiration from natural patterns to build the toolbox, and zoom further in on my methods for working in the ensemble.

6. Ensemble work, where I look at some of the other sides of being a band leader, working with the ensemble and my different roles.

7. Artistic results. Here I reflect on recording improvisation, and running a festival. I also present the artistic results of the fellowship: The CD "Evolving Patterns" and a recording of the final artistic presentation at Earwaves 17.

8. Epilogue

The Appendix : Consists of more documentation, including a presentation of a recording from Kongsberg Jazz Festival, sound examples of earlier pieces, satellite projects, other concerts, literature and more.

The first two chapters have no musical examples, but if the reader needs some accompaniment, It is possible to go to www.naturalpatterns.no and listen to some of the music of the PZE under chapter 7 and 9 while reading..The examples belonging to the other chapters are also located here.

Silence. The sound of the room.

The sensation of closeness or distance to the other musicians, my state of heightened listening.

The physical sensation of the instrument.

Does it make the sound I want it to, and does the sound have the effect I intended?

Reacting to reactions to my own sounds, in a constant feedback loop, conversing with my imperfection.

The audience focusing on every detail.

I know and feel that they are there, yet I need to block them out completely to be able to contribute.

What sound do I want to make, what do I hear?

A space around me where the sound of my instrument vibrates, mixing with the sounds of the others,

coming from all directions at once, my eyes closed.

A feeling of being pushed by the impulses coming from the others, forcing me to react intuitively or semi-consciously,

or, by will power, ignoring them, staying silent.

A half-awake, yet intensely focused state where nothing exists but the sounds.

Conscious thoughts of form or register or rhythms forming in my mind, then leaving them behind as the music dictates something else.

Slipping into flow, brought on by a sudden point of connection with the ensemble sound, or with a certain musician,

a feeling of the music moving by itself.

Then I overdo something, or fall behind, losing the connection with the music again and go back to the original state of listening,

somewhat disappointed to have to start over again.

But maybe this is a good thing. Maybe it creates dynamics in the overall form, an unforeseen turn of events that keeps it interesting,

leads to another musical place.

Thriving on the unforeseen, the crossroads where the music goes to a different, well known, yet completely new place of agreement among the musicians,

where everyone's role is instantly defined, as if following a pattern agreed upon beforehand.

Why Free Improvisation?

"a freshness, a certain quality, which can only be obtained by improvisation, something you cannot possibly get from writing. It is something to do with the 'edge'. Always being on the brink of the unknown and being prepared for the leap". (Steve Lacy in Bailey 1993: 57)

Why is free improvisation important to me?

Why do I find improvised music so compelling when it works?

Growing up in Stavanger in the Nineties, I was lucky enough to be exposed to free improvisation on many occasions. The city had a reputation as the Free Jazz capital of Norway since the late seventies, much due to sax player Frode Gjerstad's efforts to spread the gospel of free improvisation. Gjerstad invited musicians from the British and American scene to play with him, like John Stevens, Derek Bailey, Nick Stephens, Louis Moholo, Kent Carter, Bobby Bradford and others. There was also the possibility of hearing and playing with musicians like Eivin One Pedersen, Didrik Ingvaldsen, Nils Henrik Asheim, Paal Nilssen-Love and Gjerstad. These experiences made a strong impression on me, opening up my mind and ears at an early age to improvised music.

The surprises occurring, and the fragility, sometimes on the verge of collapse, as well as the unparalleled possibilities for musical interaction has always spoken to me, and free improvisation seems like the ultimate mode of musical communication. Playing on the actual *sound* of what you hear, rather than the sound of a pitch you hear within a previously decided harmonic system. I find free improvisation to be an unsurpassed method of making music, and I can blend all my experiences into my "voice".

So why introduce notated scores into this idyllic anarchy?

I have often thought about my want to "improve" the free improvisation of my ensemble as something negative, as predetermined material changes the dynamics of the music, in a drastic way. I realize that this is an expression of my personal need to reconcile my two sides: Me the composer and me the improviser.

But is there something to be gained by introducing predetermined material in an improvising ensemble?

A small ensemble of good improvisers doesn't normally really need any predetermined material, and there is a risk of closing its communication. If it can be improvised, improvise it. A large ensemble, on the other hand, may actually need it, and I think the communication can be opened up *more* by more structure, making it easier to communicate.

A Dynamic System

David Borgo, in his book "Sync or Swarm" uses the metaphor of a non-linear dynamical system to describe how free improvisation works. A musical "butterfly effect" where the input into the system can have far-reaching consequences. (Cobussen 2013)

Marcel Cobussen, in his article "The Field of Musical Improvisation" writes the following on Borgo's metaphor:

"The musical butterfly is a detail in the sound production that, when attended to or acknowledged by musicians, can generate alterations in the development of the music such that eventual outcomes are disproportionate to any initial causes. In other words, during an improvisation, each gesture can imaginably produce significant modifications in the total sound and musical development. " (Cobussen 2013)

I recognize this constant negotiation between listening and playing during an improvisation: I can input something into the system for it to stay alive, yet I'm careful not to push it too much, and risk creating unwanted chain reactions, all the while being sensitive to the different inputs from the other musicians.

Musical Coordination

"In freely improvised music, we view musical success as the attainment of musical and interpersonal interactions in which players feel able to make strong and distinctive musical contributions and where a high level of musical coordination is present."

-(Burrows and Reed 2014: 1)

Burrows and Reed describe how a group of collectively improvising musicians, with no prior discussion, are able to quickly settle into what they call "a musical "equilibrium" in which players collectively explore and enhance a coherent musical space." They call this achievement of equilibrium "musical coordination", and go on to describe how "The greatest free improvisations exhibit an uninterrupted series of high-quality equilibria linked together to form a coherent structure or narrative".

This achievement of equilibrium, and subsequent coordination, comes when there is balance in all the inputs in the dynamic system, affording some momentary stability. This is the moment when I experience flow and focus, and I feel, in the words of Burrows and Reed "able to make strong and distinctive musical contributions".



A Large Ensemble

I've always loved the sound of larger, freely improvising ensembles, both as a listener or when I have had the opportunity to play in a large ensemble myself. The multi-faceted and complex sounds of ensembles such as the Spontaneous Music Ensemble, Splitter Orchester, Barry Guy New orchestra, Evan Parker and Anthony Braxton's ensembles have made a big impression on me over the years. When everyone is attuned to each other in musical flow, the experience of the sound can be extremely powerful and satisfying.

Unfortunately, when the music is not working, nothing can annoy me quite as much either: When the communication is lacking, for many reasons, a large improvising ensemble can sound smaller than the sum of its parts, boring and formless. The moments where everything works, and the music is great, are fantastic, but unfortunately these moments are very often surrounded by longer periods of either passive, frustrating searching for equilibrium, or chaotic, equally frustrating cacaphony. With an ensemble of ten musicians, successful music sometimes seems dependent on luck. At least if you want to achieve forms which are not the most basic clichés: Tentative introduction, gradual buildup, ecstatic section, fade.

In my experience, in a smaller group of improvisers, the form is much easier to negotiate. The musicians hear each other, everyone can process most of the information, and with good players, the music can be successful most of the time. The smaller the group, the easier the collective organization. A group of three to max four improvisers can play clear collective sequences, but if you increase the number of musicians to five, it is already significantly more difficult to process the input from the other musicians. The cognitive load can be overwhelming. (Canonne/Garnier 2011)

Thus, I think about a "large ensemble" in free improvisation, as any group of more than 4-5 members. Any group above this is harder to coordinate musically, and not as naturally self-organizing. Achieving musical equilibrium and subsequent coordination in an ensemble of this size gets more difficult. If it does happen, it's hard to sustain over longer periods of time without any form of organization. With the right combination of musicians, taking breaks and giving the others space, it is of course possible to make good music, but in my experience harder to achieve fast, coherent transitions and clear, unified musical ideas.

"In our experience, freely improvising large ensembles, even those made up of exceptional musicians, rarely produce great music when all musicians are improvising simultaneously. One problem is that the human brain seems to have difficulty in simultaneously keeping track of more than three distinct musical expressions. Without the ability to hear and therefore interact, even otherwise great improvising musicians will not be able to coordinate their musical choices."
(Burrows/Reed 2014)

This is why I chose to work with a large ensemble to explore the question of how improvisation can help me compose and vice versa: I believe a smaller group does not need any predetermined material to create music as good as anything I could write. A large ensemble, in my opinion, can benefit from it.

Non-Idiomatic Improvisation

Composing for an ensemble of free improvisers?

There is a paradox here. Free improvisation has no predetermined material, and the form is being created in real-time. Its name originally derives from the fact that it is free from musical idioms and the shackles of musical genres. This is a form of music where one can play exactly what one hears, and express anything one may want to.

But why would it be considered strange to roll on the floor screaming, while just screaming would be ok (albeit a little too extreme for some)? And why does a group improvisation tend to end with everyone stopping at more or less the same time? Why doesn't one of the improvisers keep playing for five minutes after the others have finished? Why do so many improvisers today, including myself, tend to use so called "extended" instrumental techniques or preparations, instead of playing clear pitches (not to mention a c major arpeggio)?

There seems to be some conventions and accepted practices to so called free improvisation. Maybe it is idiomatic after all?

Yet, there is definitely some more wiggle room than in any other music, and idiosyncrasy is usually encouraged. Maybe one is free to be personal? To build one's own language over time? Free to create your own expression of what free improvisation should be?

John Butcher writes about how big ideas are of little use in free improvisation:

The improviser's language, or voice, meaning that which the improviser tends to play, is developed in real time, and over time, in small increments (Butcher 2011) . Every time we improvise, we discover something new, and put it in our lexicon of musical materials, where we can revisit and develop it at a later date, consciously or subconsciously.

What you play is not only something that you have researched and practiced at home, but it also has to come out spontaneously, in the blink of an eye (to use an English idiom).

Method and Genre

"I'm saying that there is a set of rules. It's no good Derek (Bailey) saying he doesn't have any rules. Well, he can say that but it doesn't necessarily mean that it's true. The very fact that I can recognise his playing from one occasion to another indicates to me that there is a set of rules. If it's coherent there must be rules. There are rules; it's a different set of rules." (Eddie Prevost 1987)

Derek Bailey, in his seminal book "Improvisation: its Nature and Practice in Music", talks about free improvisation as the music where one normally finds "non-idiomatic" improvisation. This music, "while it can be highly stylised", does not represent an idiomatic identity, like jazz, flamenco etc. (Bailey 1993 : xi)

So what is the difference between the "idiomatic identity" of jazz, and the "non-idiomatic" identity of free improvisation?

One explanation could be that free improvisation is more a method than a genre, where you are free to invent your own idiomatic identity and modes of interaction, as in what Butcher says about developing your voice above.

But how does one explain the different set of rules which Eddie Prevost points to?

I believe the "rules" of free improvisation stem from the ideology of the first improvisers, such as Bailey, based on a philosophy of rebellion against the established rules of music: Freedom from harmony, metric rhythm, linear form and tonality, forging an anti-aesthetic, closely related to modernism in classical music, and simultaneously influenced by collectivist ideals prevalent in society at the time of its birth. The discoveries and ideologies of these strong personalities, were maybe influential enough to make it seem obvious to continue creating music in the same way they had started.

Now, is this a bad thing? Free improvisation is definitely alive and well, and continually developing both artistically and in terms of popularity, at least among young musicians. In my opinion, it's perfectly possible to be personal and idiosyncratic *within* a genre as well, as Coltrane, Monk and Mingus have shown in jazz. In free improvisation, the palette is wider, and the freedom even greater. You can manipulate all parameters of the music, and in the beginning the genre was something new, so you didn't have to relate to a then 60 year old tradition in the same way as in jazz. Today, the tradition of free improvisation is at least 60, and although it's still hard to identify it as a genre, it seems to me that one's music may be defined as belonging to some school or other by how dialogical your interplay is, what sounds you use, how close to the language of other genres like jazz or rock one stays etc.

To me, this genre- or school-consciousness doesn't really influence my aesthetic choices in music making in any dramatic way, other than how I am influenced by other musics. The *method* of free improvisation is sufficiently strong to keep the music developing in interesting ways, whether it's a genre or not, in my opinion.

An axis of Communication

So what kind of Free Improvisation do we practice in the Per Zanussi Ensemble?

An axis or continuum comes to mind when thinking about communication and dialogue in an ensemble: On one side you have completely involved dialogue where the musicians respond to every impulse. Moving to the other side of the axis, there is a gradual

separation of the musical streams or layers, with less and less communicative expressions of listening. Less like a dynamic system and more like separate layers. On the far side is (Cagean) indeterminacy. (Free improvisation is different from Cage's indeterminacy, because it involves the improvisers' memory and taste).

In a way, this can also relate to the time scales on which we communicate: Slow communication, meaning reactions to impulses which will only be identifiable after some time, can easily be mistaken for non-reaction or non-equilibrium. It can be a useful strategy to try to align our different reaction-times within the ensemble, so that everyone feels included in the communication. However, it can also lead to interesting parallel streams when it sounds like someone is ignoring the ongoing dialogue.

Even though our common aesthetic reference at the start of the project was close to the style of European free improvisation, the musicians in the ensemble all come from different musical backgrounds. Some come from classical music, some from jazz, and a few have almost exclusively played free improvisation.

This means that we have quite different approaches to improvising freely, and to concepts such as virtuosity, collectivity and communication. During a free improvisation in the ensemble, especially in the beginning of our work, there were *many methods of improvisation going on at the same time*: Dialogical improvisation, with fast reactions to each other's impulses. Slow, layered playing, at the other side of the axis. Some working with blending their sound with others while some would take the foreground every time. Some subverting and some following. Some extremely expressive and some minimal.

This can be interesting in a smaller ensemble, but in a large ensemble it leads to a greater feeling of non-related streams, and I identified this as an area to experiment with when composing. Today, I think the ensemble is oscillating on this axis in a more controlled way, and a culture of sorts has emerged.

A philosophical difference I have also noticed (and tried to influence through composition) is how some musicians will almost plan how to improvise in advance, whereas for others, who prefer to start from scratch, this is anathema: "When I improvise with her, I usually play something like this" vs "I don't want to know anything about what is going to happen

in advance". To me, both approaches are valid, but the last one is closer to the idea of free improvisation, of course.



"Extended Techniques" and Preparations.

About the term "extended techniques" John Butcher says:

"It seem to derive from the reducibility of the pen-on-paper composer's world where an instrument plays fixed notes and, after referral to the published lists of possibilities, certain extra colors and articulations are then bolted on. Because they are rarely derived from the player's own needs and personality they invariably end up sounding like the awkward appendages they are. One wouldn't describe Jimi Hendrix's use of feedback, Son House's percussive attacks and bottleneck, or Albert Ayler's over-blowing as extended techniques. They are all an intrinsic, inseparable part of the music and a completely necessary part of the artist's sound." (Butcher 2011)

In the classical tradition the standards for instrumental sound are rigid, and idiosyncrasy is not encouraged. The word "extended" seems to imply that they are extended from the ideals of the classical tradition. Within the world of free improvisation, on the other hand,

where finding your own sounds and applying them musically according to your own aesthetics is the method, the word "extended" seems superfluous.

Sound

Your personal lexicon of musical material is influenced by your entire web of artistic practice: Your background, your relationship to your instrument, the musicians you work with, the environment you belong to and the concerts you go to. Both the sounds you use, and the way you use them with others.

What kind of materials do we use in our musical dialogue?

What parameters are given most importance in the free improvisation we practice?

To me, one way it makes sense to me to think about our material is in terms of pitch content, along the lines of Denis Smalley's classification of sounds on a spectrum from note via node to noise. By "node" he means a sound which is made up of both pitch and noise, in the middle of the spectrum. In the PZE the focus in a free improvisation will move along the whole spectrum, from note to noise, but it seems to me that we often feel most comfortable in the "node" to "noise" part of it: Prepared sounds, multiphonics, extreme timbre manipulations etc. Too clearly pitch-based improvisations in an ensemble of this size can be tricky, with a lot of possibility for creating chords that reference tonality in a way we do not want.

*"tonality is like an argument, and the answers to the questions are always the same[...]
Atonality is a way of moving from one point to another without answering questions [...]
Atonality has a non-grammatical quality, a non-causal sequence to it. (Bailey quoted in Fell 2015)*

I agree with Bailey, and this quote illuminates what he means by "non-idiomatic": The atonal music does not, in theory, allude to any idiom, and you are free to move, non-rhetorically, wherever the music takes you.

Pitch based, atonal music is really not what I want to play either, though, and we've been skeptical of this kind of improvisation in the PZE as well. We use several "classical" instruments, and I feel there is a risk of sounding like a bad version of Webern, so choosing to work with more noise-based material is a conscious aesthetic choice.

Another reason for working with more noise/node-based techniques is that the idiom of Western "classical contemporary" music is still a strong tacit influence on much of the improvised music scene today, and vice versa. We can't escape the influence by this, especially the more texture based music from the sixties and forward, like Lachenmann, Xenakis, Sciarrino etc. (This, I suppose, places the ensemble's improvisations firmly within George Lewis "eurological" category).

Some of the ensemble's musicians also have have a lot of experience with playing contemporary music, and their artistic practices are heavily influenced by this background.

Pitches and "Main Tones"

In the PZ Ensemble, one common (re-)occurrence of use of clear pitches i see over time in our improvisations, is using one pitch as an anchor. I will get back to this, the idea of the "Main Tone", when I speak about the Korean influence on this project, but the tendency to use central tones/pedal points is something I also heard early on in our improvisations. I think this is because several of the players already liked to use this device, often combined with microtonality. It gives some stability or equilibrium to an improvisation, while still being open enough to play and manipulate for a while, and does not necessarily step outside the aesthetic of "European free improvisation".

*Imagining the sound of ten different musicians in a room together with me,
trying to somehow intuit how they are going to behave, react, play.*

*Interactions between the musicians, the musicians and the score,
the score and the composer, me the composer, me the improviser.*

*Devising musical experiments, trying to mold the chaos inherent in eleven different
initiatives and thought processes, getting the maximum of intuitive expression
from eleven individuals with differing outputs:*

Some overdoing it, some pulling back, hiding in the massive sound.

Too much friction, or not enough?

3. Composition and Improvisation

Composing for an ensemble of free improvisers.

A second paradox:

Aren't composition and improvisation diametrically opposed?

"I would like to define improvisation as denoting the spontaneous element in musical performance, which either takes place within some kind of implicit or explicit framework or (as in "free improvisation") creates and transforms that framework as it proceeds. I would define composition as any kind of musical creative process or the results thereof. Therefore, within this scheme improvisation is a method of composition, no more and no less." (Barrett 2014: 107)

In the quote above, Richard Barrett goes on to say that his definition of improvisation as one way of composing, makes it clear that the two ways of creating music are in no way in opposition. Thus, composition can mean "making music" and improvisation is a *method* for making music, in a spontaneous, real-time way.

Then, if "composition" means "music-making" and "improvisation" means "spontaneous music-making", what is a useful word for the other main method of composition:

"Planning and notating how to make music in advance and have it executed at another point in time (possibly by musicians)"?

"Predetermined musical structuring or material" feels like a useful definition for me.

This material, which is usually notated in some way, is normally more or less similar from performance to performance, whereas free improvisations can, maybe even should, be very different.

I agree with Barrett's definition, but there are some fundamental differences between what we normally associate with composition (predetermined structuring or material) and improvisation:

Improvisation is an ongoing dialogue, and is usually based on communication from the very moment it starts, with other improvisers and the audience. Composing music on

paper is usually a solitary process until just before it is performed. There may be communication with the players and the composer in advance, and also when rehearsing the music, but the main form of communication is verbal or literary. In improvisation one communicates via musical sounds.

Composing predetermined music is also a process which takes place out of time, and subsequently the composer can work with time in a different way than the improviser: The improviser works with spontaneity and intuition in real-time, and can not change something which has been played. The composer, on the other hand, can plan the length and timing of every event in a musical structure if she wants to, change her mind and move sections around as many times as she'd like.

In my ensemble, and within me, there is a constant dialectic between the two ways of composing. They influence each other and when I can find a balance between the two, sometimes it results in successful music.

Referent

Barrett also mentions improvisation within an implicit or explicit preexisting framework in his article (Barrett 2014). An example is a jazz standard, where a rhythmic and harmonic framework is improvised over, somewhere on the continuum between the completely improvised and the completely predetermined. This notion of the "referent" is something I will return to later in this text, and has been a useful tool for me in my work with the ensemble.

A second Continuum : Between the Improvised and the Predetermined.

In the article "Generating and Organizing Variety in the Arts" (Eno 1981), Brian Eno describes a "scale of orientation" or continuum from right to left between composition "tending to subdue variety in performance", i.e. predetermined music, for example prerecorded electronic music on the extreme right, and composition "tending to encourage variety in performance", i.e free improvisation, on the extreme left. In between we find all the facets from classical music, various folk musics to jazz, free jazz etc. Even free improvisation is rarely completely invented on the spot, but influenced by a host of different factors.

I imagine my own work as a composer in this project as oscillating along the continuum between the completely improvised and the predetermined. This movement back and forth, with varying degrees of determination, is noticeable in the way I have developed the music throughout the project period. It can also sometimes be seen within each piece, where some sections will be more predetermined and some less. Sometimes the pitches and rhythms can be notated, sometimes the music is described by text and sometimes completely improvised. The music moves back and forth along the continuum on a gliding scale, both within a section of a piece, a whole concert, and throughout the project period.

I have tried to discover how to balance my own material (the predetermined) with the material of the improvisors (the spontaneous), finding the optimal point on the continuum for me and the ensemble, where I can both express compositional ideas and we are able to improvise freely at the same time. The music should feel comfortable and inspiring for the improvisors playing the music and myself as the composer, while yielding "successful" musical results. This optimal place for music making with an ensemble of improvisors is probably a utopian notion, but the search is a constant motivation for developing the music and methods. An ideal combination of what I would like to create and hear and how I would like to create it.

In a way, trying to find this possibly illusory/utopian point is a balancing act of "everything": My own tacit and explicit influences from many different sources, what kind of music I want to make both as an improviser and a composer, the personal "webs" of the musicians,

letting their musical voices be heard, the social situation of improvisation in an ensemble and so on.

Algorithmic vs Heuristic

Brian Eno also describes the difference between what he calls "algorithmic" and "heuristic" ways of organizing a composition (Eno 1981).

The "algorithmic" way of organizing he describes as "a rigidly ranked, skill-oriented structure moving sequentially through an environment assumed to be passive (static) toward a resolution already defined and specified." For example a classical piece where everything is moving according to a clear logic.

"Heuristic" he defines as "a set of instructions for searching out an unknown goal by exploration, which continuously or repeatedly evaluates progress according to some known criterion." This is a more common way of organizing experimental music, and it encourages autonomous behaviour and self-organization, as opposed to the central control system of the "algorithmic" variety. This is related to the dynamic system metaphor which Borgo uses to describe free improvisation, and feels to me like a fruitful way of thinking about organizing improvisors along the continuum. Another perspective of the continuum emerges here, and Eno talks about how most music utilizes hybrid forms of these two ways of organization.

Now, in composition these days (Eno's article is originally from 1974), "Algorithmic composition" usually means "the process of using some formal process to make music with minimal human intervention" (Alpern, 1995), often in a random (stochastic) way where the outcome is not known beforehand. This would make it more related to a heuristic process: Enabling a person to discover or learn something for themselves. I still think his article illustrates the differences between two ways of organizing music in a succinct way, so I choose to use his definitions for the remainder of this section.

My own music has evolved towards having some "algorithmic" structure in the macro form, as I decide the temporal organization of the sections of each piece: Start, middle, end, transitions between sections. I do, however, also utilize sections of "heuristic"

composition, where conditions and some kind of musical identity is predetermined by me, but the outcome is unknown. *When* these different approaches occur is the result of my artistic choices, but eventually, all music is in linear: Sound sculpted in time.

There are also sections of free improvisation in my forms, where the only explicit condition which influences the music is instrumentation. There may also be a tacit influence from the preceding section and a feeling of what will work musically in the macro form and "culture" of the ensemble. I try not to *directly* influence the actions of any of the improvisors in these sections, in the sense that I don't tell the improvisors how to improvise. They will, however be influenced by their memory of what goes on before them in the macro form.

The notated music in the ensemble has gradually moved towards a less predetermined way of working during the research period. In the early days, the emphasis was on more strictly notated pieces with a clearer separate musical identity, but now the project has become more process and improvisation oriented. I have felt that the improvisors needed to have more influence over the material, but I still wanted the benefits of predetermined composition in the large ensemble.

"Composing means building an instrument" (Helmut Lachenmann 1986)

"The thing that matters most in group music is the relationship between those taking part. The closer the relationship, the greater the spiritual warmth it generates. And if the musicians manage to give wholly to each other and to the situation they're in, then the sound of the music takes care of itself. Good and bad become simply a question of how much the musicians are giving."

(John Stevens 1968)

Composing the Ensemble

The first, and one of the most important compositional decisions to make while composing with free improvisers, is choosing the right musicians for the ensemble. In this context the choice of musicians is a decision beyond choosing the instrumentation for a piece, or even writing for an ensemble with a certain established approach or way of doing things.



Photo: Francesco Saggio

Instrumentation of Personalities

With free improvisers, I give away a lot of my control, and also place a great deal of trust in them. To invite someone to take part in this ensemble is an invitation to collective

music-making, and to taking part in a closer relationship than that of a "normal" ensemble playing music which is more predetermined. Mutual respect is a prerequisite, and it is also assumed to be present from the beginning, at least for me. For this reason, an important part of the process is to get to know the improvisers in advance, both personally and musically, and then attempt to make an "instrumentation" of musical personalities. Musical and personal chemistry is very important, and essential to the success of the music. (In previous ensembles, with more predetermined material, I would take a much more dictatorial approach, having a clearer idea about how I wanted the musicians to play in advance).

The musicians have some shared aesthetics regarding form, choices of sounds, how to relate to each other and communicate musically. Some of them also have a shared history through working together in other situations. Yet: No two people are alike, and they also have different backgrounds, and varying musical interests and ideals.

Now, chemistry does not necessarily mean that everyone have to be best friends and have the same taste. Some musical friction can be healthy, and I think it can yield some interesting results as long as there is a mutual respect. The most original music in the ensemble, seems to me to emerge when the different aesthetics of the musicians clash and react to each other, using my predetermined music as catalyst. There needs to be enough compatibility to enable us to work together, yet enough friction to let the musical reactions occur.

Unfortunately, It's hard to really know how everyone will function in the large ensemble, both musically and personally, before we try it. Some may present a different image of themselves before we start working, and not function in the way I had hoped.

Choosing Musicians

I started the process of choosing musicians by listening to recordings of them playing solo or together with others, trying to get an image of their aesthetics and attitudes, and imagining how they would play in the ensemble. Listening to the recordings gave me an idea of what they are capable of, and also an idea of what kind of aesthetic area they might like to move in. If this coincided with my interests, I would use this in my planning of the compositions.

Another approach was to do a number of improvised sessions with them, both concerts and rehearsals. Some of them I already had relationships with over many years, but we hadn't necessarily played free improvisation together regularly. Some were new acquaintances to me.

I wanted to feel how I worked with them musically, what their voice and skills were like, and how we interacted socially. Are they good readers? Good improvisers? Big egos? It was important to me that the musicians had strong expressions, and could contribute to the music, as well as the ability to reflect on and discuss the project in the rehearsal situation.

Sonic History

To give a concrete example: The saxophone player Martin Küchen and I have worked together for 12 years with the Trespass Trio with Raymond Strid. We have good discussions about the music and are usually in agreement aesthetically. In the Trespass Trio we play mostly free jazz, with simple, open melodic tunes, but I knew that Martin also



Photo: Julia Spicina

has a more sound based, low dynamic expression, closer to European free improvisation and contemporary music. This is the case with myself and Raymond Strid as well, and, although the borders are not absolute, we seem to avoid typical material from the free jazz idiom when we play free improvisation: Rarely pizzicato bass and ride cymbal together, less "jazz" influenced saxophone, metric rhythms etc. We all seem to compartmentalize a little when it comes to free jazz vs free improvisation (another example of how "free improvisation" can be an idiomatic term?).

Since I knew I wanted to have both Martin and Raymond in the ensemble, I saw that we needed to use more of our "improv" language, and less of our free jazz ways of playing together. Especially when we play as a trio, or as quartet with other instruments in the ensemble. The trio of saxophone, bass and drums has a sound which makes it seem more idiomatic, giving associations to jazz, and making it more challenging to make "non-idiomatic" music.

ex 1 Trespass Trio: "Centers"

John Butcher says that certain instrument combinations have a much stronger "sonic history" than others. (Butcher 2016) This term refers to what associations a certain instrumentation gives the players and listeners: In a "jazz" group like the Trespass Trio it's possible, by for example playing arco or preparations on the bass, prepared saxophone and untraditional percussion, to alleviate some of these associations. However, if the goal is to make "non-idiomatic" music as a trio, it will give a lot more resistance in the process than for example a trio of electronics, sax and percussion. An electronics player and a sax player will probably approach improvised music from different starting points, with different improvisation traditions in the back of their minds. (Not to say that they can not learn from each other).

I do use this idea consciously for musical purposes in my music sometimes. In Li 2 (Kongsberg), there is for example an almost free jazz-like improvisation with two saxes, pizzicato bass and two drum kits playing in a very energetic way. I wanted this to contrast the more controlled, contemporary music-like, low dynamic of the rest of the piece.

ex 2 : Kongsberg 2016 excerpt (Quintet)

The same goes for more "classical" instrumentations, like flute, strings and clarinet, for example, which can sometimes give associations to "contemporary" music. The musicians will tend to move into this landscape when the instrumentation suggests it.

Here is an example of a recording of myself and Ole Henrik Moe from a duo rehearsal, in one of the first cycles of the project.

ex 3 : Duo with Ole Henrik Moe

Acoustic Instruments

I early on made a choice to only include acoustic instruments, or acoustic instruments that were amplified only slightly, in the ensemble. One reason for this was practical: I wanted to be able to play concerts and conduct rehearsals with a minimum of technical requirements.

I also wanted the sound to be blendable dynamically, following John Stevens' well known idea in the Spontaneous Music Ensemble, that all the musicians should adjust their playing volume to be able to hear everyone else at all times. With electronic instruments, this principle can sometimes be difficult to follow, because of amplification which makes dynamics harder to control, the difference in acoustic vibrations, and physical gestures which can be harder to interpret.

I will not tell musicians to change their instrumentation (for example play electric guitar instead of acoustic guitar), but if I notice an interest in using (or not using) a certain different instrument, I can encourage it. This will also motivate the improviser, in their own process of discovery.

Like I said, composing a group of free improvisers, the instrumentation does not only mean a blending of instrumental colours. It also entails a blending of the musical personalities behind the instruments. The ensemble I've put together was intended to be a mix of different "voices", with somewhat different musical backgrounds and aesthetic ideals. Yet not so different that it would be impossible to reconcile their differences when working together.

"..the interest for me in improvisation is making that kind of music which you couldn't really imagine before you find yourself in the middle of it." (John Butcher 2016)

Benefits of Composition and Improvisation

Throughout this project I have asked myself which musical ideas can work in both composition and improvisation. Or rather: What ideas, thought out in advance, can be of use to my ensemble of improvisers? I have, in a way, tried to compose some of that which I feel is difficult to improvise in a large ensemble:

Clarity of form, structure and temporal organization, identity of materials (that can be reproduced), instrumentations, large scale behaviours (and listening) and achieving equilibrium and coordination quickly.

I have also asked myself what the improvisers' spontaneous musical ideas can provide for the music that predetermined composition can not:

The improvisers can interpret the predetermined ideas or material, making them sound better and more alive and subtle.

They can help me compose in a quicker way, where I do not need to re-notate everything to try out compositional ideas.

They also inspire my compositions through a constant feedback loop:

I might, for example, bring an idea to a rehearsal, which is not yet fully formed.

In an ensemble of 11 improvisers, there is an almost limitless creative potential, and I will always get new, and better, ideas after rehearsing with them. If I bring back one of these ideas in a more worked out form, it will probably be influenced by the musicians a second time, and possibly morph into something new. Their way of making my material their own becomes an important part of the feedback loop.

The musicians are also composing on their own, "making that kind of music which you couldn't really imagine before you find yourself in the middle of it", improvising within their sound worlds, bringing their own materials to the music.

By "material" I mean that which the music is built from: Musical ideas, sounds, pitches, rhythms, gestures etc.

The Voice

John Butcher, in his article "Freedom and Sound - This time it's personal", gives the simple definition of the expression "voice" as "a useful shorthand term for an individual's sound and ways of playing" (Butcher 2011).

The voice is an expression of the musician's previous musical and personal experiences and taste, of her listening and expression of what she hears, of her ways of reacting to the overall sound, of her web of artistic practice.

I chose the word "with", as in "music making *with* an ensemble of improvisers" as opposed to "*for* improvisers", for a reason: I have begun to think about the voice of the improvisers, including my own, as the main materials to compose with.

Other Materials

The *other* materials, those which I use to compose predetermined material, have gone through some changes during the project, from an initial inspiration from Korean Gugak music, including a detour into Spectral music, and ending in a toolbox of approaches inspired from patterns found in Nature. In the following chapters, I will discuss this process, starting with my relationship to Korean traditional music, Gugak.

At first incomprehensible,

but immediately intriguing, interesting, inviting, inspiring.

Immersing myself, allowing myself to be

influenced and irreversibly

changed.

4. Gugak

The term Gugak describes the whole field of Korean traditional music, and the term means "National Music", as opposed to Western music. It is generally divided into court- and folk music, and each of these categories include several genres.

Korean Court music is usually classified into music of Chinese origin, *aak*, the Koreanized *dang-ak*, (also of Chinese origin) and native, indigenous music, *hyang-ak*. The music in these genres had various functions within the court or aristocracy, for rituals, banquets, chamber music etc.

The folk music genres in Gugak can be roughly divided into p'ansori (vocal folk "opera"), sanjo (instrumental music), jeong-ak (instrumental and vocal music), nongak ("farmers' music", drumming, dancing, and singing), and sinawi (shamanistic music).

There is some level of improvisation in Gugak at all times, usually quite a bit more than in other East-Asian folk musics. It is referent-based, and there will be a drum pattern giving structure.

Pitch wise, we find one or more modes (jo) and melodies with strong, relatively free microtonal ornamentation within the modes. In some genres, Like Sinawi, these melodies can create an improvised multi-part harmonic texture. (Finchum-Sung 2013)

I first heard a recording of Gugak about fifteen years ago, and the music was probably a variety of Hyang-ak court music. Its sound made a big impression on me, and this image of a slow music with a gristly, expressive, yet delicate sound has stayed with me.

Since then, the genres which have been most important to me have been various court music, and the folk music genres Sinawi and Sanjo. Below are some examples. I will go on to discuss how Gugak has inspired me, and discuss how I have approached using this inspiration in my own music.

Some examples of Gugak:

Court music:

ex 1 Hyang-ak

ex 2 Dang-ak (Boheoja)

ex 3 Aak (Yeomillak)

Folk- and shamanistic music:

ex 4 Sinawi (shamanistic Ssitkimgut ritual music)

ex 5 Daegeum (transverse flute) Sanjo

Further reading:

[https://www.gugak.go.kr/site/program/board/basicboard/list?
boardtypeid=74&menuid=002001006](https://www.gugak.go.kr/site/program/board/basicboard/list?boardtypeid=74&menuid=002001006)

Inspiration

Using inspiration from East Asian music in European and American music is by now almost a tradition, and the most famous example is Claude Debussy hearing gamelan music for the first time at the World fair in Paris in 1889.

From the fifties and sixties on, a second wave of composers began taking an interest in Asian music, but this time from a more philosophical angle. John Cage's interest in Zen Buddhism and the I Ching is well known, but the music of East Asia has also influenced composers like Karlheinz Stockhausen, Terry Riley, Luigi Nono, Olivier Messiaen, Tristan Murail, Giacinto Scelsi, Steve Reich and others. (Everett/Lau 2004)

Other free improvisers, such as John Stevens ("Karyobin" is a Gagaku dance) and AMM (Duch 2010), have also expressed inspiration from Asian music in their improvisations.

I was aware of the most famous examples of this when I started the project, and realized that my interest in Asian music wasn't exactly original in a historic sense. It was, however, personal and real to me, and an inspiration for my music, allowing me to move to a new place artistically for a period of time.

I have always let myself be inspired by a wide variety of music outside the genre I'm currently working within, believing that this ultimately makes my work more interesting. A wide frame of reference and different inspiration feels essential to be able to create something personal. This is an idea of hybridization or synthesis, filtering other musics through myself, and developing my web of artistic practice, and it is something I have been doing for as long as I can remember. Usually, the sounding result will be something different from what informs it, yet somehow connected, mixed with my own musical experiences and tastes.

Gugak Qualities

In June 2013 I went for two weeks for an intensive workshop at the National Gugak Center in Seoul, learning to play various instruments, as well as music theory and history. In addition to my own studies of Gugak recordings and theory in Norway, this stay gave me a slightly more thorough knowledge of the Korean musical traditions.

It also made me question my interest in the music: Would it be possible for me as a Westerner to do this ancient music justice in any way, without resorting to orientalism? The more correct and respectful way to approach a project like that would maybe be to first learn to play the traditional music over a period of many years? Or work with Korean traditional musicians and meet them and their musical tradition on their terms?

In stead of following one of these "correct" routes, which time wise would have been beyond the scope of this project anyway, I decided to focus my attention inwards, looking at what properties of this music had interested me in the beginning, when I was blissfully ignorant of the structures and theory of the music.

I realized that the reason for wanting to absorb Gugak and let it come out in my own music is linked to my *impression* of the music, especially my impression of it before I knew anything about it. To be able to make *my* music I needed to let Korean music influence me in a more abstract way, translating the abstract qualities I perceived in it, instead of trying to translate its sounding features directly.

Time in Gugak

My greatest interest in Gugak, and other, similar Asian traditional music, such as Japanese Gagaku and various Chinese musics, is related to how time is expressed. Sometimes when listening to these musics, it can feel as if time slows down, and one enters a different, slow sound world, where your focus shifts completely: From forward movement to near stasis, and a complete concentration on changes in the timbre of the sound.

Francois Rose and Jaroslaw Kapucinski (2013) describe the traditional Western concept of time as linear, and the past and future is often emphasized over the present. This is for example visible in Western classical music, where one moves logically towards a goal, from one section to another, always related to what happens before and after in the composition. The Japanese concept of time, on the other hand, is described as circular, where the present is the focus. The past and the future are vague, and through the present, the listener experiences eternity. The structure is static and slow, but each musical moment is multi-dimensional and dynamic. This is also clearly the case in Gugak, which is closely related to Japanese musical traditions.

Jonathan Kramer, in his book "The Time of Music", proposes the term "vertical time" for this non-linear focus on time in music:

Phrases have, until recently, pervaded all Western music, even multiply-directed and moment forms: phrases are the final remnant of linearity. But some new works show that phrase structure is not necessarily a component of music. The result is a single present stretched out into an enormous duration, a potentially infinite "now" that nonetheless feels like an instant. In music without phrases, without temporal articulation, with tonal consistency, whatever structure is in the music exists between simultaneous layers of

sound, not between successive gestures. Thus, I call the time sense invoked by such music "vertical." (Kramer 1988: 55)

Now, vertical time does not necessarily mean complete stasis, but less focus on *development*. Linear, horizontal time moves from one place to another, whereas non-linear, vertical time focuses on the moment, and in music in vertical time, this means a less hierarchical organization: No phrase is more important than the other.

"In non-directed linear time there is no clearly implied goal, despite the directed continuity of motion." (Kramer 1988: 46)

To me, the similarities to how freely improvised music in an ensemble can work are obvious. Borgo's description of an improvisation as a non-linear, dynamic system seems to confirm this, and I think the vertical time of Gugak was especially attractive when I first discovered it.

Gugak Connections

In the vertical time of Korean (Asian) traditional music and the vertical time of improvisation, the past and future are subordinate to the moment, the here and now is the most important. In Western music, linearity has been prevailing. I wasn't consciously aware of this when I decided to look closer into gugak, but I think maybe there was an element of *recognition* to me in the music.

Ed Sarath discusses this very similar perception of time in improvisation in his article "":

"My central premise is that the improviser experiences time in an inner-directed, or "vertical" manner, where the present is heightened and the past and future are perceptually subordinated.' I contrast inner-directed conception with the "expanding" temporality of the composer, where temporal projections may be conceived from any moment in a work to past and future time coordinates". (Sarath 1996)

I'm not saying that this feeling of vertical time is the same in a Korean traditional musician as in a Scandinavian improviser. The cultural differences are vast, and I have no way of understanding this approach to music fully. However, I think I am looking for the *feeling*,

my subjective experience of vertical time, which I think may be attainable for me when playing music.

Rhythm in Gugak

"The best of what we call repetition in music, heard closely, is really the opposite of repetition: Subtle differences, slowly shifting backgrounds, a change moving against a constant." (Ratliff 2016)

Time in Gugak is not only vertical, it is also *circular*, meaning that it is based on cycles and patterns, which leads us to rhythm.

The repetitive rhythmic patterns in Gugak, called Jangdan, outline the structure of a piece, much in the same way as Indian Tala. The drummers give the pulse, which the rest of the ensemble relate to. Now, the patterns of Korean court music, are, at least in the beginning of compositions, extremely slow, and the feeling of vertical time is present.

You listen differently at different tempos: In an extremely slow music like Gugak court music, rhythm as pulse is less present, and a stronger focus on timbre feels natural.

Korean musicians seem to consider that in Western music, rhythm is based on the heartbeat (pulse), while in Korean music it is based on breathing (hoehup). Musicians in a Gugak ensemble will synchronise their breaths as a means of coordination. This is because the rhythms in Gugak are not metric in the Western sense, and they are usually quite plastic. The beat is flexible, based on breath, and can be stretched at the drummer's discretion.

Rhythm in Free Improvisation

In European free improvisation, rhythm has usually been of a non metric, non repetitive kind, and Derek Bailey describes how Tony Oxley early on would superimpose rhythms to give a feeling of a more abstract, less metrically identifiable rhythm:

"The regular metre was always under attack; systematically so when Tony Oxley evolved a method of super-imposing a different time feel over the original, creating not a poly-rhythmic effect but a non-rhythmic effect." (Bailey 1993: 87)

I think this describes well how we tend to use rhythms in free improvisations in the PZE as well. The focus is more on gestures and energy, and if there is any metric rhythm present, it usually takes the form of shorter rhythms which have the function of a phrase or a tension building device rather than a "beat". The tempi are either fast or slow rubato, and rarely cyclical or repetitive.

I was curious as to what would happen if I introduced rhythms with the most prominent properties I identified in Gugak: Slow, repetitive and metric, yet rubato.

The rhythm becomes a structuring device, as it does in Gugak, adding form and boundaries. Now, do I want this? Maybe, but I will tend to either mask the rhythms (like a fast 5/8 rhythm within a more chaotic improvisation), or play them even slower than in Gugak court music (like in Patterns 1 on the CD), or in seemingly non metric versions.

Pitch and Melody in Gugak

Gugak is usually based on a pentatonic mode (Jo). The musicians will use certain ornaments on certain pitches in the mode, and the pitches are organized in a hierarchy of importance. The modes also contain information about performance practice, certain melodic phrases and microtonal ornamentation (Sigimsae). The Korean understanding of pitch (eum, meaning "sound") includes these pitch gestures and ornaments, which gives direction and shape. Sigimsae literally means "fermentation" and refers to the musical maturity of a performer.

Again: The timbre and embellishment of one tone becomes more important than linear movement. There is no planned polyphony or harmony in Gugak, but random modal polyphony is created in Gugak by heterophonic melodies, which can, for example in the genre Sinawi, be improvised. (Juyong 2013)

The composer Isang Yun describes this idea of a "hauptton", or "Main Tone" as a sounding point of gravity or anchor the music deviates from and returns to over and over again in Gugak.

Below are two examples of how I have tried to express these ideas in the PZE.

Ornamentation and heterophonic melodies/random (modal) polyphony related to Eno's "heuristic" category of organization:

ex 6

One of my interpretations of the Main Tone idea:

ex 7

Spectral Techniques

Together with the ideas of microtonal ornamentation (Sigimsae) and random polyphony this idea led me to associate to the field of Spectral techniques:

What if the Main Tone was a sound, and we could improvise together within the spectrum of this one sound?

When I say "Spectral techniques", I mean computer-based analysis of the frequency spectrum of a sound, to extract approximations of microtonal pitches to be used as musical material (I will not go into the other aspects of the music, or history of the movement here).

I also had a feeling that, since several of the members of the ensemble were already playing in a microtonal way, using these techniques might allow me to write music which was closer to what they were improvising.

I started analyzing various sounds using software, extracting the frequencies that made up the sounds, and creating pieces and harmonic fields based on these spectra.

Here are two examples of "spectral" techniques mixed with free improvisation. The first one is a piece based on the sound of an alto saxophone multiphonic. The second one is based on the partials of a middle C.

ex 8 sax multiphonic

ex 9 C partials

Improvising within a spectral framework is extremely difficult, since it requires a high level of accuracy intonation-wise. I rather quickly understood that it would be too complicated for the ensemble to successfully make music this way without a lot more time to rehearse. Today, I only occasionally use these techniques for predetermined material.

I do think, however, that the work we did, trying to make sense of this microtonal landscape was useful as an exercise to develop the ensemble, even if it was a detour, and I sometimes hear "spectral sounding" chords showing up in our improvisations today. The "spectral" playing was a way of adding to the repertoire or "culture" of the ensemble, opening our ears to what could be possible to improvise later on.

Leaving Gugak Behind

One of the questions I initially posed in this project was how to be able to utilize my inspiration from other styles while composing for my ensemble. Composing music with inspiration from other musics, such as Gugak, is tricky when it's mixed with free improvisation. Is it possible to let one style influence the complex interactions of the improvisers? Wouldn't that interfere with the voices of the musicians?

Again, we return to the dialectic within this ensemble, and within myself, between the predetermined material and the improvisations influencing each other. A "marriage" of two different ways of making music, where periodical balance is reached through giving and taking.

On the one hand, I do think that the inspiration from Gugak has been difficult to use in an effective way musically: I felt that my pieces with a clear Gugak inspiration influenced the improvisers too much, resulting in a music I wasn't happy with. It sounded too close to Gugak in some ways, and too close to free jazz in others, for my taste. My reaction, and an attempt to solve the problem, was to abstract the properties of Gugak even more, associating freely around the properties I perceived in the music, ending up briefly in a "Spectral" landscape.

These abstractions of, and associations around Gugak resulted in some successful music, which I probably would not have made in another way, and some of the material developed in this period is still used in my music. Yet, they are not the sound of Gugak, but abstractions, and some of them could maybe have been developed in other ways, sounding similar. An echo of Gugak is still there, but not necessarily audible.

I was getting more and more wary of the fact that I didn't only want to make music in my ensemble that sounded similar to Gugak or very timbre-oriented music, punctuated by

completely free improvisations. The Gugak-inspired compositions were intended to delineate the music, but I realized that the way we were using it was too constraining, preventing us from utilizing all the musical resources in the ensemble.

I felt like I needed to get closer to what the improvisers, including myself were actually interested in doing. In a situation where we were free to play whatever we wanted, what would we be playing? I was still looking for the right place for the music to inhabit on the continuum, where both the improvised and predetermined music could thrive simultaneously, in balance.

For this reason it didn't make sense to me to pursue the Gugak track any further, and try to force it to work together with the free improvisation of the musicians:

If the voice of a musician for example is based on lots of fast playing, the inherent slowness of the Korean court music-inspired approaches would mean that this musician suppressed her natural inclination to improvise fast phrases. This could result in her feeling like she couldn't develop her voice in this group, in (Butcher's) incremental steps, leading to detachment, less feeling of ownership and eventually possibly leaving the ensemble.

I still think the Gugak approaches are valid to me, and result in interesting music, but I felt like I needed an even more all-encompassing approach, allowing for more interaction, improvisation and behavioral ideas or constraints. Especially since I had gradually started to look at the ensemble process as an important, maybe the *most* important, part of composition. Li was a solution to that problem.

a gg gre gatio naggre gationa gggregati onaggregat inaggregationagggregationagggregationagggregation
a gg gre gatio naggre gationa aggregati onaggregat ionaggregationagggregationagggregation

U C d U C d C l o u d s

C l d l u C d C l o u d s C l o u d s C l o u d s

o s o d s C l d l u C o s o d s C l o u d s

U C d C l d l u C C l o u d s

o s o d s

ctalizastisrziOlstAyrctsiSrZcLtistcrAllyStascrystzationCRYSTALLIZATIONCRYSTALLIZATIONCRYSTALLIZATION

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brrrrrrrrrrrrrrrrrrr      kkkkkkkk          nnnnnnnnnnnnnnnnnnnn  
     eeeeeeeeee aaaaaaaaaaaaa   /ooooooooooooooooooooo           gggg
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5. Li: Natural Patterns

The universe is dynamic - always on the move. From clouds of gas and dust, stars coalesce. Water circulates in the ocean in great loops and gyres, driven by differences in temperature and saltiness; convection currents stir up the air and summon up clouds and jet streams. Rivers flow down from the mountains in branching formations like those through which our blood courses. Many of these flows are turbulent - too fast to maintain any constant form or to be fully predictable - and yet that doesn't strip them of all order. (Philip Ball, 2016, p.108)

"Li" is a term coined by David Wade in his book "Dynamic Form in Nature" (Wade, 2007). It derives from the old Chinese expression "Li", which translates to something between "pattern" and "principle". Wade uses the term to describe patterns created by processes in the natural world, which may seem chaotic, but still give the impression of some kind of order or symmetry, like waves, ripples, clouds, patterns of flow in liquids, rivers and so on.

"Li are essentially dynamic formations, and as such can give the impression of a frozen moment, of a process caught at a particular instant of time, or, in a more abstract sense, of the principle of energy engaging with that of form" (Wade, 2007,p. 3)

The Li tend to be relatively simple formations on a macro level, like sand dunes in a desert, which have a clear, repeating character. At the same time the dunes have a high degree of detail and content on a local level, consisting of constantly moving grains of sand. They are dynamic patterns in space and time, expressing how a force works on a material : The sand dunes are formed by the process of wind working on the sand over time, gradually building the dunes.

The Li in Nature are either clearly ongoing processes, like the flow in a liquid, or processes which appear frozen due to their extremely slow movement, like patterns in rock formations, for example. I immediately felt a link to how the processes of improvised music in an ensemble work: The macro form of the improvised music I enjoy playing and listening to most, is often relatively clear cut, yet there is ample variation on a micro level. Improvised music can also be seen as a self-organizing system, where any input has consequences for the overall form, just like in the Li processes and patterns are influenced by the various external forces and conditions working on them.

These properties of the Li made me think that they would be the perfect metaphor to use in my music. They could possess all of the qualities I abstracted from Gugak, and many more, allowing myself and the musicians to associate freely around them, influenced by our previous work together, within the framework of the Li.

My Adaptation of the Li

Nature is constantly moving, dynamic, unpredictable, at times violent and always flowing. Seemingly chaotic, yet somehow ordered. Now, I am not trying to paint a programmatic picture of Nature, but rather let the Li be inspiration for the music in different ways, creating referents and exercises for improvisation, and building blocks for my compositions. I have tried to enter each of the natural patterns and see how they could correspond to a musical idea, keeping the ones that spoke most clearly to me, or that I connected to how members of the ensemble were playing.

The Li can function on several levels for the musicians, and for me when I compose. They describe textures, rhythmic and cyclical patterns, behaviours or relationships between the musicians.

The reader can refer to the "toolbox" ([LINK](#)) throughout this chapter if needed, for an overview of the Li.

Search and Reflect

My adaptations of Li are influenced by John Stevens' book "Search and Reflect" (Stevens, 1985), which is a classic guide to practicing free improvisation. Here Stevens presents a range of pieces or exercises designed to work for musicians of any level, focusing on specific fundamental musical elements such as rhythm, durations, group interaction and listening, and there are some similarities in my approach to adapting the Li into musical elements. I was lucky enough to hear John Stevens play on several occasions in Stavanger in the early nineties, when he was invited by Frode Gjerstad, and as a young, impressionable musician, I was deeply intrigued by his music.

Search and reflect has been important to me for several years, primarily as a teaching tool, and I feel it touches upon most of the elements of free improvisation that I find important. It was natural to me to take a closer look at Stevens' approaches to improvisation. I think the way he breaks the music down to its smallest building blocks is a useful way to approach free improvisation. One can only either make sound or be silent. Silence has the property of duration, he says, and the interaction of silence and sound produces music. Silence can be thought of as the canvas upon which sounds are "painted".

In my composed ensemble music, I felt the need to deconstruct the material even more than I had done with the Gugak abstractions, and the Li provide an opportunity to work with basic, archetypal musical elements. I believe it has to do with how to think when one improvises: In a jazz context you can feel the rhythm, listen to the chords, and play your lines within the jazz tune, focusing on harmonic, melodic and rhythmic invention within the framework.

In free improvisation, on the other hand, I need to give a lot more care to the macro form, the texture and the input of the others, as the framework is being created in real time. There really is no way of automating one's playing in the same way as in many other forms of music, relying on pre-rehearsed material, so I often feel a need to simplify how I think about material when I'm improvising freely: Sound or silence, high or low register, loud or soft, pitch or noise, short or long sounds, certain gestures or physical movements etc.

What I have been trying to do with the Li is to make this semi-predetermined material simple and open enough to the improvisers, so that they can focus on listening and interacting, as well as sculpting the materials to their ideals. At the same time I have the possibility of working with the material, composing temporal structures and inserting other predetermined materials. In this way I try to enter the mix of predetermined material with improvisers from the perspective of how the processes of free improvisation actually work, without disturbing the fragile balance of conditions which need to be in place, for the dynamic system of free improvisation to function properly.

Simplicity

My musical versions of the patterns need to be simple enough to say something clear about texture, behaviours or form, allowing us to appropriate them in a free manner, where the complexity occurs in the sounds and interpretations more than in the instructions or systems. More complex instructions to the improvisers usually leads to less complex music.

The British composer Michael Parsons, quoted in Eno, touches upon this, revealing an important aspect of my approach to the Li:

"The idea of one and the same activity being done simultaneously by a number of people, so that everyone does it slightly differently, "unity" becoming "multiplicity " gives one a very economical form of notation-it is only necessary to specify one procedure and the variety comes from the way everyone does it differently. This is an example of making use of "hidden resources" in the sense of natural individual differences (rather than talents or abilities) which is completely neglected in classical concert music, though not in folk music." (Parsons, quoted in Eno 1981)

Now, if the description of the prescribed activity, in this case a Li, is "vague" or simple enough, I leave room for more chaos, more uncertainty and more surprises and complexity in the resulting music.

Li as Referents

Central to improvisation is the notion of the 'referent': The referent is an underlying formal scheme or guiding image specific to a given piece, used by the improviser to facilitate the generation and editing of improvised behaviour on an intermediate time scale. The generation of behaviour on a fast time scale is primarily determined by previous training and is not very piece-specific. If no referent is present, or if it is devised in real-time, we speak of 'free' or 'absolute' improvisation. This is much rarer than referent-guided, or 'relative' improvisation. (Pressing, 1984: 2)

Moving forward from Gugak, I started using the Li as *referents* for improvisation which were more varied in expression, and had more to do with what type of improvisation the musicians were practicing already, leaving room for their individual expressions. When I had been composing referents in this way earlier, I moved mostly in a kind of jazz idiom, but this time I wanted a more open, yet specialized (or personalized) approach. Allowing them to co-create their own referents, not unlike one would in an actual free improvisation:

When I improvise freely I might, either consciously or subconsciously, create my own constraints for my playing. Working only in a certain register, tempo or timbre, for example. This lets me focus the music, and create a point of gravity or anchor which I can then work from and vary. New ideas can form, and make the music move in an organic way from one point to another. Referents can be "seeds" which can be developed and varied as they are played, similar to how the process of a composer or an improviser can be.

I have tried to insert this thinking into the ensemble: Mixing the referent-based improvisation with "referent-free" improvisation, but working with referents that could work aesthetically in the context of our free improvisations.

Abstract, Associative Interpretation of the Li

The Li can be interpreted in several ways. They can, as mentioned, describe patterns or rhythms, textures or behaviours in a concrete way. But they can also be interpreted in a more abstract, associative fashion.

Pressing points out how one can choose to relate to a referent in many ways:
"It may be imitative, metaphoric, allegorical, antagonistic, canonic, contrapuntal, variational or independent, just to mention a few possibilities; and the time scale for behavioral response may vary from very short to long" (Pressing, 1984: 4)

My initial ideas, when choosing what Li to use for my toolbox, were quite concrete (i.e. "spots" equals short sounds), or slightly more abstract, as in "clouds" should have a rolling, turbulent character, while still consisting of groupings of "particles". Some musicians will approach them even more abstractly, and "the feeling of clouds" could be a viable way of interpreting the Clouds Li for some. An axis again, from concrete to abstract interpretations.

Rehearsing the Li

The first approach I use when working with the ensemble, is to try out the Li improvisation exercises.

These exercises allow us to work on the Li patterns together, rehearse listening, behaviours and textures collectively. They also allow us to gather around something concrete in rehearsal, allowing us to have a conversation about abstract music in a concrete, collaborative way. The natural patterns become a manageable simplification of what could go on in an improvising ensemble, and a way of stylizing and developing the materials we use. Later, in concert, we can open more up and take freedoms with the material, building on the experiences we have amassed from working with the Li in rehearsal.

We will work on a Li, for example "Ripples", which consists of layered, medium tempo and repetitive sounds. After we have played, interpreting the text, we discuss the results. How did it sound? Do we agree on the others' interpretations of the text? Does it sound good? Should we try one with more or less pitch content? Faster or slower? Louder or softer?

This way, everyone is included in the process, and the hierarchy with me as leader is somewhat played down, allowing for a more collective and collaborative approach.



I will try to encourage as much conversation as possible, and only rarely intervene if I feel we are completely off course. The focus is on the sounding, collective result.

The Li are usually open enough for the musicians to contribute their voice to the mix, so that when they work as referents for improvisation, they will be close to the material that the musicians play when they improvise, their voice, which allows for a blurring of the lines of what is predetermined and improvised, and creates a coherence in the music.

So, by introducing referents into my music, do I make it non-free improvisation again?

Yes, the parts where the musicians are using a referent is obviously referent-based improvisation, and not free improvisation, but again, the referents we use are worked out together to make sure that the musical voice of the improvisers can be heard. They make their choices as to how they choose to interpret my instructions, which makes the sound of our referents close to something they would play in an improvisation. This blurs the lines between what is free improvisation, which I also include in my forms, and what is referent-based.

It also blurs the lines of what can be considered predetermined composition in the ensemble, and I try to play with the amount of creative freedom we have as improvisers: Sometimes I will assign specific Li to specific people, giving pretty strict conditions but creating a complex texture. There is still freedom to create within this texture, yet the

result is similar enough each time to give a clear identity to the music. Other times we use only one common referent, which we develop together without any instructions.

The First Attempt

What happens when I introduce a new Li? How do people react to it? How do we approach it? What are the reactions like?

Sometimes, the first time we play it, a Li works well, possibly because we are able to be spontaneous or simply lucky. When we start discussing a texture or pattern there is usually a period where things get more difficult. A few words can have a great impact when our thought processes meet and are verbalized, and a light, open atmosphere in the group is crucial at this point.

I have my ideas and intentions when introducing a Li, of course, and can get disappointed if it does not sound the way I want immediately. I have learned not to talk too much about the result until we have tried it several times, and I think ideally I should just let the Li develop without any comments, like I would in a free improvisation. Sometimes, because of time constraints, for example in a recording situation, I have to state my intentions with a Li clearly, but I feel that this is a dangerous act. It's better to let it self-organize, and then be enthusiastic afterwards, when I feel we are in the right place, trying not to intervene unless someone clearly does not understand the idea. Again, I find my position the hierarchy challenging: I will usually be relied on to have the last say, or somehow mold the initial texture or pattern.

Some of the musicians will also expect me to give a clue as to where it should go. If the group is large, I might suggest something to avoid too much hesitation, but my ideal situation is when the musicians provide input, and we can discuss the material in rehearsal. If I don't agree with their interpretation of my text, I try not to create a situation where I have to tell them not to play in a certain way. The important thing is to give them enough time to feel what the Li could sound like, letting the texture or pattern evolve in the ensemble. Here is an example of a longer version of the "Ripples" Li, from 2015:

ex 1 Ripples

Clichees

A danger of the Li as musical material, especially the ones that are more pattern-oriented (as opposed to behaviour-oriented), is that they can become one-dimensional clichés over time. For this reason it's important to me to try slightly different versions each time we meet, adding new extra information to them, like "ripples with air sounds", "Spots with pitches", "Angles moving from note to noise" etc.

Sometimes I can get the feeling that some musicians are thinking "oh, this is just typical improv flourishes, how traditional/boring/unimaginative", whereas others immediately start "hacking" it, using their fantasy, and the Li as an out of time-referent, for example imagining the sound of actual clouds, their shape, different types of clouds etc, trying to maximize their freedom within the constraints. "Do they have to be of equal dynamics? How dense could it be? What if I interpret it like this? Can my clouds be longer?" Luckily, if there is some enthusiasm, the more reserved ones will usually be infected by the mood. This, again, has to do with choosing the right personalities for the ensemble: The musicians have to be open and adventurous enough to join these seemingly naïve games.

Another important aspect of the Li is to understand the limits of how much one can improvise within them before they no longer possess the qualities that gives them their identity. They are dependent on being stretched and subverted, and sometimes they are just seeds for development, but they need to have certain traits to be identifiable from the other Li. This suits some of the improvisers well. Some feel more creative freedom working within certain parameters. Others might find them constraining, and consciously play outside them to make it more interesting.

They are both necessary agents in my music, and I rarely find that the balance is disrupted too much for my taste. It's not always necessary to adhere to my idea, but it's important to know when it *is* important to stick with it, meaning that the ensemble has to understand my process behind the Li. It can also be important to know when the music is best served by *not* following the initial idea, in situations where my Li ideas need some spicing up.

A variety of interpretations of the Li add more dimensions to the music. However, when composing with the Li, they sometimes need to be very clear, especially when several different Li are playing at the same time, so we tend to be careful that the identity of the Li is preserved, at least in layered sections.

Virtuosity

Virtuosity, showing your dazzling instrumental prowess, must sometimes be sacrificed in a collective musical situation like the PZE. Some improvisers feel a stronger need to play fast, technically difficult passages than others. This does not always work musically in an interactive situation, as too much virtuosity can disrupt coordination in an ensemble (Burrows and Reed 2014).

So do the musicians have to abandon classical virtuosity in order to fit in in the PZE?

Not necessarily, because there is room for that in some of the Li, and some musicians manage to make meaningful contributions even if their voice is based on playing a lot.

However, I think that another virtuosity is more useful: The most important in free improvisation is to be a virtuoso *listener*, and know what to play at the right time, to make the music sound good together, regardless of background and skill.

Establishing a Group Culture

The way we work with the Li as exercises and referents, in addition to playing the other predetermined material and the larger compositions of Li, lets the ensemble develop a group identity or musical "culture", where my Li and other materials influence the musicians.

Over time, this practice gives the ensemble a stable identity. In stead of finished works, a method and a *culture* in this specific ensemble emerges. This method is a way of speeding up what happens naturally in a long-term group, reaching a common



understanding and musical identity fairly quickly, which can then be developed and influenced again when it feels necessary.

When I use the word "culture", I mean "the attitudes and behaviour characteristic of a particular social group" (Oxford dictionary). I am talking primarily about a musical, aesthetic culture within the ensemble, how the improvisers behave and interact musically, what kind of sounds they will prefer, what kind of musical norms and goals we have etc. Similar to an identity and practice a freely improvising group will use years to negotiate tacitly, with rules that are suited to the members.

Of course, the personalities, instrumentation and voices of the improvisers will influence the music, but the "cultivating" aspect of the Li, and my compositional identity, to be strong enough to be recognizable in two different ensembles, on every level of the music. My role has changed over the last years, from thinking more about the detail level of the compositions, towards the creation of ensemble culture as an important factor in my composing. I still structure the compositions temporally, and use the Li as material, but the improvisers have taken on a much more important role in the act of creation.

Especially in an ensemble like PZE, where we've worked together since the start of the project, the identity and culture of improvisation, and the shared experience of music-making over time, will give conditions, either consciously or subconsciously. This tacit knowledge is based on "how we do things" in this ensemble, a performance practice, and it is what I aim to influence through the compositions and Li material.

To possibly misuse Coessens' concept again: We build a common, somewhat scaffold-like and simple, web of artistic practice within the ensemble, which we can develop together:

The culture of the ensemble will naturally also be influenced by every improviser's web of artistic practice, and the musicians are free to choose how they react to the musical culture: Some will line up with it and some will instinctively oppose it. This is not negative, but gives a dynamic to the music, as long as it isn't completely subverted and destroyed by everyone at the same time. It's pluralistic: There should be room for the voice of the individual.

In this example, someone sending a clear message, (in my ears) is Bjørnar Habbestad, who is very expressive after the slow, soft chords in Li 3 before the percussion/flute trio. He modifies his dynamic level after a while, resulting in more dynamics in the form overall.

ex 2

Another interesting phenomenon is that since the Li are worked out collectively, group dynamics will influence the sounding result to a certain degree. The fact that I have a veto right, is another example that this is a different process than working with a freely improvising ensemble. Yet, if I feel like I have to exercise this right, which happens very rarely, I know that there is something fundamentally wrong with how I've approached a situation. I aim to be as non-authoritarian as possible in the rehearsal situation, and I think the process of creating a culture, at least the culture I want, where everyone feels equal, is dependent on this to function.

Transferring the Culture

The more I develop my ideas, and tune them into working well, combined with working regularly together with the ensemble, the closer I feel like we are approaching my idea(l) of culture. I also know the behaviours of the musicians more intimately.

I believe this culture building is transferable, and if I were to start a new project with new people, this forming of culture would happen much faster using the lexicon of techniques I've built during the fellowship.

I did get the chance to use the toolbox with one other large ensemble during the fellowship: The Bergen Impro Big Band.

This group is a collective with a changing line up for each project. When I worked with them, the ensemble consisted of 4 guitars, three double basses (including myself) and two electronics players. I enjoyed working with a more electronic, large ensemble: I had done experiments with electronics/synth players earlier in the process, like John Chantler, but never in a larger setting.



The musicians of the BIBB are on very different levels, some professionals and some amateurs, yet this experience made it clear to me that the Li can be useful to make coherent music, regardless of skill. I was happy with the result, and it made me a little more confident that the Li are a useful way of making music with improvisors. I also had similar experiences doing workshops at UiS, Trondheim (NTNU) and Oslo (NMH) throughout the period.

ex 3 BIBB

Composing with Li

Rehearsing Li with the ensemble becomes a kind of material studies for my compositions, like a visual artist or architect would work, but with a living material. I use the Li as building blocks in larger forms, and I have an idea about what they might sound like in the composition, allowing me to work with the improvisers without being completely in the dark as to what will happen when we play.

The Li are inspired by natural patterns in a pretty direct way, but the macro forms I devise come from a more intuitive way of working, not influenced by the "concept" of Li.

I make a timeline corresponding to the duration of the concert we are about to do, and usually we will play for one hour. This is long enough for the audience, and a format I like working within. I will think about a possible start, an ending, various climaxes, transitions and how different sections contrast each other, and create a form from these materials.

I always include sections of completely free improvisation as well, making sure that all the musicians get to play at least one free improvisation with a small group in a piece. What will happen in the improvisation is of course unknown to me, but I usually give a time suggestion, for example three to five minutes. The real meaning of this time-limit to me, is that the improvisers should not end at the first possible ending, but push through and feel that they have time to play for as long as they want. Three to five minutes seems to be a natural length for an improvisation, in this ensemble, before one feels the need to change the approach and move on to something new. Within a three to five minute section of free improvisation, two-three smaller sections usually materialize.

After playing with the group for a while I realized that I preferred these improvisations to mainly happen in groups of up to three players. When everyone is playing, I usually like to use Li or some other form of organization. The Li then function as clear, unifying parts between the improvised sections and the predetermined notated material, staying within a similar aesthetic or contrasting. If you have to transition from a predetermined part to a free improvised one, there is always a gap between the two cognitive activities of reading and improvising. There is inevitably less focus on listening and a much smaller room for creative expression. The Li bridge this gap, as they are something in between.

Notation

Notation is one of the main visible differences between the process of predetermined composition and improvisation. Notation allows one to fix the methods for composing and preserve them for the future, like in literature. Improvisation is an aural and oral tradition, which relies upon listening and responding to and expressing what you hear, not reproducing what you read.

I have come to the point where I think about my ensemble scores as a map, and the sounding result as the real territory: A much more detailed and unpredictable, "real" version of what is found on the paper.

Prescriptive and Descriptive

"Prescriptive" notation means notation which tells the musician to perform an action, for example guitar tablature, which does not describe a sounding result, but rather where to place the fingers. Another examples is a tremolo, which does not say which pitch to play, but rather what to *do* with a pitch.

The other category of notation is "descriptive" notation: It describes the sound, for example traditional pitch and rhythm notation.

Before the Li, when my main area of focus was Gugak-inspired compositions, I would usually notate the music using a mix of techniques, both "prescriptive" and "descriptive": Pitches, rhythms(descriptive), graphic notation and text (prescriptive).

The way I used graphic notation began to seem, for my use, too imprecise to give any clear information to the musicians, yet too "visual" to help listening and improvisation. (The only graphic notation I have kept using up until this point, is to show ornaments, or precise rhythmic impulses).

Questions came up during the cycles of rehearsal, such as:

Should this be notated in a simpler or a more specific way?

Will we have time to rehearse it if it's more predetermined?

Will it be better even if we have the time to rehearse it?

Can it be improvised with the same or a better result?

Can it be improvised in a tutti version without any structuring?

Do I like it better one way or the other?

I felt like the music I was writing was less interesting than what I knew the ensemble was capable of improvising: Less subtle, less poetic, less energetic.

I noticed that the musicians coming from jazz and improvised music, would play with less conviction and energy when faced with a notated score. The "classical" musicians are able to make good music while reading, but the problem with both groups is that they tend to make the sheet music their main priority when it's placed in front of them. For some reason the notes on paper becomes the centre of attention and takes on a role as something more important than the communication, the collective sound and the form of the music.

(In some situations, this can have value as a rehearsal strategy, though: Sometimes, after a long, focused rehearsal of Li or free improvisation, a new focal point like a score can give new energy.)

Through this process of creating the music in the ensemble, I discovered that, since the musicians are on very different levels when it comes to reading music, the best way to get more complexity, subtlety and life in the music, was to write less, focusing more on simple texts. I initially tried to use some completely notated pieces for some of the musicians, while others improvised, but I quickly realized that ensemble homogeneity and communication between everyone was more important to me.

Some musicians in the ensemble are of course completely able to read extremely complex notation *and* keep their focus on listening at the same time. However, I didn't want a divide between the "readers" and the "non-readers". When I did try it, I saw it leading to a hierarchy or division between the two groups (where both sides seemed to feel like they were on the top of the hierarchy), and what I wanted was a much closer cooperation, listening wise, where everyone was as equal as possible in every respect.

Another idea, which has become more and more important to me, is that since free improvisation is an aural art form (possibly the music that is most dependent on listening of all), composing for free improvisers should have the same aural, or oral, quality. Not a visual, literary one.

I can see a clear development from strict notation to a more and more open way of notation throughout the project, through working with the improvisers. I am presently using mostly text to convey my ideas to the musicians, within a linear score similar to a conventional one. (see Li 3 score) **EKS?**

The text Li open up to a more oral/aural way of working, with less emphasis on reading the score. The focus of the performer can be placed on listening, and not be split as much between reading and creating.

Simplifying of the notation has also helped create culture in the ensemble, and a greater feeling of ownership due to the way we have worked out the Li materials together. We have trained ourselves to listen to the same aspects of the music, and work as aurally as possible. The reduction of notational complexity results in a more complex sound, and I think everyone's voice has more space now.

This goes for my compositional voice as well, although it has changed throughout the project: I think about layering of textures and sound, and I have a more mature idea of what more abstract ideas actually sound like than before.

Evolution of Li

Below are some examples of how the notation of somewhat similar ideas has changed.

Melodic material:

From:

JUNGLE SOLO PZ2014

Materiale

8 16

To a Gagaku-inspired version:

C score

70

To the Li version:

Meander

Move from one point to another in a melodic, meandering, linear way, non repetitive.

Rhythm:

From:

System A (4/4):
 Staff 1: Quarter rest, eighth note, quarter rest, quarter note.
 Staff 2: Quarter note, eighth note, quarter note, quarter note.
 Staff 3: Quarter note, eighth note, quarter note, quarter note.
 Staff 4: Quarter note, eighth note, quarter note, quarter note.

System B (3/4):
 Staff 1: Quarter note, eighth note, quarter note, quarter note.
 Staff 2: Quarter note, eighth note, quarter note, quarter note.
 Staff 3: Quarter note, eighth note, quarter note, quarter note.
 Staff 4: Quarter note, eighth note, quarter note, quarter note.

To:

System A (4/4):
 Staff 1: Quarter note, eighth note, quarter note, quarter note.
 Staff 2: Quarter note, eighth note, quarter note, quarter note.
 Staff 3: Quarter note, eighth note, quarter note, quarter note.

System B (3/4):
 Staff 1: Quarter note, eighth note, quarter note, quarter note.
 Staff 2: Quarter note, eighth note, quarter note, quarter note.
 Staff 3: Quarter note, eighth note, quarter note, quarter note.

To:

System 1: [Pattern of black squares and circles representing rhythmic values]

System 2: [Pattern of black squares and circles representing rhythmic values]

System 3: [Pattern of black squares and circles representing rhythmic values]

To the Li-version, a percussive version of Ripples:

Ripples 2 (Rhythms):

Repetitive, percussive, polyrhythmic shorter sounds.

Audio "Notation"

Another form of "notation" I have been using, are audio recordings at certain places in the pieces. These are usually:

Electronic sounds inspired by the Li made by me

These sounds can be based on various sources (a no-input mixer, Korean shaman bells, modular synth). This example is the sound of a creaking door electronically treated. **ex 4**

Actual sounds of Li

The Li processes in nature are usually silent, very slow or extremely violent sounding.

This sound, however, has a musical quality which I enjoyed: It is the sound of sand dunes moving, producing a "singing" sound. **ex 5**

Or electronically treated improvisations by parts of the ensemble based on Li.

The process usually looks like this: I bring a Li -> I record a smaller or larger group playing the Li -> I treat the recording electronically -> We play with the resulting audioLi.

ex 6 Centers AudioLi

I think about these sounds as another way of giving information to the musicians, like a score would, on how to behave musically.

The AudioLi are meant to be played along with by just listening. They "force" the musicians to listen closely and relate to what they hear directly with no translation through a score or instructions. (This way of working was inspired by the way John Butcher uses audio in his pieces, especially "somethingtobesaid". I also heard a concert of Georg Friedrich Haas' piece "Introduktion und Transssonation", where the ensemble plays along with recordings of Scelsi improvising, which interested me).

I will introduce new AudioLi frequently, to keep them fresh in the ears of the musicians.

If we have played an AudioLi for a while, I might also ask the musicians to play them from memory without the audioLi present. Here is an example of the "creaking door" example from above: **ex 7**

Chinese Whispers

This technique of "Chinese whispers", i.e playing from memory, I have also used on my own predetermined material/pieces. Either improvising a version of a piece just after playing it (which is mostly practical to do in the studio), the next day on a tour, or months later. All three situation yield interesting results, and quite often I enjoy the improvised versions more than the originals. The example below starts with an excerpt of a graphically notated piece and moves on to an improvised version.

ex 8

Pitch-based, circular Li

I sometimes prescribe groups of pitches to use with the Li. These harmonic fields are intended to instigate vertical time, and also to give harmonic clarity and identity in some sections of a performance. They are some of the few gugak-influenced techniques I still use in the ensemble, and are inspired by the way one finds random harmony caused by heterophony in Gugak.

The circular notation indicates that the musicians do not have to move the music anywhere, and lets us focus on timbre, improvising chords and staying in the moment. A typical example of a "heuristic" way of organizing the mode of pitches and a way of instigating a feeling of vertical time in the ensemble.

Earlier on I would usually write pitches with lines showing the approximate length of each pitch. I still use this approach on occasion, but the circular notation has taken over more and more, leaving more room for self-organization.

ex 9 Centers (+Eks på note)

The Score

Why a paper score?

Within this field there has been many recent developments regarding the way one makes a score. Video scores on ipads, software generating scores on the fly etc, by artists like Pedro Rebelo, Espen Reinertsen, Justin Yang et. al.

My main interest has been in investigating the sounding results and the communication between the musicians, and I've chosen to not focus on making any radical changes in the way I present the score to the musicians.

Originally, I envisioned my scores to be of a more modular character, somewhat like Earle Brown's scores inspired by Calder's mobiles. I chose to keep the traditional Linear form of the score (for example in Li 3), with traditional rehearsal signs, because the musicians can read it quickly. It's a tried and tested form that works in the concert situation, with a minimal risk of misunderstandings, and it gives the order needed to communicate in rehearsal in a large group.

C score

Sofia DUO cont. →

Bjørnar

Morten

Lotte

Martin

OHM

David DUO cont. → E harm?

Per

Raym.

Dag E

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

OPEN DUNES
AD LIB

Work vs Process

"What we call a "work" might better be thought of as a developing structure that arises from the activity of music making" (Benson 2003, 125)

A work is defined as "A thing or things done or made; the result of an action."
(Oxford Dictionaries Online)

A process is "A series of actions or steps taken in order to achieve a particular end." (Oxford Dictionaries Online)

I have gradually moved away from the idea of producing finished works or "pieces" during the project period. This way of thinking about musical works, as finite objects with a strong identity, to be preserved and repeated in more or less the same way, seems to me to be too far away from the dynamic and constantly developing nature of free improvised music. I have realized that the process is more important to me. The seemingly fixed nature of the scores I've produced, is merely an expression of what kind of music I perceive the ensemble to be making in that very moment in time, and not necessarily how the music should be preserved for posterity. I'd rather build a strong ensemble identity, culture and sound world, which can develop and mutate over time aided by my ideas, than focusing on building a separate sound world with limited materials for each piece. I could have made one piece focusing on only one or two gugak abstractions, for example. And one piece working only with behaviours, one focusing on textural Li etc. These pieces might have had a clearer identity, along the lines of what we associate with "experimental music", but I wanted all of the toolbox to be available simultaneously, like one has in a free improvisation, at least to me, the composer.

The culture and the toolbox instead become a method for me for assembling "works" and frameworks quickly when we have a concert or recording, allowing me to think about the music effectively, and convey the macro form easily to the other musicians.

My identity as the composer of the ensemble's music comes out in the way I structure our music for each performance, but it's closely related to my improvising as well. The performances are iterations and variations of the previous music, with new ideas and

material added as I see fit. I'm playing in, "playing" and "composing" the ensemble simultaneously, in a way. A process in between presenting something to be repeated exactly from the ensemble, or being one of many equal voices in an ensemble. My development as a composer has become more and more closely related to the group process, getting inspiration from the musicians and our improvisations, and the feedback loop between me the composer, me the improviser and the ensemble has become integrated in a way I have not experienced before. The performances and recordings become snapshots of an ongoing process, which to me becomes the work itself.

It's interesting to me how the work with the Li, combined with a need to do something that would include the musicians more and let them use their own languages and strategies more, made the music sound closer to European free improvisation. Is it less original than my work with only the Gugak inspired material?

Who knows: Both the composer, the composer/improviser and the musicians are happier now, and in the end I think that leads to better music. I am more happy with this music than I was when I had notated more, and this way of working makes me more creative and eager to make new pieces.

Maybe I'll slide a bit farther back to the left of the continuum now that I know that this, more open, approach works. Maybe now we have the tools to successfully go back and use more melodic, notated materials together with the Li again?

About the Toolbox

Simplifying the building blocks with which I compose allows me to create a number of different configurations/pieces quickly. Since the material is always different, partially created spontaneously and partially orally/aurally in rehearsal by all the musicians, the results can be highly diverse from performance to performance.

Harmonically, the music can also change drastically, by changing the pitches available to the musicians in the more pitch-based Li, and by the fact that pitch is often free for the performer to choose. The instrumentation of improvisers can also be changed, creating even more different outputs with the same toolbox.

By adding instructions to the Li regarding tempo, timbre, dynamics, speed, register and expression, I can develop a rich compositional material in a short time, allowing for great variety from realization to realization of the pieces.

For example:

Ripples with AIR sounds (Li 2)

Angles moving from note to noise over 30 sec (I.e processes within the Li) (Li3)

The toolbox of Li is constantly developing, and will hopefully never be complete, but here is the current list of Li I use to compose with the ensemble. It should be expanded, improved and hacked. This toolbox of Li is in a constant state of flux, and new Li are added all the time.

The Li can be played one at a time, juxtaposed, layered and used as building blocks in larger forms.

I think about the Li as belonging to 3 different categories. Some of them may also belong to several simultaneously.

Textures : A continuous collective sound or texture

Patterns : Rhythmic focus.

Behaviours: Describing behaviours, processes, relationships, modes of action.

I also sometimes use **hybrid forms** of the Li, mixing several (usually two) of them.

Spots/Ripples f.ex

These can then be layered again within a composition, or have various instructions regarding form. (F.ex Crystallization in Li 3)

They start in two possible ways :

- One person starts, the rest imitate or complement as soon as possible.
- Everyone start together at once on cue, playing from memory/the text, and trying to achieve equilibrium as quickly as possible.

The Li Toolbox

(Examples of most of these will be shown later in this text, when we listen to the piece Li 3)

Angles (noise):

Angular noise sounds of varying lengths,
variation of frequency.

Marcato attacks.

Angles (pitch):

Angular, pitched sounds of varying lengths, more long than short impulses, sometimes
marcato attacks.

Aggregation:

Move from single sounds with much space to building a tutti structure. Pause and repeat.
(Also in two to three groups in parallel simultaneously)fix?

Breaking (1):

One person starts playing a stable sound, the rest of group 1 imitate.

Group 2: One person starts a stable sound which complements or contrasts Group 1,
and the rest of Group 2 imitates the instigator. Group 1 fade away.

Repeat. Gradually less change and shorter intervals.

Breaking (2):

Like a mass being penetrated and broken apart.

Cracking:

Imagine and play the sound of a material cracking.

Crystallization:

Move from something fluid and fast to something clear, static, crystalline and simple.

Clouds:

Make phrases together, react to impulses. Iterations and flourishes.

Asymmetric rhythm, fast. Longer and shorter gestures.

Centers (1):

One person leads a group through his/her playing.

The other players can imitate, contrast, accompany etc, but listen to the leader/center at all times.

Centers (2):

Focus on a common center of gravity: A sound, chord or mode.

Centers (3):

Every player is her own center. Listen, but stay autonomous. Wadada.

Dunes:

Very slow sounds, repetitive, breath tempo.

Explosions:

Explosive sounds.

Flocking:

Fast, follow each others movements in a chaotic "unison".

Pitch or noise.

Lines (linear movement, meanders):

Move from one point to another in a melodic, meandering, linear way, non repetitive.

Lines (tutti):

Make linear, melodic phrases together, either in heterophony or finishing each others phrases.

Mass:

A static, sustained sound mass.

Ripples 1:

Repetitive. Like a faster, polyrhythmic version of DUNES.

Ripples 2 (Rhythms):

Repetitive, percussive, polyrhythmic shorter sounds.

Spots 1:

Or points, short sounds, open.

Make phrases together, react to impulses.

Play only one sound at a time, space and listening.

Spots 2:

Make spots together in smaller groups. Try to synchronize.

Trigons:

Parallel trios.

Waves:

Dynamic waves.

Possible variations, additional instructions, modifiers

Instrumentation

Pitches or sounds (more noise content): Note -Node - Noise. Movement from note to noise and back.

Dynamics loud/soft/medium/varied

Open/dense/both

Small/larger groups

Fast/slow/medium/variation in tempo

Register high/low

Register changing or fixed

Timbre, constant or changing

Short, resonant or sustained sounds

Spatial placement of groups or sounds.

Metric rhythm more/less

6. Ensemble



Bandleadership

When I named this project "Natural Patterns - Music making with an ensemble of improvisers", using the word "with" instead of "in" (an ensemble), I not only wanted to say something about the contribution from the improvisers, but also something about my dual position as the band leader and ensemble musician. It's not a collective of free improvisers where we improvise the music together. This is *my* music in the sense that I create the meeting points where the musicians insert their personal material, and influence and communicate with each other, and because I am the leader and administrator of the ensemble.

In a classical orchestra there is a clear hierarchy, with the conductor on top, the group leaders next, and the rest of the musicians at the bottom. In most freely improvising ensembles, there is, in theory, none. Yet, most large ensembles playing free improvisation seem to need a kind of leader or instigator to not disintegrate. Also, when someone has

gone to the trouble of assembling a large improvising ensemble, one seems to automatically assume that he or she has a strong idea of or wish for the sounding result.

Another hierarchical aspect can be present as well in free improvisation: The more experienced improvisers, or at least those who consider themselves as such, will sometimes command more respect, either consciously or subconsciously, compared to the less experienced ones. This can result in less flow in the music, people becoming too timid or too brash, and personal conflicts in the group.

The same goes for notation. If I give too much instructions or too detailed notation, there is a point where even extremely strong improvisers will become less assertive, and turn into a more passive interpreter of my musical ideas. The balance is skewed and hierarchy is established, and the result is a blander music, where neither my intentions as composer or the voice of the improviser comes out. I can almost sense the musician turning into an instrument with less power of intention, due to too constricting leadership.

Flow

My experience is that the improviser needs to be given space to play and to feel calm, safe and focused when improvising. The material the improviser works with has to provide this, not add pressure, which is what I aimed to do with the Li.

This does not necessarily mean giving the player as much freedom as possible at all times, but rather not stressing the players too much. The improviser has to be able to focus on the totality of the sound, and their own contribution to the sound and musical situation, without having to focus too much on notation or other predetermined material which makes them having to divide their focus, or that makes them uncomfortable. The ideal is to be able to achieve a state of Flow as often as possible when improvising, where the challenge suits the skill of the person at all times.

In my music, I believe that it's possible to achieve this feeling of relaxed focus together with predetermined composed material, as long as we do not have to make too many choices regarding the macro form of a piece while improvising. As in transitions between improvised and notated material, for example: Notated predetermined material in my music is normally only introduced by musicians who are not improvising at the moment. This way, we can focus completely on the improvisation, with the knowledge that one has

complete control over what happens in that moment. Notated material could be played by improvisers *after* an improvisation, though, when it is clear that the improvisation has definitely ended, like a start of a new section, or as a cue for a transition.

Atmosphere

Another important aspect of this need of a stress free environment (or exactly the right amount of stress) is visible in the rehearsal situation. In a context where the music depends on correct execution and interpretation of notated compositions, for example in a classical orchestra, it is, in theory, possible to do a decent job even if the atmosphere is hostile. In an ensemble like the PZE, a bad atmosphere due to conflicts between myself as the leader or between the musicians makes the music suffer. It becomes less creative, and one resorts to clichés to just get the music done, and escape the situation.

Rehearsal strategies

A main task for me as the band leader, in the fragile social and musical construct of the ensemble of improvisers, is thus to manage the group dynamics of the ensemble. In a large group, some will be more timid, some will be bored, feeling like they are not being heard, and some will command a lot of attention. People also have different aesthetics and opinions about my (and others') musical ideas. This can lead to conflicts or ineffective work.

Throughout the project I have worked on my own communication skills, trying to both verbally and physically communicate in a way that makes every musician feel like they are being heard and appreciated. Trying to resolve conflicts, encourage verbal and musical dialogue (which also the Li were important tools for), and making sure that the atmosphere stays light (or at least bearable), and that everyone feels involved.

Rehearsal strategies are often tacit or non-existent in the average improvising ensemble. I would therefore also consider, after each cycle with the large ensemble, what kind of rehearsal methods were most effective: A combination of Li with some predetermined material and free improvisations to focus the ensemble now and then? Working on sections or entire forms to get an overview? Warming up by improvising together or help concentration by delving into something concrete?

Now, finding one clear answer to this seems difficult, and different strategies work better at different times in the process. I see it rather as an accumulation of tacit knowledge, where i sense how the ensemble responds to me and the various rehearsal strategies I try out, allowing me to adjust my ways of working from cycle to cycle, gradually finding a way that works for this specific ensemble.

Placement and listening



Throughout the period of working with the PZE I have also constantly searched for the optimal placement of the musicians. The listening situation, and thus the music, is greatly influenced by a number of factors:

Amplification

Ivar Grydeland describes his experience with PA systems, in a way I can relate to:

PA systems alter the playing situation on stage. Not only does it change the dynamics. If it is loud, it can almost eliminate the dynamic range of the instruments. Everything is big. Small details get big. The instruments sound bigger and larger in the hall than they do on stage. I sometimes listen to the other instruments, and my own instrument via the room, via the PA system, not directly on stage. So much of what we do is about proximity. That the sounds we play are near us, between us and that they coalesce and form

composites near us. This disappears a little with a PA system. This, needless to say, changes the communication on stage. A PA system is such a heavy and dominant filter that it has to be considered as a 5th member of our group. (Grydeland 2016)

We normally play acoustically in the PZE, except for the occasional AudioLi electronics and some light amplification of the acoustic guitar. This way of working seems to give a more realistic and dynamic interplay situation. If we do use a PA system, I try to limit it to giving an almost inaudible lift of the softer sounds, to help in rooms with dry acoustics.

Listening and dynamics

The ideal is that everyone can hear each other at all times. This is of course dependent on the musicians playing louder instruments adjusting to the ones with a lower volume. Yet, I still want the music to have as wide a dynamic range as possible, where the peaks are allowed to be fairly loud.

Cueing

1

Visual contact between the musicians is also important, even if the main way of communication is through sound. Some parts of the compositions have visual cues, where I, or someone else in the group, will indicate when to start or stop a certain material.

I have aimed to distribute this visual cueing throughout the ensemble, to avoid a hierarchical situation where one person becomes the leader at all times. I also try to keep visual cues to a minimum.

2

I discovered that sound cues are more conducive to listening, and that this allows the musicians to start new sections or end what they are doing in a more musical, listening way. This sound-based way of cueing helps the large ensemble organize and find equilibrium much like the way a smaller ensemble works. In a smaller ensemble mixing predetermined material and improvisation, like a free jazz group playing tunes, for

example, a hint of a melody can be enough to make the whole group instantly start playing a unison melodic line.

In a larger ensemble, the chance of this succeeding is much smaller, I think, especially when there is a written score involved. This, again, has to do with the cognitive discrepancy between reading and listening/playing. My sound-based cues can be the audioLi starting or stopping, a group entering and playing something contrasting, a change in a process (from pitch to noise, for example), someone changing dynamics and so on.

Physical Placement

1

All of the above elements are greatly influenced by the placement of the musicians on stage, and has a strong influence on the musical results, since listening possibly is the most important feature of improvised music (and musicking in general). Improvisation, and being able to contribute something meaningful to the musical situation, depends on being able to focus on the total sound of the music. If your focus is on trying to hear what the others are doing, this becomes impossible, and you don't feel safe and relaxed in the way one needs to contribute creatively.

I have experimented with various ways of setting up the large ensemble throughout the period, trying to ensure that everyone has the optimal conditions in most performance spaces. As an improviser, the ideal listening situation is to hear everyone equally well. When you are seated next to a loud instrument, and yours is loud too (for example a sax next to a sax), there is a tendency to try to match each others volume, leading to a general increase.

In the beginning, I tried placing sax players away from each other, drums on different sides and so on, i.e not mixing louder instrument groups. I also tried to keep musicians who tended to play mostly with certain others (i.e. listen to certain people more than others), away from them.

At some point I started trying to use these tendencies in the compositions instead of working against them, for example using instrument groups together and already established groups within the ensemble.

2

In addition to the aural well-being and balancing the voices of everyone taking part in the ensemble, I have another motive for this focus on the physical layout of the group.

I think about the ensemble in a two or three-dimensional way, with an axis from left to right and one from the back to the front. The third dimension, from low to high, usually is expressed more in a register sense, but the two others I use in various ways : The way the ensemble is split into groups, which can be either close, far away from each other, on various points of both axes, in how phrases are distributed, either through notated "spatial" exercises, two groups playing "against" each other on different sides of the axis, or through verbal instructions on pauses in Li-textures. This can, sometimes, result in beautiful sound spaces where sounds come from different places in interesting ways.

3

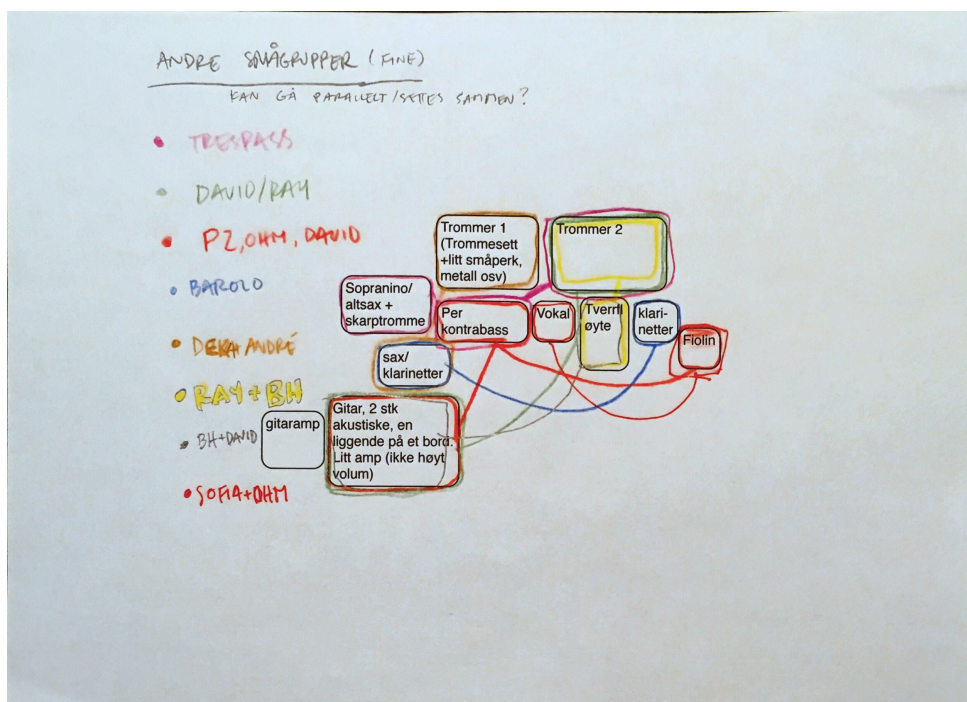
A method for thinking about these issues in the preparation part of the cycle, has been to make diagrams of the ensemble, seeing possibilities for combinations and movements in the ensemble on paper, and then trying them out in rehearsal.

- The combinations are based on proximity in the ensemble, which makes improvisation and interplay easier,
- my ideas of who would sound good improvising together,
- sound movements along the axes,
- certain instrumentation groups (percussion, winds, strings and so on),
- harmonic/chordal movements
- preexisting groups within the ensemble

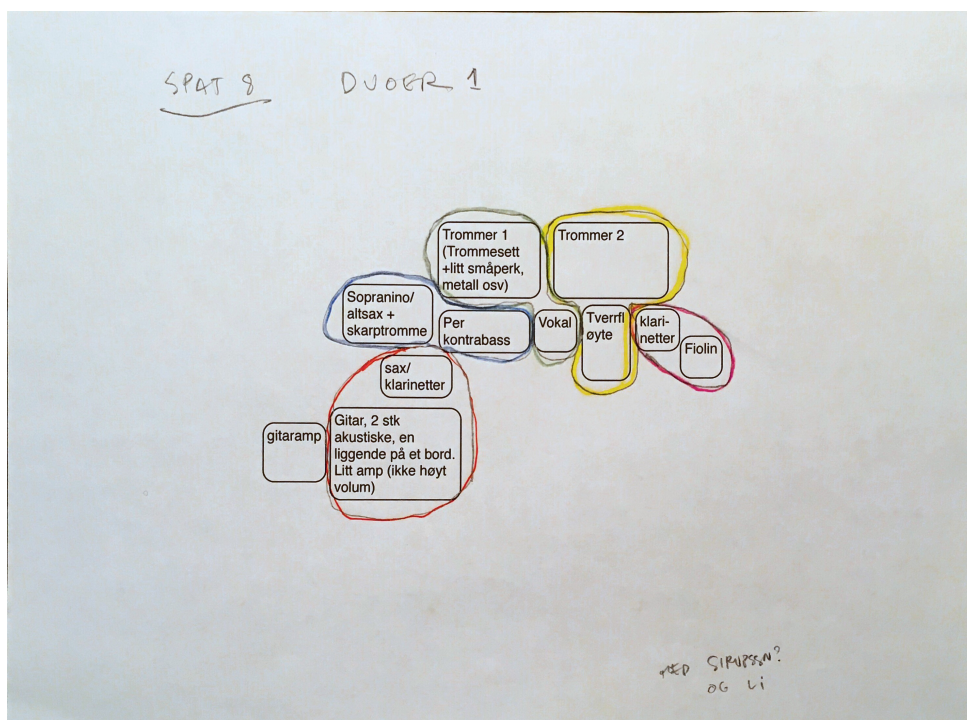
Both the diagram of the physical placement is changed on a regular basis, after rehearsals or concerts where I see that the listening suffers on some level, and in situations where I try a "spatial" or group idea which does not work the way I wanted.

4

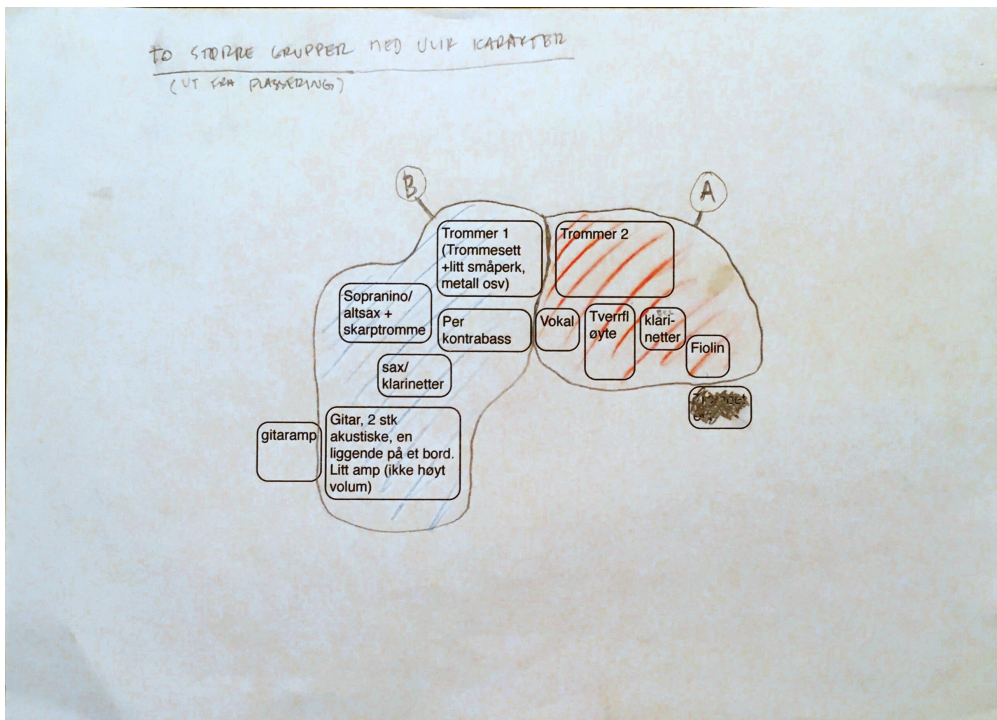
Here is an example of a diagram where I have outlined several smaller, preexisting groups or possible new groups in the ensemble.



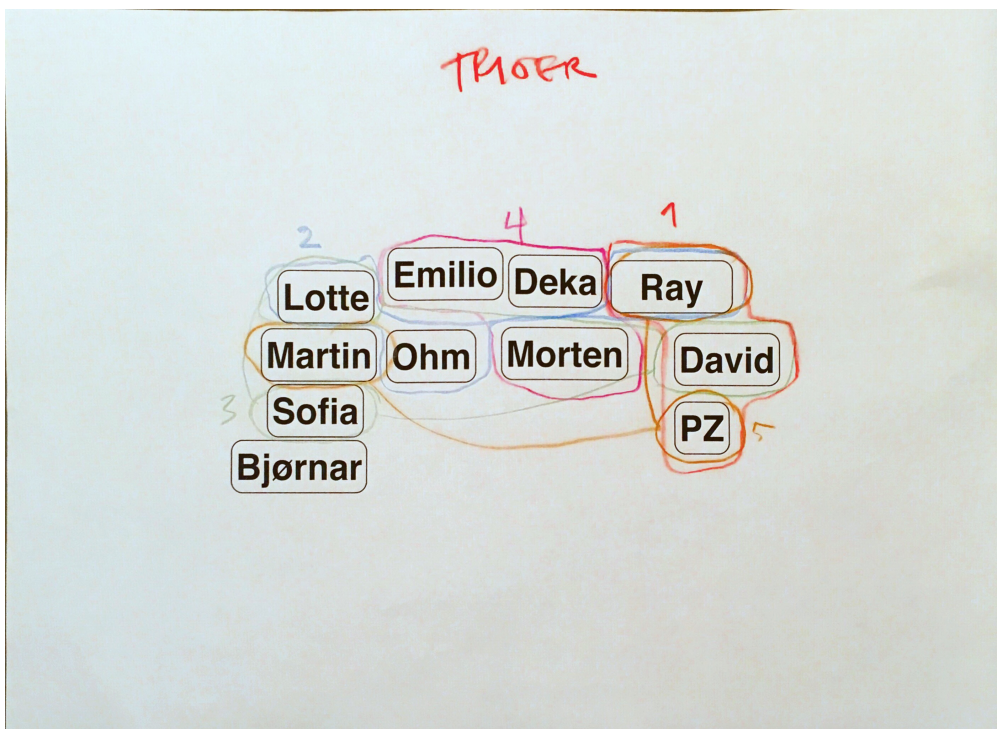
In this diagram I have outlined duo possibilities based on proximity.



Here is an example of a diagram where I have outlined possible "opposing" larger groups to use in the Breaking-Li.



This diagram shows possible trios for Li 3



Here is an example of an exercise/etude created to make a pointillistic (Spots) movement in the ensemble, and to work on our ability to listen and play spatially during improvisations.

Spatial Spots

**ON TO ANDRÉ/PER/MARTIN/RAYMOND IMPROV.
5 min**

This is a part of a similar exercise/etude created to see what it feels like to make a slow, sustained movement in the ensemble :

Spatial Dunes->Quintet

TO MASS TUTTI

Acoustics

Acoustics and the context we play in are important factors, to a certain degree determining how the final musical result ends up. Improvisation is site-specific.

Evan Parker talks about how he can use a certain, more high energy and direct way of improvising that he knows will communicate better in for example noisy festivals. (Parker 1987)

I definitely got this feeling when we played the Kongsberg Jazz Festival with the PZE (see video). There is something restless and frenetic about the way we play most of the piece. Maybe we aim for high energy, or maybe it's just the fact that we are playing in a well known jazz festival, and we subconsciously don't want to bore the festival audience? Or maybe we were a little nervous for the same reason?

Ex: PZE at Kongsberg Jazz Festival 2016



Photo: Kjetil Møster

Playing at Bergen Kjøtt gave me another clear experience of how the context colours the music. We played a concert in the middle of a textile exhibition by Hildur Bjarnadottir. Colored textiles were hanging from the ceiling, making a quite special atmosphere. The room has a quite long reverb, and this changed the music. From a rather aggressive version at a smaller club in Oslo the day before, into a much more listening and contemplative mood in general. The long reverb made it impossible to hear anything if you play too much or too loud, and in this case luckily we reacted by listening even more.

Balance

Naming the ensemble the Per Zanussi Ensemble, seems to be a clear indication that this is not really a collective of improvisers. The main reason I chose to use this name is the research context of the project. I wanted to signal that this is *my* project, where I explore *my* ideas about composing with improvisers. This may suggest to the musicians that we are not really equals, and undermine the idea of creating a culture within the ensemble, making feelings of ownership towards the music weaker.

I do think this is problematic, improvisation wise, and I have considered changing the name into something which suggests a more collective approach in the future. I also think Simon Fell has a point in his article "A More Attractive Way of Getting Things Done: Some Questions of Power and Control in British Improvised Music" (Fell 2015), where he suggests that the best way of organizing a large ensemble may be to let all the musicians take turns leading artistically.

On the other hand I do think someone has to be an administrative, instigating force to be able to make ensembles of this size survive over time, and I think most projects of this size historically (with some great exceptions) have happened because one person has had a burning wish to see his or her ideas realized.

The project has circled around the two sides of my musical personality: The composer and the improviser. What I have said about the improvisers in the ensemble has also been true for *my* role as an improviser.

However, juggling my roles in the ensemble can be a challenge, compared to how I experience improvising in a smaller group or someone else's larger ensemble.

At a concert with the PZE, at first I will be more nervous than I usually am. Then, when I realize that things are going well (with everyone else in the ensemble too), I will be more at ease, but my focus is still constantly split between my own playing and making sure everyone is in control of their tasks.

After a while, an "improvisational fatigue" (worse than in a setting where I have a freer role) sets in, and sometimes these different approaches seem impossible to balance. It feels easier for me to set up experiments and work on the music outside the rehearsal room, where I don't have to relate to the chaos and challenges of the real world (i.e the other musicians). Yet, I know that the "real" music only happens in relation to the others, playing and discussing together.

7. On the Artistic Results

In the studio: "Evolving Patterns" CD

(ex. 1)

"Stockhausen once compared the recording of one version of an open form to a photograph of a bird in flight. We understand the picture as showing but one of a multitude of shapes the bird may take. But which is the artwork, the bird or the photograph? And which is the composition we are hearing, the abstract open form that we might intuit with the aid of score or program notes, or the realization on the fixed, carefully engineered recording?"

(Jonathan Kramer 1988)



The main way to play our music is in concert. I perceive this as the best way to share the experience of the musicians, and to get the physical experience of the sound. However, recordings are important to me as documentation of the process, a way of reflecting, and as a marketing tool to be able to play live.

The CD "Evolving Patterns" was recorded in two separate sessions. The first session took place in Stavanger, at NRK, during the Earwaves festival in October 2015, and the second session took place at the Norwegian Academy of Music in Oslo in April 2016. We

have done several studio recordings both before and after these two, but I felt that there was some special material worth releasing from both of these sessions.

Playing music with this level of improvisation in a studio is of course quite different from performing in front of an audience. My music is not really dependent on longer periods of high energy and a lot of feedback from an audience for the musicians to "get into it", so in a way I think it works to record it in a studio, but the nerve you get in a live situation can be lacking. Another problem can be the fact that you feel like you have to play "well" since it's being recorded for posterity.

This can be detrimental to flow and make some players more timid and self-conscious, especially the less experienced ones. Yet, I think the studio situation can be helpful in some respects: We have had a tendency to be a overly active, playing too much in a live situation, and not leaving enough space for my taste. This can work better in a studio situation, where the atmosphere is usually more calm than in a live situation.

We can also be a bit quick to leave a section, moving too fast to the next. In the studio the opposite tendency can sometimes occur, allowing for more patience, slower change and a stronger feeling of vertical time.

The Ripples piece we heard in chapter 5 is an example of a slow changing pattern which usually will be a bit too fast in concert. The slowness and its movement back and forth from the massive to the intimate is a quality that we hadn't been able to do before playing it in the studio.

The main challenge, recording wise, is usually to be able to get some separation between the instruments, and still be able to hear everyone. We try to alleviate this by being as close as possible, and recording almost like a classical ensemble: The room microphones, picking up the total sound of the ensemble are the most important, and close mics are only used for extra balancing if it's necessary.

Three acts of composition

Recording of improvised music is in a way an act of composition in itself, fixing something which would have had a different shape and sound in any other moment than the moment it was recorded.

The first session, before Earwaves 15, we used as a kind of rehearsal, recording everything, and tried out the form of the whole piece to be played two days later. I wasn't too happy about it at the time, but when I got around to editing it, I discovered several parts I felt were good improvisations, renditions of Li or of more Gugak-inspired compositions. I liked them more than most of the version we played in concert: They seemed more focused and intimate, and just expressive enough, whereas the concert version was a bit too frenetic.

For the second session, I only had a very loose idea of form, and gave the musicians a lot of written parts to play, some Li and some improvisations. I wanted to get good documentation of layered Li, of spatial etudes, pitch based material and so on. This proved to be a much more tiring and frustrating process, with no real visible goal of the session. It seems that recording a whole "piece" gives us more opportunity to portion out our playing, think about which approaches and sounds you have already used etc. I later found that the recordings I enjoyed the most from this session were the ones that had pretty explicit instructions (Like the spots/ripples over electronics, track two) and some of the free improvisations early in the session, pre-fatigue.

The editing process becomes a third act of composition (the two first being the precomposed material and the fixing act of recording). In this process I've composed a form consisting of material from two different points in time, and used only the parts I liked, fitting them together with other parts in a way I find to be good and interesting. A couple of places I have even layered recordings of two different events. I will usually keep everything as it is in a live recording (like for example Li 2 and 3), but in a studio session I do not see any problem in "cheating" by adding something if it helps the music. This music is not completely free improvisation anyway.

The mixing and editing process is very similar to the way I have begun composing the concert pieces. The main difference is that I have to imagine the sounds and behaviours of the Li and improvisations in the latter, while in the editing process I work with the concrete sounds of the ensemble as building blocks. I do think the mixing and editing of

music recorded by the ensemble has influenced my composing greatly in this way. The reduced complexity allows me to think in a more broad way form wise, knowing that there will be more than enough complexity on a local level to keep it interesting sonically. If I want to I can also zoom in on some parts and compose more detailed music here and there.

Listening, choosing and mixing is not only about preparing the music for release, but also a way of meditating over it for me. A slowing down of the process that can be hard to do without the purpose of the mixing, and an integral part of my method. It allows me to think about the music in a slow way, and it forces me to ask questions and make aesthetic choices which decide the way forward in the next cycle of research.

Despite this, during editing and mixing is maybe the only time during the process that I have thought about "finishing" a piece of music. A CD produced in this way feels more like a final composition than a concert, even though it's composed by snapshots of our playing at certain points in time, and in reality is a documentation of a process. It has a different context and it feels very different physically. I have created a different narrative through the editing, and I can only relive small parts of the experience of playing the music through listening to it.

Complete live recordings on video, on the other hand, can be more useful as a way of reliving the experience of playing the music, although from a very different perspective. You will not get the physical sensation of the space, the instrument, the closeness to the other musicians, the social setting (was the atmosphere good in the group?), but a recording can be a way to help you remember it. For me there is always a slight feeling of seeing someone else, though. Almost like when you hear a recording of your own voice speaking.

I also think that my experience of listening back can vary depending on when I listen: The focus can be very different when listening to a piece at different times of the day, depending on my own state of mind. Sometimes I will have more patience, sometimes less. This makes it hard to be analytical about one's own music, as the perception of the music changes. Some of it sounds worse than I remember it, some of it sounds better. What would I think about the music if someone else were playing it?

The material on the CD is a mix of improvisations, Li and predetermined material inspired by Gugak. It is a kind of "best of" collection of the main periods I have gone through. Some raw scores exist, but much of the music has been altered significantly in both the recording studio and in the editing process. I have enclosed the original scores for the piece the record originated from, but there is no complete score for this music.

Musicians :

Bjørnar Habbestad - flutes

Martin Kuchen - alto/sopranino sax

Andre Roligheten - tenor sax, bass clarinet

Erik Carlsson - percussion

Dag Erik Knedal Andersen - percussion

Sofia Jernberg - vocals

Ole Henrik Moe - violin/banjo

Morten Barrikmo - clarinets

Raymond Strid - drums

David Stackenäs -guitar

Per Zanussi - double bass/electronics

Recorded by Per Ravnås and Ulf Holand. Mixed By Ingar Hunskaar.

Listening to Evolving Patterns

Patterns 1:

This piece is an example of my interest in slowness, as found in Gugak.

There is a circular rhythm in the percussion throughout the first part, which uses the idea of rhythm as the main method of structuring.

Notation wise, it is either graphic (a line meaning "play whatever you want") or a few notated, held chords in the winds. These gagaku-sounding chords are composed of pitches from an analysis of a noisy, arco bass note, and have been added during the editing.

All of this gives a very slow result, and we focus on the timbre of the ensemble. This can be very frustrating to play, and feel unnaturally slow. However, I think it results in a very interesting music, clearly referencing asian, vertical time: The movement is so slow that the musician has time to really listen and focus on the timbre.

At a certain point, the "Jangdan" or rhythm is let go, and an Angles Li is introduced. Then we return to the graphic rhythm notations and written chords.

The slowness is brutally broken by a contrasting "Clouds" part, where the density and speed increases, building to a climax, and fading out.

The last part of the section is a unison line or "Meander", which is accompanied by bass clarinet and bass drum. This is based on the idea of meandering rivers, and the ornaments are inspired by rules for Korean court music: When the interval between two notes is smaller than a falling minor third, there is a glissando between them. When the interval is greater than a falling minor third, there is an upward glissando and a pause before the next note is played.

Patterns 2:

This is an example of a processed electronic track based on a trio recording of myself, drums and guitar. On top of it, we work with a rhythmic, percussive hybrid of the Li "spots" and "ripples", creating a rhythmic texture. This is changed into a more held "ripples" material in part of the ensemble after the electronic track ends.

The section ends with an improvised trio, referencing an open "clouds" material (the way we chose to interpret it in April 2016: As iterations on one sound at a time, creating a cloud together), which returns in other forms in later sections of the recording. This way of playing the clouds contrasts the clouds from both Patterns 1, and the clouds found in the piece Li 3, which will be discussed later.

Patterns 3:

This is a section based entirely on 8 pitches. In the first part of the section, some of the musicians play the pitches with ornaments, inspired by the way one assigns specific ornaments to specific pitches in Gugak.

We then gradually move on to holding the pitches, improvising slow chordal harmonies together, with a circular notation.

Patterns 4:

Short parts of Li, where the Li and who plays when is strictly notated. This is part of a longer, older Li piece called "various activities", and it is an edit of the parts I found most successful.

We then transition to a longer tutti "ripples" Li, where the focus is on slow variation. The instrumentation is changing over time, and we end up with only reeds and flute playing key sounds.

Patterns 5:

This is a Li piece where dunes, ripples and lines are layered, entering and exiting.

The bass starts solo, and the rest of the ensemble enters, playing Dunes Li.

A percussive Ripples pattern enters, and a Meanders Li comes in on top, sounding almost jazzy for a second. this on/off pattern continues for a while, until a duo of clarinet and percussion begins. A microtonal held chord in guitar, flute and violin is cued in, and a drone section begins. The bass enters to signal the end of the section, and we segue to a dramatic Waves section, using the pitch C as an anchor.

Patterns 6:

This track starts with a Clouds section. It is kept quite open, and iterations of a single sound is the main approach. It develops into a Ripples improvisation.

It then proceeds to an alto flute solo. The Clouds material returns, and transforms into iterations of the pitch C.

It then segues into a section where the guitar is in the foreground, working with a predetermined set of pitches. The "accompaniment" in the other instruments starts with noise and air sounds, before gradually going into set pitch materials.

Final presentation of the artistic results: "Li 3" at Earwaves 17

(ex. 2. See also attached score)



The festival "Earwaves" has been organized in Stavanger three times during my fellowship, the first time in 2014. I started the festival together with Signe Irene Time, and it features improvised music in various forms. It includes local musicians and students, which helps building an audience, and hopefully uniting the very small scene for improvised music in Stavanger.

We have also included some more well known names from Norway or abroad, like 1982 (with Nils Økland), John Russell and Anders Hana.

The most important reason for me for doing it this way, was to have the opportunity to invite the entire PZ Ensemble to stay for several days and record, rehearse and discuss the music. It is much easier to secure funding for a festival than for a one-off concert, and I also believe that gathering the band in a town like Stavanger, where they are away from home, helps the concentration on the music. The ensemble also gets more closely knit socially, living and eating together.

This would of course have been nice to do at an already established festival as well, but so far it has not been possible. Playing any kind of non-mainstream music today depends on the artist doing most of the additional practical work, and I would say it's a prerequisite

to be an organizer (on some level) to have any chance of realizing your own musical projects frequently.

On the first day of the festival, we play in small groups, and the idea is to simply get some experience in improvising together in the room. This helps the playing in the large ensemble on the second day, when we play a new piece for the whole ensemble.

I believe that this way of organizing the festival around the ensemble has been an important, positive factor in the ensemble process.

For each festival I have assembled a new piece, and the final artistic presentation of the fellowship period consisted of an hour long concert piece named "Li 3".

Li 3:

This is the final ensemble piece made during my fellowship, and the closest I've felt to achieving the balance between predetermined and improvised music that I have been looking for. I think that this piece landed closer to my idea of expressing a culture in our music than earlier pieces. It is also the piece where I feel like I am using all of the different parts of my new musical toolbox, built throughout the research period, with more usage of semi-improvised Li in general, and more Li influencing the behaviours of the musicians.

After listening back to previous pieces, I have always been frustrated and felt that I need to develop the toolbox even more. The result after this piece was that I got more ideas about what to do within this method, rather than immediately after the concert thinking about how I could fix it, or what I *should* have done. I felt that I had arrived at something good and effective which can be used to create music in the future by me or others.

The score is simpler and more text based than earlier performed pieces, with less graphic or regular notation, allowing a greater focus on listening for the improvisers.

The score is linear, but based on open spaces of vertical time-encouraging Li or free improvisation. The idea of circularity within the linear form is still present, by sections recurring in the form:

The centers-material comes back in mutated forms three times.

The "melody" in the beginning is repeated in the duo by Sofia and Morten.

AudioLi give a feeling of cycles, and sections of a "soloist" with Li accompaniment also appear several times.

The sections with a "soloist" can hypothetically have these outcomes:

Only soloist (everyone else chooses silence)

An overweight of one of the Li: F.ex a lot of spots, no dunes and vice versa.

Something in between: Equal amounts of the two Li

Most emphasis on following the soloist. Which means that it can be anything the soloist wants, with the rest following her or "following her" as in contrasting her.

In Li 3 I tried to use all of the tools in my "toolbox" which I have collected throughout the research period. I was thinking about the piece's macro form and instrumentation in terms of possible choices in free improvisation: Lead, follow, support, contrast, change musical direction, or be silent.

Musicians:

Bjørnar Habbestad - flutes

Martin Kuchen - alto/sopranino sax

Lotte Anker - tenor/soprano sax

Emilio Gordoa - vibraphone/percussion

Dag Erik Knedal Andersen - percussion

Sofia Jernberg - vocals

Ole Henrik Moe - violin/banjo/saw

Morten Barrikmo - clarinets

Raymond Strid - drums

David Stackenäs -guitar

Per Zanussi - double bass/electronics

Recorded by Inge Engelsvold

Video recording by Bjørn Ketil Udem

Listening to Li 3

PAGE 1:

(0) Introduction

The piece starts with an echo of a Gugak-inspired piece, originally written as three heterophonic melodies in "Earwaves" in 2014. It was reduced to a duo (Vocals and clarinet) for the Kongsberg Jazz Festival, in "Li 2", with two written parts.

This version of the "melody" consists of only the vocal part in a unison B. I didn't write any dynamics, because I wanted to try it out in rehearsal. The section has been tried in both very dynamically soft versions and in a almost free jazz sounding, expressive version.

I also wanted to see if it would be naturally heterophonic, when we played it by just following Sofia. With only one of the melodies being played, it sounds more abstract, and I thought it would fit the tone of our current playing better than it has before, in its more complex, polyphonic form.

We tried playing the melody tutti, with everyone playing the ornaments and all of the pitches, but to me it didn't sound good. Too heterophonic, but not heterophonic enough. The solution was to let bass, violin and vocals start, with only vocals doing the ornaments in the beginning. The rest entered ad lib after a while, making the timbre change gradually, and the dynamics increase.

(1) Clouds enter over Db drone

Bass, clarinet, vocals and violin go directly from the B in the melody up to a Db, which is then held quite softly for a while. The pitch can be changed gradually, and we go into a tremolo after about thirty seconds.(?) The rest of the ensemble were told to enter with Clouds or Angles material. This material should be coordinated within the group, and have long pauses.

Again, no dynamics were indicated. I decided in the rehearsal that the drone should be played piano, so that the Clouds would mask it at times. The Angles material was discarded, to make the sound of the Clouds Li more homogenous. We also decided that the wind players should be led by Bjørnar, playing and pausing together with him, making phrases together. The same was done in the percussion group, but without a clear leader. This made the Li more structured and restrained, making phrases or blocks that turned out more or less the way i had envisioned them.

There was less change in the drone than I had anticipated, probably due to the fact that Ole Henrik was using a mute to get the violin to resonate around the Db frequency, and subsequently stayed around that pitch for most of the section.

In hindsight, I see this as the Li taking over the "old" Gugak material and approaches in the ensemble: The textural Li clouds gradually overtaking the drone. The old music being washed out by the new.

(2) Trio Raymond, Lotte, David (3-4) min

The trio improvisation enters, and was influenced by the Clouds, as anticipated. In the middle it goes into a more open landscape, with lots of pauses, the end the guitar starts playing a more rhythmic figure. The improvisation ends with percussive punctuations by Raymond.

(3) AudioLi 1+Percussion trio

This section was substituted with **section 4: Aggregation** in rehearsal, because I felt the need for something relatively clear after the improvised trio in (2).

The basic idea of Aggregation is that one starts with something open, and gradually makes it more dense. In this version of the Li I have split the ensemble into three groups. The first, drums, bass, guitar and clarinet start playing the pattern. Then the next group enters : Violin, vibraphone and percussion. The last group enters next, and consists of vocals, flute and the two saxes. The whole process is repeated three times.

The text notation describes how to behave (gradually going from open to dense in groups). The translation happens in the musicians mind (her interpretation of the text), through listening/feedback when we rehearse, and the same in the concert situation.

(4) Aggregation

Substituted with section 3: AudioLi 1+Percussion Trio

The trio starts improvising. I then start the AudioLi, creating a turning point in the improvisation. The percussion trio adapt.

(5) Lines

Instruction in rehearsal: Play something reminiscent of the bass/guitar/violin line in Evolving Patterns 1 on the CD.

(6) Centers 2-material enters

The Centers material is a group of pitches organized in a circle.

This was supposed to be a more linear version of the material, where we finish each other's lines. Not entirely successful, possibly because of the circular notation, which encourages vertical time.

(7) Sofia, OHM, David enter with improvisation

We decided not to have David play, as he had been playing a lot in the preceeding sections. The improvisation clearly contrasts the drony chords in the "Centers 2" material, and Sofia and Ole Henrik made this choice in rehearsal.

(8) Sofia, OHM, David continues improvisation

David still lays off.

(9) Clouds tutti

Both behavioral and textural and indeterminate because of the high tempo. A tutti Clouds section. This sounds quite similar to the one on the "Evolving Patterns" CD, recorded

more than a year before. I find this quite interesting, as it may mean that this Li is either easy to remember, or the musicians have certain ways of playing this material that feel natural. It may also be because of its high tempo.

(10) Duo Martin/Raymond enter, coming out of clouds.

The duo comes out of the clouds, so to speak, with a disjointed, angular improvisation on sopranino sax and drums. They are listening and conversing with each other, but also responding to the preceding texture, and the preceding sections.

PAGE 2:

(1) Li-groups

We decided to let the improvising trio wait, and come in after a little while. The different Li work well together, resulting in a varied, open landscape. This way of restricting people's material has proven quite successful, I think. Everyone knows their assignments and possible referents, but they can still listen and make the materials fit and contribute to the overall sound and form of the music. The free improvisers are also influenced by the Li being played by the others, and can choose to contrast them or play along with them.

(2) AudioLi 2+Dag Erik/Martin

The only instruction here was to play along with the AudioLi. In rehearsal we also decided that vibes should join in at some point.

(3) Tutti enter with Centers 2. Note to noise.

Again the centers pitch circle enters, this time the instruction was to make it a bit more rhythmic, taking over the role of the AudioLi. I'm not sure it was successful, and it has a more held quality. Maybe this is because the note heads were whole notes?

Dag Erik plays a slow pulse on the bass drum, which we rehearsed in advance. We skipped note to noise here, which I think was a bad idea in hindsight.

(4) Sofia Solo

(5) The rest enter with Silence, spots, clouds, dunes, or follow sofia

Another Li-grouping, this time tutti under the soloist Sofia in stead of several groups. I tried to make it even more clear by limiting the amount of Li. I removed Clouds from the list of possibles, but I think removing one more of them would have been even better. It feels a bit unclear now, with too many choices to make.

(6) Breaking, two groups

This Li was simplified, removing the instruction to change your sound into a new one. I also assigned a leader to each group. Percussion (Dag Erik) led group 1 and Emilio led group two, starting each sound.

There was also an instruction to make the gaps between sounds smaller and smaller, ending up in an almost continuous, changing sound.

The game of having to make a split second decision about how to imitate the sound of the leader gives a nice energy.

(7) AudioLi 3 + Ripples in strings/winds

This section was cued by me, just before the AudioLi started. An additional instruction to the drums to replace the AudioLi after a while was given

(8) Drums enter

(9) Sofia + OHM + Bjørnar enter with dunes, then improvisation.

The rest: Repetitive sequence of ripples -> dunes->silence

(10) Sofia, OHM, Bjørnar tacet

(11) Trio Raymond, David, Per improvisation

This trio was very open and slow. We began with pizzicato bass, but I can hear myself changing to arco very quickly, maybe due to the fact that guitar and drums changed into a quite noisy section very quickly. At a certain point, I think I hear Raymond pushing us to leave the form of phrases of similar length.

(12) The rest enter, flocking from low/mid to high register

This section was removed, and we went straight into Ole Henrik Moe solo.

(13) Solo Ole Henrik

(14) The rest enter with Flocking, following OHM

It was not easy to follow the violin, as he deliberately made extreme changes in dynamics, register and timbre. This might have been a good idea though, as it may have sounded too obvious if we were able to follow him completely. This way it sounds more interesting and multi-dimensional to me.

(15) Per solo+ gradual Li in the rest: Silence, Spots, Ripples, Center (follow)

I enter with long notes, consciously trying to contrast the tempo and intensity of the preceeding part. I was feeling some fatigue here, and struggling to go into a "soloist" mindset.

PAGE 3:

(1) Sofia+Morten play an improvised version of their duo piece from Li 2 (Kongsberg). Per, David, OHM, Dag Erik enter after a while (Lines-material?)

This piece is played from memory, and is supposed to be a version of the duo from Li 2 (Kongsberg). The interesting thing is that this was last played some months before, and both Sofia and Morten had played a lot of different music since then, making it hard to remember, especially the clarinet part. (The vocals part is identical to the introduction of Li

3). Even if Sofia obviously remembers some of the vocal part, the word "improvised" in the instructions seems to make her vary the melody, making her own interpretation of what she remembers more different from the original.

Morten's playing seems to be more related to what Sofia does, not so much what he remembers. Before the concert he had remembered more than in rehearsal, but I told him to not think too much about it, but rather play more freely. The idea of playing something you barely remember is interesting to me, and I think it adds a very different approach, very much in the field between something predetermined and improvised. The old melody becomes a referent, in a way that changes the focus.

(2) The rest enter with Dunes/Waves/Silence. The others join in.

I left Dunes in because I wanted a more complex, layered sound. However, it could have been even more extreme dynamically. I hear the spectral music influence on our improvisation here, and some of the chords remind me of the notated spectral chords in Li 2 (KB).

This is either because people remember them or because they hear something similar to what we have done before. Maybe they also make the same choices when they are reacting to what the others do, resulting in a chain reaction, which in turns yields similar results as earlier improvisations/spectral pitch pieces

(3) Trio Dag Erik, Bjørnar, Emilio improvisation 3 min.

Expressive. More Gugak sounding than anything I would have written.

(4) Quartet Lotte, Per, Raymond, David. Improvised.

We start out softly, due to the violent ending of the previous section, but quite quickly move to a higher dynamic level. This is the closest we get to the sound of "free jazz" in this piece, with high energy, a loud sax, pizzicato bass and ride cymbal, but it's constantly broken up and changed.

(5) The rest join with Crystallization.

The rest of the ensemble enter, with chaotic, fluid, moving contributions, which are then turned into a held, fairly static chord.

(6) Angles tutti. Note to noise.

On my cue, we go into the Angles material. The sound changes from fairly clear pitches (Note) to noise in the ensemble.

(7) Various Li on cue. Groups of two and two. Back and forth between Li and free improvisation or silence.

On my cue we go into this section, where two and two musicians focus on one Li. There is also the option to improvise.

I start a low bass note to signal that we are moving into (8), Mass.

(8) Tutti: Mass or Clouds

The idea here is a static mass of sound. You also have the option to play Clouds material. It sounds more extatic than static, maybe.

(9) AudioLi 4

Tacet, then follow the electronics, using Centers 2-pitches, quotes from the start or free pitches. 4 min, make ending.

The first piece for large ensemble (Earwaves 2014) starts with this group of pitches and the last concert (Earwaves 2017) ends with them, going full circle.

It sounds like the musicians are a little afraid to play here, maybe the AudioLi should have been a bit higher in volume. The Audioli is a recording of five of the musicians playing the Li centers 2 in advance. The recording has been altered electronically by me, using ring modulation.

This section illustrates how the form being composed differs from an improvised form: The instruction is to play for the whole duration of four minutes. If we were to improvise the section, I don't think we would choose to keep playing for that long, but rather end after a minute or two. This four minute coda would seem unnecessarily long to me if we were improvising. I might still be, but at least we feel like there is a reason to do it. We also have a common experience of what this feels like, which might allow us to use the same device in an improvised way at a later point.

8. Epilogue

Throughout this text I have described my process of composing with an ensemble of improvisers, the Per Zanussi Ensemble. I have shown how my process and methods have changed during the course of my work, and how I have finally found a method of composition that I feel works well for my ensemble. This approach helps me compose by working with improvisers, and my compositions help improvisers play freely in a large ensemble. Right now it feels like an approach which I can use for many years to come, but I am certain that it will continue to develop in the future.

An important difference between doing this as a purely musical project, in the context of artistic research, is that I have shown *how* I have developed my toolbox, methods and thinking behind the music, and I believe that it can be of use to others working within my field.

The project explores my own personal methods and approach to the music, drawing on many different sources, and creating a personal synthesis of these, resulting in a musical hybrid. The bulk of the project's contribution to the field is embedded in the music, in the scores and in the recordings.

I think I have contributed the following knowledge to my field:

- A flexible, personal method for composing/notating and rehearsing for improvising ensembles which can be used by others, allowing a large ensemble to listen and function in a way that resembles smaller improvising ensembles. I have also shown how I think my compositional methods create a culture/identity within the ensemble.

- A body of work which has some originality.

- Articulated and described tacit and explicit knowledge around my process of composing, rehearsing and performing with a large ensemble of improvisers, which hopefully can be of use to other researchers and performers in my field.

The work has been a constant search for a balance between two ways of composing, and I believe I have found a possible way for improvising musicians to relate to my predetermined material in a way that feels comfortable for both them and myself. This is an ongoing, constant search, but I feel good about the results so far.

My methods for composition and notation have developed significantly throughout the fellowship period, and I have developed my aesthetics, both as an improviser and a composer. My improvisations are influenced more by my composition methods than I had anticipated, with inspiration from other sources such as Gugak, and I have embraced a more open way of composing.

I have consciously tried to find a way of unifying two sides of my musical personality, and I feel like I have succeeded on many levels. I see a possibility for a clearer balance between the spontaneous and the predetermined within my practice, and I hope this development of myself and the ensemble can be an example for others to tear down some musical walls within themselves in the future.

Per Zanussi, Oslo, 04.15.2017

The Pool of Musicians

Here is a list of the wonderful musicians, in alphabetical order, who have been involved in the project at some point.

Andre Roligheten

Bjørnar Habbestad

Dag Erik Knedal Andersen

David Stackenäs

Eivind N Lønning

Emilio Gordoa

Erik Carlsson

Henrik Nørstebø

John Chantler

Jon Hegre

Kjetil Møster

Lotte Anker

Magda Mayas

Martin Kuchen

Morten Barrikmo

Morten J. Olsen

Ole Henrik Moe

Paul Hession

Per Oddvar Johansen

Raymond Strid

Rolf-Erik Nystrøm

Sofia Jernberg

Stine J. Motland

Ståle L Solberg

Tony Buck

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