

Obtaining a unique sound in improvised sampling music using the iPad.

Improvisational techniques with the iPad in interplay with other conventional instruments.

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Preface

This dissertation focuses on the techniques that I have developed during my years at the University of Agder using the iPad as a sampling tool. This is an in-depth study of the techniques and their employment in a musical constellation with other conventional instruments during improvisation.

Firstly, I want to thank prof. Knut Tønsberg for academic guidance, asking the questions that needed asking and for motivating me when I felt that my dissertation was not relevant in any way. Secondly, I want to thank Andreas W. Røshol, master student in electronic music at UiA and dear friend, for constructive discussions about the dissertation, discussing what topics are interesting to talk about during the research and for good talks at UiA, at home and at Charlies. Also, a big thank you to prof. Bjørn Ole Rasch for guiding me towards a relevant topic in the initial stages of my research. A special thank you to prof. Jan Bang for introducing me to the concept of live sampling, and for being a great teacher, mentor and friend throughout all of my years attending UiA. Thank you to Auver Gaaren and Jaran Gustavson for participating in the research and providing me with great discussions during the research and thank you for great comradeship!

Lastly, I want to thank family and friends for being there for me for all these years, for bearing with me when I have been occupied working on both this research and on previous projects! Thank you!

Ole Andreas Undhjem Hagelia

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Abstract - English

This dissertation seeks to explore the techniques that has developed in the live sampling community that surrounds the University of Agder from the perspective of a sampler using the iPad and the app called Samplr. The research is meant to explore techniques that have only been an oral tradition for us students, and to get some of these techniques for improvisation with sampling written down.

The concept of live sampling is by definition a musical discussion with other more conventional instruments. Therefore, this research has explored improvisation in a studio setting with a bass guitarist and a keyboardist together with the researcher himself on sampling.

We found that the techniques could often feel too limiting, but the process of researching this has been a valuable one, giving us new tools and new thoughts to bring with us to later improvisations.

Sammendrag - Norsk

Denne oppgaven ønsker å utforske teknikkene som har utviklet seg i samplingskulturen som har oppstått ved Universitetet i Agder fra perspektivet til en sampler som bruker iPad og appen Samplr. Forskningen er ment å undersøke teknikker som bare har vært en muntlig tradisjon for studentene her, og å få skrevet noen av disse teknikkene for improvisasjon med sampling ned. Konseptet med live sampling er per definisjon en musikalsk diskusjon med andre mer konvensjonelle instrumenter. Derfor har denne undersøkelsen utforsket improvisasjon i en studiosituasjon med en bassgitarist og en keyboardist sammen med forskeren selv på sampling.

Vi fant at teknikkene ofte kunne virke for begrensende for improvisasjonen, men prosessen med å undersøke dette har vært verdifull, og har gitt oss nye verktøy og nye tanker å bringe med oss til senere improvisasjoner.

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Background for field of study

This dissertation is based on thoughts revolving around improvisational techniques in free improvisational music. To clarify things, and to put it in a more understandable context, I will focus on improvised sampling in the context of interplay with other more conventional instruments as seen from a electronically based live sampler. This situation is often referred to as live sampling and is what I have based my own musical work off of the last four years. Now I want to perform a study of my own methods and try to put my own techniques to the test and into text. While I do call them my techniques, they are essentially techniques and traditions that has been used at the department of popular music at UiA for some time now. To do this I want to first research the theme of improvisation and techniques as ground work, and then conduct an action research on my own playstyle in interplay with more traditional instrumentalists. To do this I need to have other musicians as sampling material. For this project I have therefore invited bassist Jaran Gustavson and keyboardist Auver Gaaren to join me in the studio, both are musicians from the master's programme at UiA.

In this dissertation I will take a look into improvisational techniques from the perspective of a sample-based musician in interplay with other conventional instruments, and so the research will be focused on my own practice as a sampler. To understand what my field in music, and my perspective on things during the research, there is a need to explain both my musical background and what led to my discovery of the iPad as a musical instrument

My first encounter with live remix was after being introduced to improvised sampling and the concept of live remix by Professor Jan Bang in my first year at University of Agder.

Jan Bang is a professor at the University. He has since the 1990's been a renowned producer and has been one of the leading artists in developing the concept of live remix. (University of Agder, 2014)

At first, I felt that I could not express myself fully with the laptop and its controllers, but I was intrigued by the concept. Because of this, and my interest in testing new programs and technical solutions for my rig, I looked into apps on the iPad that could be used as musical tools in conjunction with my already existing laptop rig. After many weeks of looking into new apps I found an app called Samplr. This app has since been the centrepiece of the tools I use for musical expression.

Samplr is made up of a few different tools built into one program. Like when you buy a synthesizer, you buy a box with some parameters that can be controlled by the musician, but this is limited. With a DAW and a soft synth, you have more possibilities, almost limitless. But using an instrument or tool with limitations can often stimulate creativity in the performer. And this is the case with Samplr. An app that does a few things but do them in a way that inspires to experiment with them. Further into this text is a technical description of Samplr. Together with the basic information of how it works, I will also try to describe some of the techniques that I use when approaching different musical settings. Both technical techniques and mindsets.

After about a year of using Samplr as the centrepiece of my rig I had a good grasp of the tools it offered, but I also started to understand the limitations of it as a musical tool. I started questioning whether or not my sound was the sound of me as an artist, or if my sound was just the sound that Samplr would have made regardless of who played it. This problem was

part of the reason I wanted to research techniques using Samplr in the first place.

After years of improvisation with all kinds of instruments and people, I have many thoughts on what instruments are easy to sample and which are harder to get sampling material from. This has changed over the years after exposure and limitations, but I still have some opinions regarding the question of instrumentation and sampleability. Often, the most important part is who is playing the instrument, and if we have a connection.

The first few years I did sampling, I thought long stretched out chords from chordal instruments were the easiest to resample into something interesting. My teacher, Jan Bang, mentioned early on that small pieces of sound that I hardly understood how to work with could also have musical quality. And even more so since sampling, in my eyes, isn't about replicating musical instruments, but to use the sound in a different way than what it was used for originally. Like the ending of a vocalist's pronunciation of a word often contained an airy sound that could be percussive, or how drums could be something chordal. This was a concept that I didn't really understand at the time, and just thought it was part of the limitations of my sampling instrument. So, with this conclusion in my mind I continued to hold on to only ambient-and more pad-kind of sounds while improvising.

As I was introduced to new constellations of instruments, I think myself that I have developed a more open mindedness towards instruments and their sampleability. One concert that really challenged me was when the drummers at my university was going to have what they called a drum night at a local venue. They called me on the same day of the concert and asked if I could do live sampling of them, and then do a live remix

as an intermission during their changeovers. It was not until I showed up to the venue that I understood that it would be no other instruments other than drums. In a way this challenge was difficult, but it was also a breath of fresh air to not work with chordal textures, but with rhythm. And even if it was something totally new I approached it with the techniques that I have already developed. This resulted in something new, yet familiar technique-wise. Throughout the years I have had a few of these experiences where I am presented a difficult task which I have to try to find a solution to, with varying results, but always rewarding in experience. Even though something doesn't work together musically at that moment, it can become a tool for later usage.

So, with these thoughts on sampling and own practice I wanted to define my sound using the iPad and the app Samplr as my instrument, and to write down techniques that I have thought about for a long time down on paper. And for sampling there is one crucial component you cannot be without, a sampling victim. For this project I have therefore contacted bassist Jaran Gustavson and keyboardist Auver Gaaren, both of whom I have played with before in many band projects. One of the most noteworthy is the band project x32 where we, together with drummer Tobias Solbakk, explore improvisations based on motifs and musical ideas from one of us, or out of ideas developed through improvising. For now, I will work only with Gustavson and Gaaren and do a recording in the studio based on concepts of improvisation while discussing both the musicality of the techniques, and the techniques themselves.

About me

I have been doing live improvisation with electronics and sampling for five years, and for the four last of them I have had it as my main focus and occupation. I have been involved with music creation since the age of 15 and started playing the bass guitar around that time. During these years I also attended a high school which focused on media creation and communication. Here I was introduced to the recording studio and was from the age of 15 to 20 determined that I was going to be a studio technician. This was also the case when I applied to UiA's program with laptop as main instrument.

After my application was approved and the first semester had started, I quickly understood that the musical environment at school demanded something more of us than being purely studio technicians. We were expected to participate in band practice, and many of us had either specialised as technicians or as producers. Because of this demand we had to adapt and find our place in a band setting. When I look back at these first years at UiA, it stands out as a clear reason for why I have ended up doing sampling and improvisation. The fact that I was attending a faculty of performing arts was pushing us all to find ways to do electronics live. And I know that if I had not had this underlying factor pushing me to explore the live aspect of electronic music I would not have discovered neither Samplr nor the live sampling community at all.

So, with this as a basis I have explored different uses for sampling and improvisations with a minimalistic rig. With only an iPad, a sound card and a mixer I have played many concerts, done sound installations, soundtracks for film projects and performed live with dancers. Maybe the biggest moment in my musical career would be playing at the Punkt festival in Kristiansand in 2017, where I played the first remix concert

that year solo, and then was asked to play at the main stage the day after.

Other projects I have done include film scores for film students' projects, music and sound production for film for professional dancers, live music for dance and stage art with dancers and actors, sound installations produced on commission by the local municipality. I also got the chance to do an improvised take on the song 'Nu Quarto 'E Luna by the Italian pianist Stefano Bollani, which was later added in the final mix and released by Universal Music Italia.

Terminology of words

As defined by Merriam-Webster, the word rig most likely stems from the nautical term rigging. Definition of rig: to fit out with rigging. Rig a ship. To furnish with special gear.

Sampleability is a word used in this dissertation describing the usability of a sample. It is not defined in any dictionary I have found, but it is a term that has been used in the musical sphere surrounding UiA.

Signal-chain according to Wikipedia is a term used in signal processing and mixed-signal system design to describe a series of signal-conditioning electronic components that receive input (data acquired from sampling either real-time phenomena or from stored data) in tandem, with the output of one portion of the chain supplying input to the next.

Inter-App Audio allows audio apps that are instruments, effects, or generators to publish an output object which can be used by other audio apps.

DAW. A term usually used to describe a PC or a Macintosh Computer that is used primarily for Music Creation and Recording, Mixing, and Mastering Audio Files. Audiobus is an app used to route apps' audio inside the iOS environment to other apps.

Qualitative as defined by Merriam-Webster: of, relating to, or involving quality or kind.

Research questions

The research done are focusing on two research questions. Both have inspired the title of this dissertation. "Obtaining a unique sound in improvised sampling music using the iPad," which the title focuses on the following research question:

How can I obtain a unique sound using the app Samplr on the iPad, and what tools do I bring with me that help creating a unique sound?

While the title only mentions the iPad the improvised sampling music part is the main focus of the study and from this derives the fact that in this type of situation of music expression there is near endless possibilities of expansion through processing of the audio emitted from the iPad. Through discussions with other students and teachers at the university we have coined a term that we have called situational disposition of tools, which points to the selection of which tools to bring to an improvisation. In the same way that a guitarist chooses effect pedals, electronic musicians chooses which tools to take with them to achieve a desired sound, result or flexibility. So, in conclusion the title gives this research the task of expanding on techniques that are both technical choices and techniques that are unique to a sampler's perspective.

The second research question inspired the sub-title for this dissertation. "Improvisational techniques with the iPad in interplay with other conventional instruments." This derived from the research question which is:

How are the techniques that has developed in the live sampling and improvisational scene at the University of Agder applicable in a band setting?

This question is worded in this way to give a clear demarcation of what the musical constellation is, and as an indicator of what musical sphere and traditions the techniques come from. The question also indicates that this is not about just the sampler, but the sampler as part of a live sampling tradition which is by definition an interplay between more traditional instruments and an electronically based sampler.

Demarcation

When conducting a research as this focusing on both techniques and interplay with musicians in a live sampling situation there are many interesting aspects that has the potential for academic exploration. For the research done in this dissertation there is a need for demarcation to limit the field of research.

As a researcher I have therefore chosen not to focus on what happens in the brain of an improviser. While this is a subject that is relevant, it is not the purpose of this dissertation to explain why and how an improvisation happens within a neuroscience field of research.

The action research's different cycles all happened during one day at the studio. This was an active choice in consideration of time constraints for the other musicians' availability, the time it takes to set up everything for a studio recording, and to have the musicians being able to focus on the techniques presented to them in context of each other.

About the data collection method applied, I have chosen to keep it as simple as possible. I have used audio recordings as

part of the collection of data method together with writing a log of my own thoughts from a researcher's perspective. One of the most reliable methods in this research has been the reflection part of the research where I had conversations with the other participants in the research. In this part of the data collection I was being aware of my role as a researcher and tried to only ask open questions to get an honest opinion from the other musicians participating.

Other methods I could have applied include filming the whole process to collect data on the interaction with the other musicians, but as mentioned I did not want to focus on the visual communication of the techniques used. After conducting the research, the other musicians mentioned aspects of visual nature that they would want to try the next time we played together, in such a setting as a concert that allows for a purer energy for expression of improvisational energy.

About the rig

My total rig is made up of many pieces of equipment that can be used stand-alone or together. From most important to least important this includes; an iPad with the app Samplr, an audio interface called iTrack Dock from Focusrite that gives my iPad 1/4-inch jack stereo input and output, a Yamaha mixer with routing to a separate group out channel for sampling, a MacBook Pro with Ableton Live, a Novation Launch Control midi controller and a Novation Circuit groove box. These are the things that I use most frequently, but I also have contact microphones, hydrophones and a few synthesizers which I can use if the situation calls for it. For the situational disposition of tools, these are all part of the process, some get used more often than others.

Samplr

My instrument is an audio sampler in a software format. I use an app for the Apple iPad called Samplr. It is a fully operational sampling tool with different playback options. It's signal flow works like any other recording tool, but it has other tools for playback which makes it unique.



Picture: Samplr with the playback mode Looper.

It's main components consists of the six sample banks at the bottom of the screen, the play area which displays the waveform of the audio from the selected sample bank, three to four sliders on the left side of the screen that controls volume of the selected sample and other parameters like ADSR depending on the selected play mode, a pitch control in the middle of the screen, the red dot just above the play area is a movement recorder, the infinity button to the right of the movement recorder is a hold button which holds the current

touch points at the point that they are placed. In the upper right corner there are five effects that only affect the chosen sample bank. These effects include distortion, filter, amplitude modulator, feedback delay and reverb. Over the pitch control is the play mode select area. This area chooses how the waveform reacts to touch.

The first control is blue and is called Slicer. With this tool you can place down markers on the play area that marks a slice. The slices are sections of the audio that when triggered play from the marks starting point and to the end, or until there is a new marker. This slices the sample up into sections which then can be triggered by touch. I don't use Slicer much, but it can be of interest in some cases.

The next play mode is called Looper. Touching two points in the play area gives Samplr a start and a stop point which is looped. These points can then be moved in real-time for long pad like sounds or moved in close for shorter rhythmical or noisy sounds. In the parameters section there now appears a button that makes the loop play back and forth instead of only looping from start till finish. In my opinion this is the most useful and musical play mode because of its interactivity and usability in a live setting.

The next play mode is called Bow. Bow does kind of the same thing as Looper, but you only need to use one finger, and the start and stop points are defined by a set distance around the one finger used to play. When choosing Bow there appears a new slider in the parameters area which can be used to shorten or lengthen the distance between start and stop of Bow. I think of Bow as the granulator mode of Samplr. It's an easy way to play a sustained version of a sample, for example a guitar chord can be held for a longer duration than its original duration.

To the right of Bow is a play mode called Tape+Scratch. Tape+Scratch turns the play area into a tape that plays the audio in different pitches depending on how far from the middle the finger is placed. The middle represents stop, the further the finger is moved right the faster the audio is played, and the further the finger is moved left of the middle makes the audio play backwards with increased speed. The speed, as mentioned above, also makes the pitch go up or down.

The next play mode is called Arpeggiator and can play from up to ten different selected areas on the sample in sequence. In the slider area with the ADSR controls there is now a button that changes the direction the arp plays, and the speed of the arp. Also manipulating the decay can give interesting results, going from really short rhythmical sequences to sequences made up of chords making a more abstract type of sound.

Second to last is the Keyboard play mode. For me this is among the least used play modes. It displays a keyboard as an overlay over the waveform that plays the sample from start till finish or until the finger is released. The reason I almost never use this play mode is because of how unmusical it feels. Playing keys on a touch screen is not intuitive enough in my opinion for it to function in its intended fashion. Also, when playing a sample in Keyboard mode, it does not pitch itself correctly. The key C only represents the sample in its unaltered state and going further up on the keyboard only pitches the sample according to the key pressed. So, for it to be usable musically the sample needs to be a C, either when recorded or pitched in the pitch area of Samplr before being played in Keyboard.

The last play mode is Loop Player. I don't really use this play mode either, though this play mode does have its uses. It plays the selected sample from beginning to end and loops it

afterwards. Because of its limited use I almost always just use Looper instead because I know Looper better and in my opinion Looper is more versatile.

When pressing the red button at the top of the screen (see fig 1 Samplr) it allows the user to «Record Input» or «Record Mix». When choosing «Record Mix» it records all of the output audio that the app plays into the selected sample bank. The concept of «Record Mix» is great, but after trying to record a session into its own sample bank it seems that there is a problem with the iPads RAM using Samplr. But to record a session there are workarounds using either other apps on the iPad itself to tap into the audio internally or using external gear.

Audio interface

To get low-noise inputs and outputs to and from the iPad there are audio interfaces that can be used with the iPad. After discovering Samplr I saw the need for an audio interface dedicated to the iPad, and after researching what types of interfaces was available I found one called Focusrite iTrack Dock. The iTrack Dock is a docking station as well as an audio interface, so it charges the iPad as well as giving it a stereo jack-output and stereo jack-input. It's also usable with most iPads despite the difference in size because of a slideable lightning connector. Even so it works arguably best with an iPad mini-size iPads because of their size. The iPad minis fit well within the formfactor of the docking itself so that it doesn't stick out on the sides and it all looks like one box instead of a box with an iPad on top. Other audio interfaces available at this time are lacking in my opinion when considering both the angle that the dock places the iPad in for a more ergonomic approach, and connectivity. Also, a feature that is most underused by me, is the USB connection on the back of the dock. This gives the iPad a way to connect to midi-controllers like keyboards or the Novation Launch Control. But because of how Samplr is built, I have not found a way to control any parameters inside Samplr by using external gear. There are ways to send Samplr through other apps on the same iPad and then control these apps with external controllers, but because my iPad is an iPad mini 2 from 2013, it lacks the processing power to do this confidently. Therefore, I let the iPad focus on only Samplr to not risk any crashes or overheating in a live setting.

The mixer

While I do have all the devices needed to send and receive audio, I also need something to funnel and redirect the audio from a source and into the iPad efficiently and fast. For this task I use a dedicated mixer with the possibility of routing inputs to either the main mix or to a separate group track. I therefore acquired a Yamaha MG12Xu mixer. It can route up to 8 different audio inputs, 4 of whom are stereo line-inputs, out to a separate group track that I can then send to the stereo input of the iPad. Usually I save one of the channel strips for the iPad itself to go through the main output and into the sound engineer's mixer.

Having a dedicated mixer with channel strips containing the different instruments of the musicians I play with on separate channel strips are a huge help considering live sampling. Say the keyboardist plays something that I instantly want to sample I just move the fader of the track containing the signal from the keyboard up and the audio is instantly sent to the input of my iPad.

Processing of own audio

From a modular setup perspective, the setup with only the iPad, the audio interface and the mixer could be enough, but it can also expand further. The first two years that I used Samplr, I only used this basic setup. After this there was a need and a demand for expansion for fear of stagnation. I had used a computer with Ableton Live before, therefore it was natural for me to incorporate this into my signal chain again. Instead of sending the output from the iPad directly into the mixer I send it into another audio interface connected to my MacBook Pro running Ableton Live. From here I send the signal from Samplr to its own track, apply effects on said track and then send it out from the computer, through the audio interface and then into the same channel strip that I used for the iPad on the mixer before. This gives the setup a much richer environment for processing of the audio. As mentioned earlier in the text this could be done inside the iPad itself using an app called Audiobus to send the audio from Samplr through a dedicated reverb or delay app before sending it out of the iPad, but as mentioned before the processing power of the iPad I use currently is limited. Because of this it works perfectly fine outsourcing the process into a computer with more processing power dedicated to manipulating the audio.

Another factor is connectivity. As mentioned, according to my knowledge, Samplr does not have interconnectivity with any midi-controllers. So, to give a more muscular approach to manipulating the audio I have chosen to use the Novation Launch Control to control the different parameters of the plugins I use in Ableton to process the audio. The Launch Control is a midi-controller with 16 knobs and 8 pads that can be midi-mapped to anything inside Ableton. It can also have up to 8 different user profiles, so essentially, I can map 64 pads and 128 knobs to anything I need inside Ableton, though usually I only use 8 knobs to control how much of the signal is sent through the effect. And while I have also said that

Samplr has five effects built in that are easy to use and inspire creativity in how playable they are, they are crude and there are many effects outside Samplr that outperform them when it comes down to quality.

Other equipment of interest

The equipment in this section is equipment I rarely use but are still part of what I would call my situational rig. Among these components is a groove box called Novation Circuit. It has two basic synth engines and four drum slots that can handle imported samples. This whole system is supposed to be a basic representation of something like a DAW fitted into a stand-alone box for easy access to something that can inspire creativity.

The way I use the Circuit is to trigger samples that are part of a more set composition rather than the improvisational settings that I usually do. In the chapter describing situational disposition of tools I will mention an example where I use this, and how the modular nature of the electronic musician can be useful.

The last part of my rig that is relevant is a stereo pair of contact microphones and a hydrophone. While microphones and other sources of audio can be described as something outside of the samplers control, I include these as part of my rig because of its uniqueness and limited usage. The contact microphones are a type of microphone that picks up sound through other mediums than air, to be used in contact with the source of sound or with a resonating or conducting surface (Merriam-Webster, n.d.). The contact microphones are used as a source of audio when the nature of the source of audio isn't really a musician, but for example placing a contact microphone on the floor when a dancer moves over the

dancefloor. I will expand further on this as well in the next chapter.

Describing situational disposition of tools

After doing many different projects with vastly different demands of me, I have made up some thoughts on both techniques and expansion of rig. Expansion of rig is something I have defined as the need of tools, or the need of adaptability, based on the situation I'm facing. As an example, I want to use one of the projects I have done together with a dancer I have done some stage work with in the past. I think this is relevant to show a broader use of my musical tools than what I describe in the actual research phase of this dissertation, and to give a better understanding of how an electronics-based musician has to adapt to a variety of situations.

When facing different situations, there is always different expectations set by the people I'm working with. In the spring of 2017 I got contacted by professional dancer Julie Rasmussen who had an idea for a stage performance piece. When we first met and talked about the project she had a vision of what she wanted, and I gave her an impression of the things I could do with the tools that I use.

«A two-week research period at Aladdin Blå spring 2017, where we explored Norwegian identity and culture, through own experience and the perception from the outside. »

This is the description we used for the project, and it sums it up well. We wanted to create a performance that reflects the Norwegian culture in such a way that even Norwegians can get a glimpse of what Norwegian culture looks like from the outside. Without describing the whole project in detail, this is the basis of it.

So, for this project I had to think of the ideas that Rasmussen had in mind, and then pick the tools I had access to to try and realize these ideas. For this project we needed samples that had a fixed length and could be triggered easily. I also needed to be flexible musically to match her movements which was more based on mindsets of movements rather than fixed steps. So, for this project I used both my iPad to meet the need for flexibility and the Novation Circuit to load predefined samples without having to use a computer. I also used a long jack cable for the Circuit to be able to use it despite it being placed further in front of the stage than the rest of my equipment. Then I routed all of this into my mixer with which I manipulated the audio with on-board effects. This gave me the flexibility I needed for the role I was put in, to be able to be on stage together with the other performer and not be as stationary as I am usually.

While it may sound like an obvious thing to use a long jack cable if you want to use your gear further away from the rest of the rig, but I would say that despite it being a simple example it is a perfect example of all the small things that an electronics-based musician must think of. I will not claim that this is a problem for all electronics-based musicians, but if the goal is to do different types of sound related projects like sound installations and stage performances this is relevant. To experiment and think of different ways to be a musician is a natural reaction to stagnation.

Another example of situational disposition of tools is the tools used during the research period of this dissertation. For this project I used the rig I would call the extended musical Samplr-rig. This rig includes the iPad with Samplr, the iTrack dock, a mixer, a MacBook Pro with Ableton Live, an audio interface and the Novation Launch Control. With this rig I can funnel all the other sources of audio into the iPad,

manipulate the audio in Samplr, send the manipulated audio through Ableton and further manipulate the audio in Ableton before finally sending it out through the mixer. This is currently the most complete setup I have for improvisation in a musical constellation.

For more experimental dispositions of tools I can use different recording techniques with contact microphones. This technique was used in another project with Rasmussen. The contact microphones were firmly attached to the stage floor, and during the performance I would send the signal through my mixer and add basic effects like reverb. When using the effects actively this created a really interesting reaction in which even the smallest step on stage was magnified and presented to the audience as part of the performance in a sonic way.

Improvisational sampling techniques

The techniques I'm mentioning here will be techniques that I have developed together in conversations and reflections together with my fellow students at the conservatory and with my teachers.

Own techniques

My own techniques are the techniques that I have developed through my years at the University of Agder together with my teachers and co-students. These are techniques that are more of an oral tradition in my opinion. While the first years at the university introduced us to basic concepts of music and composition, the most valuable learning has been through interplay and reflections with the people I have played with. And since I was part of the first class that had laptop as their main instrument I would say many of the techniques that developed at the school at my time was both unique to the

school and free of earlier traditions. We had many occasions where exploration of sound was more in focus than trying to replicate a technique. We did however receive guidance from our teachers in what things sounded interesting sonically, and was guided and pushed to explore new ways of thinking of sound sonically. So, the following techniques that I'm mentioning under the title "Own techniques" are what I would call a collective culture of improvisational techniques that has developed at the University of Agder's Faculty of Fine Arts. Of course these are my thoughts on what the tradition has become, and only my attempt to note down some of these techniques.

The first technique I will describe is more of a mental approach to sampling. In my opinion there are two levels of live improvisation with samples, the live remix and the live sampling. Live remix I would describe as the act of sampling a source which you then do a remix of just as the sampled source is done playing. Live sampling is when the source you sample is not finished playing before you play the samples. These two as concepts often have a very clear divide between them. A live remix often is presented as a separate concert happening right after the first concert. A live sampling setting is more of an interplay between the sampler and the sampled instruments.

The line between them can seem clear, but they can also happen at the same time. For example, a live remix can have live sampling within it if there are other musicians on stage together with the sampler, and the basis of the remix is the previous concert, but both the sampler and the musicians does not limit themselves to samples only from the first concert.

The reason I define these as two levels, or two opposites is because of the mental approach when sampling. The sampler need

to think of how fast they want to react to the sound. Do they manipulate only the audio in a through-type of way, which is the most instantaneous way, or do they press record, manipulate and them after careful planning place it in the sonic space.

This all leads to my first technique which revolves around the most instantaneous approach. Samplr can't manipulate audio in an instant, but the person sampling can record, manipulate and play the audio as fast as they can. This makes it more hands on, and in my experience makes the other musician more aware of what the sampler is doing as well as their own play. The technique can create moments of so-called "battling", or a reaction based instantaneous composition.

The second technique I want to expand upon is a type of sonic placement. This can apply to many instruments outside of sampling as well, but as a sampler there are no limits in where you can place yourself sonically. With sampling it is possible to pitch and alter the audio to take up the space outside of the range of the other instruments. For example, playing with a trumpetist the trumpet takes up space from mid to high mid, so there is space both over and under in the spectrum. The sampler can then give their samples a sub function or go even higher and be what I would call an airy comment on what the trumpet is playing.

Another factor to consider in-between these two techniques is the rhythmical aspect. This is what I want to call the third technique. While in the above example with a trumpetist it could be interesting to take a sub function, this often implies having a sustained bass that often anchors the whole improvisation. While it can be an interesting tool to use when needed, I often fell that it limits the improvisation. Especially so if it all gets anchored early on. A solution to

this can be to focus on short rhythmical placements of sound. Even if the sampler only focuses on sub frequencies this can be a way to do something different. Short low frequency sounds made as small comments from the earlier sonic movement made by another instrument can be effect full in that it is unusual for the low frequency spectrum to only be touched upon.

Now for techniques especially focused on Samplr there are a couple of limitations in the software itself, but these can also instigate exploration and creativity. I will also mention that some of these techniques might seem unoriginal and obvious when seen in context of other instruments. To counter this, I will say that after researching Samplr for all of the years I have used it I have yet to find a definitive quide on how to use Samplr. Like any other instrument there are different ways to approach them, but other conventional instruments have both traditions and cultural heritage affecting the musician. Samplr has not been around long enough for there to have occurred any traditions or knowledge that is demanded of the musician playing it. Therefore, I would argue that even the next example which I would describe as more of an explanation of how a button works than technique is still considered a technique. There are many small buttons and sliders inside Samplr that would have been obvious on say a synthesizer that still are interesting and need explaining in Samplr. The next example is something I had to discover myself after experiencing stagnation with my sampling.

This easy example is working with the Arpeggiator in Samplr. Let us say there is placed down four points that are arpeggiated. To make this more interesting without manipulating the audio later in the signal chain the sampler can work with the on-board effects and the ADSR-settings. Especially interesting is the slider which controls the sustain of each point played. When turned to its lowest value

the sound becomes so short that it is mostly resembling something from a drum machine, even resembling a metronome. Now to make this interesting musically one can increase the value of the sustain slider to gradually change the sound from a metronome to chords, or even evolve it into more of a sustained pad type of sound using the attack slider.

Another technique I have been experimenting with inside Samplr that is also software dependent is letting a loop run for a long time while manipulating it inside Samplr. As an example, taken from a live remix perspective, if sampling drums in one sample bank and a synthesizer in another, one can make a loop out of the drums and keep the synthesizers sample ready to be played as a lead on top of this. This is a kind of full production mentality, but what can be even more interesting is only using the drum loop as the sole component of the whole remix. To make this interesting you can take inspiration from a technique used by DJ's to transition between sections of songs for greater emotional impact. By utilizing a filter to do a sweeping motion removing the frequencies either at the bottom or the top, DJ's can make a great impact on the listener using what can be considered a cheap trick. This technique can be expanded upon and be interesting if done right, and even Samplr's built-in effects can create big impacts.

So, getting back to the example of the drum loop, using the distortion on the drum track itself can create tension.

Actually, all of the effects create tension when applied smoothly and over time and can be musically interesting if then released in an abrupt way in comparison to the smooth applying process. Of course, this can be done the other way around as well. If applying both of these during the same improvisation this can even be considered a musical comment of the previously applied method in itself.

The last technique I want to mention when focusing on the mentality of the sampler alone is to give away control of own practice to something else. To personify something else entirely. One example I have discussed with prof Jan Bang is to imagine yourself doing something totally physical, like driving an excavator. Every move the excavator does needs a sound, so by personifying the machine it is no longer up to the musician what will happen.

Other techniques that apply more to a group than an individual is also interesting in this dissertation since I will be applying these techniques in interplay with other musicians. The technique I'm describing is an example mindset when starting an improvisation.

One of these techniques can for example be that the group has planned that everyone starts off at the exact same point of time. While this is a planned concept, the result is that since this is an improvisation there will most likely be disharmonic tones happening at the start. Usually what happens is that every musician involved will try to tune in on each other and the result will end up being an intense experience for both the musicians and the listeners.

Theory

Literature on the subject

Because the field of research is a really narrow field, I have based my research on the traditions that has occurred at UiA, as well as the knowledge that I have acquired during my years using Samplr.

The traditions at UiA regarding live sampling have flourished much because of professor Jan Bang, and it is the practice of live sampling that is in itself the theory in use here. Therefore, I have not used much literature regarding improvisation, and rather have taken an empirical approach to the research.

Regarding Samplr's techniques, these are also acquired using an empirical approach, but I have also found discussions on the Audiobus forums regarding Samplr. From here I have been linked to YouTube-videos which show other people's techniques. Most other users of Samplr use it with a more rhythmical and grid-based approach. Even so, some of these videos have given me a fresh view on Samplr, especially the ones that go through all of the features in Samplr, and from this I have learnt things I did not know technically about Samplr before this research.

One of the best videos about Samplr's features is Cuckoo's video "Samplr for iPad mini Tutorial" (Cuckoomusic. 2017). This video features Cuckoo, which is a renowned YouTuber in the exploratory electronical music scene on the internet, and him going through Samplr's functions. The video is a great introduction to the app, but it is aimed more towards the fun it can be rather than the improvisational tool it can be in interplay with other instruments. Cuckoo mentions this as well, calling it simple to use, yet deep in potential.

Methods

Methodology, sample and procedures

The underlying basis for this research project was to examine techniques in sampling in interplay with other musicians using conventional instruments. This study explored techniques and musical concepts that has appeared at the University of Agder's faculty of rhythmical music and tested them in a studio setting. The time spent on the research itself was set to one day in the studio. The three cycles of the action research were all conducted during this day to give the musicians total focus on the different stages in the cycles. The data collection will be in the form of recordings of the improvised music and interviews in combination with logging of the researchers own thoughts on the process.

My role during the research will first and foremost be as a researcher, secondly as the research object to be studied. During the process I will as mentioned take notes in the form of a log and recordings. Before the research process takes place, I will have written techniques down that will be tested in the studio. The question of what can be deemed a better result than the others will depend on the functionality of the technique in a live sampling situation.

Procedures

Introduction to the procedures section

After spending weeks researching and developing this action research's outline and field of study began the actual conduction of the study. The gathering of data and analysing process and validifying process began, and the applicational value of each technique was weighed and considered. Following is the overview of the process of conducting the study.

Description of the tasks involving each participant

When gathering participants for the study there were many factors affecting the resulting group of participants. One factor considers who actually has done improvisations together with a sampler before. While it could be valuable to get external musicians, who does not know each other nor the concept of live remix from before of, for this research only musicians who had been doing this for a while was considered for the sake of pushing the techniques further. Introducing musicians to the concept of live sampling at the same time as focusing on techniques would result in more focus on the musician's introduction to the concept than further development of the concept. There is a community at the faculty for improvised music, and there are many people who could be applicable when choosing instrumentation of the group to be studied even when limiting it to people who has been introduced to the concept already.

Another factor is of course who has the chance to use their time on this research. This limited the choices even more, but of the people who was free to join the research was Gaaren and Gustavson. Because of instrumentation and sonic placement of their respective instruments they were chosen. Synths and keys are versatile and can fill many aspects of the sonic space in a band. The bass guitar is more limited, but this could also be an interesting aspect of the research to see how someone as limited as the bass guitar behaves in an improvised environment.

Components of validity and reliability assurances

While conducting this research the question of validity of the research has been a prominent question. Music quality is such a subjective opinion in itself and even more so improvised music. In this case the improvisations are a result of each

musicians learnt traditions in both music placed in the popular music sphere and their traditions connected to improvisation. This can then mean that the results found in this research makes sense to the musical sphere and traditions the subjects have close connections to, but not in other musical settings. Not to say that it does not have any musical value in the light of other cultures, but more to describe the value of its uniqueness and the need to see this from the perspective of the musicians involved.

To further validify this research it is important to take into consideration the competence of each of the musicians involved. All of the involved musicians have a bachelor's degree in rhythmical music in their respective fields and have been trained in basic concepts that are expected of them at this level. Also, as mentioned earlier the musicians are currently attending the same university at their masters' courses. Gaaren attends the rhythmical music course year one. Gustavson and I are attending year one and two respectively at the electronic music course. I as a researcher would with this taken into consideration argue that they are good representatives for musicians at their level from our university.

I as a researcher also want to mention the expectations from me. While music is subjective, I cannot just write my opinion on all of these subjects without mentioning the fact that these are both scientific findings as well as opinions. I will argue that my education and past experiences have left me with a basis of knowledge that cannot be ignored during this process. The concepts of techniques in Samplr itself are techniques that I would say I am among the first to mention in a scientific context specifically for Samplr. Both these techniques, and the techniques that is based on mental approach to improvisation and sampling, are techniques that

has been discussed with professors from the faculty for all of the years I have attended this university, and therefore can be considered as serious concepts of technique.

Action research

Method employed

This research used action research as method to improve on techniques and playstyle in a live sampling situation. Action research is a "systematic and orderly way for teachers to observe their practice or to explore a problem and a possible course of action." (Johnson, 2012. p. 1). The teacher in this example is in this research replaced by the musician. Action research was chosen because of its hands-on approach which work well with research in a musical context where the goal is to address problems in the practice of improvisation.

Action research is a recursive process that does not always proceed in a linear fashion. You may find yourself repeating some of these steps several times or doing them in a different order (Johnson, 2012. p. 1).

For this research this is very true, and I would add another aspect to consider. When going this deep into researching the practices and techniques in improvised music one must also consider that the techniques deployed are also dependent on the musicians themselves, and the techniques usability in other settings with other musicians could be different than the findings in this research.

Collecting data and logging

For the purpose of being able to look back on the research process and the thoughts I had at the time, I have used the

method of keeping a logbook. I used it to note down my thoughts and things to remember that happened during the research period. I also found it to be a great help during the reflection phase of the action research for a reason I will come back to later.

To be able to look back on different cycles of the action research itself I chose to do the research in the studio at the university and record everything. We did record everything live, but because of the studio setting we were able to record everything in a multi-track recording. This opens up for further work on the audio, but to keep the research as simple as possible we chose to keep the processing of the audio in post as minimal as possible. The only processing done is adjusting of the volume of each track to create a balance in the audio, and also small adjustments to the panning of synths and electronics to create a more natural space in the mix.

During the reflection phase of the research between each recording we had an open discussion between us, but as mentioned I as a researcher tried to not have too many opinions to draw out the other musicians' true thoughts on what had happened. This is where the note taking, and logging unexpectedly came in handy. I had many thoughts myself, and some I shared with the other musicians, but the note taking came in handy here so that I could note down thoughts that might influence the words of the other musicians.

Another important aspect when considering the other musicians thoughts is the validity of this research. If the conclusion was just my own opinion without having conferred with anyone else, the research would have to be more based on previous work and theories on the topic than it is now. Because of the discussions had within the group of the research, the

conclusions can be seen as valid in its context because of the expertise perspective of the people involved.

Analysing results and describing thoughts on techniques

Cycle one - data collection step

Before we went into the research phase there was a few techniques picked out as a starting point. One thing that we noticed during the process was that following the techniques without being able to respond to them and change the techniques would be unmusical. From the feedback and natural involvement of the other musicians we therefore took the liberty to expand upon the techniques. Therefore, the techniques used here are not necessarily the techniques described earlier in the research.

The first technique we focused on was free improvisation. This was because the technique is a wild card that can evolve into something new and interesting but can also turn out to be of no value. Even if it turns into a no value-type of improvisation, this has value as the musicians will then discuss what can be done to improve with an increased passion for the subject. Also, free improvisation was chosen to loosen up for the day, to let the musicians get a feeling for the setting and to let them try out things they wanted to try out before we move on to improvisational techniques with a more controlling nature.

The second technique we used was a technique focusing on all of the musicians having a mental image of what we want to express, and then exit the improvisation with a predefined ending. In this case we made the keyboardist queue us out of the improvisation.

The third improvisational technique used in the first cycle was the everyone starts at the same time-technique. We were supposed to keep this part short, but we expanded upon the idea that was developed out of this technique because we all felt that the idea was worth more than the guidelines of the research.

Cycle one - reflection

During the reflection phase we used a phone to record the discussion that ensued. The conversation we had was in Norwegian and was transcribed in Norwegian, so excerpts from the conversations are translated as directly as possible to English without changing the meaning behind them. Quotes in this section will as mentioned be excerpts from the transcription which can be found at the back of this dissertation in the appendices. The conversations are marked with a number at the end of the name indicating which cycle it's from, followed by a dot and another number indicating which technique it describes.

"I mean, often it sounds nice with loads of ambient stuff, but often it can turn into something stagnant. Or, I mean, you make a lot of nice sounds for a long time before it actually turns into something that is interesting." (A. Gaaren, 2018.)

This was the general consensus in the group after doing the technique in which we have a theme or picture in mind before starting. Gustavson said he felt that this wasn't too different from the free improvisation. Much because of the dynamic of the group that has been established long before the research came into the picture. Gustavson did however feel that this technique was much better as a starting point for improvisation than the free improvisation without guidelines.

"But I feel that it is much better to start like this, because if you're supposed to get into it you need to really bring something to the table." (J. Gustavson. 2018)

Cycle one - defining new areas of interest for further development

When discussing how the techniques feel in a practical setting like this and what can be done to further improve on the techniques, the other musicians had suggestions on what could be done to increase the possibilities we have when communicating with each other during the improvisation. At this point we still wanted to follow the techniques, but we wanted to be able to communicate our musical intent in new ways.

One such communicational tool that was discussed was the use of hand gestures. In general, we wanted to have more eye contact than before. The concrete hand gesture we developed at first was lifting one finger in the air to signal that you had an idea, and that the other musicians could lay off what they were currently doing. This technique was meant to use in a setting where there had been stagnation, but the one signalling wanted to create a clean cut without there being nothing left. For example, queueing everything else to stop, and then let the quietest part of the music be the only element left to let the listener hear an element that has been there the whole time in a new way.

Cycle two - data collection step

For the next part we wanted amongst other things to try out a back and forth thing with short sounds with no sustain in them. The theme for cycle two can be described as a back and forth kind of focus. The first part everyone had to do short sounds with no sustain, and the idea was to react to each other with short comments.

After the first part of cycle two we wanted to try the technique, but in a modified version to contextualize it. So Gaaren wanted to be the glue between the sounds happening during this take, and Gustavson and me were to battle each other with short concrete ideas.

Cycle two - reflection

After the first part of cycle two was finished Gustavson felt that he had now become a weird musician who only played things that were out of context. Gaaren thought it was challenging to make it interesting. A solution suggested by Gaaren was to add one contextualizing element to make it interesting.

"To get it out there, to get to the back and forth stuff, all we need is an element that just is there consistently. Maybe just let it play so that we know where the tonal centre is."

(A. Gaaren. 2018)

From this resulted the second part of cycle two where Gaaren had more of a pad-type of role to glue it together.

Cycle two - defining new areas of interest for further development

Reflecting on cycle two there is the discussion on how relevant the techniques are, and especially how relevant the research setting is. Both Gaaren and Gustavson agree that the techniques used in the research are great for further development of the techniques that we bring to a real improvisation, but that the techniques alone in a controlled environment are more limiting than liberating.

"I think that the concept is kind of cool, to have the back and forth thing on top of a more rigid thing. We have talked about this the last time we met for practice between you and me (referring to Ole). It's probably easier with a chordal instrument, to get the battling thing to work in a way. I think it's exciting as a concept. When you create a lot of space though. I think it must, kind of. Yes, I don't think it's something we can use as basis for a whole song, but as Jaran is saying, it is a great tool to bring with you on stage." (A. Gaaren. 2018)

Cycle three - data collection step

For the third and final cycle in this research we decided that we were going to get back to the free improvisation but keeping in mind all of the things that we had discussed throughout the whole research period. Just before the third cycle started we agreed to keep it free but have planned queues as tools in case we feel that we are hit by stagnation during the improvisation. The most important queues were the one finger in the air, and we also discussed another where we have two fingers in the air to indicate the same as one finger with one difference. Two fingers in the air now meant that you want the same clean cut, but that the other musicians just lower their volume on queue instead of stopping completely.

Cycle three - reflection

When asked to reflect on the improvisation that just happened, the musicians initial thought was that we were missing a drummer. Since we usually have a drummer with us when we play, this is maybe a natural development after a full day in the studio without anything to release the tension we had built in this last recording.

"I believe the most important thing is to maintain the energy. And then it is important to try and think that you should avoid, what do you call it? Pit hole? Like when you play and then you gradually feel that.. It is so infectious. So that we should try and avoid it in every way possible." (A. Gaaren. 2018)

From this, Gaaren meant that falling into a pit hole is dangerous because it can feel like a great idea, but suddenly everyone on stage are stuck doing something repetitive that they cannot get out of.

Another reflection that has gradually been discussed throughout the whole session is the usability of the techniques employed. Together we felt that one of the questions being answered after this session was that all of the techniques are great tools, but only tools. Especially in a group like this where we know each other, and with the duration of the improvisations. With the duration of the last cycle's recording for example, we could not have kept it up if we were to confine the improvisation on one specific technique.

The last cycles improvisation felt really long. We all agreed that it could be because of how long we had been in the studio, and so the energy had been depleted.

Cycle three - defining new areas of interest for further development

Having finished the last cycle in this action research process, both Gaaren and Gustavson agreed that we had gained new knowledge on the subject of improvisation. This last part was also the part where both of them was most energetic with feedback and ideas for further development of our group. One of the suggestions derived from the fact that we had addressed the need for communication. Because we sat about two meters apart the whole time, Gustavson asked if we could sit closer next time to get a more physical connection instead of the typical solution that we should just look up more. Looking up can in some cases when using Samplr not be a reasonable solution because of the visual nature of Samplr.

So, for further experimentation with this group of musicians, we will try and sit as close together as possible during our next rehearsal. And we will try out a kind of situational disposition of drums, with trying to keep our drummer on a leash and only let him go when there is a climax.

Results

Challenges with methodical work in sessions

When doing research that is based on methodical work and go through techniques in a controlled environment there are challenges with the authenticity of the music. While it is an authentic improvisation, it is heavily steered in a direction of reflection on own practice. I would argue that an authentic improvisation is the one that invokes spontaneous expression of musical personality. Of course, I do not deny that a true improvisation could occur in a research setting, but after having conducted the research I would have considered making the atmosphere less coloured by the scientific aspect so that the techniques could have had the authentic impact that they could have in less constricted settings.

Challenges with the human interplay

During this research, because of my role as part of the musical constellation, friend of the other musicians and as a researcher, I had to try and keep the questions as neutral as possible. Also because of the relationship I already had with the other musicians this must also be mentioned as a factor that can have had an impact on the findings and results. In other musical constellations with musicians that does not know each other the employed techniques could invoke different results.

Challenges with the constellation

One of the predominant factors that we found out during the research period was the band setting, or instrumentation. Or more concretely the people who played together. While all of us has played together many times before in different band projects with which we all have had a great experience with,

we found that for a project like this one there were difficulties with being guided by the techniques. In some cases, the feedback from the participants were that they felt the technique stood in the way of the improvisation. This could have been solved by being looser on what is allowed during the research, and to communicate this before the improvisation started.

Other challenges with the constellation sampling, bass and keys include the role that each instrument inherently takes on. Gustavson felt that if he was to play anything at all he had to have a great idea because the bass felt like it was either on or off. As a sampler I know the limit myself, but I have the option to work in other registers in the sound. I have discussed a technique in Samplr in the techniques part where I mention the limitations of the bass register, but the ways to break with what is expected might be easier as a sampler than as a bassist.

Gaaren felt that he had to keep himself on a leash to not overshadow the rest of us. This might be true in that he has an instrument which can span over a huge register, but the same can be said of sampling. One key difference is that the sampling was played back to us in our headsets only, but Gaaren played through an amplifier. This makes the sound more realistic and places the instrument in the room, and in this setting, this easily took the lead sonically. One solution we have discussed before is to send the sampling out through its own amplifier as well. Most often we play together in a room with speakers, but we still have discussed moving the sampling sound out of the speakers to place it in the room as a spatial placement of the source of sound.

After the last cycle, as mentioned, we felt that there was something missing. We felt that we could have needed a

drummer, like we usually have when we play together, but not for the whole part of the improvisation. When thinking of the constellation of instruments, we would only need some percussion in the climaxes during the improvisations.

Ending chapter

During the process of planning and conducting this research I have learnt and become aware of many aspects of my own musical expression and thoughts of improvisation in a live sampling situation. During this chapter I will reflect on the findings and my own expansion of knowledge.

Reflection on improvisation in this type of constellation

Starting out I thought that most of the techniques I had noted down were techniques that more or less were employable in any setting. While this research is self-contained in the explorative part, I have gathered thoughts on other projects subconsciously from different projects outside my academic research. And I feel that many of the same conclusions appear both in the research and in other settings that are freer. From this I conclude that the techniques are a variable in a greater set of things that define an improvisation that has interesting musical ideas.

Reflection on the research objects expansion of knowledge

While I might not have found a definitive answer to improvisation with sampling in interplay with more conventional instruments, I do think the research has yielded results that are valuable. Especially the notation of different techniques when using Samplr, and the mental approaches when initializing an improvisation. And since these thoughts are from an electronics-based musician, I believe that the results are valuable as part of the field of improvisation since it is from a point of view that is not as explored as other views.

Further work

Taking inspiration from the research conducted in this dissertation, I will continue to try out the techniques described, but now with a new view on them because of the reflection and discussions had about them.

The musicians that helped me during this process are people I play with in different musical contexts, and within the x32 project we will try to extend the level of communication from now on. We will try to sit closer together, and to try out having a dedicated amplifier for the samples to bring them closer to the real world.

If I were to conduct this research again I would have devoted more time to making the research process feel less like a research process, and more a regular improvisational setting. As mentioned, I think having a dedicated amplifier is something really interesting to try out next time.

On to a much bigger project, I will try to create my own musical tool inspired by Samplr. This is a whole other discussion, but it is a necessity because of the possible outdating of Samplr which hasn't been updated since 2014. So, for my own personal expansion of knowledge, I need to be self-sustainable and be able to create my own musical tools on a platform that is independent of outside factors.

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Appendices

I. Notater fra aksjonsforskningsprosessen:

Første syklus

Improvisasjonsteknikker å prøve ut:

```
Fri impro med grunnlag i tema

Billedlig inngang med avtalt slutt

Alle starter samtidig - tune in

Introdusere samples fra tidligere
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Refleksjon:

Loop og satt greie kommer naturlig, avslutning og overgang

1 finger i været for å signalisere at man tar over

Rett på tune-in funket veldig bra for å få noe konkret å spille. Jaran synes ikke det føltes veldig annerledes enn fri impro, kanskje på grunn av musikalsk kjennskap til hverandre.

Ønske om å prøve en ping pong greie med korte lyder uten sustain.

Routingproblem løst

Siste greie funka så bra at vi ikke kutta den tidlig likevel

Andre syklys

Improvisasjonsteknikker å prøve ut:

Korte lyder uten sustain.

Refleksjon:

Korte lyder uten sustain

Vanskelig å finne sin plass. Wannabe frijazz.

Respondering i en sirkel kan funke.

Jaran hadde mindset som å være et sample.

Vrient uten tonalt senter.

Løsning en legger noe fast som limer alt sammen.

Føles konstruert å ha ping pong greier (battle)

Viktigere å ha de tingene vi har gjort i dag som verktøy enn å håpe på at det vi har gjort skal bli plate

Kult å bryte helt med det klanglige og fine og bare kaste inn samples som kanskje ikke passer engang

Forslag til setup om å sitte helt inntil hverandre for kroppslighet og lettere kommunisere

Tredje syklus

Improvisasjonsteknikker å prøve ut:

Fri impro med avtalte que's (grunnet i våre følelser av tidligere sykluser)

Refleksjon:

De tingene som ble kult trengte et siste kick (trommis mangler), men kanskje ikke ha trommer over hele låta.

Spørsmål om når man skal kutte noe, ting spiller lenge og blir kjedelig, men man føler at det allerede er god driv blant resten av bandet så man tør ikke kutte. Enighet om at det går greit å avslutte sin del både for å signalisere at man vil videre, men også som musikalsk at alle ikke behøver å spille hele tiden. Auver nevner pit-hole, farlig å bli fanget i noe som fort blir kjedelig og aldri avsluttes.

Enige om at en finger i været ikke behøver å være god idé, men kan være signal om at man vil prøve noe nytt i det minste. Igjen verktøy.

Føltes lenge, men kan tenkes at energien bare var lav på grunn av intensiv økt.

II. Transkripsjon av refleksjonsopptak master

Opptak Master refleksjon 1.m4a

Auver:

Finne frem til noe som er fornuftig.

Jaran&Ole:

Ja.

Auver:

Uten.. altså det er ofte fint med sånn fult av ambient greier da, men. Ofte blir det litt sånn der.. daufødt. Eller altså, at du bare lager fine lyder i.. Jævlig lang tid før du på en måte skjer noe som egentlig er interessant. Det var litt tøft. Det er min tanke.

Ole:

Ja, ble veldig konkret liksom. Altså, vi holt ikke på lenge liksom. Det var tre-fire minutter eller noe. Og det føltes som, hvertfall for min del, som noe som var en komposisjon. En låt. Vet ikke om du har hørt Mogwai, har du hørt om de? Litt sånn stil følte jeg det var.

Auver:

Ja. Det var du som viste det til meg.

Ole:

Ja, sant? Hei mate.

Ja, men hvordan synes dere det her var i forhold til fri impro liksom?

Jaran:

Føler det er litt det samme, egentlig. Det er jo ikke sånn at når det er fri impro så starta vi så veldig ulikt heller.

Auver&Ole:

Nei, ikke sant.

Jaran:

Men jeg føler det er mye bedre å starte sånn her enn, for når hvis en starter så føler man at man må ha noe, hvis man liksom skal komme inn i det, så må man ha et eller annet å komme med liksom.

Ole:

Noe å melde liksom?

Jaran:

Ja, mens nå er det mye mer sånn.. Ole: Nå starter alle på en måte. Mhm. Tror dere det har mye å si at vi har spilt før og kjenner hverandre musikalsk og sånn og på en måte? Jaran: Mm. Ole: Veldig ledende spørsmål som endte i at du sa mm. (Latter) Ja, tror det. Auver&Jaran: Ja tror det altså. Auver: Ja en vet jo på en måte at hvis, hvis jeg får en idé så plukker dere opp det ganske fort, og det har ganske mye å si. Tenker jeg ihvertfall. Hvis du har litt sånn der (utydelig ord. Dialekt?) så sitter ikke dere i deres egen verden liksom.

Jaran:

True that.

Opptak Master Refleksjon 1.2.m4a

Ole:

Kanskje vi kunne prøvd det en gang, å ikke legge noe som ligger på en måte, men at vi spiller mot hverandre.

Jaran:

Vi gjorde jo det i starten på den ene.

Ole:

Bort i sola?

Auver:

Bare dere, bare jeg ikke overkjøre dere. Det er det som er, hvis jeg blir for gira, så blir det fort at dere ikke får plass.

Auver:

Ja, eller altså jeg er det eneste akkordinstrumentet, så jeg kan jo ta jævlig mye plass, det er bare det jeg tenker på.

.. Hehehe sjå på meg!

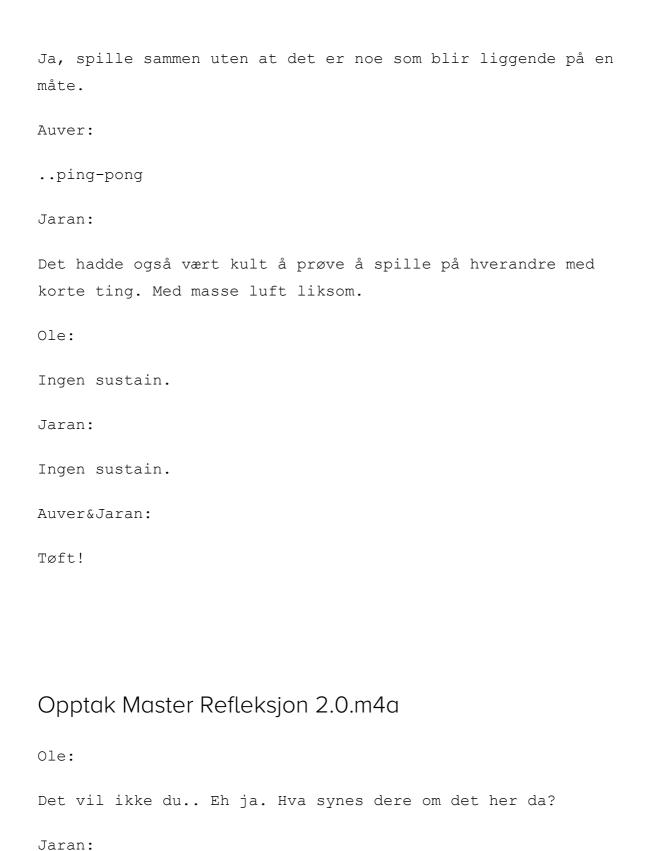
Jaran:

Det kunne vært tøft å legge en, en drone som bare er en tone, som en sånn, som et tonalt senter istedenfor akkorder liksom. Også spille rundt det óg hverandre på det.

Auver:

Det hadde vært kult å prøve begge deler. En med drone og en bare der med en sånn der...

Ole:



Penis. Neida.

Ole:

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Det var penis liksom?

Auver:

Jaaa... jeg har ikke peiling på hva jeg gjør.

Jaran:

Jeg føler jeg har blitt en av de spesielle folka som bare lager pling plong.

Auver:

Jeg synes det er vanskelig. Vanskelig å få det kult.

Jaran:

Det er vanskelig å gjøre lydene interessante liksom, eller sånn. Ja.

Auver:

Hverfall sånn tonalt. Jeg tror det hadde funka bedre på sånn perkusive ting, så når du kaster ut sånn.. Ja. Jeg synes det er vanskelig når det er på en måte du skal spille toner. Da høres det ut som sånn rar frijazz.

Ole:

Jeg føler og det var veldig, ja. Det var ikke noen retning på en måte, og det er kanskje lett at det blir hvis man ikke har noen plan på en måte. Jeg tror, noe jeg tenkte at det kanskje funker hvis man, at ikke alle kan gjøre det på en måte. Enten så måtte vi gått for veldig "du spiller, jeg responderer, du responderer, du responderer" (peker på alle sammen og mener at man responderer på den til venstre for seg hver gang). At man responderer i en sirkel.

Jaran:

For nå tror jeg, hvertfall sånn som jeg prøvde å gjøre det, som å prøve å være et sample. Sånn helt ut av kontekst på en måte. At det ikke var sånn tonalt spille fra noe, men..

Ole:

Ja at det er din mindset liksom, at du prøvde å være en sampler liksom?

Jaran:

Ja eller, istedenfor å tenkte at "er jeg i g?" liksom, så bare tenke at hva ville en som hadde sampla gjort her liksom? Hvordan kunne det..

Auver:

Ja, jeg synes det er vrient uten tonalt senter, jeg. Da sliter jeg.

Jaran:

Ja, det var derfor det var litt greit å tenke som en som sampler, for de gir jo beng i det.

Auver:

Ja, men de bruker å sample, eller altså..

Jaran:

Hvis man tenker at man har med seg samples utenfra liksom. Så du bare har en bank med masse rare ting også bare fyre det av.

Ole:

Jo det var, det var to på en måte løsninger jeg tenkte. Den som at man responderer bare på hverandre. At det da vil være mer sammenheng i det, mens en annen er at liksom at alle ikke kan gjøre full fri liksom. Det må være enten tonalt senter, eller at man må ha en som er dedikert til at nå skal han spille grunnlaget på en måte da. Også at det her er på en måte, at vi to kunne kanskje gjort en duo, spille mot hverandre som en sånn, cheesy nok som det er, men som en gitar battle da. Eller noe sånt. At man spiller mot, og responderer på hverandre på en måte.

Jaran:

Bare påpeke at Ole Hagelia pekte på Auver Gaaren i dette tilfellet her.

Ole:

Godt du er her.. For de som ikke ser.

Ole:

Men ja, jeg tror. Jeg føler vi liksom vi er inne på det samme tankesett med hva som ikke funker liksom.

Auver:

For å få det ut av det der der, skikkelig pling plong greiene så alt du trenger er et element som ligger der. Og kanskje spille, du trenger ikke, hvertfall vite hvor grunntona er på en måte. Sånn, bare at "ok, vi er i g", så kan du spille i alt annet enn i g. Sånn hvertfall som jeg er vant til, også blir det mye mer logisk, eller gir mye mer mening måten å spille på.

Jaran:

Ja det er jo mye enklere å finne en retning da, hvis man kan på en måte komme og gå til en ting som man vet hvordan føles på en måte. Ja absolutt.

Ole:

Ja, skulle vi da tatt også prøvd en kort ting til som er mer..

Ja, hva tenker dere, hva slags løsning skal vi teste på det på
en måte? Eller er det noe som vi bare skal kaste fra oss?

Auver:

Det hadde vært morro å prøvd med, med et fast, enten at jeg legger noe greier eller at Jaran eller du.. at det hvertfall er ett eller annet som limer sånn at det blir rart kult istedenfor at det blir.. rart.

Jeg kan egentlig prøve å legge noe shit. Så kan dere to battle.

Opptak Master Refleksjon 2.1.m4a

Jaran:

Jeg synes det er ganske vanskelig å.. trade med deg når jeg ikke har så mye akkordmuligheter, eller sånn å gjøre det skeivt på en måte. Med sustain. Det er liksom, jeg har.. eh ja, begrensa. Føler meg veldig begrensa da. Så ja.

Ole:

Er det kanskje duoen elektronikk bass som kanskje er vanskelig?

Jaran:

Eh, ja hvertfall når det er sånn pling plong battle shit. Fordi det er jeg gjør et pling eller to pling også er det det jeg klarer å gjøre uten å måtte begynne å skru mye underveis og tulle rundt da.

Ole:

Jeg tror, som jeg tenker sjøl, at hvertfall sånn som det her så funker det på en måte at Auver gjør det du gjør, men at man kanskje ikke skal låse seg til at man kun ligger der, at du kanskje kan ha en mer sånn der, du kan nesten tenke låt på en måte. Også spille liksom grunnlaget til en fiktiv låt. Også óg det du sier med at du føler deg bundet to pling plong så er du ferdig. Så at kanskje den battle greia ikke behøver å være pling plong på en måte, men det kan være liksom et riff som du introduserer inn under det Auver spiller. Også responderer jeg på det på en måte, eller at jeg bruker noe av det tidligere og spiller det som en slags solistrolle. At det er kanskje en mer sånn setting som det kunne funka i da.

Jaran:

Ja for jeg tenkte litt på det. Forde at bass blir så sjukt dominant. Dominerende. Med en gang hvis jeg begynner på riff så er det liksom "ja da har jeg bestemt det", på en måte. Så får det være sånn da, men med en gang jeg legger to toner på en gang så er det sånn, med en gang så er det noe tonalt også blir det litt sånn.. ja.

Ole:

Hva synes dere om konseptet det å drive å utforske sånn her da? Altså for jeg føler vi har kanskje, jeg synes jo mer i dybden vi går jo mindre relevant blir det til noe som vi kan bruke senere på en måte. Altså sluttresultatet, det er fint å snakke om det føler jeg, men, og kanskje det er noe vi tar med

oss til senere, men kanskje at, hvis man kun skal basere en låt på sånn som vi gjør nå for eksempel så blir det veldig lite konkret. At rammene kanskje står i veien for kunstnerisk utfoldelse.

Jaran:

Ja, det er vel kun et verktøy da.

Auver:

Jeg tenker det at konseptet det er jo litt tøft da, å ha det ping pong greiene på en fast greie. Vi snakka jo om det sist når vi øvde mellom meg og deg da. Det er sikkert lettere med akkordinstrument da, å få den battlingen til å fungere på et vis. Jeg synes det er litt spennende sånn konsept egentlig. Når du skaper mye plass da.

Jeg tenker det må være.. på en måte.. ja, jeg tror ikke det er noe man kan bygge en hel låt på kanskje, men ja som Jaran sier kult verktøy å ha.

Ole:

Ja å ha det inn under fingrene på en måte at det er en mulighet å gjøre det, også behøver ikke, også kanskje som jeg ser det, at ikke hele bandet behøver å det som baktanke, men at kanskje en eller to tenker at nå skal jeg gjøre det.

Jaran:

Ja som et lite segment liksom i, bare for å bryte det opp. Tørke det opp også..

Auver:

For det er en veldig fin brytning fra lange toner og klanga ting og delay og alle de fine tinga, så er det. Det som er kult da, hvis vi hadde utbygd en sånn der, det handler jo bare om å spille sammen da, men at når jeg hører at du plutselig fyrer av et daukjørt sample, at på en måte da kan man skape en greie ut av det og liksom ja ha det i skuffen.

Jaran:

Ja for det er det jeg tenker at det er det som er nyttig med der her er å gjenkjenne ut ifra liksom det musikalske hvor man kan gå da. Å ha en sånn uniform forståelse for nå blir det fett hvis vi slenger oss på det, eller nå blir det fett hvis vi gjør noe stikk motsatt, eller ja. Også heller embrace litt det der overraskende greiene utrygge greien da.

Ole:

Ja sånn som vi drev med veldig far out greier nå, men at sånn mot slutten så begynte vi å sone oss inn mot noe likt på en måte, som så kunne blitt en jam-aktig. At det er mer sånn?

Jaran:

Ja, bare å ikke være redd for det liksom. For det er det, vi har jo fått en del kommentarer på det når vi har vist frem x32 sånn på interpret, at selv om det improvisert så låter det ikke improvisert.

Auver:

Ja, det tenker jeg at er en god ting egentlig da.

Jaran:

Jajaja, men det å bare ha muligheten, og litt den fryktløsheten å kunne bare syre det helt ut plutselig, også ta det litt en annen vei.

Ole:

Ja, det tenker jeg det første greia vi snakka om også rekke opp hånda også si, at nå har jeg noe og at alle andre legger av, det tror jeg er det viktigste, uten at vi har prøvd det en gang da, men det er kanskje det som funker best vil jeg tro. At man kan kutte klart, at hele bandet er med på at ja at nå har han ene en god idé. Også prøver man ut det liksom. Og at man da har den muligheten til å sitte å lage noe sjukt rart da.

Auver:

Det er jo et konspet som og kan gjøre det veldig spennende å spille live da.

Jaran:

Det er fordi, det jeg også tenket på er sånn, ok hva er det som veier høyest. Si vi er i et godt kjør da, og det låter fint ogsånn, også plutselig så fyrer du av et alt for høyt sample med uvilje liksom. Og bare at det er stygt og ikke passer inn, og hvis du bare kicker deg på den uansett om du spiller riktig eller ikke liksom så tror jeg den verdien, energi verdien det er skaper er høyere enn den harmoniske verdien liksom. At man hele tia har den der, så man kan gjøre sånn der vurderinger ut ifra det. Så drite i tonalt senter, men liksom ja.

Auver:

Så går det ann å utarbeide den queinga, si at 1 er at man sier hold kjeft alle sammen, og 2 er da har man en god idé, men bare fortsett å gå, men ro ned, for typ at det er jeg som sitter å kødder. Men altså at jeg roer meg, også fyrer du på med en greie liksom og at man på samme..

Ole:

Ja at jeg.. at det er que nr 2, at hvis man tar to fingre opp at det kanskje betyr "ikke legg av, men legg dere ned" på en måte?

Auver:

Ja, eller ja, men bare gi plass til meg da. Si at vi er på full syre rock og, tar du to fingre opp så kutter jeg også litt og hører på det du har da. Det kan være litt kult. Det er det som er spennende med det prosjektet her at, sånn live og at ingen vet hva som kommer til å skje, at det er på en måte låter sammen med de, så kan vi på en måte gå dypere inn i låtene med sånne next-level ques da, som kan være jævlig kult. Og det kan gjøre det jævlig dårlig, men det gjør det hvertfall spennende hver gang vi spiller. Og det er litt viktig synes jeg da.

Jaran:

Også, jeg tror mye kanskje også, bare det å se på hverandre, at man glemmer det så jævlig fort. At det er sånn "ja ok, nå har jeg funnet ett eller annet som nå vil jeg skru på" så trenger man ikke å se på at man skrur på det, man kan bare se opp også. Jeg legger merke til at det var mye lettere å spille på dine ting når jeg så på det du gjorde. Da er jeg på en måte før, da ligger jeg forran hele tia, jeg ser at du gjør sånn "nuu"' også vet jeg at du kommer til å slippe den, så kan jeg være akuratt der du slipper ikke sant? Og litt sånne ting. Det er mye fetere. Så jeg har tenkt litt på dette her er jo også for liksom samspillgreia, men å ha, sitte i en firkant. Type det bordet helt opptil rhodesen, også sitter jeg på den sia, også trommesettet dér. Også har kicken i midten der, også bordet oppå kicken, altså sånn helt kompakt. Sånn helt oppå hverandre. Det kunne vært fett å gjøre en gang. For jeg har sett noen gjøre det en gang før, og det er dødsfett, for da er det mye mer kropslig og liksom. Det var kanskje litt sånn derial, men en liten note.

Ole:

Men fint, takk.

Jaran:

Også ha liksom ampene rett under der, spille mot deg, amper som spiller ut sånn. Så liksom, PA som monitoring.

Ole:

Tenker jeg som siste syklus at vi skulle prøve en sånn, som vi snakka litt om i begynnelsen. Bare sånn tema vi tenker ett eller annet, men uten det, også at det er lov å gjøre egentlig sånn.. Jeg føler det beste strekket vi hadde var kanskje det første, fri impro, for da at hvis vi alle på en måte "ja vi kjenner hverandre, vi kan spille på den måten" på en måte. Men selv om det er fri så har vi fortsatt noen rammer innad i gruppa på en måte. Så hvis vi gjør noe sånt, men også kanskje tenker litt formmessig, jeg vet ikke. Også med de der quetegna, kanskje? Også tar vi heller bare et langt strekk, ikke at det MÅ vare en halvtime liksom, men at vi kan spille en halvtime. Også at man ikke må tenke, for det følte jeg som en begrensning nå, når vi gjorde det her at liksom her hadde det passa sjukt bra å spille sånn sustain greier, at jeg legger ett eller annet oppå der, men så følte jeg og en begrensning på en måte at nå har jeg sagt i oppgaven at jeg skal teste ut små korte greier, og det skal være en egen greie og det skal være kort. Men at det er mye større begrensning enn å la det spille naturlig da.

Jaran:

For jeg tror man er jo musikalsk nok til å forstå når det passer og ikke passer på en måte. Det er jo ikke sånn at vi må øve på å spille korte ting på en måte.

Ole:

Jeg tror eneste som er sånn farlig med en impro i en trio, eller uansett, er at man ikke slutter, og at man holder en idé alt for lenge, men jeg tror det er på en måte sin sjarm rundt det og på en måte. Og de der que-greiene med fingrene kan og være verktøy som vi kan bruke hvis noen av oss føler at "ja det her er kjedelig. Nå skulle jeg ønske Auver holdt kjeft liksom" så er det mulig å komme seg ut av det.

Jaran:

Det er jo sånn jeg tenker, når man har testa de korte greiene da, så er det sånn ok, for hvis auver ligger veldig på sustained så er det veldig behagelig for oss å ligge med korte ting. Jeg tror det fører til at vi kan holde på for lenge, men da hvis Auver blir kontrolleren og sier nå holder det, så tar han vekk det. Da havner vi på dypt vann ikke sant? "Oh shit nå må vi faktisk komme på noe", og det kan jo føre til at man kommer seg videre da, at man pusher hverandre bare til å fucke opp.

Auver:

Ja uten (keys) da tenker du?

Jaran:

Ja jeg tenker bare som en annen måte å gjøre det på, istedenfor å si "jeg har en ny idé", så bare sånn..

Auver:

Ja ikke sant, nå gidder jeg ikke mer.

Ole:

Ja, at hvis man selv føler at nå er det dritkjedelig liksom, men de andre føler det er god groove, så bare.. eller ikke det en gang, men at man har en greie gående som den som ikke er inni det har et bedre perspektiv på. Bare slutter.

Jaran:

Ja for jeg tenker sånn, hvis man har noe som man har lyst til å teste så kan man gjøre det når som helst, altså. Det er jo det som er, det er jo ikke sånn at vi, eller man, man vil inn i en sånn god-groove hver gang, man skal melke det helt til man er der på en måte. Ja så egentlig bare uten ques, så jeg tror det kommer automatisk hvis man bare ser på hverandre. Og bare følge med på at nå driver Auver å skrur på synthen så da kommer det noe derfra snart liksom. Også bare følge med.

Ole:

Ja, bare ha øynene opp. Også tror jeg óg det er viktig at, som, selv om vi har avtalt at en finger betyr det og to betyr det, så, at man, det skal absolutt ikke være "vi skal bruke det, men akuratt som de her småtinga som vi har drevet med nå da, så skal det være et verktøy som vi KAN bruke hvis vi noensinne føler "nå er det". For det er sjeldent sånn, som det første når jeg følte at nå har jeg lyst til å ha en sustain greie som alle andre legger fra, også fortsetter jeg for eksempel, det er veldig sjeldent jeg får den følelsen liksom. Men når den først er der så vet jeg ikke hva jeg skal gjøre liksom.

Ja, skal jeg ta å sette på ny recording?

Opptak Master refleksjon 3.0.m4a

Ole:

Hva synes dere om det her da? Altså, ja?

Auver:

Jeg synes det var mye tøft jeg. Likte veldig godt det som var i begynnelsen. Ja nå husker jeg ikke, men det der.. du skjønner hva jeg mener.

Jaran:

Jeg husker ikke hva som var i begynnelsen engang.

Ole:

Ikke jeg heller, så jeg skjønner ikke hva han mener.

Auver:

Men jeg synes det var jævlig mye kult. Generelt kult, noen plasser det stoppa opp, men det er naturlig det.

Jaran:

That's the nature. Det er sånn det, man merker at man forventer liksom trommesett.

Auver:

Ja, for bassriffet, det ene bassriffet var jævla kult. Jeg tenkte faen nå kommer vi ingen vei uten trommer liksom.

Jaran:

Vi skulle bare hatt..

Ole:

Det var liksom et par ganger der jeg óg tenkte det, også er det sånn, jeg føler å kanskje ikke det hadde behøvd å være

trommer der liksom før det, men det bare akkurat der så skulle vi hatt Tobias bare smelt på.

Jaran:

Jeg tror det kunne vært en sånn kult fremtidig å jobbe sånn. At han ikke føler at han må spille, enten eller eurorack.. bare sånn at han har mulighet til å dukke inn akkurat der, også gå bort igjen fra det istede for å være med på hele. For det hadde vært dødsfett! Knuse på liksom!

Ole:

Jeg føler det er et par ganger som er litt sånn at vi holder ganske lenge på noe som jeg selv føler ikke funker, også prøver man å jobbe ut ifra det. Jeg tror det er mer åpning for å bare la ting forsvinne. Ikke behøve å holde på alt på en måte. Uten at jeg liksom vet nøyaktig hvilke punkter det er heller da, bare sånn av og til.

Jaran:

Jeg tenkte også på det, sånn der "ok dette her er kjipt". Men så føler jeg at hvis ingen andre har, hvis ingen andre bryter igjennom med noe, så er det fordi de ikke har noe. Jeg går ihvertfall ut fra at når jeg føler det er kjipt så føler dere også det. Også er det bare "ok hvem har noe" liksom? Også er det da, ok skal man kutte det og fremprovosere bare at noen bare gjør ett eller annet. Det kan være det er løsninga liksom. Eller skal man vente til noen liksom bare gjør noe.

Ole:

Jeg tror jeg følte på den siste delen der så var det jævlig fett den bassen som lå, men så var det bare liksom, det funka ikke liksom alt sammen. At vår idé kanskje ikke var helt med på det, så jeg følte selv at det var liksom "her er det plass til at man kunne, at vi to kunne bare tatt helt pause og bare hørt litt på hva du har" også bare bytte lyd eller instrument eller at man finner noen helt nye samples.

Jaran:

Jeg tenkte der at det hadde vært perfekt hvis for eksempel du hadde kjørt et annet, en loop eller noe sånt som bare hadde kryssa helt med det her. For da hadde vært så naturlig om jeg hadde gått ut da. Istede for å bygge på noe man ikke synes er fett for å prøve å gjøre det fett. Eller bare starte med noe, helt annet tempo på delay liksom. Som en cross-fade. Man trenger ikke gjøre alle overganger sånn veldig smakfulle og tasty hvis det går på liksom kompromiss med hva som er på en måte kult eller ikke. Eller hvor lang tid det tar da.

Auver:

Jeg tenker det viktigste er jo å opprettholde energien en har. Og da er det, prøve å tenke at en skal unngå sånn der, hva heter det? Pit hole? At en spiller også sitter en der og merker gradvis at.. det smitter så jævlig da. At en bare prøve å unngå det på alle mulige måter.

Ole:

Jeg tror liksom det er helt innafor å, sånn, at man bare slutter helt å spille. For å opprettholde energien så må man kanskje bare slutte å spille óg?

Jaran:

Men sånn som hvis jeg hadde slutta å spille på det riffet, hva hadde skjedd da liksom?

Ole:

Jeg tror, for det er litt sånn den greia, en finger i været på en måte. At her kunne man, enten at vi slutter, du holder den. Kutter alt. Eller motsatt, at du kutter den. Også plutselig så er det helt ambient aktig uten noe fast, også etablerer det seg noe ut fra det liksom.

Jaran:

For det som er vanskelig her er den der fingeren i været. "Jeg har en god idé!"

Jaran:

Nei for det er akkurat det, man må stryke hvertfall "god". Nå spiller jeg noe annet! Liksom. Jeg tenker, ja. Hvis noen andre hadde begynt med noe annet så hadde jeg nok mest sansynlig slutta å spille, men så er det også sånn hvis noen har en idé oppå det jeg har, ok nå er det noen som har planlagt ett eller annet som legger seg oppå og jeg slutter å spille så er det og litt sånn, uh, kjipt.

Auver:

Jeg synes den greia på slutten var ganske kul jeg.

Jaran:

Ja, særlig når du begynte å spille noe greier. Lyst. Det ble noe tematiske greier der.

Auver:

Men det ble litt lenge der kanskje ja.

Ole:

Jeg tror vi bare spillte lenge generelt. Så at man kanskje ble litt tom for idéer og energi.

III. Samplr - overview



IV. The expanded sampling rig used during this research process.



V. The other participants' rigs.



VI. VI - Ole Hagelia - Cycle one.mp3

VII. VII - Ole Hagelia - Cycle two.mp3

VIII. VIII - Ole Hagelia - Cycle three.mp3