

# ALIGNMENT

*A MUSICAL RECYCLING STUDY*

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## *A MUSICAL RECYCLING STUDY*

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## INTRODUCTION

My main goal with this text is to describe an experiment called "The Alignment Project", where I worked for an extended period writing several pieces from the same pool of ideas. The pool of ideas is related to the concepts of «uniformity» or «non-uniformity» and how they translate into music.

The project can be divided into three main parts

One – How my background has influenced this project - my musical background, which is dualistic between classical music and improvised music.

Two – The ideas I've chosen to work with in this project, including the extramusical ones, and why I chose these ideas

Three – the actual project that I am describing - the new music I'm currently developing. While describing this broad aesthetic project I will perspectivise to relevant work by other composers.

# WHAT IS MY PROJECT

## BACKGROUND

I started on my master in 2018, 20 years after finishing my bachelor and with artistic practice as an improvising performer-composer. At this point I had particular artistic questions about music and societal challenges. To explain that fully, I have to go back in time to 2011 when terror struck Norway.

Anti-tribalism<sup>1</sup> in relation to my artistic output has been on my mind since Utøya (more about this on p. 9). This incident made me consider changing direction in life. I questioned how I as a performer-composer could make a difference in this new climate, wouldn't it be more useful to become a lawyer or a nurse? At this point I decided to continue composing and performing, as long as I used the modest influence I had to do some good, to explore musically questions of "the other" as opposite to myself, and "Why should we help other people"? I delved further into the philosophy of collective improvisation music and improvisational theories.

The years went by, and in 2018 I had just finished several anti-tribalism pieces<sup>2</sup> that I regard as transition pieces, since at the time I felt that collective improvisation or hybrid forms with improvisation was not the right medium. These transition pieces were hard to make. Social engagement pushed me to work in ways I had no experience with, no concept of or no language for, and this again pushed me to ask myself what do I need to do to make the process easier? How can I create new types of visions and structures in which ideas like this can have a place to go? Having interesting ideas that could be developed into several new pieces, wanting to work differently than in my previous output, led to a multitude of new questions:

What types of techniques and strategies would I need in order to create these new types of visions and structures? During my master I worked through a range of issues to do with notation, musical work, idea and repetition/variation, to see where this could take me, as several subquestions arised, such as:

- How does my music relate to something outside itself?

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<sup>1</sup> Richard Sennett talk about tribalism, and how cooperation has developed humankind. Sennett, *Together* (London: Penguin Books, 2013), p. 3-5.

<sup>2</sup> Seim, *The Duos project* (2016-17) <https://www.gunhildseim.com/project/the-duos-project/> and *Velkommen Hjem* (2018) <https://www.gunhildseim.com/project/velkommen-hjem/>

- What level of compositional control would be necessary, and would this be opposed to the "collective-composition-paradigm" I had been working in before?
- How do I spend longer time on conscious planning, as opposed to the more spontaneous and subconscious type of planning that one applies when improvising?
- Will the sounding music change if it is constructed in new ways?

Regardless of the type or origin of a musical work, it was my hypothesis that the difference between pieces that I subjectively regard as successful or not are often small. The *quality* or the *difference* of one piece in my catalogue compared to another does not necessarily have to do with big things. Like a butterfly effect, small adjustments can have large implications.

I decided then to make several pieces from the same material, to test my hypothesis in reality.

At the end of the master I faced a new societal challenge, in the form of coronavirus and "lockdown music", which, it turns out, is an interesting type of challenge for a project like this.

## MY INTERESTS AS A COMPOSER

For about 20 years I've been leading and playing in improvisation groups. As an improviser, I have one foot in oral music traditions and one foot in the western contemporary classical music. This shapes the way I think about music, but also the concept of musical ideas and their development into music, the concept of the musical work, authorship etc.

Improvisation music is a physically oriented type of music, which combines (for instance) extended techniques, sound exploration and sound combinations. The role of intuition, the sudden nature of ideas and their instant embodiments, are central. It has a strong focus on a collective effort of combining different voices to make exciting mixes. Collective improvisation does not focus so much on the type of "heroic solo improvisation" normally connected with jazz music, but rather focuses on chamber music qualities. At its best, this music has a proximity to composed chamber music.

With my background, I have less experience with composition and notation of certain types of musical elements more than others. This goes especially for timbre-based music. I have lots of experience with *playing* timbre-based music, but I lacked experience in how to deal with it in fixed form/score form. For instance, although I played complex noise improvisation myself, when I was writing a score I wrote melody and rhythm-based music without the complex timbre elements, since I didn't have so much experience in notating elements that sounded like the noise improvisation I liked to play. There was a difficulty in bringing together the two genres of timbre-based music, the notated contemporary classical and improvised music.

When starting on my master I was ready for a "tabula rasa" situation in which I enjoyed questioning my basic processes in a controlled environment. Without necessarily changing how the music sounds - or rather: the sounding result is not the focus of this project. What concerned me were the processes behind the sounding result, and how to present the music in notated form.

## MUSICAL IDEAS - HOW DO I DEFINE THEM

What do I mean by a musical idea?

It is generally accepted that:

- Musical ideas may consist not only of pitch, intervals and rhythm, but also color, timbre, dynamic etc and the extramusical
- Ideas might actually not be original

What about the treatment of musical ideas? Could there be more possible originality connected to that? Or are the two interconnected?

Ideas can come from anywhere, and may come suddenly - from the world of sound or somewhere extramusical. I would suggest that the interesting part is not the ideas themselves, but what to do with the ideas. The idea itself is separate from the execution of it. I think this has to do not with the ideas themselves, but with something else that one could call *strategies*. I will get back to that later.

## INSPIRATIONS FROM OTHER COMPOSERS

I am inspired by composers like Rebecca Saunders and George Lewis, who combine timbre-based music and notation in entirely different ways. And I have drawn a lot of inspiration from Helmut Lachenmann's music and texts about composing.

To address the first, Rebecca Saunders' music is some of the notated music I've heard that most closely resembles the esthetic of what I would call sound exploration with direction and purpose. I find that in many of her pieces it is timbre and the differences within timbre that propels the music forward, for example in "Quartet for Clarinet, Accordion, Piano and Double Bass"<sup>3</sup>

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<sup>3</sup> Saunders "Quartet for Clarinet, Accordion, Piano and Double Bass" (1998)

Eva McMullan-Glossop suggests that that Saunders' preoccupation with timbre comes from Wolfgang Rihm and Helmut Lachenmann<sup>4</sup>. I would suggest several other influences as well. In pieces like "Quartet" I find a tendency towards "steady-states", more than in for instance Lachenmann's music. I find it interesting to analyze her scores, and I imagine that this is the way some improvised music could look if it was notated. I believe that the perceived similarity stems from Saunders' interest in music as physical presence and as body movements/gestures, as well as her experience as a violinist<sup>5</sup>. She talks about the surface weight and feel of sound. I find her music consisting of a reduced number of pitches, lots of color and a multi perspective of sound.

There is a strong gestural approach in both Saunders' and Lachenmann's music. Both Rebecca Saunders<sup>6</sup> and Samuel Wilson<sup>7</sup> draw on theories of embodiment when discussing the relationship between musician and instrument. Wilson suggests that French philosopher Maurice Merleau-Ponty's theory of habitualisation between user and object of use ("The blind man's stick") is comparable to musicians' relationships with their instruments. Saunders suggests that a sound from a musical instrument consists of the following order of events 1. The performer feels the gesture 2. The audience sees it 3. It's audible.

Wilson in his text also connects embodiment to Helmut Lachenmann's text "Über das komponieren"(1986)<sup>8</sup>, in which one sub-chapter is titled "To compose means: to build an instrument". Lachenmann here compares the composed work to an instrument, and the composition process as instrument-building. (Not just a physical instrument, but also a "meta-instrument", as I will go into later.) The cross-section of embodiment theory and instrument-building-theory that Wilson connects here is interesting in regard to composer-musician collaboration, especially in the pre-compositional process.

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<sup>4</sup> "This preoccupation with 'timbre' has not traditionally been associated with English composers, and therefore it is believed that this influence originated from the *musique concrète instrumentale* of Helmut Lachenmann, as well as the time Saunders spent studying with Wolfgang Rihm (1991–1994). McMullan-Glossop, *Hues, Tints, Tones and Shades*, p. 493

<sup>5</sup> Ircam composition class with Rebecca Saunders, youtube 2019

<sup>6</sup> Ircam composition class with Rebecca Saunders, youtube 2019

<sup>7</sup> Wilson, *Building an Instrument, Building an Instrumentalist* p. 428-429

<sup>8</sup> Lachenmann, *Über das komponieren*, under section "To compose means: to build an instrument"

Marcel Cobussen calls the field of musical improvisation a space of interactions<sup>9</sup>, where the social and musical merge. For example: the music often has a "conversation" character. This is one of many possible angles, as there exist myriads of approaches to improvisational music.

The gestural approach in today's contemporary music can be traced back to Russolo, American avantgardists like John Cage, AACM, Anthony Braxton, Theatre of eternal music, and British artists such as Cornelius Cardew and Derek Bailey. There is influence from graphical score-making, especially gestural notation. Inherent in this gestural approach is a strong tradition of close collaboration between composer and musician.

I will exemplify further with composer and improvisational musician George Lewis, who sometimes works with social strategies in notated form. I experienced this first hand while performing his piece "Creative Construction Set" which is a mobile, open form work for ensemble (open instrumentation) consisting of instruction from cards<sup>10</sup>. Each performer has a set of cards with actions, which they can perform themselves or show to other players for them to perform. Two of the cards read:

- "When you detect a new sound, play in contrast to it. Stop when the other sound does"
- "When you detect a new sound, imitate it as closely as possible. Stop when the other sound does"

The types of instructions on the cards, or the social strategies, are not something that is invented by Lewis, but he is known for notating improvisation material. I performed this piece between the writing of the two "Aligns" (see p. 12), and found similarities with my own project; with Align 1, I tried to picture many of the instrument entries in a similar way as these two instruction cards (see p. 9). As we would say in an improvisation, "go with it" or "go against it" (or anything in between). For skilled improvisers it is not a choice between two extremes, but a fine-tuned scale of degrees between the two.

## METHODOLOGY

While writing my pieces I would make a behavioral analysis of myself as a composer. What are my customary operations in terms of ideas? I would analyze my background, interests (musical and extramusical) and my customary operations as a composer. The behavioral analysis was done before and after making the cycle of works, to see if something changed during the process, and how.

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<sup>9</sup> Cobussen (et al.) "The Field of Musical Improvisation"

<sup>10</sup> Lewis, George 2015 Creative Construction Set (tm)



As a method for making new material, I would analyze the way I recycle ideas, in a kind of a recycling loop:

1. Research my own work for interesting material that I could re-use
2. Deconstruct, rearrange or translate to a different medium
3. Repeat 1-2

I have also studied other composers working methods in regard to rearranging, recycling etc., for instance how Rebecca Saunders re-uses ideas, or how Helmut Lachenmann's structures his material. I am not including those findings here, as it is enough for another essay, and would take up too much space. Rather, I will focus on describing my own recycling and limiting of ideas.

Why limit ideas?

The ideal process for me was to work for an extended period without new ideas. One reason to do that would be merely to see what happens. Another could be that the saying goes that one works more creatively within a framework. The stricter the better, sometimes.

It is important to underline that this limitation of ideas was something I wished for, and that I deliberately imposed on myself. It was a conscious determination to block ideas/sudden impulses, and it felt liberating. This did absolutely not come from a place of not having good ideas, or not enough ideas. It was the result of not being concerned with new ideas at all.

This determination came from a wish to do things in a different way. Many times in my work as a composer, I have thought about the opposite – am I using this idea well? Rather than having a lack of ideas I felt that I had a perceived overflow of ideas, and that this fact could limit my time to really examine each idea - to explore and use each idea well. Many times when composing, it was challenging both to decide what to do with the ideas, or to discard them. I was questioning my own choices about idea development and started to ask myself, did I really need to “jump to the B-section” already? Why not just continue on the “A-section”? Why make sudden breaks when you instead could have gradual transitions? I wanted to develop greater control over the material and the amount of information present at any point in the timeline. To reach this goal I started limiting the amount of ideas in my works. Not to make the works shorter, but actually, in the end, to make them longer, more coherent and to improve form and substance.

How do I turn a continuous stream of ideas into a work? This is related, I think, to the recycling loop above, although more connected to finishing a work. How does one go from having one really good idea, to really making use of that idea, turn it over, and examine it (like a mobile) from all angles, limiting the inclusion of new ideas?

The "work-finishing" cycle usually goes like this: Making plans from the ideas. Carrying out the plans. Making revisions of the plans as I go. Look at what happened beyond the plan, and try to include that. And there are always leftover ideas that I did want to include but didn't have the time, which can be saved for the next version.

In improvisation we say "making a version" which means performing or recording a planned improvisation. I try to see these works as frozen versions of the process.

I found it fruitful in this text to include a section with description of reflection on the last piece, in the description of the process of a new piece. These are pre-composing thoughts on what I want to do differently the next time.

## INITIAL IDEAS AND OVERVIEW

### THE EXTRAMUSICAL ELEMENTS

I needed to expand my repertoire of strategies/ways of making pieces that respond to questions about likeness and difference, about myself and the other. "Acting out" in music for instance the concept "problems with cooperation" that Richard Sennett writes about - when cooperation leads to cooperation for a common cause against an enemy<sup>11</sup>. The musical version of the "common cause against the enemy" was in my mind associated with marches - which made me want to take material from a march and somehow translate it into "anti-tribalism music".

I also thought (as in improvisation-related "go with" and "go against") that there must be a way to construct and notate musical passages that are driven forward by *difference*, where one could place the musical entries of the performer in different places on a spectrum between likeness and difference. To compare it to conversation, this would be a spectrum between agreeing and differing. The difference could be for instance pitch, timbre etc, and probably the most musically interesting place on a spectrum like this is the area between alike- almost alike - a bit different -clearly different. I did not try these ideas out at first, but as the project progressed, I did.

I started with some research on marches and eventually chose "Colonel Bogey"<sup>12</sup> for the first piece, since this is somehow "the perfect march" in the way that it syncs body action and motivates its performers.

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<sup>11</sup> Sennett, *Together* (London: Penguin Books, 2013), p. 5

<sup>12</sup> Alford, Kenneth J., *Colonel Bogey* (London, Hawkes & Son, 1912)

It is also has a lot of built-in innocence because of the whistling and other connotations that I found to be a very interesting contrast, as a kind of symbol for the happy innocent soldier who does not yet know that he is going to die for the cause.



It is important to point out that I never intended to give listeners all of this background when hearing the pieces. At the most, I would say that the pieces have to do with Aligning or Not aligning. I wanted the pieces to work without any background information.

So in this case, I would hide Colonel Bogey in the structure, and I will get back to the specifics of how I did it.

## WAYS OF TRANSLATING

How does music relate to something outside itself? Music has a questionable relation to the extramusical. The tribalism idea is an extramusical idea that could go in many directions, for instance emotionally rooted ways of making music, but I did not want that. Nor did I want to make theatrical pieces.

I am rather inspired by Helmut Lachenmann's term "resonance" to use semiotics of the more symbolic kind. I would like the pieces to work musically even if you don't know the composer's meaning. I am also inspired by Webern's very subtle use of snare drum rolls and brass in "5 pieces for orchestra" op 10, and how it makes associations to the military.

In his writings, Lachenmann suggests several types of resonances that exist in music. The two main categories are 1. Resonance in sound itself, in the way you could say that music consists of sounds and their resonances (both natural and artificial/constructed resonances) and 2. Resonance as a semiotic phenomenon, as when a certain sound awakens a certain memory or resonance in the listener - from history or something extramusical.

So, when starting this new project, I turned to translation/coding as a possible solution. Translation, according to Helmut Lachenmann, is about hiding something somewhere in the structure, for instance another piece of music. In his "Tanzsuite", Lachenmann uses the German national anthem

as a “skeleton that now serves to help me articulate a characteristic time grid”<sup>13</sup> which has semiotic implications.

When translating, you are adapting to a different medium while trying to preserve something or interpret something. You are repeating some of the original, but with a different voice or different language.

I also started to think more conceptually around marches, the military, uniformity, and battle, and found some other initial ideas from that. There are several hidden metaphors in my project, for instance the tempos (I superimpose two tempos: 1. Human resting pulse of around 70 BPM. 2. March tempo 120 BPM) and the use of the snare drum.)

These ideas got mixed with other ideas that I was interested in or became interested in during the process. For instance, Gerard Grisey’s use of harmonic series, or the conscious use of degrees of beatings (for instance In Anthony Pateras’s music), or the use of notated extended techniques in “musique concrete instrumentale”, would help me in my attempts to make notated timbre based music.

## ORIGINALITY

My project started with another person’s piece and developed into several of my own pieces - both serial production and something relating to connections and relations.

Addressing the ethics of borrowing material from other composers is relevant in this context. The famous quote "A good composer does not imitate, he steals" (which supposedly came from Igor Stravinsky) suggests that transforming something that inspires you - deconstructing, remixing, recontextualizing, substituting - is the way to do it. I want to transform Colonel Bogey into something new and unrecognizable.

Thoughts of originality and genius in music still stand strong in the musical world; the notion that there is linearity in music history with geniuses like Mozart lurking in the past (or Miles Davis, for that matter), inventing new melodies out of thin air. I consider this an essentialist view. The idea of a sole author as the driving force in the development of musical styles can be challenged, and has been challenged in modern philosophy, for instance by Roland Barthes<sup>14</sup>.

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<sup>13</sup> Heathcote "Sound structures, Transformations, and Broken magic: An interview with Helmut Lachenmann."

<sup>14</sup> Barthes, "The death of the author"

The concept of the musical work is a construct of western classical music that started in the Baroque era and had its peak in the Romantic era; the concept of the genius is a romantic one. Neither are universal terms, and don't not necessarily apply in other music genres or in other geographical places, maybe not even in today's art music.

Modern technology and digital connectedness, according to artist Holly Herndon, has made it even more clear than before, that:

"the history of music and our shared human project that leads up to today, is a shared resource that we all tap into and we all learn from"<sup>15</sup>

Many works can be categorized as collective efforts rather than individual ones. Is there maybe a contradiction in me being an author that questions the Western idea of the work? No, I don't think so. Pitting the "one-composer-paradigm" against the "collective-composition-paradigm" is not my intention; in my opinion there is a whole spectrum between the two extremes.

Copyright laws about intellectual property seeks to regulate this field, trying to separate what is ok or not. This is an important task to prevent people from copying other's works and call it their own, or taking credit for their collaborators' work. It is important to credit our sources.

Memory can make us think we invented something that we actually heard somewhere and forgot. As an improvising musician, I know it can happen by accident. In improvisation, imitation and learning by heart is a replacement for writing things down. Probably because of my background in improvisation, the thought that nothing comes out of thin air feels natural to me.

## OVERVIEW OF THE FOUR PIECES

- «4 short studies for grand piano» was written in the autumn 2018 (and revised in spring 2020), for prepared grand piano with sostenuto pedal. Total durata of the piece is 6:21.
- «Align» is a piece for wind band, written in the winter 2018/19. The durata of the piece is 4:00.
- «Align 2.0» is, a piece that builds on «Align 1.0», written in the winter 2019/2020. The durata of this piece is 11:00. It is a quintet piece for flute, clarinet, bassoon, accordion and percussion.

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<sup>15</sup> Cills, H "A chat with Holly Herndon about making music with AI, Artistic Necrophilia, and Embracing the Inhuman"

- «Lifeline» is a piece for four musicians in different locations, playing trumpet, snare drum, Zoom and live-streaming, composed in the spring of 20.20. The durata is flexible, but in the first video recording the piece was 15:00 minutes long

## HOW DID I WORK ON THIS PROJECT

How does the fact that I limit ideas influence the process and the music itself? Which possibilities come from this, which would not occur under normal circumstances? What are the limitations? What happens to the compositional control?

One thing that happens when focusing less on new ideas/content and more about the ways they are applied, is that the focus shifts from ideas to *strategies*. One can see the strategies more clearly, and how the strategies influence the music. Also, one gets more practice with strategies.

## WORKING METHODS

### MY CUSTOMARY OPERATIONS AS A COMPOSER AT THE START OF THE PROJECT

My challenge at the start of the project was how to construct and notate the complexity that I want. Earlier, as a performer-composer, I would develop pieces by discussing them with skilled improvisers, and they would provide much of the complexity for me, without me specifying where and how to do it.

In the "one-composer paradigm", slow processes of planning, structuring etc will provide the complexity. Compositional processes, but also pre-compositional processes, like exploring, collecting material are important. You need other tools, but they can be used for analyzing, including, structuring and treating all kinds of material, including material like timbre and extramusical elements.

What I don't need to change, though, is the way I am used to working directly WITH the musicians, instruments and spaces. I can do that even more.

## PIECE 1: 4 SHORT STUDIES FOR GRAND PIANO

### PRE-COMPOSING THOUGHTS I

*What would I like to do with the material?*

Consider the whole - what total pool of material do I want to mix together in the piece.

Limiting/filtering this pool of material and making "sets" from the filtered results.

With all of the ideas combined, (Colonel Bogey, my own tonality interests, the non-pitch material, other material) I found a big pool of material. I made selections from that, mostly by gathering in sets.

I wanted to hide Colonel Bogey in the structure. My thought was to use the original pitches and tempo, in addition to small bits of instrumentation, melody and rhythm.

### WORKING WITH TIMBRE

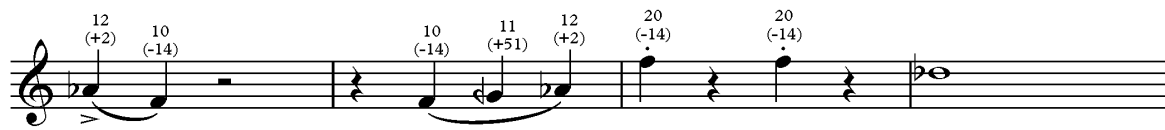
Early on in the composition process, I was determined on working with timbre, and that led to the decision about preparing the piano.

I started working hands-on with finding preparations for the grand piano that fitted the theme. As a musician I have worked with several musicians who improvise on the prepared piano, so I have seen it done close up, and I tried to experiment the way I've seen them do. I also tried to learn as much as possible about the musician who would play my piece in a reading session, the classical pianist Ermis Theodorakis. I didn't have the opportunity to meet with him until the piece was done, but I listened to recordings he made of other music, and learned that he could play very advanced rhythms and layering. Since it was going to be a fully notated piece, I needed to study scores, and one work that especially informed my sessions was Helmut Lachenmann's "Serynade". I analyzed the work and got into the inner workings of the sostenuto pedal (the "third pedal").

I recorded videos of some of my experiments with the prepared piano, Colonel Bogey and the conceptual ideas.

The tension between the tempered tuning and other tuning systems that characterize all the pieces was there from the moment I started practicing piano harmonics on the low piano strings. As a

result, the Colonel Bogey theme changed character from normal tempered major to a harmonics based major scale:



I liked this idea because of my goal of directing the focus towards timbre. It also gave the motif a dream-like quality.

This transformation laid the ground for the conscious use of beatings/clashes between tunings.

## WORKING WITH MULTIPLE SETS

To deconstruct the Colonel Bogey theme, I used a technique I know well from improvisation: I took the pitches from the melody and made into a set. For the Colonel Bogey bars above it could look like this:

Ab G F Db

I then rotated the order of the pitches to make new melodies.

What was different this time, compared to working in improvisation, was that I started working with multiple sets simultaneously. One of the advantages of working with planned structures, as opposed to intuitively is the amount of sets you can use simultaneously. I read up a bit on mathematics, serialism, and set theory. I made tables with sets of many musical parameters, and I used homemade rows of numbers to structure the order of events. Every pitch was also assigned a voice, a static dynamic, a dynamic contour, a duration, a timbre, etc. This way I could deconstruct the original passage and make a new one, which I then could use as material. Here is an example of a table I made while working with the fourth piece - Lifeline. (It is still the same melody, now transposed to G).

The sets are helpful in the way that they can

- structure and distribute a desired pool of parameters
- prevent customary and intuitive decisions in situations where one wants to renew the compositional language



Entry nr.	Instrument	Static dynamics voice 1		Static dynamics voice 2		Static dynamics trp 3		Static dynamics trp 4		Dynamic development		Difference type octave		Difference type timbre		Difference contrast dynamics		Difference x-fade development sudden or slow		Timbre personality symbols connected to pitch and original melody c. bogey		Timbre personality Symbols connected to pitch and original melody c. bogey and duration					
		code	res	code	res	code	res	code	res	code	res	code		code		code		code	result	code	result		code	result			
1	3	2	3	f	4	p	6	mp	1	ff	3	<		0		0		1	2	d	echo	1"	a	snare			
2	4	3	4	p	3	f	3	f	4	p	4	>		0		1		0	1	><	d	echo	1,5"	f	gliss opp		
3		1	3	f	4	p	4	p	3	f	3	<		1		1		0	3	<	h	gliss down	10"	g	heart		
4	3	2	5	pp	2	pp	3	f	4	p	5	<>		0		0		1	2		h	gliss down	2"	h	gliss ned		
5	5	1	4	mf	3	f	5	pp	2	pp	4	>		0		0		0	1	><	c#	whistle C#	1"	c#	whistle		
6	4	3	3	f	4	p	4	mf	3	f	3	<		0		1		0	4	>	d	echo	1"	a	snare		
7	3	2	6	mp	1	ff	3	f	4	p	1	><		1		1		1	3	<	d	echo	7"	d	echo		
8	1	4	5	mf	2	pp	6	mp	1	ff	5	<>		0		0		0	2		d	echo					
9	5	1	4	p	3	f	5	mf	2	pp	4	>		0		1		0	1	><	h2	gliss down					
10	4	3	3	f	4	p	4	p	3	f	3	<		1		1		1	5	<>	h	gliss down					
11	3	2	1	ff	6	mp	3	f	4	p	2			0		0		0	4	>	h	gliss down					
12	2	4	6	mp	1	ff	1	ff	6	mp	1	><		0		0		0	3	<	g	heart G					
13	1	1	5	mf	2	pp	6	mp	1	ff	5	<>		0		1		1	2		g	heart G					
14	5	3	4	p	3	f	5	mf	2	pp	4	>		1		1		0	1	><							
15	4	2	3	f	4	p	4	p	3	f	3	<		1		0		0									
16	3		2	pp	5	mf	3	f	4	p																	
17			1	ff	6	mp	2	pp	5	mf																	
18			6	mp	1	ff	1	ff	6	mp																	
19							6	mp	1	ff																	

## CONSTRUCTING FADES

I practiced a technique that compares to fading and could be used to fade passages in or out, or crossfading between different passages. In short, I would remove information from the music. For a fade-in I would for instance play every fifth beat to begin with, then every fourth, then every third, etc. For a fade out I would do it in the opposite order. One can then control how the material gradually appears and disappears. I used this technique on the deconstructed and rearranged passages that I made with the sets. I also practiced it on the Colonel Bogey original

## THE PIECE *4 SHORT STUDIES*

The 4 pieces are

1. Harmonics, a slow mood based on on-string harmonics in the low register, with vibrations from objects inside the piano and some resonances of silently depressed keys.
2. Fades, where different elements are introduced via crossfading material
3. Resonances, with some march rhythms and fermatas and quite a lot of resonances from silently depressed keys.

4. Pulses, based on superimposition of the two tempos for the march project.

Originally, there were 5 movements, but in spring 2020, after considering the piece as a whole, I decided to cut one movement that did not fit in (called Waves, with “time-waves” stretching and compressing material)

As the title implies, these are etudes, four separate movements that do not have a distinctive unity in the piece as a whole so the pieces are quite different from each other. The piece was written as a pre-study - a way for the composer to familiarize herself with a certain way of thinking and working.

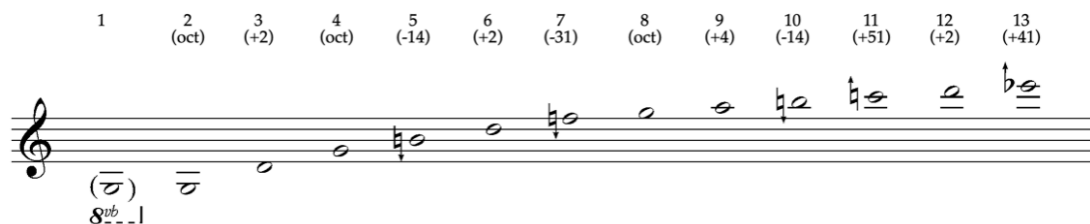
## PIECE 2: ALIGN FOR CONCERT BAND

### PRE-COMPOSING THOUGHTS II

*What would I like to repeat?*

Obviously, I will keep using small parts of Colonel Bogey. Thanks to the inspiration from piano harmonics, I decide to go on with the use of harmonic series. I therefore apply harmonics (numbers 1- 13) in the next three pieces (here represented by the G harmonic series applied in Lifeline)

I would also like to continue using fades.



*What would I like to change?*

I felt that my use of sets kept too little of the characteristics of Colonel Bogey. I wanted to keep using sets in Align, but decided to divide the melody not only in single pitches but also in larger chunks (which I called "Colonel Bogey Particles"), and rotated these with the set rotation method.

I also wanted Align to have a better unity, a better system. Naturally, since the piano piece did not focus on coherence, I decided to try out methods to look more closely at what I had already. As part of that, I tried the Spear software, and I tried out the building instrument approach in relation to Colonel Bogey.

## MAKING THE “COLONEL BOGEY INSTRUMENT”

I was searching for the essence of Colonel Bogey, and in this search I found inspiration from Helmut Lachenmann and the way he sees "Instrument building" as one way of thinking about composing. The essence is a combination of what I personally draw from the march, and what I think is the objective essence of the march. I wanted to use this essence as a symbol in a careful and many-faceted way with the intention of demonstrating how «the march» is there always in all of us, just waiting to surface and take over.

General march characteristics:

- Bpm 120
- Basic rhythm consisting of downbeat and offbeat. In the piece I have translated this concept into the more general «signal” (downbeat) and “echo” (offbeat)
- Some typical rhythmic characteristics in the melodic material
- A «main theme» for treble instruments contrasted by a «trio part» for bass instruments
- The snare drum sound as a marker for the «war connotation»
- «The act of marching» (body/space/visual part of the march concept) which I chose to omit since these was supposed to be traditional concert pieces and not performance
- Specific for Colonel Bogey: The whistling
- Added: The heart rate meter as a contrast/conflict, Beatings

## ZOOMING IN AS A METHOD

Zooming in is a method is something I started to do little by little in Align 1, and became better at as I went on to the next pieces. It has to do with logic in my opinion. As a composer, I set out to make something logical from my ideas. This means first and foremost logical to myself. During the process I also consider how it can make sense to the listener.

The word logic in this context does not mean “understanding” or “interpreting” music or artwork; rather, it is about the steps to build something organic. For a sound structure to be organic, or, to put

it another way, for a sound structure to have some kind of intuitive logic, it would need to develop in the area between expectation and contrast. We keep listening when we are somehow intuitively able to follow and keep interest. The area between expectation and contrast could be huge, and in this project I have been interested in exploring this area, to explore ways of moving on without changing the basic idea or resorting to formulaic thinking. Earlier when discussing the concept of musical idea, I said the interesting part is not the idea itself but what the composer does with it. I want to avoid formulaic thinking.

The question “Where could you go from here?” (or, if made into a statement, “*Where* is the place you could go from *here*”) contains both the words “where” and “here”. From “here” you could go in many directions, but to take the next step to “where” in a logical manner, you need to *Zoom in* - to look for the characteristics of your point of origin, and the more detail you can find and perceive about what exists in the “here”, the more possible connectors or natural expansions you might have to the next moment of time. I am underlining again that there is no *one* path that is “the logical one”, but many logical paths that lead to an infinity of next moments, which means music could go literally anywhere, without necessarily breaking the perceived logic. This way of thinking is similar to Deleuze and Guattari's concept *rhizome*<sup>16</sup>, which I will come back to later.

I used Spear to zoom in on and analyze some resonances from a recording of the piano piece, and found some chords. I combined these chords with chords based on the march orchestration from Colonel Bogey, and also with the Db harmonic series.

## DIFFERENCE BEHAVIOUR

Remembering George Lewis's cards, the following figure is something I drew while I was contemplating how to make a musical structure based on likeness or difference. The different colours could interpret as different musical "behaviours".

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<sup>16</sup> Holland, Eugene W. Deleuze and Guattari's A thousand plateaus, a reader's guide, p 50-62



First I had to define what likeness or difference behaviour could be in a musical sense. It could include pitch, durations and timbre behaviours. Once I had defined some musical behaviours, they could then be combined in structures on a timeline. The musical behaviours that I used were degrees of "go with" or "go against". In this way, Align 1 became a piece about conforming or non-conforming to me. To explain more in detail how I translated conforming/non-conforming to music, I made a table of what musical difference behaviour could be:

Part	Samenes parameter	start	grade of sameness 1-5	middle	grade 1-5	end	grade 1-5
Stationary	Microtonal						
	Interval						
	Timbre						
	Instrument family						
	Number of players						
	Chord number						
	Register						
	Dynamics						
Development	Rhythm						
	Pulse						
	Stop/start						
	Crossfade						
	Movement between registers						
	Dynamic development						
	Duration of the different parts						
	Imitation accuracy						
Texture	Type of movement						
Groups/layers	Numbers of groups						
	Simultaneous ideas						
	Simultaneous registers						
	Group merging						
	Group splitting						
	Number of people in group						
	Number of instr family in group						
	People switching group						
	Group unity						
	Different personalities in group						
Timbre	Trying to sound alike						
	Trying to sound different						
	Flutter						
	Rumble						

## THE START OF A COLOUR PALETTE

Skipping a bit ahead - in making my own march from Colonel Bogey particles, I was looking for a melody that I could loop. One short phrase that stood out, was Eb B Db F G  
I used this phrase so much that eventually it became almost a new main theme.

The pitches in this phrase were assigned a different type of timbre to each pitch. That way I used the melody as a starting point for a color palette:

Db (root) vibration/vibrato

B glissando upward

Eb snare

G whistle

F glissando downward

I also added Ab - echo

In making timbre plans for the project, I was inspired by Rebecca Saunders and the way she makes timbre palettes. The exploration of timbral possibilities forms an integral part of her extensive pre-compositional process. Saunders, quoted by Ellward (2008), believes that

"Each work requires a thorough investigation of the palettes of sound available in each specific instrumentation and how they can be fused together and worked against each other, i.e. [she finds herself] starting very much at 'the beginning' each time, scraping together tiny moments of colour and gesture before the actual composing process can take place <sup>17</sup>

McMullan-Glossop (2017) connects this to how Saunders (and Lachenmann) works with musicians in the pre-compositional process:

"Therefore, where possible, Saunders works closely with the musicians in order to understand the sounding potentials of the instruments, an influence that additionally stems from Lachenmann who similarly explores the instrumental capabilities prior to embarking on the compositional process. For this reason, he is also renowned for working closely with the instrumentalists prior to composition <sup>18</sup>

## THE PIECE *ALIGN*

The piece was composed in the winter 2018/spring of 2019 for a workshop with Sjøforsvarets musikkorps. As Sjøforsvarets musikkorps is a military band, I intentionally tried to compose "pacifist music" for that setting (it was part of the game to not tell the performers or conductor about this until after). During the composition process, I had meetings with some musicians and went to listen to the band. I recorded all of the rehearsals and had daily meetings with the conductor.

Align was based on the Colonel Bogey-instrument; now my ideas were shaped into more of a unity. The "point" of the piece is the appearance of a march in bpm 120 on top of a structure in bpm 70. For this I made my own march from the before-mentioned "Colonel Bogey particles".

The piece can roughly be divided into:

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<sup>17</sup> Ellward, L. "Rebecca Saunders - *Stirrings Still*" CD review

<sup>18</sup> McMullan-Glossop "Hues, Tints, Tones, and Shades: Timbre as Colour in the Music of Rebecca Saunders"

Introduction & theme – a play with unison pitches and different behaviors, where the pitches after a while form a melodic passage (towards a “disappearing point”)

Pulse fade – from the disappearance point the march fades in gradually and then takes over

Ending – a very short ending where the march stagnates into a unison loop on the phrase Eb B Db F G

## PIECE 3: ALIGN 2:0 FOR QUINTET

### PRE-COMPOSING THOUGHTS III

#### *What would I like to repeat?*

At this point I was really starting to like the small parts of Colonel Bogey, and their different transformations. Especially interesting was the colour palette I started.

Also the sameness/difference elements from Align are something I would like to explore further and relate closer to timbres. I decide to make a pool of the different timbres and different orchestration ideas for them, then organize and place in different orders.

#### *What would I like to change?*

I'd like to extend the duration. The commission for Align asked for a maximum duration of 5 minutes, which felt like a very short time for such an “epic” idea. It needed to be substantially longer to make sense. That has to do with the amount of information in the piece, and the degree of change over time. It changes too fast. The piece needs to be stretched in between different points, not just add new parts. As a result I wanted to look closer at the nature of *change*.

I found inspiration in Deleuze 's concept of change, how things change over time. Where most western thinkers have focused more on substance - what there is, Deleuze wanted to account for movement, evolution or flux, how things change. He talks about how *repetition* is a basic of nature and the world<sup>19</sup>. Nature repeats, but reorganises. For instance there are no two leaves on a tree that are absolutely identical. They have many similarities –like colour, smell, or shape. If they are very similar, one could still say they exist in different times, but they are not exact copies. Their characteristics or variables are reorganised in each repetition. Each repetition is something new in

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<sup>19</sup> Deleuze, Repetition and Difference (1994) introduction chapter



space or time, but it carries something from the first. It is the very difference in every repetition that accounts for change.

One way to apply this to my project is to compare the term "characteristics" with the ideas and "leaves" with the works I develop from the ideas.

Another angle is Deleuze and Guattari's concept of the *refrain*<sup>20</sup> which use musical repetition as a metaphor for the universal human phenomenon of attempting to order chaos, exemplified for instance with a child who comforts himself by singing. The singing and the rhythmic pattern of the singing acts as stability in the middle of chaos, and functions as a marker of space/time. For a certain amount of time, the repetition of simple phrases structures that space/time. Repetition happens in different ways depending on the degree of difference/change in each repetition. If the difference were reduced to a minimum, Deleuze would call that "bare repetition" which he would connect to acts of repetition that are based on instinct in a stimulus-response type of way. The greater the degree of difference in repetition, the more creative the human behaviour becomes.

## RHIZOMATIC FORM

The colour palette and the thoughts about change connect in Rebecca Saunders' music. McMullan-Glossop (2017) writes:

"In a similar way to a rhizome, "the music of Rebecca Saunders unfolds through time by making connections horizontally or vertically in a seemingly unconventional but creative manner"<sup>21</sup>.

McMullan-Glossop compares this to colouring theories in visual art, that she groups together some of Saunders' techniques as:

- Strategies of expansion
- Strategies of contextualisation
- Strategies of connection
- Strategies of reduction

In this way, Saunders can "grow" large musical structures from single sounds or small motifs, using timbre as the main connector. Murphy and Smith (2001) explains rhizomatic form with music being made up from floating blocks of sound

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<sup>20</sup> Holland, Eugene W. "A reader's guide to Deleuze and Guattari's A thousand plateaus" (2013) , p 107

<sup>21</sup> McMullan-Glossop: "Hues, Tints, Tones, and Shades: Timbre as Colour in the Music of Rebecca Saunders"

"There is no longer a predetermined "plan of organization" to be recovered or inferred, but only a "plane of consistency" on which these blocks of sound or "percepts" enter into various connections, convergences, and divergences. In Deleuze and Guattari's terms, these blocks form a rhizome."<sup>22</sup>

I am in the start of trying out some colouring techniques like these, for instance how a tone on one instrument can change that of another, also when playing in unison: Deepening, resonance, lugging/resistance, weakening, intensifying. How a different dynamic, sound color or octave can change the whole picture.

## THE PIECE *ALIGN 2.0*

During the writing process I had meetings with all of the musicians, sent them examples and asked for their feedback or suggestions. I went to all their rehearsals, between which I made modifications.

The piece can roughly be divided into

Introduction– a play with unison pitches and different behaviors

March fades – a long period of foreshadowing after which the march fades in gradually and then takes over

Loop – The march gets stuck in a (melodic) loop, which changes over time

Entropy – I use the same loop as in Align 1, but I make it go on for a much longer time, and I shuffle the pitch order constantly. I apply durations related to pitch as well as timbre. I make durations from the dimensions of the harmonic series. The changed melodic loop morph gradually into the timbral elements, the pitches are faded out while the timbre connected to the pitch stays.

## PIECE 4: LIFELINE FOR TRUMPET QUARTET

### PRE-COMPOSING THOUGHTS IV

*What would I like to repeat?*

I see no reason not to go on with the Colonel Bogey-instrument or the -particles. The transformations are really taking on a life of their own, and I feel like I could go on with this for a long time. I am

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<sup>22</sup> Timothy S. Murphy and Daniel W. Smith 2001 «What I hear is thinking too: Deleuze and Guattari go pop” section 7

happy with the ending of Align 2.0, the entropy where I faded out pitch and kept the timbre. I want to keep using the duration plan from the entropy too.

The notion about likeness and difference how it can play out in a musical context still feels very new, as do the thoughts about very gradual change. I thought that I was starting to gain control over the variation/complexity control of time.

I got the impression that I managed to make a logical structure that the listeners could follow, but made small changes in the area between expectation and contrast. Like I mentioned before, I believe that we keep listening when we are somehow intuitively able to follow and stay interested.

Also I tried to create passages with a "Dazzling effect" versus passages where the listener can "just be present", to create variation.

A table/graph visual representation of how A-B in Align 2 is stretched out in comparison to the same passage in Align 1. The material is the likeness/difference material, and it is the same in both passages. The thickness of the line represents thickness of orchestration. The light green represents the ensemble trying to imitate each other closely. The darker green is when one performer starts deviating from the "consensus", changes to blue when several performers starts to use their voices differently. In Align 2.0 the turquoise passage is similar to the dark green, only the constellation of players are different; one voice is deviating, but not the same voice as in the dark green passage.



I want to repeat how I worked with gradual change over time in Align 2.0..

*What would I like to change?*

In the fourth piece I wanted to get closer to pure timbre-based music. I had taken small steps towards this vision with every new piece in the cycle. Therefore to get rid of melody in its traditional meaning was a goal, or an experiment. But how to keep the thematic material without melody? My solution was to replace every pitch with a B, for parts of the structure. Again, I used the same timbres connected to pitch (transposed to G):

G (root) vibration/vibrato

A snare

B glissando downward

C# whistle

D echo

F glissando upward

I used the same melody particles, but I translated every pitch to a B so it became a varied timbre melody on one pitch.

When the instrumentation changed to trumpets, as I will elaborate on below, I started researching timbre-based trumpet music, and again from Rebecca Saunders there was lots of inspiration to gain<sup>23</sup>

## CONTEXT

As I started the fourth piece, the coronavirus lockdown arrived. I was already planning the piece to be another grand piano piece, but by mid March I could no longer work with the same musicians and the access to the rehearsal space with grand piano was cut. I was confined to my house only speaking to people via video conference, and all the concerts and rehearsals were canceled. I then decided to make use of the situation as it is. The instrument that I had immediate access to was trumpet, and I had to rely on myself. The only way I could meet people and play was via the Internet and social media.

While the younger generations had been meeting online for years, most people were now forced to do the same, and a few weeks into lockdown, new words like "zooming" and "zoom-party" were on many people's lips. In the media I saw Zoom referred to as a *lifeline*. Contact with other people is a basic human need.

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<sup>23</sup> For instance "Blauww" (2004) for double bell trumpet, with lots of extended techniques.

This was a possibility to go deeper into the questions I posed in Align number one. Music in the new paradigm of the virus leads to questions about proximity and distance, mobility and public health. I saw this as an opportunity to go deeper into issues of impulse and response.

This will also be an exploration of how music can take place after this paradigm shift caused by the virus. The question "why should we help others" mentioned in the introduction can be reformulated "why should we help those who are not in our proximity zone"? When the Internet is our connection to the outside world, and long or short distances don't matter, what does it do to the focus on proximity or distance, in relation to "the other"? What about our view of "home", our own bubble, or the value of our Internet connection? The fact that we, via Zoom, literally get into each other's living rooms and home zone is interesting.

## STAGING

While composing I wanted to take into consideration the limitations of Zoom as a concert stage, and try to deliberately use the limitations. This is a new type of medium, and because of the context it has an inherent feeling of loss, where you make music without physical contact and physical sound. If it weren't for this context, it would be seen as just another medium that we haven't fully explored. The piece can therefore be regarded as experimental.

How does the format affect the piece?

- Built-in format constraints, such as physical distance, bandwidth, and issues with synchronization, are parameters that are taken into consideration in the writing.
- Not so many tutti passages, since the software automatically focuses on one person at a time, and filters out others.
- Filtering. The medium works as a mute that you can't control fully, which filters out for instance overtones. Indeterminacy element.
- Instead of those missing elements, picture and movement are added
- The music has no longer a clear foreground role
- virtual backgrounds and their meanings
- the stage is our own living room, or our combined backgrounds.
- Deemphasizing what happens simultaneously, in favor of playing more successively
- Zooming feels like being alone looking in a mirror, but also wanting to connect with others. I try to reflect both situations in the piece.

- Not possible to use rhythm synchronized rhythm groove. Judging precision by the start of sounds instead the middle of the notes. Durations and time-grid has to be approximate

## THE VISUAL ASPECT

The visuals create their own pulse in polyphony with the sound.

Images are assigned durations too, and the order of images are decided from the same type of process as the other elements, with longer durations spread more out in time. I organized the images in sets and rotated them in the same manner as I did with sound elements.

Image parameters 1) camera on/off 2) background home 3) virtual background 1 (zoom) 4) virtual background 2 (dream)				Choreography player 1-4: 1) hold camera and move it 2) dance 3) leave frame 4) just be there, dont play 5) immerse in background 6) lean towards the others				Behavior layer parameters 1) imitate all parameters 2) imitate some parameters 3) contrast some parameters 4) contrast all parameters			
3	2	3	2	5	4	3	4	2	3	2	3
2	3	2	3	4	3	5	2	3	2	3	2
3	2	1	4	3	4	4	3	4	3	2	1
1	4	2	1	6	2	3	4	1	1	4	2
2	3	1	2	5	3	6	1	2	2	3	1
3	2	4	3	4	4	5	2	3	3	2	4
4	1	1	4	3	1	4	3	4	4	1	1
1	4	4	1	1	2	3	4	1	1	4	4
2	3	3	2	6	3	1	6	2	2	3	3
3	2	4	3	5	4	6	1	3	3	2	4
1	4	3	4	4	6	5	2	4	1	4	3
4	1	2	1	3	1	4	3	1	4	1	2
1				2	2	3	4		1		
2				1	3	2	5		2		
				6	4	1	6				
					5	6	1				

## THE PIECE *LIFELINE*

Lifeline is a multimedia piece of 15 minutes duration for musicians in different location, a zoom-party for trumpet quartet. Again I explore the questions of likeness and difference, but now also in performance form (the video element) and translated to a new medium.

Performer participation: They get to choose 2 virtual backgrounds from a few rules. The first should be a zoom in on their live background, something they want to showcase in the zoom representation of your home. The second should represent something they miss when confined to their home. One of the additional backgrounds is selected as a common background so this image is shared with everyone, and in the end they all use this picture.

I include in the score how the zoom meeting should be both recorded directly and as a livestream (which creates delay and leads to further difference in timeline) In the end, the livestream is broadcasted inside the zoom meeting, and creates timelines inside timelines. The musical expressions represent a form of communication signals through time and space, with echo, imitation and contrast. The recordings are the audience versions of the work.

## FOLLOWING ONE IDEA THROUGH THE FOUR PIECES

### THE META SNARE DRUM

In "4 short pieces", I make a "snare" out of a metal box on the lowest strings, that resonates when you play the pedal, especially in movement 1, bar 8 (the pedal makes the sound, represented by the slash notes). It is a snare drum translated to piano.

5

Pno.

U U

11 12 13  
(+51) (+2) (+41)

21 21 17  
(-29) (-29) (+5)

string harmonic

*p*

*Sost. Ped.*

Ped. Ped.

In Align 1, the snare becomes more ambiguous, and I start to call it a meta-snare. It still is literally a snare in many entries, like in Fig 1, but in other entries, like fig 2, it connects and fuses with the whistling sound, which was a sound I started to experiment with. So, in addition to the whistling and the snare, we are also getting hybrids between snare and whistle. Since there were so many performers I applied the whistling as a microtonal "cloud". It had a "wind sound". Many associations came to me from this, such as the blowing sounds from wind instruments combined with the stroking of drum skins, which then again connected to the snare. The meta snare sound became in my head more like distortion or "secondary vibration", which also made multiphonics a natural association.

This is a way of making connections between timbres, that can compare to the strategies from p. 24 - a painter's mixing of colours on the palette.



The musical score consists of three staves. The first staff has a measure of rest followed by a measure with a 5:3 ratio annotation and a *mf* dynamic. The second staff also has a measure of rest followed by a measure with a 5:3 ratio annotation and a *mf* dynamic. The third staff has a measure of rest followed by a measure with a 'flap tongue' annotation, a 5:3 ratio annotation, and a *mf* dynamic. Below the first staff, the text 'snare drum w/sticks + marching bass drum' is written. Below the second staff, the text 'Percussion' is written. Below the third staff, the text 'Glockenspiel' is written. The bottom staff has a measure of rest followed by a measure with a *p* dynamic, a crescendo hairpin, and a *pp* dynamic. The bottom staff also has a measure of rest followed by a measure with a *mp* dynamic, a crescendo hairpin, and a *p* dynamic.

FIGURE 1

46 120

11

The musical score consists of multiple staves. The first system includes a key signature change to C major (C major) and a tempo marking of 120. The score features various musical notations including notes, rests, and dynamic markings such as *f*, *mf*, *ff*, *pp*, and *ord*. Performance instructions are provided throughout, including "air only better", "whistle, get tone from top 1", "Aix, valves 1/2 closed (C#3)", "sandpaper rim of drum", "brushes circular on snare", and "bass, use on woodblock or similar". The score is divided into measures by vertical bar lines, and some measures contain specific musical notations like "1/2 air" and "1/2 air".

FIGURE 2

In Align 2, I transfer these ideas to the new line-up, and expand on it, for instance with really long snare rolls.

182

Fl.

Cl.

Bsn.

Accord.

Perc.

11 (-49)

10 (-14)

p

sim.

11 (-49)

10 (-14)

general poco a poco dim  
but within that, play  
small cresc./dim and  
accents

In Lifeline, the snares become resonators for the trumpets, who each have their private snare drum. Maybe they can represent a signal enforcer, which reminds us about what we lost when we lost the physical contact during the corona crisis.

## CHOICE - AND THE LINEARITY OF TIME

There are many reasons that one idea gets chosen over another for a piece. Some of the reasons are not good reasons:

- memory (i forget the other ideas)
- habit (for instance I have always used melody)
- ability (for instance inability to make other types of structures)

There is also the problem of time. Time and choice are related (linearity versus the multiverse). The good thing about a project like this is that you get to repeat the choice process. I see this project as an artificial multiverse, a way to create different versions of the same idea. Since time itself restricts

me - I can't choose both to jump and to not jump simultaneously - this artificial multiverse makes me able to do it one after another and see what happens. That way I can practice my working process with the ideas. And I can practice *choosing*, as if the different pieces were multiverses that sprang out from the same starting point.

## STRATEGIES

I have expanded my toolbox of conscious strategies. This is how they developed in the course of the project:

Conscious Strategies	4 short studies	Align 1.0	Align 2.0	Lifeline
Translation	x	x	x	x
Re-using of codelines in all pieces?				
Possibilities of many simultaneous Sets	x	x	x	x
Constructing Fades	x	x		
Making Lachenmann-instrument		x	x	x
Saunders-Color palettes and strategies			x	x
Zooming in, f.x. Computer analysis of material		x		x
Constructing scales and chords from material		x	x	x
Constructing rhythmic grids from random set rotation	x	x	(x)	
Constructing rhythmic grids from tempo juxtapositions	x	x	(x)	
Constructing rhythmic grids from harmonics			x	x
Drawing timeline with points		x	x	x
Making dramaturgy		x	x	x
Constructing rhythmic behaviours from march inspirations	x	x	(x)	(x)
Using behaviour strategies like George Lewis		x	x	x
Controlling information-amout			x	x
Body actions extended instrument-related	x	x	x	x
Meeting performers		x	x	x
Making practising packs for performers			x	x
Using extension lists		x	x	x

## CONCLUSION

I wrote four pieces from the same material. Each piece turned out very different from the others. I have described how I created variation between the different versions of the same ideas. What creates the variation is not necessarily the ideas, but the strategies that one applies. Through the process with the pieces I expanded my toolbox with several tools for structuring any kind of idea, also ideas that are not connected to sound, like the ideas about translating tribalism to music, or the visuals in *Lifeline*.

I conclude that having a strict framework works well for me. I find that while applying such a framework, and focusing the work on small differences, it is still possible to have an open approach, and to welcome the fact that the work can take a different direction than expected.

My customary operations as a composer changed during this project. I think that is because I repeated and rehearsed the whole idea-process four times. I am still interested in continuing this project, since I find it rewarding.

## REFERENCES

### LIST OF OWN MATERIAL (ATTACHMENTS IN EXAM FOLDER)

- 01 4 Short Studies score
- 02 4 Short Studies audio file
- 03 Align score
- 04 Align audio file
- 05 Align 2.0 score
- 06 Align 2.0 video
- 07 Lifeline score
- 08 Lifeline video

## LIST OF TEXT

The Death of the Author, pp. 142-148 in Barthes, R., *Image, Music, Text*. transl. Stephen Heath. London: Fontana, 1977.

Cills, Hazel "A chat with Holly Herndon about making music with AI, Artistic Necrophilia, and Embracing the Inhuman" Interview in Jezebel/The Muse 08.05.2019 <https://themuse.jezebel.com/a-chat-with-holly-herndon-about-making-music-with-ai-a-1834562691>

Cobussen, Marcel (with Henrik Frisk and Bart Weijland) "The Field of Musical Improvisation", chapter about interaction, web article with no date (article also published in Konturen: Interdisciplinary Journal for German Cultural Analysis 2 (2009)) <http://musicalimprovisation.free.fr/index.php>

Deleuze, Gilles *Difference and repetition*. New York, Columbia University Press 1994

Ellward, Lucy (2008). "Rebecca Saunders - Stirrings Still" CD review, Retrieved from <http://heardaside.blogspot.com/2008/08/rebecca-saunders-stirrings-still-blaauw.html>

Holland, Eugene W. *A reader's guide to Deleuze and Guattari's A thousand plateaus*. London, Bloomsbury Academic 2013

Lachenmann, Helmut (1996) "Über das komponieren" from the essay-collection "Musik als existentielle Erfahrung . Schriften 1966-1995" Wiesbaden (1996) p 77, translated by the author.

McMullan-Glossop, Eva (2017). "Hues, Tints, Tones, and Shades: Timbre as Colour in the Music of Rebecca Saunders" *Contemporary Music Review* 36:6, p. 493 DOI: 10.1080/07494467.2017.1452697

Murphy, Timothy and Daniel W. Smith (2001) «What I hear is thinking too: Deleuze and Guattari go pop» article in the web -journal *Echo (University of California/Los Angeles)* Volume 3, issue 1 <http://www.echo.ucla.edu/article-what-i-hear-is-thinking-too-deleuze-and-guattari-go-pop-by-timothy-s-murphy-and-daniel-w-smith/>

Sennett, Richard. *Together, The Rituals, Pleasures and Politics of Cooperation*. London: Penguin Books, 2013.

Wilson, Samuel (2013) "Building an Instrument, Building an Instrumentalist: Helmut Lachenmann's Serynade" *Contemporary Music Review*, 32:5, p. 428-429, DOI: 10.1080/07494467.2013.849871

## LIST OF OTHER COMPOSERS' MUSIC

Alford, Kenneth J. *Colonel Bogey* (London: Hawkes & son 1912, reprint by B & H; source: IMLSP) [http://ks4.imslp.net/files/imglnks/usimg/a/a9/IMSLP260874-PMLP278230-Kenneth\\_J.\\_Alford\\_-\\_Colonel\\_Bogey\\_-\\_Score.pdf](http://ks4.imslp.net/files/imglnks/usimg/a/a9/IMSLP260874-PMLP278230-Kenneth_J._Alford_-_Colonel_Bogey_-_Score.pdf)

Lewis, George, *Creative Construction Set™* (2015), open-form/instrumentation work. Commissioned and premiered by Berlin Splitter (large electroacoustic improvisation ensemble), Berlin Jazz Festival 2015. Score obtained from the composer.

Saunders, Rebecca, *Quartet for Clarinet, Accordion, Piano and Double Bass*" (1998) Info and sound file <https://www.rebeccasaunders.net/quartet> Score: Leipzig: Edition Peters, EP7512, 2019

Saunders, Rebecca *Blauw* (2004) Solo for Double-bell Trumpet. Info and sound file <https://www.rebeccasaunders.net/blauw> Score: Leipzig: Edition Peters, EP10958, 2013

## LIST OF VIDEO

Ircam composition class with Rebecca Saunders 2019  
<https://www.youtube.com/watch?v=gmh7egV6QGo>