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Frames of reference
– media, space and framing in composition

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0. Introduction

The purpose of this thesis is to try to formulate a framework for composing, and a way of speaking about it, that incorporates not only pitches and rhythms, but also visual parameters such as perspective and framing, physical parameters such as space and room (and to a lesser extent architecture), as well as performative parameters. On the basis of texts by Marshall McLuhan and Johannes Kreidler, I will sketch a theory of how compositional media (instruments, bodies, loudspeakers and projectors, physical space, further defined in part 1) can be combined and utilized. Further, I will describe one of the main focuses of my recent compositions, which is the layering of different categories of compositional media (instrumental, performative, electronic, spatial) and how their respective potentials and limitations shape their use as a thing I compose with.

Looking back at my application and later the project description for my master's some 2–1½ years ago, my goal then was to compose pieces that in some way take cues from the reality we live in. Because our reality is multi-medial, I argued, it moves in different scales, different paces, different patterns (McLuhan, 1964/1994, p. 8). I feel that in my studies, I have merely started understanding this multi-dimensionality of different media and it is still something I wish to explore further theoretically and utilize creatively in trying to make art.

I have come to find that my world of compositional ideas and way of seeing a performance relies heavily on visual aspects and visual metaphors. My imagining of a piece will generally incorporate a fixed idea of how my pieces are set up on a stage: that there be a concrete visual relation of some sort, that the distances between musicians *feel* right.

The first time I became conscious of spatial discrepancies between sound sources was in Donaueschingen in 2017, where the SWR symphony orchestra premiered Australian composer Thomas Meadowcroft's piece *The News in Music (Tabloid Lament)*¹, a piece for orchestra and preproduced audio. While the whole piece in general elicited unfavorable reactions from the audience, what struck me the most was how disconnected the orchestra's sound was *physically* from the sound of the electronics coming from the PA speakers hanging from the ceiling (a quite common setup). For me, the sound never blended, and as a result I struggled to perceive the two elements of the composition as belonging together, resulting in

1 <https://www.youtube.com/watch?v=63wv4W14nxQ>

a kind of spatial (as opposed to temporal) latency².

I had a similar experience a few years ago visiting a performance of six short dance pieces at the Norwegian National Ballet. In one dance piece, the musical accompaniment was a solo piano piece, I don't recall which one, played through the large PA in the opera house in Oslo, its sound magnified a thousandfold. In the next dance piece, as if by magic (because it is magic!) the same loudspeakers played a recording of the second movement from Tchaikovsky's fifth symphony. How could this be? How could the same sound source seamlessly switch between two so radically different musical spaces? And how could the sound of the solo piano be so vastly out of proportion to its origin? Of course, this is the wonder of the reproduction of sound, accelerated and made ubiquitous by the digitalization of many aspects of our lives.

I am interested in composing not only as a way of creating something, but also as a way of reflecting on what has been, is being created, and how. Lachenmann said to compose is to build an instrument (Lachenmann, 1996, p. 77). For this you need to know what you are building with. I am interested in knowing the media I compose with, and signifying to the audience what it is am building with.

In this thesis, I will try to map the terms instrument, framing and space as compositional media, meaning parts of a composition that I try to communicate information with, and discuss some of their conceptual, technological and historical dimensions.

In part 1, I define medium and media in compositional terms, as well as the relations between compositional media, instruments and space.

In part 2, I discuss different understandings of frame and framing in music and art.

In part 3, I give some examples from music history that make use of physical space and, to a lesser extent, conceptual space. This list is by no means representative of the diversity of works that deal with space, to whatever extent, and furthermore focuses solely on Western art music starting around 1900, unfortunately represented mainly by white men.

² This is not a statement about the quality of the composition. It was merely the acoustic properties of the technical setup that, to me, were distracting.

In part 4, I describe my own compositional attempts at layering different media within my compositions, and how this potentially expands the physical and conceptual spaces I am working within.

1. Media: a means to what end?

What is a medium? A medium is a thing. It is a thing that does a thing. The thing it does, is to convey, or to communicate, or to facilitate, or to impart: information, a feeling, a process, knowledge (respectively?). “Medium”, in the most basic sense of the word, means “middle”, which etymologically puts it in relation to the German “Mittel” and the Norwegian “middel”, which can both be translated as “means”, “device” or “vehicle”. A medium is something that one, voluntarily or not, uses to convey information.

In his book *Understanding Media: The Extensions of Man* (1964/1994), Canadian media theorist Marshall McLuhan gives a more cryptic definition of media, stating that “the medium is the message” and that “the “message” of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs.” Even more cryptically, he states “that the “content” of any medium is always another medium”, further elaborating thus:

The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. If it is asked, “What is the content of speech?,” it is necessary to say, “It is an actual process of thought, which is in itself nonverbal.” (p. 8)

This chain of mediated abstractions or translations (thought–speech–writing–print–telegraph) is also present in composed, especially instrumental, music: the content of a score is the composer’s thoughts, just as musical interpretation is the content of the score, and musical interpretation is the content of a performance. Is the content of a concert merely the performance of the musically interpreted, manually scored thoughts of the composer? I would argue that a concert is so much more than just a chain of abstractions as described above. A concert is a social space, an emotional space, an acoustic and physical space, a space of discourse. Even just a single aspect, or *layer*, of this chain, such as interpretation, may in extreme cases present an unmanageable amount of complexity³.

In his book *Musik mit Musik*, Johannes Kreidler postulates that music is always open, that it

3 For example, when doing research for my piece *a cello is not a cello is not a cello* (2021), I found a website collecting information on all recordings of J. S. Bach’s six cello suites ever done, which to date are more than 200. “Who needs more than 200 recordings of Bach’s suites?”, one might ask. But just this one example opens up questions, and thereby arguably creative potential, in terms of music history, interpretation, style, recording technology and so on.

is conveyed⁴ and realized through ruptures, transfers, by way of human intervals (“Menschenintervalle”) and technical circuits. By utilizing these gaps, these openings, or by adding new ones, he argues, one gains creative ground. Music may be fanned out (“Musik ist aufklappbar”), layers may be distinguished and identified (2007, p. 20). What is being fanned out are the different media, the spaces in between thought and speech, imagination and score, brain and hand, instrument and ear, electrical current and membrane, to name a few. Referring back to McLuhan, as a listener and a composer, I want to dissect these chains of content ↔ media, open up their layers and think about and play with their creative potential. If I manage to identify a medium as a medium – a cello as a cello, a loudspeaker as a loudspeaker, a room as a room – it creates a kind of resistance that I can compose with and *against*.

The change of scale in how we consume music or any other art has changed immensely over the last 150 years, and writers such as Walter Benjamin and Harry Lehmann have coined the terms “age of mechanical reproduction” (1935/1969, p. 217) and digital revolution (2012), respectively. The fact that I can listen to Catherine Lamb’s *divisio spiralis* while on a walk around Sognsvann is both completely normal and mind-boggling to think of. What I’m interested in is how different media, different instruments and their respective dimensions of scale or pace or pattern can be utilized in one compositional space, and how one medium, in the sense of McLuhan, potentially *is* its message, or at least part of it.

Every medium may be fanned out into different dimensions of history, perception, discourse. The technological history of the videocamera for example is young enough for even me to have witnessed it become a ubiquitous gadget. A few decades ago a professional film camera was inaccessible to most, nowadays people make feature-length movies on a iPhone. The first cell phone I owned had no camera, my current one has three (which is comparably few).

Examples like Lisa Streich’s use of motorized gadgets on traditional instruments⁵ or Simon Løffler’s intricate setup of guitar pedals, lights, a mixer and the electric current running through the musicians’ bodies (in his piece *b*⁶) are interesting cases of how one singular compositional medium or instrument can require several human or non-human entities’

4 An alternative translation of “vermitteln”, the German word used, could be “to mediate”.

5 <https://www.youtube.com/watch?v=2AB0UJN62Xg>

6 <https://www.youtube.com/watch?v=yM4DCuiodxg>

cooperation.

A medium can be a carrier for a material and its development⁷, or it can be the material itself, although both are indicated in their respective other's manifestation: while the cello's particular sound production is the material of Lachenmann's *Pression*⁸, it is already present in J. S. Bach's cello suites, whose explicit material (rhythm and harmony) is something else. Consequently, what is a medium and what is its content is always in flux. At least analytically, I can zoom in and out of its layers and open them up in potentially infinite different directions.

Technological advancements have also changed how composers compose. A few decades ago, making a tape was painstaking work that took weeks to finish and a studio in which to do so, today I can edit sound (and video, which is even more data-intensive) on a small computer I carry with me almost everywhere I go.

A quite radical and perhaps provocative quote by German media theorist Friedrich Kittler, writing about microcomputers, reads: "We do not write anymore.... Nowadays ... writing passes instead through microscopically written inscriptions" (Kittler, 1997). If one were trying to be polemic, one could argue that in a similar way, no human being composes anymore, but that composing runs through inscriptions burnt into silicon by electronic lithography. Of course, in many ways, this is not the case. Plenty of composers still write by hand, sketch by hand. But writing a score by hand will always mean going back to a "simpler" medium that has been technologically surpassed. The changes brought to musical composition (be it pop or contemporary classical) by the advent of technology and mass media cannot be undone, even if I sit down and compose a piece by hand.

Ernst August Klötzke, my instrumentation teacher in Frankfurt at the time, insisted that we write our orchestrations on paper, by hand. He argued that the hand teaches the brain the craft of instrumentation differently (and for the sake of his argument, more thoroughly) than a computer could. To him, writing by hand and with *inner* listening as opposed to writing in a notation program and with *outer* listening constituted a better learning of this craft. In a way, I agree with this, but I wonder what potential may lay in fully embracing digital means in the

⁷ "Development" in a very broad sense: material may for example be developed purely by repetition, shifting the site of its development from the paper to the listener's perception.

⁸ <https://vimeo.com/242038057>

learning of, for example, orchestration.

The underlying question here is: how does writing by hand or digitally change the outcome of what I write? How is the medium of a notation software its message in terms of how my compositional process will turn out? Writing by hand may be often seen as a more “pure” way of composing, as a more direct expression of what a composers hears in their head. But I argue that the hand also is a medium, changing the compositional processes in one way or the other. Thoughts must be conveyed through some kind of medium, therefore the thoughts I write out while composing or sketching will always be affected by what media I choose to execute it with, be it pencil, paper, screen, note program, audio-file editing program, video camera, colors, and so on. The only pure musical thought to exist would be the one that never leaves its composers head.

Personally, my workflow relies on being able to utilize different media, and thus different “patterns” of composing: when sketching material, I will most often use a pencil and paper, while some kind of music notation software is indispensable for writing scores and parts, because of the flexibility in layout, ability to gain overview quickly, to copy and paste, and perhaps even to listen to a (admittedly dumbed down) version of what the piece might sound like in a performance. But this presents a different problem: often, instead of composing, I will fidget with the layout options, trying to find the perfect font for the bar numbers for example, or changing spacing (and then changing it back). This multitude of tools used (which then also must be seen as compositional media) becomes only more complex with the use of different categories of media: I can’t write a score in a video editing program, and vice versa. I need to get them to communicate with each other, either directly, or through me as a translator. In composing a piece for video and performers, I use (at least) two tools, two media. The relation between then becomes a third medium. The same might be said for writing for two instruments, be they similar or different. In using two compositional media, a cello and a cello, their relation becomes a third medium, which is totally different from for example the relation between a cello and a piano.

While a loudspeaker connected to a (digital) computer can, in some cases, be said to be little more than a better, more flexible version of a phonograph (an analog medium), I once again invoke McLuhan in saying that the change of scale (in how we listen to music) is irreversible.

Only several decades ago, one had to sit with the record player and turn the record at a certain point, in order to listen to an album (which was limited to a certain length, to a certain amount of (analog) information). Nowadays I can listen to a digitalization of the same record on shuffle from my phone, which sends the information, digitally encoded, to my bluetooth speakers, where the information is decoded and turned again into sound. When getting to know an album, I often alternate listening to it on shuffle and in its original order, so as to gain a fresh perspective on the songs and their relations. This is a change of pattern. If I suddenly remember a song from long ago and want to listen to it, a quick search on Youtube or Tidal will not take long. This is a change of pace.

Where I live now is a very noisy environment. The fridge sings, there's cars and the T-bane outside, the neighbor's dog is a nervous wreck, we know when someone above us is showering or has just used the toilet. Outside, someone is using a saw that sounds like an electric guitar. This has been my home for almost four years. The place we are moving to next month will be much quieter. Residential neighborhood, in a side street. Our landlords (whose basement we'll be living in) have a big house and don't live their lives in only 1 or 2 rooms. Almost all pieces I have made in the last four years have to a large extent been thought up and composed in this space, in this medium for my everyday life. Some of the concrete elements, the sounds and sights I have been living in – living among, living with – have made it as material into my pieces, for example the fridge in *grau-gräulich 1*⁹ and the kitchen in *Kjøttdeigbrus*. I wonder how the rest of our living situation has influenced my composing. I wonder how it will change when I move.

9 <https://www.youtube.com/watch?v=ISMqA-KjOSw>

2. Framing and perspective

A musical frame in its simplest form: a piece starts, then it ends. What happens between these two points in time, is the piece, what happened before and happens after, is not. On Youtube, you can listen to Radiohead's *Pyramid Song* slowed down by 800%¹⁰. Is my life and all its sonic content, internal and external, just a version of John Cage's 4'33", slowed down by 9248352%? But in the same way that music extends into more dimensions than only time, this temporal frame is only a part of the whole. Manos Tsangaris describes the nineteenth-century ritual of the concert thus: the audience sits and waits, the artists enter the stage, applause. They bow. Some preparations, the people stop talking and a pause emerges, probably the evening's most important silence, marking the frame for the following piece (2005a). Surely you remember?

He continues: had we not codified the situation (or positioning) of making music within the internal and external requirements of the concert hall and designated this as the frame for music *itself*, music as such would not exist. The framing of a composition (as a performance or as a score) is what makes it discernible to us as a composition. A piece of art on a wall in a museum is a piece of art because it is hanging on a wall in a museum. These frames are physical ("concert tonight at seven at the concert house") and social (connected to class and education).

But all of these *other* things are also part of the frame, not only the evening's most important silence. We know (mostly) when the piece begins and when it ends. Where does *the frame* begin, where does it end? Are only the small preparations on stage part of it, or also the big preparations, the hours of rehearsals, the years of practice, the centuries of musical discourse, the millenia of music history? In order to be able to compose anything at all, the composer will most often have to make decisions about what *not* to include from this ocean of possibilities. This is also influenced by the composer's choice of topic or material, which in turn becomes a medium in itself.

When I start to compose a new piece, as I mentioned in the introduction, one of the first things I tackle is the (visual) disposition of the compositional media on the stage, how they

10 <https://www.youtube.com/watch?v=XiKWfcy-Z70>

are situated and spaced towards each other, how the media relate to each other. I call this framing, because for me it is a compositional process of designing a frame. What is more, once I have found a frame for a piece, I can try to poke holes in it or perhaps even go so far as to test how much I can chip away before it's no longer recognizable as a frame (at which point I may have unwittingly created a new frame on a larger scale).

In my composers collective Blomsterbed, we generally try to lessen the invisible yet ubiquitous gap between the audience and the performers, the social and cultural framing that identifies us as one or the other¹¹. At our first collective event in the fall of 2021¹², we served a welcome drink to every audience member and accompanied them into the performance space. We tried to lead the audience through the performance with an interactive program note. We tried to make the evening as inviting, comfortable and fun as possible, while showing individual compositions of ours that were generally more meditative and subdued in their expression. For the Only Connect festival in Oslo 2022, Blomsterbed was asked to make a performance in the staircase in the Munch museum. This was meant to be a transition between a concert on the ground floor and one in the twelfth, and again we made it our goal to lead the audience through our respective individual pieces. To this end, we asked a group of friends to act as “tour guides” and take groups of audience members up the escalator stairs¹³, past the members of Blomsterbed, each performing on one of the floors (or between them). We composed a collective opening performance that combined dance moves, pop music and practical information about the concept of the performance. Since we tend to act as both hosts and performers in these events, there is also a switching of roles at play: as hosts, we try to facilitate closeness and openness between us and the audience; as performers, we try to maintain the gap, in order to delineate the individual composition and its performance. Maybe, this difference between differences is something we can continue to work with in the future.

As with space, framing can be understood both in a concrete physical or visual way, as a social dimension, as well as conceptually. Because framing may also mean: I set the frame

11 One could say that another dimension of this is the discourse surrounding, for example, contemporary classical music. For those of us who are “in” this discourse, who know the lingo, the etiquette, it is very easy to identify someone who is not. I feel that sometimes this can create an invisible social barrier for those who are not inside the circle, so to speak.

12 https://www.youtube.com/watch?v=BpJNpnT5a_k

13 We had originally even considered having all audience members hold on to one long rope going up the stairs. We cut this part for practical reasons, instead opting for the use of an “invisible rope”.

and do no more. One might call this “hands-off”, or as I have (jokingly) called it “low-effort” composition. Pieces that present us with something and then leave us to our own devices. In extreme cases, such as Cage’s *4’33”*, the piece really does consist of little more than a situation (but nonetheless composed!) the composer puts the listener in. Like hanging a fancy frame around some window in a museum and calling it a piece of art.

Talking about James Tenney’s so-called “postcard pieces”, *Koan* (1971) for violin, French musicologist François-Xavier Féron (2004, p. 104) writes:

As the composition process offers no mystery as to how it will unfold, the ear is directed towards the constituent sounds themselves. Behind its simplicity, *Koan* is the gateway to an oneiric sonorous world full of unnoted and ambiguous things that happen along the way such as beats, combination tones, stream segregation...

With two last phenomena he describes here being psycho-acoustic in nature, could one say that this is the extension of the compositional medium into the body of the audience, into their sensory organs? That, as we extend our bodies by means of different media, the media extend, up-stream so to speak, back into us?

A piece that is framed in this way gives agency away from the composer, to the performers and the listeners. Pieces like LaMonte Young’s *To be held for a long time*¹⁴ are extreme examples of this, as they give a lot of agency to each audience member. Agency to be bored, to leave the concert, to change their minds, to be enticed to listen, to be drawn into a flow state, or the other way around. In a way, this is a compositional medium, although the “composing” part is largely out of the composer’s hands.

In visual arts, having a certain frame also means having a certain perspective. Perspective can be both a technical term and a narrative device, in both cases meaning something along the lines of “seeing through”, as in “seeing through the eyes of” or “seeing through the windowpane of the canvas”. Especially in a narrative visual art such as film, the camera (or, to be more precise, the audio-visual) perspective (framing, point-of-view) is of vital importance, as it shapes and defines not only what we, the viewers, see, hear, know, but what we *do not*. Every perspective we experience when we watch a movie is the result of a

¹⁴ <https://www.youtube.com/watch?v=QX43QTYyV-8>

deliberate string of decisions about narrative content, lighting, distance, mise-en-scene. Playing with the particularity of the perspective is standard practice in movies and other visual media alike, for example breaking the fourth wall, using special effects or camera movement to convey a character's mental state or simply making visible the viewer's perspective by withholding information, thus identifying it as a medium of its own.

In 2018, I wrote a piece called *fem ellipser* in which I took inspiration from the ellipsis as a narrative device, especially the way it is deployed in film: two scenes are cut in succession, but their connecting part (however long it may be) is omitted (for example: a person leaves a room and then, in the next scene, leaves the house, the part where they are walking through the hallway having been omitted). I tried applying this narrative device to musical material and its development over time, "cutting out" parts of a (loosely) linearly developed material, replacing the match cut of film instead with breaks of different lengths and intensities. Looking back now, I did it wrong. Although I had a clear concept in mind, I still just composed the piece from A to B, resulting in a rather coherent set of movements, with rather generic pauses between them. I had come up with a (for me) new and exciting framing, a compositional challenge, but my compositional methods fell behind. The piece turned out okay anyways, but I still wish I had managed to create more coherence between its framing, its media and its execution.

3. Physical space/conceptual space: some examples

To speak of space is to measure.

Here is where to experience it. And even
if we could chart it by foot or even by flight,
its whole would not be fathomable.¹⁵

(Tsangaris, 2005b, translated by the author)

In the closing paragraphs of his essay *Musical Time/Musical Space*, US-American musicologist Robert Morgan moves his attention from what he calls “tonal space” (the main concern of his article) to two other musical spaces:

The first is the actual physical space in which music is performed. Sounds, of course, have physical sources, whose locations are to at least some extent perceptible to the listener. Yet traditionally, Western music has made little use of spatial direction as a compositional resource. There are exceptions, such as the polychoric music of late-Renaissance Venice, for which separate choirs were placed on opposite sides of Saint Mark’s and heard alternately, creating a spatial analogy to the responsive structure of the music. But only in the nineteenth century does the placement of performing forces begin to assume widespread significance. Berlioz was fascinated by the possibilities of multidirectional sound sources; the Requiem, for example, distributes four subsidiary orchestras in the four corners of its performing space. And one finds similar effects in many other composers, including Beethoven, Wagner, and Mahler. (Morgan, 1980, p. 536)

One aspect is, of course, multidirectionality *within one room*, a kind of immersive sound so to speak, which we know well from the movie theater, for example, and which in the context of a concert creates a different kind of space than the “full-frontal” standard mode of Classical music perception. But already in Mahler’s symphonies, which often make use of off-stage orchestras, it is not only the direction that is altered, but the sound itself. Our ears, highly advanced sensory organs, are in most cases capable of locating and distinguishing sounds as coming from one room or another. While Beethoven and Mahler often use this effect more as

15 “Vom Raum zu sprechen ist vermessen.
Hier ist der Ort ihn wahrzunehmen. Und selbst
wenn wir ihn abschreiten oder *abfliegen* könnten,
wäre er als Ganzes nicht zu erfassen.”

a kind of trope (horns or trumpets in the distance, signaling the inauguration of spring or of the hunt, for example), Charles Ives takes it a step further to abstraction by creating individual and independent idea spaces that are, additionally, physically or temporally separated (e.g. *The Unanswered Question* and *Central Park in the Dark*, respectively).

In *The Unanswered Question*, the “string quartet or string orchestra (*con sordini*), if possible, should be “off stage”, or away from the trumpet and flutes. [...] The strings play *ppp* throughout with no change in tempo” (Ives, 1908/1953, p. 2). The trumpet’s musical material is neither harmonically nor rhythmically connected to the strings, while the part of the flutes “becomes gradually more active, faster and louder through an *animando* and *con fuoco*. This part need not be played in the exact time position indicated. It is played in somewhat of an impromptu way.” Ives facilitates the programmatic narratives musically by creating different spaces – physical, harmonic, temporal – that come together within one framing. I will come back to the notion of framing as a container for different spaces later.

Central Park in the Dark also uses asynchrony to establish different locations within a fictional orchestral soundwalk, in addition to employing a polystylistic composition method decades before it became popularized in Western classical art music by composers like Bernd Alois Zimmermann and Alfred Schnittke. Even without the programmatic title, while listening to *Central Park in the Dark*, the contrasting natures of the different musical material becomes apparent, down to the emulation of acoustic-spatial effects, such as the piano part being suddenly louder, or “closer”, in its second entrance as opposed to its first (Ives, 1906/1973, bars 60 and 47, respectively) or the strings playing in “low light”, achieved by stacking of thirds and fourths in close tonal proximity, effecting both tonal and timbral ambiguity.

In many of these cases, it is clear what is meant to be on stage and off stage, meant to be foreground and background. Even in *The Unanswered Question*, in which the hierarchies, at least in the narrative sense, are more ambiguous, the strings clearly provide a foundation, a sonic backdrop, an accompaniment without a melody, the effect of which is enforced and enhanced by both their soft dynamics and their slow harmonic pace.

In Øyvind Torvund’s *Symfoni for Kunstnernes hus*, premiered by the Norwegian Radio

Orchestra in the fall of 2022, this question becomes null and void. Everyone is on stage. Everyone is off stage. Where even is the stage? And by contrast, where is the audience? In Torvund's piece, the orchestra was split into groups (strings, woodwinds with synthesizer soloist, brass and percussion soloist) and placed in each their own room/space across two floors of Kunstnerens hus in Oslo. (Unfortunately, nobody was placed in the small room in the basement with the coat hangers and lockers, which I would have found extremely amusing.) Before the music started, the audience was asked to walk around during the piece, which lasted around 40 minutes.

Of all the groups, the brass section, being placed in a smaller room in the back of the first floor, was furthest away, and they were therefore amplified through a loudspeaker next to the door to their room. This also meant that if one went to "visit" the brass section, one could hear little of what the other groups were playing. In contrast, if one sat in the large staircase leading to the second floor, one would achieve the most balanced sound picture, as it was right in the middle between the woodwinds in the foyer and the percussionist and strings in the large galleries in the second floor. As I remember it, the music evolved over time and space, with certain parts of the material either being repeated and slowly developed by the same group, or echoed by another group, either as an immediate call and response, or temporally (and spatially) removed, perhaps more as a memory.

Torvund's symphony had the format of an actual musical piece that is played from start to finish, which stood in contrast to the agency that was given the audience in their ability to move around and "mix" their own sound to the symphony, meaning that one had only limited time to find an optimal place to listen to the music, as opposed to if it had been an installation. For me personally, the social situation also became a part of the experience of the piece, as I often had to walk by or between groups of people, or wait for a person to walk through a door before I could walk through it myself. Since there was no difference in lighting between stage and audience, and the audience was frequently scattered around the musicians, observing the other audience members listening became for me also a part of the piece.

In this concert, the audience was meant to walk around, which is something that in my experience must be explicitly stated, perhaps even enforced by volunteers if it is integral to

the piece. Here, it was facilitated by there being no main room, and no place where one could clearly hear all groups at the same (although after a while, the majority of audience members ended up sitting or standing in the large staircase going to the second floor). Despite this and despite there being more than enough space around the musicians in their respective rooms, audience members still voluntarily formed (more-or-less) circles, at a distance, around the players, or were lined up along the walls, creating a boundaries between performers and audience, often consisting of several meters of free space (instead of what might be a raised stage other places or chairs placed at a comfortable distance from the performers).

In Iannis Xenakis' 1966 orchestral piece *Terretektorh*¹⁶, the courteous distance is rescinded, as the audience members are scattered among the orchestra musicians, or perhaps the musicians are scattered among the audience, whichever way one chooses to see it.

In [Xenakis'] words, he wanted to create a "Sonotron: an accelerator of sonorous particles." Indeed, the opening three minutes of the piece centers on a single note, passing it around the musicians to create a swirling effect Each player of the orchestra, in addition to his or her own instrument, is required at various times to play from an arsenal of percussion instruments, including woodblocks, whips, maracas, and siren-whistles. These sounds are spread around the orchestra, creating "flames" of sound (sirens), or "clouds" of noise-like textures. For perhaps the first time, members of the audience could hear the orchestra from the "inside". (Harley, n.d.)

Certain "small" instrumental sounds will be audible to some and not others, creating an extreme sense of near and far, as well as (built in to the score) sound moving around the audience ("waves of waves" so to speak). I imagine the swarm-like outbursts of whips and woodblocks, which are reminiscent of similar effects in *Pithoprakta*¹⁷, composed by Xenakis some 10 years before, but here stretched out into several spatial dimensions, to be especially interesting, perhaps even jarring to listen to due to the fact of the harsh nature of their sound.

Similarly, in Pauline Oliveros' *Earth Ears: A Sonic Ritual* (1989) players are asked to "spread out appropriately in the performance space, surrounding the audience if possible, so that sounds pass through the audience from player to player". The piece consists of potentially

16 https://www.youtube.com/watch?v=37ajOyhcl_c

17 <https://www.youtube.com/watch?v=nvH2KYYJg-o>

endless cycles, each one consisting of four sections pattern–transition–change–transition, for which the material is to be improvised or invented by the players and (musical) movement from one section to the next should be achieved collectively. More interestingly, Oliveros ties a formal, structural part of the piece to (physical) player movement: “During **transitions** those players who are mobile should indicate **transitions** by moving gradually to a new location in the performance space” (Oliveros, 1989, bold words in the original).

In 2017 my former teacher Michael Reudenbach had a piece premiered at the ZeitRäume festival in Basel, which was composed for a “three-dimensional” concert hall: eight musicians were placed in scaffolding around the audience and additionally on three levels (audience level, above, beneath) and communicated sonically according to a set of composed instructions. A very striking experience for me was listening to the bass clarinetist playing some very low notes, directly above me. Low notes are generally more difficult to locate, which can be exaggerated by soft dynamics, and even though I *looked* at the musician and *saw* them playing, I could not locate the sound I was hearing, failing to combine my auditive and visual senses. Perhaps, this experience was especially peculiar because the *low* notes were coming from *above* me, when our spatial metaphors in music most commonly work the other way around. This directly inspired the placement of the bass clarinet in of the pieces in my portfolio, *tve*: off stage, playing low and soft notes, barely noticeable if one doesn’t know it’s there.

In the spring of 2022 at Borealis festival in Bergen, Norway, I visited Espen Sommer Eide’s installation *The Waves*. It takes inspiration from the eponymous novel by Virginia Woolf, in which six childhood friends are followed throughout their lives and where the narrative constantly switches perspective and where often, one and the same event is described from the point of view of different characters. Eide’s installation consisted of different kinds of loudspeakers arranged in the rooms of a two-floor villa, the Christinegaard Hovedgaard, among sofas and other furniture that was already in the building, making for an overall atmosphere that encouraged lingering and listening for extended periods of time. He used recordings of vocals and electronics by singer and improviser Mari Kvien Brunvoll, microtonal tuba by Martin Taxt. and self-made instruments (Christinegaard Hovedgaard, n.d.). During my ca. two-hour stay in the house, fragments and longer parts of these recordings (which also can be listened to as a regular album) appeared and reappeared in

different rooms and different sequences and were thus musically contextualized and recontextualized constantly. As with Ives' program for *The Unanswered Question*, Eide has translated the interwoven narratives of Woolf's novel into musical and physical parameters.

The recordings themselves were made in Marres in Maastricht, the Netherlands, where the installation was originally shown. The tracks of the album are accordingly named after the rooms they were recorded in, meaning that this re-installation I visited in Bergen was, in a way, like having moved one house into another, one set of rooms in to another set of rooms.

4. About my own pieces

In this last part I will talk about the five pieces I have handed in as the compositional part of my thesis: *tve*, *I wanna be like*, *double-trouble*, *Jenga tower made of cheese* and *Kjøttdeigbrus*.

Use of framing in *tve* and *I wanna be like*

There are several aspects that were important to me in the framing of my piece *tve* for accordion, video, off-stage bass clarinet and ensemble. Firstly, I had a specific visual setup in mind: the canvas needed to be quite large, almost as in a movie theater, and above the heads of the ensemble. I wanted the accordion to be in the middle of stage, directly beneath the canvas, as a kind of visual intersection or focus point. It is the only instrument on stage that doesn't move throughout the piece, and in the third and last movement, only the accordion and video remain on stage. In the second movement, the percussionist and string players were to make a closed community around the vibraphone (musically and physically), excluding the accordion visually and action-wise, isolating it as a lone soloist that doesn't communicate actively with the rest of the group. After this, they leave the stage together before the third part. While both video and accordionist are present throughout the whole piece, the accordion only enters at the very end of the first part, meaning that the video is the only constant in the three parts (and incidentally the medium that is most static in the development of its material). Thus, I tried to treat the video, by far the most visually dominant compositional medium used, as an instrument that "plays" its material and has pauses as well, instead of using it as narrative medium that the rest of the piece evolves around.

Conceptually, I imagined the three parts of the piece to be like scenes in the theater, each with its own visual constellation and "roles" for the players. For each part, I had very clear relations between the instruments in mind. The small ensemble of three string players and the percussionist always act in synchrony, joined together rhythmically and in terms of their material in the first part; by playing on the same instrument, the vibraphone, in the second part; by their joint absence in the third part. The accordion is a kind of solo instrument, while the bass clarinet is hidden off-stage, acting from inside the "shadow" to the accordion, only briefly stepping out in the third part. In terms of synchronization, the bass clarinet is meant to

loosely follow what's happening on stage, while maintaining its own sense of phrasing. In the second part, by using space notation for the accordion and bass clarinet, and metric notation for the rest, I tried to illustrate the differing musical spaces and their respective internal timings: strings, percussion and video in metric, but not global synchrony; accordion and bass clarinet outside of the meter played by the other group.

Even though I intended for it to be an abstract instrument, by using video material of a group of trees and plants in a forest, recorded one afternoon in the woods around Sognsvann, of course I opened up the concert space in the semantical direction of nature, trees, environment, wind, animals, which is something I tried to mitigate by using the video more abstract-instrumentally. The addition of video came quite late in the process of composing this piece, although some of its elements fit in snugly with the underlying themes I had decided on earlier: the instruments' different materials (metal, wood, air or breath) and how they form different parts of each instrument.

I wanna be like for video and performer is greatly inspired by Tony Oursler's *Self-Portrait in Yellow*¹⁸ (from which a quotation became the first line of text in the piece). One of the first compositional decisions I made was the physical-visual framing: I, the performer, sit on stage with a box over my head, onto which a video of myself inside said box is projected. The text and singing, the *content*, if one will, came later and is to this day prone to changes. The purpose of this staging is to disconnect the performer's body from the performance by making it hold in place the canvas for the video projection, as well as by splitting the head and face from the body and placing them in different media and states of action (video projection, active and physical presence, inactive, respectively). Additionally, in the beginning of the piece it is my intention to give the illusion of the projection being a live-video of me talking and singing inside the box.

In the course of working with this piece though, I realized more and more that by using video as a medium, I could extend the room and make use of video and sound editing, as well as the possibility of moving the box along with the audience members, who are stuck with the perspective from inside the box. In the current version of the piece, it ends by me taking my head out of the box both in the video and on stage, but it is then revealed that, in the video, I

18 <https://www.youtube.com/watch?v=OkSOLlmTFoc>

am in a different place (my apartment), and I take the box, and the audience to a patch of grass outside my building. Live on stage, I put down the box and leave the room, and the piece ends when the video is done and live-me re-enters the room.

Layers of media in *double-trouble*, *Jenga tower made of cheese* and *Kjøttdeigbrus*

Double-trouble (evil twin) is a quartet for accordion, baritone saxophone and their doppelgängers on a video screen, written for AKSE (Maren Sofie Nyland Johansen and Eivind Holmboe Leifsen). Over the course of the piece, a four-note theme (C-e-b'-es") is developed from its starting point **e**, which is initially bent up- and downwards microtonally and later fanned out into a chord. For the most part, all four instruments play in constant unison.

There are at least two layers of compositional media in this piece, the first being the musicians and their playing, and the second (or second and third) being their prerecorded material, that is edited (at times audio and video independently). By keeping the audio layers specifically in close proximity to each other, I tried to create moments ranging from small irritations, "blurs", to clear discrepancies, while snapping back to the starting point of the original material (bars 1 and following) twice during the piece (in bars 153 and 208). The layers almost never completely lose contact, except for the "chaos" part (bars 187–207), where I added old sound recordings of the musicians improvising together, while the video and live layers fall out of sync completely.

When writing this piece, I was interested in the nuances of sound created by blending different parts of each instrument: alternating fingerings on the saxophone for the same note (a kind of slow-motion *bisbigliando*) and different registers in the left and right hands on the accordion, which are later expanded into microtonal oscillations around the starting pitch **e** (starting in bar 31). In the video part, I realized that I could complement this by adding digital manipulation to the video, for example time-stretching the pre-recorded material (which is more or less identical to the material the musicians play live), resulting in microtonal shifts in pitch, by using loops, as a technological translation of the constant repetitions in the instrumental score and by splitting the audio from the video, so that the musicians virtual selves can sometimes be seen laughing or looking into the camera, while their instrumental sound plays on. The double framing of live performers and their video versions is something

that the composer Michael Beil has worked with extensively, often using live-processed video to create several versions of the musicians and their actions on stage, for example in *BLACKJACK*¹⁹ (2012) and *caravan*²⁰ (2017).

The piece ends with a prolonged note e, played in all four instruments, where I tried to take advantage of the visual aspect of the musicians holding a note for as long as possible. While we can watch the accordion's bellows move to produce a sound, in *pp* this movement will be very slow, perhaps even unnoticeable. Looking at the saxophonist, we receive no visual cue as to how much air is left in his lungs. The last unison note is played *morendo*, and the musicians should freeze in place when they have finished playing, which is doubled in the video actually turning into a static picture for a few seconds before blacking out.

Jenga tower made of cheese is a piece for 5 musicians and 4 loudspeakers, although the exact configuration of instruments remains open to changes. In general, there should be one less loudspeaker than there are musicians, with a minimum of 3 musicians, placed at least 1-2 meters from each other, with the loudspeakers between them. Each musician is given a repertoire of three sounds or actions, from three different categories: A. melody tone (part of an overarching melody divided between all players, moving from left to right in a constant loop), B. variable length event and C. singular event. For example, the percussion part of the original version consists of A. vibraphone (fis", bowed), B. crash cymbal, struck and then muffled after a shorter or longer period of time (that the performer chooses freely), and C. a single strike on a small drum. The musicians are generally very limited in what they may play, and sonic variety is achieved by the composer grouping the sounds in different ways. In one of the categories, each performer is allowed a choice of two different sounds. Ideally, the musicians would choose the sounds themselves, but for now, the version that exists uses sounds chosen by me. The score also includes four voices for the loudspeakers that play the same material, prerecorded and put together to a tape. In the beginning, only the live musicians, the melody cycling through the instruments, accompanied by the other, more percussive sounds.

While the melody (A) is written out across the whole score, the rest of the overall form is divided into three types of sections: 1. free improvisation with B and C while not playing A;

19 <https://www.youtube.com/watch?v=5iYlejiftAg>

20 https://www.youtube.com/watch?v=kLD_WyTIBaI

2. homophonic, written out; and 3. heterophonic, written out. The overall form of the piece is as follows:

1 – 2 – 3 – 2' – 1' – 2* – 3' – 2° – 1*

Starting in part 1', the prerecorded sounds start creeping in, as the live musicians are gradually faded out of the action on stage, and the loudspeakers take over more and more space, additionally panning the previously fixed sound sources to different locations. By the end of part 3', all live sounds have been replaced by their equivalents coming from the loudspeakers. In part 2°, the live musicians resume their playing in a kind of reprise. In part 1*, the prerecorded sounds join the improvisation, and the piece simply stops after a while, unceremoniously and abruptly.

In writing this piece, I was interested in the interplay between actions and sounds produced by “real” musicians, meaning their own and their instruments’ bodies, and the same actions as disembodied sound, as well as the possibility of relocation of these sounds. The repetitive nature of the music, the quiet, low-energy performative actions and the gradual displacement of the sounds, I envision, make for an atmosphere that is at once concentrated and relaxed, inviting audience members to listen in to the sounds and the melody as they cycle through the instruments on stage. By using the same “content” for the musicians (the performative-acoustic media) and the loudspeakers (the digital-acousmatic media), I aimed to make visible the location (or non-location) of the sounds, and to call forth a sense of disorientation. The use of different media was aimed at extending the acoustic and performative room in which the music happens.

Kjøttdeigbrus for ensemble with amplified objects, Youtube-video, live-video and performer, is the last piece I wrote during my studies and one of three pieces I had planned on making when I applied, the other two being *tve* and *I wanna be like*. In my application, I wrote about the acceleration of society and of different media being increasingly accessible in the 21st century, to which I will often try to compose slow and repetitive music as an opposite pole, and hopefully for the listener a chance to experience “Entschleunigung” (a German term perhaps translated as “deceleration”, commonly meaning some kind of temporary abstinence from being “online” and constantly available). In *Kjøttdeigbrus*, my aim was to do the

opposite and combine as many compositional media as possible.

The first element I will describe, and the one we are presented with first, is the ensemble that starts the piece playing relatively “normal” music. In the start of the composition process, this part was meant to be a joke, to make the audience think that perhaps they were listening to just another contemporary music piece. It was meant as a parody of a pling-plong concert, but over time it evolved into its own thing, and I developed a real affection for the music I had written. This had to do with the decision to have a cameraperson film the musicians, adding an extra layer to what was happening (looking back, the cameraperson could also enter the stage at a later point), but also with the fact that the musicians took the music I had written at face value (probably with an appreciation that I couldn’t have for it myself) and turned it into a very professional and satisfying performance. While composing the first 11 pages of the piece, I utilized compositional methods that I am very familiar with: additive rhythms, reduced harmonic material, instruments that I have written for before. So in a way it felt like I wrote nothing new. But by the power of the musicians playing, it turned into something worthwhile after all.

After this, there is an interlude consisting of one of the performers making small sounds with sugar and kitchen objects on a cutting board, amplified by a microphone, reminiscent of the sound world of ASMR-videos on Youtube²¹. What I found interesting here was the juxtaposition of two very different musical forms of expression. By drastically changing the “scenery” of the piece (while still keeping it connected through the live-video), I noticed that it allowed the amplified objects to take musical space and just *be* and *be perceived*, as opposed to the process-driven form in the start of the piece in the ensemble.

The style of composition changes yet again in the part for kitchen machine and ensemble. Here, the kitchen machine is used to play a melody with the different speed settings, that also influence dynamics (faster=louder). It is accompanied by the other instruments playing freely choosable notes, one note per bar. Each musician is asked to play only about 30-40% of the time, which creates a mosaic of random chords and notes around the sound of the kitchen machine.

21 This part was composed by Astrid Solberg, who introduced me to these kinds of sounds and who has used them extensively in her own work.

In general, apart from certain timing cues, the ensemble doesn't relate to the Youtube-video, except in the end of the first part of the video, where Youtube-me asks the viewer to "like and subscribe" several times, each time met with a loud "yes" from the ensemble. This is the only point in the piece where they relate to something outside of their group, as, although they are being filmed much of the time, they do not seem aware of this fact.

The second element is the aforementioned Youtube-video, which is of me making different kinds of food, consisting of two parts. The first part is in the style of a supercut of a fictional German cooking show hosted by me on Youtube called *Einfach kochen* ("to just cook", but also "easy cooking"). Here, it was important to me to document my technical advancement in using this particular medium: the quality of the filming in the beginning is of lesser quality, the colors are off, the camera is autofocusing on different parts of the picture, the camera angle is too low, I use the in-camera microphone and so on. During the process of filming several days in a row, I fixed these problems, and the later "episodes" of my show become accordingly more professional-looking. Furthermore, some outtakes have been kept in the video, such as moments where I make a mistake in the script, or where I am practicing how to say a certain line. Watching cooking shows is something that I have done since I was a teenager and it's an interest that has followed me from the TV-era into the newer media, such as Youtube or Tiktok. Thus, in coming up with the scripts for the videos, which are largely improvised, I tried to develop a kind of Youtube persona, where I try to combine different hosts that I have seen over the years and emulate their ways of speaking, choice of words as well as different tropes of video editing that have become common during the last years. The second part is a real-time video of a Chili con carne (that I started earlier in the video) simmering in a pot. Here I used the sound recorded from the pot to make a more ambient backing track for what is happening on stage.

In terms of the framing, the live-video is the most consistent element in *Kjøttdeigbrus*, but it's also the most loosely defined, mostly filming what is currently dominant in the score. Unfortunately, in the premiere (the video of which I have provided), we lacked a moveable canvas and couldn't find space in the room to project the video on to a particularly large surface. Ideally, the live-video would be the same size as the Youtube-video and projected onto a different area than the stage space, in order to split the audience's concentration visually in more than one direction. Perhaps, there needs to be more than one live-video.

The last element is that of the performer (me). After the ensemble, live-video, amplified objects and Youtube-video have been playing for a while, I open the door to the stage and come in with a portable stove, food and cooking utensils²². In a kind of doubling of the food show on Youtube, I start making a lentil soup, explaining what I am doing (in English), again trying to emulate different kinds of cooking shows I have seen and using some common tropes, trying to channel them through the aforementioned Youtube-persona.

It's after the entrance of the cooking show performer, when the kitchen machine melody starts, that the piece reaches its densest point in terms of number of media used and how each medium is composed with: the ensemble, though having already played its most intense passages, is still actively playing from the score (with the conductor), Youtube-me is still making food and explaining along the way, and performer-me has just started cooking.

Each individual element (or medium) of the composition is itself a collection of media. The ensemble is made of a conductor, musicians and instruments, microphones and objects. The live-video element is made of a performer (the cameraperson), a camera (on a swivel), a projector and a canvas (in the case of the premiere a white table propped up on some chairs). The Youtube-video uses a canvas, a projector, a PA, and this is not to speak of what is happening *in* the video. The cooking show performer is not only an additional physical presence in the room, but also speaking, "instruments" (kitchen utensils) and smells. In the end, soup is served to the audience, opening up the barrier between audience and performers and thus creating a new kind of social space. These things, media in themselves, are the framing, the requirement to even perform the piece. But the content, the pitches and rhythms, what we can see and hear, are also media. The monotonic music in the start of the piece presents a microcosm of rhythms and timbres, of their relations to and deviations from the other. The live cooking references the Youtube-video, as do the amplified kitchen objects, or is it the other way around? The audience is watching the performers watching the steel lids, while the lids' sounds go in and out of sync, as each lid's scale influences its pace. In each gap, transfer, rupture, relation and reference, one can find something to be creative with.

22 I hope that this came to a surprise for as many people as possible.

5. Outroduction

In this thesis, I've talked about what interests me in composing, as well as in experiencing compositions of others. I've tried to gather my thoughts about media and mediation and how they influence not only my compositional practice, but my everyday life.

There are always multiple dimensions and spectra involved in the perception and explanation of any given medium, in fact, even the definition of what or where or how it is, can be tricky. I feel that we can, at any given time, go into and out of these layers by way of thinking about, talking about, experiencing art. Music is certainly a huge part of this experience, but I believe that music itself is only a part of what makes music music.

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