Sonic Dominance and the Reverbation of Culture

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Outline

Introduction

In this thesis I will lead you trough a sonic landscape of religion, culture, transcendence and instrumentalization. The text starts from a point of mostly personal fascination, like church organs, Kraftwerk, techno and night clubs. Along the way I'm combining the overlaying themes in my fascination with my research into the work of Françoise J. Bonnet, Steve Goodman, John Akomfrah and Uwe Schütte. This resulted in a deeper and contextual understanding. Not only was this research about the history and culture of sonic transcendence, resistance and weaponry. It was also important in finding my own interest as an artist. I don't believe that an answer to what the power of music is can be found, should not be searched for either. Like Beethoven stated, music is of greater heights than theology or philosophy. Therefor what you're about to read is an observation on constructed sound. Finally this thesis represents my perspective and approach on architecture, as an architectural design student with a background in music. Architecture is an art of form and construction and so is music. Therefor I am often referring to 'constructed sound' instead of music, labeling something as music depends on who receives it. Although traditional architectural theory barley comes up in this writing, it is of value to the conception of architecture as the construction, ordering and elevation of space.

Chapter I. Holy Clubs: Funktion One's and Church Organs

The hot air vibrates over the small square inside the citadel of Montmédy, a small village in northern France. It is the summer of Covid-19, my girlfriend and I decided to leave the urban landscape of Amsterdam for a small forest cabin just outside of this citadel. We finish our abbey beer, brewed not far from here, and decide to leave the terrace adjacent to the square. The empty citadel surrounds a 17th century church that is still in use. Walking by the church, the open door on the side reveals a soft light and reverberations of a big old pipe organ leak into the summer air. I stop and now acknowledge its presence.

A few seconds go by before the sound lures me in. Once inside the church I get overwhelmed with the divine sound and I keep on walking more towards the center of the big space until suddenly I find a spot where the sound feels good. I turn around and above the gigantic closed door of the main entrance I see big glossy pipes held in place by a dark wooden construction. In front of this, as if it were part of the whole construction, there is a man, an operator, looking down with his back towards me. Between all the empty church benches, one stands out by holding a tourist family of four.

The sound surrounds me, it comes from everywhere, as if I'm drowning in it. It makes something or someone appear in my mind. It is a little priest, taking advantage of being dumbfound by the great ocean. The priest is demanding respect and obedience but I can see that he is not as powerful as he once was, just like the church. Respect I'm willing to give, I have, but there is nothing left to obey but the divine sounds coming from the organ. I can't recall how the church looked, but its sound is deeply nested in my faithful but subjective mind.

For instance the acoustic traditions of holy places. Which use reverberation, to produce and carry, but also magnify and augment haloed sounds to demand respect and obedience. Based on 'it' being greater than the faithful receiver[1]

It is a regular weekend but not for De School, a club in the west of Amsterdam. Once a month the club organizes a "weekender". A party that starts on Saturday and ends on Monday. It is Sunday evening and people start to gather in front of the place, some coming back, some joining for the first time this weekend.

While the line is growing I am nearing the entrance. Out here we are all individuals with jobs or studies. Who still have some steam to blow off before the workweek starts again. I am forgetting more about this and getting more excited as we get closer to the entrance. Hearing deep bass sounds coming out of the building, as if the concrete structure and all the bricks have formed a choir that sings along with the music played inside.

Once inside I follow the sound. It leads me through the dark building where some people are doing suspicious things. I go down a staircase into smoke-machine mist. The sounds grow louder, and now I feel the bass pumping through my body. When I see the beating heart of the club I am dumbfounded; a stroboscope shows me pictures of people. The reflection of sound on concrete, the vibration of the low frequencies. I feel uncomfortable. Someone pushes me and I step into a group of people who have already been through the process of letting go of control and are now in a state of transcendence. My faithful mind got what it anticipated on, but it's so intense, the sudden switch of control. Slowly I let the dominant ambiance of loud music, flashing lights and dancing people take over. I am losing control by letting the sound control me. It is so powerful, as if the bass frequency has materialized to spread its arms around me and comforts me. While I let go of my thoughts, my body, my mind. I am only resonating to the constructed soundscape.

With a cold drink in my hand and the heavy bass still echoing in my head, I stand outside in cigarette smoke. I notice that someone is talking to me as my eyes drift over some moving lips close by. I am scanning the people that came together tonight. All sharing their stories, but what is being said tonight is forgotten. Every individual stands out, but once the music takes over, each person becomes a piece to the collective of listeners. One moving body converting sound into kinetic energy. The sound, light, smell and temperature are dominating our senses making the actual space that we are in hard to fathom. We are all in our own headspace, shaped by all that

we perceive. Small particles of a collective body with endless minds. Quoting from that one old boomer song: "Some dance to remember, some dance to forget".[2]

Churces compared to clubs

The ear is the organ of the "unproven", the unverifiable. What is heard is already no longer there. Listening, in the time of short-term auditory memory, seeks to consolidate sound for better or worse, to establish it in the regime of knowledge or that of affect, and to petrify it.[3]

Churches and clubs, pipe organs and Funktion-One sound systems, both places of collective listening. Is it the same feeling that takes over? There is an important

difference between these acoustic traditions. Let's look at a church from a time where religion and the empire or monarchy where one unified power. I am thinking of the big cathedrals. These places were designed to make you as an individual feel small and dependent on something bigger. In these holy places, the reverberation makes you hear the sounds you make better. When you take a step it leaves a sonorous footprint for a second, depending on the space. This makes a person aware of the sounds they make, and it makes them aware that the sounds travel through the whole space. It makes you feel vulnerable to realize that you can be heard, but it also makes you realize that you are not just you, but you are part of a bigger structure, constantly manifesting your presence by making sound. Why do people start whispering to each other as soon as they enter a church? Because they don't want others to hear them and they don't want to hear themselves. The only time you are allowed to make a lot of sound is when the organ is being played and you sing along with many others. It is only then because you can't define the sound you are making individually. At the same time the priest uses this same reverberation to amplify his voice, so the message of "God" is magnified.

In clubs the focus lies mainly in making a collective sound so the individual sound cannot be articulated, as previously described in the church. Although the experience in a club feels different, the outline of this sonic ritual is comparable to the ritual of going to church. They just come with a different set of rules and traditions. In a club the sound you make when talking, dancing or just screaming to the music vanishes within the overall sound. It therefore works oppositely to the religious acoustic tradition of reverberation. Knowing that you can't be heard—knowing that people can't trace the sound back to your individual self—means that you are not as "present" in the room as you would normally be, leaving more space for behavior that you might feel ashamed of in other situations. But also leaving more space for the unconscious, the transcendence to come. That's why going to a party feels so much less restricted than going to church. Yet, they both try to evoke a moment of relief by encouraging transcendence. It is either the priest or the DJ who dominates the listener.

Churces compared to clubs

Let's revisit this quotation:

…the acoustic traditions of holy places which, by using reverberation, produce and carry magnified, augmented, haloed sounds that demand respect and call for the obedience of the faithful confronted with that which is greater than them.[4]

The reverberation is always there and it will always affect people, whether it is the long deep reverberation of a stone cathedral or a concrete warehouse that has been repurposed as a club. Or even when it is a digital simulation of reverberation in a sound studio. It has the effect of making you hear space. Reverb in recording techniques is so important that it is almost impossible to imagine a world without it. Reverberation is the manifestation of space in sound and of sound in space. It lets us hear how big a space is, the material it is

made from, the shapes it has. It is literally the way sound travels through space and how it bounces off, and is absorbed by the materials it meets on its way.

In clubs and churches—in most gatherings of people, if you think about it—music is an important factor, either in getting people together or setting a mood. For an evolution or revolution in culture or counterculture people have to come together, and therefore it is of the utmost importance to begin by creating the sound that represents it. To bring people together. This next chapter is about two big musical evolutions that made a big impact on today's club culture. To be clear I think these evolutions cannot be claimed by one specific group or person; they are always a chain reactions. Techno and soundsystem culture are not the only influential movements but they are some of the most significant ones in shaping new culture.

Chapter II.
New Cultures: Techno and Soundsystem Culture

Techno

The precise start of techno is debatable but most likely it must have been in the 1980s when *Kraftwerk* made music that was so futuristic and technological that there was not yet a term to describe it. The meaning of techno back then was quite literally: music made with technology. But I think the traces go back as far as "Italian Futurism". In his 1913 manifesto `The Art Of Noise`, Luigi Russolo romanticizes the sounds of war and machines. This was in a way the beginning of machine music, not yet electronic. Russolo argues that the art of sound has been cultivated by religion capturing it as something divine. Or in ancient Greece by Pythagoras, limiting it with mathematical determination. With the arrival of machines and thus noise, the conception of what can be heard as music changed.

`This revolution of music is par-`
`alleled by the increasing pro-`
`liferation of machinery sharing`
`in human labor. In the pounding`
`atmosphere of great cities as`
`well as in the formerly silent`
`countryside, machines create`
`today such a large number of var-`
`ied noises that pure sound, with`
`its littleness and its monotony,`
`now fails to arouse any emotion.`[5]

In the late 1950s companies like Phillips and the BBC were experimenting a lot with sound equipment and were running laboratories to search for the future of listening. Here the first "electronic" music was made, by using tape recorders to record sounds, and then playing them back while manipulating the speed and transforming the sound with industrial electronic equipment like: oscillators, operational amplifiers and multivibrators. Famous for doing this at the BBC was Delia Derbyshire, who made the famous soundtrack for *Doctor Who.*[6] At Philips there was *Dick Raaijmakers AKA Kid Baltan* who made similar music at *NatLab*.[7] Important to know is that the term techno is still very far from here, but I had to make a shout out to these two pioneers.

In post-war Germany, meanwhile, the German people found themselves in an awkward position, culturally speaking. Most Germans were lost and ashamed to be German after what had happened. As Ralf Hütter, founder of Kraftwerk, said: *"There's a whole generation in Germany, between 30 and 50, that has lost its own identity".*[8] In another sense, there was no possible way to "be German" because all culture was being imported from the UK, the US and France. Dusseldorf was completely ruined by the bombings of the war. As the city was building up again it got a new identity. Becoming the center of political, academic and economic power in West-Germany amid the surrounding industrial cities. In the early 1970s two friends and students in Dusseldorf started making music together. They created their

own studio to start experimenting with different ways of making music. These young musicians Florian Schneider and Ralf Hütter, later formed Kraftwerk. The new possibilities with electronic machine sounds were a leap into the future, showing that society was already living in the future. Kraftwerk's music was inspired by the world around them and its technical developments, but it also integrated their hatred for the German past. It was very important for Kraftwerk to make "German" music, and they named their genre "Industrielle Volksmusik" or "industrial folk music". Kraftwerk were not only hugely influential as creative musicians, but also had extensive knowledge about the power of music and the way sound moves culture.

The musical man-machine from Düsseldorf was perceived as a universal being, the harbinger of a future race that had overcome the confines of social division and discrimination. And that was quite an attractive proposition to African Americans.[9]

Detroit

Düsseldorf

    In Germany Kraftwerk was very avantgarde and propelled mostly through the eccentric art scene from the late 1970s. However Kraftwerk found their "industrial folk" in the early 1980s when their German beat reached the former industrial city of Detroit. At this time the city was in decline, the factories had shut down

leaving the city with a youthful decisive moment. During the first live shows in the US, Kraftwerk was for the first time seen as a proper musical act and not some weird button pushers. In Detroit, to the surprise of the band members, people were dancing during the whole show. Kraftwerk was the little push some creatives needed to start pioneering and find a new identity for the city. For example the "Belleville Three", consisting of Juan Atkins, Derrick May and Kevin Saunderson, were amongst the first generation of Detroit techno music. As they mention in several interviews, it was them as kids listening to "Electrifying Mojo Radio" that got them inspired and interested in new and strange sounding music. At this radio a lot music was played that the big commercial shows wouldn't play, including Kraftwerk. With this inspiration they started to experiment with new electronic instruments, and began the techno legacy carried on by: Underground Resistance, Drexciya, Robert Hood, Jeff Mills and DJ Stingray.

    What becomes visible throughout the legacy of techno at this point is that futurism can be traced back in most of its evolution. It is the idea of *the art of war* that gets refaced into a cultural warfare. In Detroit techno and its offshoots we see a strong Afrofuturist theme, inspired by poet and musician Sun Ra. In someway this is an attempt to rewire the original Italian-futurism. This is similar to what Kraftwerk did, creating their retro-futurism in an attempt to overcome the alienation of a post-war German.

If Italian futurism first laid down the parameters of the modernism's art of war in the art of noise, Afro-futurism attempted to rewire these tactics by a

transduction of the alienating experience of the Middle Passage through Afro-American, Afro-Caribbean and Black British urban machine musics.[10]

The term "techno" was first mainly used to describe Kraftwerk's music and some other electronic music from Germany around1980. In the United States, the genre emerged as "Detroit techno", which also influenced the overarching genre of techno. The bond between Dusseldorf and Detroit was formed and techno, started to travel back and forth between the US and Europe. Big scenes grew with labels and clubs in Germany, the Netherlands, Belgium and the UK. This new music became the sound of the counterculture. The crowd for this music grew fast and sadly this also attracted parties with commercial interest only. Luckily it also got reproduced over and over by underground scenes from both sides of the Atlantic. Keeping the underground alive, maintaining a strong network of underground music that lives to this day. Needless to say that with the internet this underground counterculture has become a global network.

It feels as if techno parties only feel like techno parties when they are held in empty shells of buildings that once had a different purpose. This is not just because it is an "underground" type of music that takes root in society's marginal spaces. Techno, when it evolved in Düsseldorf, was an avant-garde German industrial folk music. When it was evolved in Detroit, it became the soundtrack for a culture that was neglected and oppressed. Based on listening to the records that were produced at the time, I believe that when the bond with Europe was being made around 1990 it evolved as edgy and more obscure music. The bond started to form when new record shops popping up in London and Berlin reached out to shops and distributers in the US. The emotional value in the music, was recognizable for many groups of people that felt not represented in society. But, from the beginning, techno was a music of intercultural hybridization. So, when talking about the evolution of techno I think of multiple places and times where this happened. And every time this happened it influenced the future of techno. I think the biggest quality of techno is that the sounds that construct the music are hybrid sounds that don't carry a cultural label. They are free forms of musical sounds. Machine sounds that can't be culturally claimed, that deconstruct any hierarchal structure around music. It is the quality that Luigi Russolo describes in *The Art of Noise*, how previous cultures who declare music as inviolable and sacred create an hieratic atmosphere that would slow down the progress of music.

Kraftwerk had set out to create a distinctly German music…yet at the same time was fully compatible with an entirely different culture, …Run DMC's Jam Master Jay: 'These guys proved to me you don't have to be where I'm from to get the music. That beat came from Germany all the way to the hoods of New York City'.[11]

Soundsystem Culture

Clubs have their own acoustic traditions just like holy places, the way reverberation is of essence to a church, the soundsystem is of essence to clubs. The history of the soundsystem is part of the Jamaican history of oppression. For a long time, Jamaican society was racially segregated. Black people

were unable to attend cafe's, concerts, restaurants basically anything in which culture manifests itself. Most parties were held in the hotels and resorts for tourists.[12] Because of the lack of musical events the soundsystem started out. A soundsystem is both the sound equipment as the name of the party. A soundsystem is made up of: the engineer who builds the equipment, a selector who plays the records, a deejay who is the MC (Master of Ceremony) and a crew that helps out with the logistics. The MC sings along with the music but is especially important in guiding the crowd trough the hole experience. The MC is kind of the preacher, often spreading messages of love and unity. The equipment is made out of mainly big speakers for the low frequencies with stacked on top middle and small speakers for the mid and high frequencies.

A man named Hedley Jones owned a radio shop called "Bop City" across the street from a dancehall called the Jubilee Tile Gardens. He began building powerful amps … He used skills he had learned when he joined the British Air Force and worked as a radar engineer around 1945.[13]

Radio stations that often had their own record label would work together with soundsystems to promote their music, a small local bar would give them a place to play their music, attracting customers to the bar and so people united to help each other with their projects. Soundsystems Provided people with a gathering to just have a good time, some drinks and listen to music. At its peak a system could be found on almost every corner of the streets in the hoods of Jamaican cities.

When new music, like Techno, House, Jungle and other offshoots started to come up in the UK, there was no place for this music and the people who liked it. In the British got inspired from the soundsystem culture that Caribbean immigrants brought with them.

The Summer of Love, described by Eley as "cultural radicalism", and 'mass dance culture' was made possible through "sophisticated mobile soundsystems" and marked the birth and growing popularity of free party rave culture (Eley, 2002, p.476). St. John writes how these UK soundsystems were influenced by the music and carnival traditions of the Caribbean immigrants from the 1960s (St. John, 2010, p.1).[14]

The free party rave culture is a political movement. Raving was here seen as a protest against being forced to pay to relax, dance or party. At raves these new styles of music where played, offering a place for the people that loved this music and the protest. The raves were only possible in abandoned buildings, warehouses and old factories. The soundsystem technology was extremely important to fill the hole place with music. It was essential that the system would be mobile and adjustable for any space. The system would be shaped in such a way that it could reorganize and reconstruct any space into a temporary autonomous club. In today's club culture, it is not especially necessary to use these spaces but these types of places have nested themselves in the culture. Also because of the loudness of clubs it is better to pick a non residential location.

Chapter III. Transcendence: The Dance of Sonic Dominance

Whether in a club or in a church, it is clear that structured sounds have a pattern of effect on the people listening inside them. Listening is always subjective: what has been heard is no longer there and can only be remembered, therefore sound will always be a sensory experience. Listening is unverifiable: what you hear and what you refer to as heard can be two different things. This is the basis of the power of sound, and if well-understood it can be used (or misused).

Transcendence

When gathering around structured sounds (music), the main trigger for transcendence is ecstasy. This is an emotion that allows someone to transcend their normal consciousness. There are many ways to create an ecstatic state, but in the context of club culture, I think it is applicable to start with chemical transcendence. The most obvious example is XTC, the party drug that had a huge impact on musical evolution in the 1990s and 2000s, just as LSD influenced psychedelic music in the 1960s and 1970s. The effective substance in XTC is MDMA. The effect one might experience depends on their surroundings. It does not change one's emotions but encourages a different, "transcendent"

let's say, mode of consciousness. It shuffles your senses and by doing so it can change the hierarchical order of them, resulting in transformed or magnified sensations. Next to that it stimulates a burst of energy which amplifies these sensations. In the 1950s, after the US army did many tests on the subjective effects of MDMA in humans, Alexander Shulgin and David Nichols wrote in the official report:

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The drug appears to evoke an
easily controlled altered state
of consciousness with emotional
and sensual overtones. It can
be compared in its effects to
marijuana, to psilocybin devoid
of the hallucinatory component,
or to low levels of MDA.[15]
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MDMA chemically increases the activity of serotonin, dopamine and norepinephrine neurotransmitters. But this activity can also be increased by other means without exogenous drugs: for example, by listening to structured sound and letting it influence your sensations. Researchers at McGill University recently tested whether music can have the same effect as drugs. Participants were given naltrexone, a drug that stops the opioid system from pleasure-making. When the participants then listened to their favorite music they didn't experience the same sense of pleasure they would normally expect. However when listening to songs they did not like, they noticed no real difference in their response. Cognitive psychologist Daniel Levitin, the senior author of the paper, called it "the first demonstration that the brain's own opioids are directly involved in musical pleasure."[16] From my own experience, it often happens that people

experience a trance-like state while being exposed to loud repetitive club music. This combined with a drug like XTC will elevate the sense of transcendence that is already facilitated. In this sense, the drug amplifies existing feelings rather than creating new ones.

Another important aspect in creating transcendence is the anticipation of collective listening. The receiver that goes to a gathering is already aware of what will happen because these events are repeated on a regular schedule, and therefore the receiver is looking to re-enter a feeling that they know and trust. In a collective listening environment, this expectation amplifies the reaction, because the receiver is aware of not only the act but also the other receivers who share the same anticipation and reaction. A concert, whether a classical performance or a hard rock band in a stadium, is transcending by the relation of the audience members to each other, relations which are continuously fed by the music. The audience is constantly checking the other listeners and reacting to the way they react. Accidentally bumping into someone can create a massive mosh pit. These events form a superstructure to the constructed sound, and are therefore called sonorous objects. According to Françoise J. Bonnet, sonorous objects are objects that are originally not musical, but become sonorous once they are included in a musical structure. In other words, the crowd of a concert is essentially propelling itself to the transcendent experience of the concert. Even in the polite atmosphere of a classical concert, the people that gather already anticipate witnessing a "masterpiece" by a virtuoso soloist. The way they dress, sit down, applaud, rhythmically

move their body to the music, and rise to give a standing ovation. It is a foregone conclusion that they will stand up and applaud enthusiastically.

Listening is balanced in between sensation and discourse, the freedom of sound and guidance. Order supposes authority and authority supposes order.[17]

In many religious traditions, drugs are used to magnify the feeling of transcendence. The drug elevates the believer to another level of consciousness and therefore helps them to find the divine, the inner self or some sort of alternative state or greater good. When the listener is in an ecstatic state he or she is easily overwhelmed and therefore very vulnerable and influenceable. You could see a church as an instrument for making the receivers transcend, so that they more easily absorb the messages or information transmitted to them. In a system where religion and state are unified, this pathway is the perfect tool for the manipulation of people. The church in this scenario is the tool for mass media employed by the state. But this tool develops together with technical evolution. A good example of the development of mass media instruments is found in the mass propaganda in the Nazi regime. It also marks a turning point in history where sonic dominance reached into the household. The Nazis, supervised by propaganda leader Josef Goebbels, started to manufacture cheap, simple home radios so that they would become a standard item in every German household. Like Goebbels said in 1933: "The radio will be to the twentieth century what the press was to the nineteenth."[18]

Technology and economy of transcendence

Kraftwerk also studied this turning point in history for their album *Radio-Activity*. The lyrics of the opening track say:

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Radio-Aktivität
Für dich und mich im All entsteht
Radio-Aktivität
Strahlt Wellen zum Empfangsgeraet
Radio-Aktivität
Wenn's um unsere Zukunft geht
Radio-Activity
For you and me in space arises
Radio-Activity
Radiates waves to the receiving
device
Radio-Activity
When our future is at stake
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Uwe Schütte tells us that: *"Radio-Activity* was intended to celebrate radio broadcasting as a convenient, easy and democratic means to listen to music."[19] However, it also became a provocative album for the nuclear energy debate of the 1970s. By avoiding taking a side in the debate, they intended to "provoke the hippies and...give themselves a modernistic, technology-orientated image."[20] The *Radio-Activity* album cover shows a radio that looks a lot like the DKE 38, the Nazi-era radio receiver known as the *Volksempfänger* or "people's receiver".

Clearly from a German perspective, the radio represented no innocent medium...it could be used for both political manipulation and to open minds by acquainting listeners with avant-garde music.[21]

Thus the technique could also work in the opposite direction, to subversive ends. Radio has also proved to be a perfect instrument to create and maintain sub-cultures. With radio, people could gather not only in one physical place but also at multiple places at the same time, all connected through the airwaves by tuning into the same frequency. In his book *Sound of Change*, Professor of media Christopher H. Sterling talks about how FM (frequency modulation) broadcasting changed the use of radio in the 1960s.[22] It made broadcasting easier and cheaper because less equipment was needed and also the radio signal of FM is much stronger and reliable. Making radio a more democratic medium. Programming could be more experimental, which also made radio more accessible for counter-cultural movements, minority

groups and noncommercial programmers. The previously mentioned Electrifying Mojo Radio was one of these noncommercial programs: this radio show brought new sounds to young black musicians in Detroit, resulting in a massive cultural revolution.[23] Here we also see a link between Kraftwerk's vision of the radio and the electronic music revolution. Kraftwerk, in fact, has now become part of the structure they opposed on *Radio-Activity*.

The evolution of radio tells us that the way we listen revolves around technology. Mass media has evolved into individual modes of listening through earphones, reducing the space that sound travels through, but also reducing the space needed for people to listen to structured sounds. For example, a part of the need for music is already fed by being able to listen wherever you want whenever. This has also changed the economy of sound, and subsumed sound completely into the dynamics of capitalism. Should we expand this notion into the economy of transcendence? This more consumerist way of listening increases the variety and the market for music, but decreases the wellbeing of "those musicians and corporations who have traditionally made their living through selling various types of musical commodity."[24]

Technological development effects our culture of sound and listening drastically, for example:

In the nineteenth century, with the development of a market for sheet music, and the spread of public concerts…This situation was obviously given a huge boost by the invention of sound recording at the end of the nineteenth century and the consequent growth of a world market for musical recordings.[25]

The radio also played a role in this development, encouraging musicians and producers to release popular songs as special radio edits, which would not only sound better on radio but also be cut down to a convenient length for mainstream radio shows. With today's music consumer technology, one is able to listen all week to a hyper-specific category of preferred music. Might even be trapped in this category due to algorithms. Today's technology has increased the amount of listeners and created more genres, more different venues, and more individualistic relations towards music; in the distant past, in contrast, only religion had the power to organize musical events. In that sense, music has divided people in an infinite variety of small religions.

Exclusivity

This point also reveals the factor of exclusivity in clubs. The purpose of going to a club or a music gathering is to find a place where you, as an individual, fit in with the collective. If each person feels included within certain small "religions"

within music, then another person might feel excluded from those same gatherings. By finding the people you fit in with, presumably with some shared musical interests, you are excluding yourself from many other people with different tastes. The music itself is one of the filters for exclusivity. One is unlikely to listen to loud music for an entire night if they cannot relate to the genre. When clubs say they are inclusive, they are likely speaking about other social aspects, such as race, sexuality, or gender. Still, many clubs maintain a door policy where one can be judged on the basis of their appearance and "in-group" knowledge about the party. By working at Garage Noord, a nightclub in Amsterdam, I experienced firsthand the importance of a door policy. A party that attracts a large crowd of people in Amsterdam will likely deny entry to a group of drunk British tourists who turn up randomly, with no interest in the music or community. This is done to maintain a collective social group who have the same emotional investment in the event. The exclusion also fits the aim of creating transcendence. Knowing that you are surrounded by people who are like-minded encourages feelings of safety. This is needed to lose one's self-consciousness without feeling too vulnerable. In concerts, the sense of inclusion is part of the price of the ticket, which also functions as a filter that people can only pass by making a financial sacrifice. This gives the concert a more commercial audience, whereas a nightclub has a more identity-based audience. Still, the latter audience also has an underlying exclusivity. Speaking from my own experience, everyone is theoretically welcome to join the collective illegal rave or "free party," yet in the cultural expression some might not feel welcome

or comfortable being there. When people express their identity, they also pose a question to others: do I include or exclude myself from this?

Let's return to the essence of transcendence in a sonorous gathering of people. Julian Henriques is a director who has been exploring the sonic body, especially the sonic dominance of the body. This is where the transcendental experience through sound begins; perhaps it should be called "sonic transcendence." In his work, Henriques argues that sonic dominance is reached when hearing becomes the primary sense, displacing vision to a lower position in the hierarchy of senses. This creates a more equal ratio of the senses by forcing one to depend more on their hearing. The soundsystem culture is a perfect example: the people who run a soundsystem usually spend all of their time and money on improving the sound. They focus mainly on the low frequencies, so their bass sounds will have the most powerful dominating effect possible. It is also common to have soundsystem battles between multiple systems in the same space with a crowd. The loudest sound wins. This quest for the best sounding system can also be traced to club culture, where the soundsystem is the heart of the club. This does not pertain to all clubs, since many are based only on popularity and social status. But many club also get their status by having the best sound, which implies not only loudness, but also balancing out different frequencies, loudspeaker placement, the direction of the sound, acoustics, and other technical details.

Chapter IV. The Nexus of Sonic Transcendence

…psychologist of affect Silvan Tomkins…points to the plane of pure sensation that cuts across this nexus and its implicit self-validating or resonant affective dynamics. He argues that the processes of transduction, where one kind of energy is converted into another, creating a surplus in the process, allows access onto the plane of the nexus, whether through the loudspeakers converting electromagnetic waves of the amplifier into sound waves, the microphone transducing sound waves into electromagnetic waves for amplification, or the collective body of the crowd transforming sonic energy into the kinetic energy of movement and dance.[26]
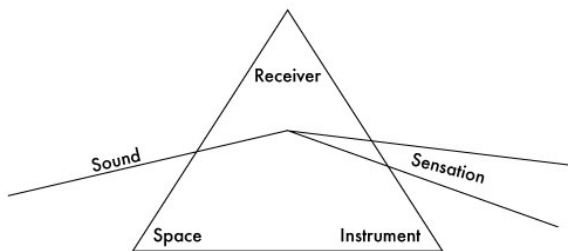
What is created in the sonorous gathering is a nexus of sound created by three factors: the space, the receiver, and the instrument. The plane of this nexus is sound, and through the nexus this sound is converted into sensation, which activates a chain reaction of transcendence. This nexus could be understood as a formula: Sound + (Space x Receiver x Instrument) = Sensation

Sound

A sound is a vibration of air that we can hear because our ears have an eardrum that catches these vibrations and converts them into information. Sound doesn't really mean anything before it goes through the three factors, so before this we could consider sound as existing and non-existing at the same time, as "quantum sound".

Sound is what attracts receivers. Sound is a sense that often triggers fear, because it is the sense of the unverifiable. It also triggers curiosity. Sound goes through a constant process of transduction: it is converted and elevated from its source through reverberation, or as an electromagnetic wave in the amplifier through the loudspeakers into a sound wave. Before this is possible, a significant amount of transduction must already have taken place in the production of the music that is being played. The playing of instruments, the recording, the pressing of vinyl or uploading online, the mixing, and finally the recording being played at a club, for example. Even before the music is played in a determinate space, it begins to design its future space through the process of its making. The music is composed as a proposal for behaving and ordering that is conveyed through listening. This composition uses melodies and rhythms, but also reverb effects, dynamics in loudness, dynamics in high and low frequencies, and many other effects. Later, these effects are heavily modulated by the way the recording is played back and heard.

Space

If sound travels through a solid material or liquid, we can receive it visually or haptically, but in order to hear it as sound, the substance it travels through has to touch our eardrum. For example, we can still hear underwater because the water has physical contact with our eardrum. The speed of sound in water is different than in air, so we also hear sounds differently. As sound travels through a space, the construction of that space also shapes what we hear by reflecting or absorbing it, a phenomenon described as acoustics.

Space plays an important role in the nexus of sound, not only because it shapes and orders the sound but also because it is shaped and ordered by the sound. The space can only become a specific space once it acquires a function or meaning from the sound produced within it. It hosts the body of the receiver, but it can only condition the receiver if it has some sort of identity that attracts them to occupy the space. For example, techno parties only "feel" like techno parties when they happen in specific places. But, perhaps most crucially, the space requires a specific kind of reverberation that allows the sound to transcend its purely quantitative properties.

A song mimicking a church reverberation could be played in a dark concrete basement under an old factory. While aiming to get a more haloed sound, a new acoustic is being created by the actual reverberation of the place. The same process happens in a church when the participants are all singing together, but through a different path: a composed work is written down and gets converted into music by singing voices, and is eventually translated into a transcendent feeling by the power of many voices singing in unison, magnified by the strong reverberation of the building.

Receiver

As mentioned before, sound only exists if it is received, so the way sound is received is paramount. Beyond the question of quantum sound, there are also different socially-constructed ways of listening, such as anticipated, musical, unconscious, forced, examining, or collective listening. These ways of listening determine the receiving body.

The receiving body could be an individual body, a collective body, a mechanical body. This body is essentially something that reacts to or is triggered by the sound. This also involves transduction, in the sense that the body reacts to the received sound. Most of the time, a receiver anticipates what it will receive. Many reactions are already primed or scripted as part of a ritual. Nevertheless, the reaction can be highly ecstatic or miserable. The body can still be surprised, which tends to amplify the reaction, mostly tending towards fear. Often, however, the activated fear is transcended into joy with the help of music (and several sonorous objects), possibly due to music's transcendental power. The receiving body reacts to loud sounds, but when it receives these sounds musically, it can convert them into joy or anger. When it receives these sounds as holy, it can convert them into obedience and faith. The receiver is in this way the point where a sound is ordered. *"Music is the art of thinking in sound musically"* is indeed a tautology.[27] A sound is qualified when a receiver is able

to put it into a specific structure, like a musical pattern, as mentioned in the Luigi Russolo's Futurist manifesto *The Art of Noise*. The structures of sound can change over time. Noise has become accepted as a part of musical structures, making the "paradox of music" complete: if all sounds can become musical, why can we perceive a clear border between what is music and what is not? This paradox confronts the receiver when they are listening.

```
In the overpowering, almost
totalitarian sensuality of bass
materialism, it also illustrates
the mobilization of a sonic ecol-
ogy of dread: fear activated
deliberately to be transcended
and enjoyed in a popular musical
context.
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[28]

Instrument

The instrument can be a musical object—an object designed for music—or a sonorous object, which becomes musical once it is integrated in a musical structure. Here, music means sound with form and construction, and the instrument is an essential tool to form and construct. The instrument can be identified in every sound, whether it is a tree making sound due to the force of the wind, a violin, a laundry machine, or a space reflecting sound, which we call reverberation.

But what does it mean for an instrument to construct? The instrument plays within power relationships, it gives dominance to the one who uses it to order. An instrument deals with a surplus in power, if we assume that *sounding establishes dominance over listening*. The instrument

is necessary to produce the most effective sound, the crucial element for power. The instrument and its player work together to balance structured sounds in between sensation and discourse, in between the freedom and guidance of sound. It is the connecting point of the law of numbers and endless fantasies which is the key to transcendence. Music made by machines emphasizes this idea by uniting the work of humans and machines for the ordering of sound. In Kraftwerk's terminology, *"Die Mensch-Maschine"*.

Sensation

This nexus always produces the outcome of a sensation. When we hear a sound, it is already an impression upon our senses. Sound is temporary and can only continue to existing in our minds as memory; therefor, sounds are always subjective.

When we look at sand on a vibrating surface, we see that the sand orders itself into beautiful patterns. Looking at this phenomenon, I see every grain of sand as representing an individual. They all move freely, but collectively they are organized into a pattern by the vibrations that surround them. I interpret this vibration as a figurative illustration of the concept of structured sounds and of architecture. Transcendence is not only an overarching part in every sonorous process, but is also the aim of sonorous events, whether it is used in a fearful, joyful, or spiritual setting, or for the purpose of transcending one's current state of consciousness for another altered state. It is the thing that the people believe in when they join in on a sonorous gathering. Transcendence is the "opium of the masses."
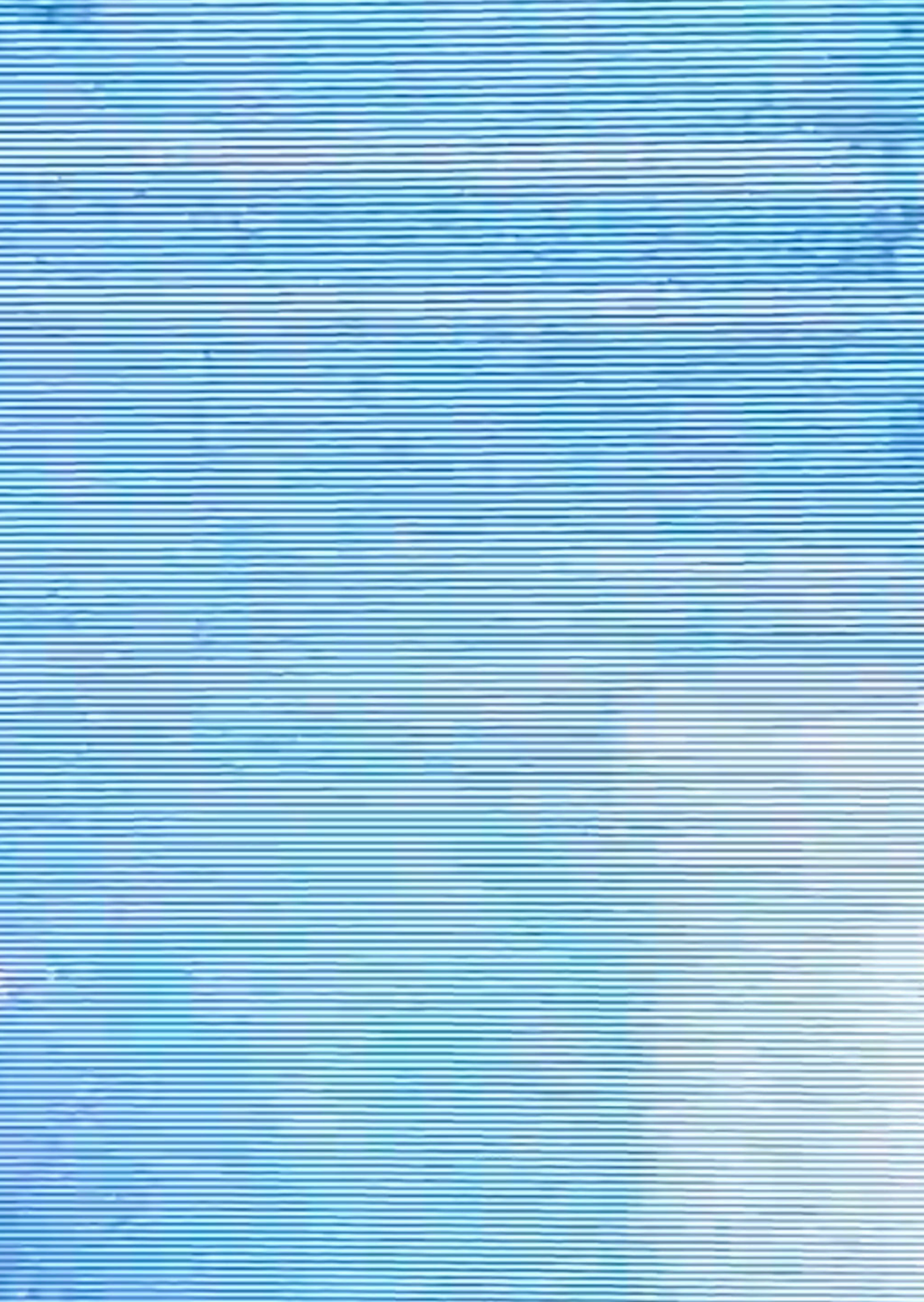
Chapter V. Music is no Crime: Music is a Weapon

It was at rave in a squatted warehouse in the western industrial area of Amsterdam, in late summer of 2019, around three o'clock at night, when the words "music is not a crime" found their way to my ear. The rave was shut down by the police. Outside the squatted venue there was a dense tension between police and the disappointed crowd. It came close to breaking out in a riot, but neither side went as far as using physical violence. People in the crowd did, however, start yelling at the police: "MUSIC IS NO CRIME!" "A PARTY IS NO CRIME!" "FREE TEKNO!" This became yet another one of the mystic declarations about music. Music may not be a crime, but it is an instrument that tends to be weaponized. According to the Cambridge dictionary, a weapon is an object used in fighting or war, such as a gun or a bomb, but it is also defined as "something used against someone". I can't imagine a more vague definition than that, but it does leave a lot of space for imagination. The dictionary presents a bomb as an example of a weapon. However, the actual destructive force of a bomb is its generation of a gigantic air pressure wave, which is practically the same as a sound wave. If this air pressure is channeled onto a projectile object, it demonstrates the basic principle of a gun. We hear this pressure wave, but we tend to forget that this is the weapon. We consider the thing we see and feel as the weapon—the bomb, the gun, the bullet. But what is actually used against us is the air pressure wave that delivers the shock or acts on the bullet.

I discussed transcendence in the last chapter, including the power relationship established between "what sounds and what listens" (instrument and receiver). This is what makes sound so effective for military use. Thinking back over all the technological evolutions concerning sound, I observed that almost all originated in a military context. For example, the radio, the computer,[29] even the Jamaican soundsystem culture, which was kickstarted by an ex-soldier who had learned the techniques for radio and sound while serving in the army. That may explain why there is so much militarized symbolism in counter-cultures. Hosting a party, rave or other counter-cultural gathering, as I see it, is in its own way a military operation against an overarching cultural system.

Underground Resistance

The work of Detroit's Underground Resistance, a record label with mostly anonymous members, shows how music is used effectively to reach out to people. The resistance of Underground Resistance is that of the neglected Afro-American against racism in the overarching white supremacist system. This message is echoed in many musical genres, and one could even say that most musical genres come from depressed subcultures. Kraftwerk felt that they could not be German, so they created music for a new German culture. Blues came out of the 1930s depression which was most deeply felt in America's urban ghettos. Detroit techno started at the crossroads of

Detroit after the city had lost its industrial identity. For these subcultures, music is the weapon used to distance themselves from the culture that excludes them. It is used to create a space, zone, or counterculture where they can find themselves and where kindred others can also find their community. To illustrate what I mean by distancing, I include a couple of titles from Underground Resistance records, which helped to mobilize this cultural movement.

I find these releases very striking. They are a revealing artifact that depicts how the people of Detroit dealt with being neglected after Detroit's economic decline. It also shows how techno was used in this case as a platform for this particular message. There is a pronounced theme of alienation in the work of Underground Resistance, as well as more broadly in Afro-Futurist electronic music, inspired by Sun Ra and funk legend George Clinton, together with black science fiction literature. In his 1996 film *The Last Angel of History*,[30] John Akomfrah shines a light on the struggle with alienation felt by Afro-Americans and all black people dislocated by colonialism. In the film he analyzes the music being made around this theme by letting the artists speak. While the white world of mainstream commercial science fiction and science was looking for alien activity in outer space, they forgot about the actual alienation caused by the slave trade. Alienation is a source for sonic weaponry. There is something alienating in the creation of a new counter-culture. What is created is a new society, a stream that goes against or splits off from the mainstream. It creates a new reality where cultural manifestations are used against the overarching structure determined by the government or other dominant structures, making it a weapon.

Some of these sonic worlds will secede from the mainstream worlds and some will be antagonistic towards it[31]

Most of the counter-cultures referenced in this text are good examples of the statement above, but I would like to mention another—the underground techno culture

from my hometown, Den Haag, named *"The West Coast Sound Of Holland".* This name is mostly used in reference to its main record label, Bunker Records. The label first began releasing their own music under the alias "Unit Moebius". They were part of the 1990s squatting scene of Den Haag. The documentary *When I Sold My Soul to the Machine*[32] sketches a clear picture of their counteraction towards society. In 1992, they made their initial steps into the techno world with their first releases "Bunker 001 and Bunker 002". Techno had become popular, and some people focused only on its economic and commercial value. Meanwhile, Bunker and other underground record labels from Europe created sonic worlds where techno was maintained as a place for people who did not feel included in society.

ATLANTIK WALL RECORDS
BUNKER

Bunker records also has a very prominent military aesthetic, even referring to Nazi fascist symbolism. To understand these aesthetics, it is necessary to know the history of the coastal landscape of Den Haag. This coast was one of the hotspots of Germany's "Atlantic Wall", with a high density of bunkers hidden in the dunes. As a child, I remember exploring these empty concrete shells with my friends. We would go into the dunes and search for the entrances of these (sometimes massive) labyrinths dug deep under the sand. In the 1990s squatting scene, these unused empty shells of buildings were likely regarded as a source of value. In these bunkers, they found some of the most remote parts of the highly built-up Dutch environment and culture. If you wish to withdraw from society, this is the perfect place. Even if the Bunker people did not literally live in these war bunkers, they provided their main source of inspiration. Ultimately, this story and symbolism, together with the soundtrack, would constitute the weapon to occupy their own place in society. The music they made was well-received overseas, including back in Detroit. The bonds between underground music scenes in the U.S. and Europe grew stronger. Meanwhile, both sides bonded over their rejection of the cultural appropriation of their music by commercial producers and industry. One need not be an expert to hear the difference between the commercial and underground forms of techno. To me it is clear that one is a way of life, a cultural exit. The other has nothing to do with and nothing to say about cultural tensions or social classification and divisions between people; it is just the background music to a fun night on the weekend.

In the mid-1990s, music critic Simon Reynolds noted

the preponderance of militaristic imagery within some strands of popular music…These musics, he adds, "act as mirrors to late capitalist reality, stripping away the façade of free enterprise to reveal the war of all against all: a neo-Medieval paranoia-scape of robber barons, pirate corporations, covert operations and conspiratorial cabals. In the terrordome of capitalist anarchy, the underclass can only survive by taking on the mobilisation techniques and the psychology of warfare-forming 'blood-brotherhoods and warrior-clans, and individually, by transforming the self into a fortress, a one-man army on perpetual alert." The city becomes a war zone, "a treacherous terrain of snipers, mantraps and ambushes.[33]

Where in cultural warfare sound is uniting people, in actual warfare sound is used to divide and alienate people. In the Vietnam war the weaponry qualities of sound become crystal clear. Apart from that, the Vietnam war also comes with its own soundtrack. Made up out of popular rock songs from the 1960s and 1970s. Some anti-war, some just emotionally connected to the war. In particular the opera piece *Ride of the Valkyries* is forever connected to the vision of low flying US choppers over the Vietnamese coast.

We'll come in low out of the rising sun, and about a mile out, we'll put on the music.[34]

Vietnam War

In the movie *Apocalypse Now* (1979), directed by Francis Ford Coppola.[35] Lieutenant Colonel Kilgore plays Richard Wagner's *Ride of the Valkyries,* from helicopter-mounted speakers. The villagers hear the low propellor sound of the helicopter together with this loud soundtrack fading in as the helicopters get closer, increasing fear and stress. Many people who see the movie think it's only part of the movie, as it's so dramatic. In reality playing music from the choppers was a common thing the US army did. They even made special recording to scare Vietnamese soldiers.

Girl's voice: Daddy, daddy, come home with me, come home. Daddy! Daddy!

Man's voice: Ha! (his daughter's name). Who is that? Who is calling me? Oh, my daughter? My wife? Daddy is back home with you, my daughter! I am back home with you, my wife. But my body is gone. I am dead, my family. I…..Tragic, how tragic.

My friends, I come back to let you know that I am dead! I am

There is still a chance that you can be reunited with your loved ones
Do you hear what I say?

dead! It's Hell, Hell! It is a senseless death! How senseless! Senseless! But when I realized the truth, it was too late. Too late. Friends, while you are still alive, there is still a chance you will be reunited with your love ones. Do you hear what I say? Go home! Go home, my friends! Hurry! Hurry! If not, you will end up like me. Go home my friends before it is too late. Go home! Go home my friends![36]

"Go home" is a translation of the Vietnamese "Ve di", the spoken text from "Ghost Tape Number 10". This tape was engineered during the Vietnam War by the 6th Psychological Battalion, a battalion with a focus on psychological warfare, specifically established by the U.S. government for the Vietnam war. The tape was intended to scare the Vietcong (North Vietnamese communist party) and induce them to abandon the battle and return home. The tape combines scary sounds with a heavily reverberated and echoed voiceover in Vietnamese. The tape would be played from speakers on helicopters, hidden in trees or bushes, or carried on the backs of soldiers. The 6th PSYOP battalion studied the Vietnamese culture intensely, focusing on their Buddhist belief in the afterlife. In order to influence the Vietcong psychologically.

It exploited the belief among many of the Vietnamese people that once a person is dead the remains must be placed in an ancestral burial ground or that person will forever wander aimlessly in space…Wandering Soul broadcasts of eerie sounds intended to represent the souls of enemy dead who have not found peace…the idea was that the sounds would at least get a Communist soldier to think about where his soul would rest in the likely event of his being killed far from home.[37]

"Ghost Tape Number 10" is just one of many tapes, just one of many examples of sound used as a weapon. As in other contexts, these sound weapons also use the structure of transcendence. They try to surprise or dumbfound the listener with fear, triggering bad memories and distressing emotions. This makes the listener feel paranoid or overwhelmed by the message. The sonic weapon can be used as a weapon of negative transcendence resulting in fear and misery, as opposed to ecstatic transcendence.

The bridge between actual warfare and cultural warfare might actually be much smaller than we think. From the alienated countercultures to the soldiers in the Vietnam War, extracted from their normal life and fighting against an enemy they don't know, don't recognize. The American veteran, poet and educator Bill Ehrhart tells the story of how his conception of the Vietnam War changed from the first moment he entered the territory of war.[38] There, he discovered that the

description of the war by the U.S. government was completely different from what he actually experienced. He went there thinking that he was fighting for a good cause, that he was helping the Vietnamese defend themselves from the communist North and would therefore be welcomed by the local people. But when he arrived, he was soon confronted with hate from the Vietnamese civilians. Ehrhart's description of the Vietnamese people immediately shows how the American soldiers alienated the Vietnamese: *"they looked funny, they didn't look like us, they lived in little straw huts with animals living inside, they smelled bad, the whole country smelled bad...and that was disturbing."* These words, though extremely colonial, racist, and ignorant, stress the sheer alienation the U.S. soldiers were nevertheless experiencing, which they unconsciously transferred to the Vietnamese. Ehrhart was shocked by the way the U.S. army treats the civilians. He asked, "What on earth are you doing?" A soldier that had been stationed there for longer told him, *"Erhart, you better keep your mouth shut until you know what's going on around here."*

The communist soldiers of the Vietcong included many civilians forced to fight. They would often hide in the forest, only engaging in battle via snipers and landmines. This made the U.S. soldiers paranoid, because they couldn't see their enemies, but they could see their friends being killed every day. They would hear explosions and shots being fired, but were unable to see who was attacking them. This changed their perspective on the civilians and on the war, and soon all they could think about was sitting out their service time and returning home

alive. They had no idea who and where their enemy was, leaving them with no outlet but the Vietnamese civilians as the target to channel their anger. They were alienated as they alienated the enemy, and this alienation went back and forth. Only the sound of the enemy reached them, so they also started to fight with sound. A sound battle arose, a literal power battle between "what sounds and what receives". From the Vietcong, the U.S. army received the sound of gunshots and bombs. The Americans retaliated by flying over the jungle, the source of the Vietcong's sounds, with huge speaker systems attached to their helicopters. They played loud heavy metal from these speakers precisely to dominate in the sound battle. Once again, *"what sounds establishes dominance over what listens".* The soldiers were trapped in a state of survival where their main goal was not to die there, so far from home. The "wandering soul" of Buddhist belief was also the U.S. soldiers' biggest fear. It made sense that the idea that scared them the most was also what they used to scare their enemy. While the soldiers on either side had different religions, they ultimately held the same faith.

It was not only the U.S. who carefully studied their enemy to influence them sonically: the Vietcong had their own sound project as well. Their plan used as its instrument the small FM radio that each U.S. soldier would carry with him. *"A man's radio was, after his rifle, his most valued possession."*[39] The Vietcong commissioned Hanoi Hannah, the famous English-speaking Vietnamese radio host, to broadcast on their behalf. Hannah took very precise aim towards the Achilles heel of the U.S. soldiers, or "G.I.s". Hanoi

Hannah's role in the war is illustrated in the movie *Da 5 Bloods,* directed by Spike Lee.[40] In one scene, she brings the news that a white man had murdered Martin Luther King, Jr., *"who heroically opposed the cruel racial discrimination in the U.S.A."* She then continues, giving statistics about the unequal status of black and white soldiers in the Vietnam War, focusing on the painful fact that black soldiers were sent to the front in far greater numbers. She reminded listeners of a history of using black soldiers at the front in exchange for promises of freedom and equality, which never materialized. She reflected back to them the reality that they were defending the structure that neglected them. *"Black GI...your soul sister and soul brother are in rage in over 122 cities, they kill them. Why you fight against us? So far away from where you are needed."* This message, which was followed by black soul music, would interfere heavily with the mindset of black troops.

The radio shows did not focus only on the black G.I. Radio Hanoi shows appealed to all soldiers by playing upon their homesickness, as well as their distrust in their own government and their sense of disaffection with the war they were fighting. *"Men would stumble across her while tuning their radios and be unable to turn away. 'How are you, G.I. Joe?' she asked in a June 1967 broadcast."*[41] She aimed to make the soldiers leave their posts. There was also a U.S. radio station, but the soldiers suspected that it was heavily censored by the government. Radio Hanoi would announce the news of killed and imprisoned soldiers earlier and more accurately, thus attracting more listeners. *"The sounds of the Animals singing "We Gotta Get Outta This Place" was followed by Hannah: 'Now for the war news. American casualties in Vietnam. Army Corporal Larry J. Samples, Canada, Alabama...'"*[42] The radio was very strategic with its music selection: they would play U.S. anti-war songs and black soul music, both popular genres at the time, which the U.S. radio station would never play.

The Vietnam war is a sensitive topic, so I would clarify: I am not attempting to justify the Vietnam war. My goal is to lay out a pattern in sonic dominance and alienation. I picked the Vietnam War because it is a rich example of sonic warfare, but also because it shows that establishing sound is an essential form of power. My examples focus on the experience of the soldiers and civilians in relation to sound, not the politics behind the war or the violence committed during its timeframe.

The Vietnam War is only one of endless examples mentioned in *Sonic Warfare*, the book by Steve Goodman (who is also a musician and DJ under the name Kode9).[43] He also discusses Nazi experiments using air cannons to shoot airplanes out of the

sky; Israeli jets breaking the sound barrier above Palestinian territories in order to scare them and keep them awake at night; and the placement of big sound installations at the North-South Korean border to broadcast messages to the enemy. These are sonic weapons with physical effects. My interest, however, lies more in the weaponization of sound through conceptual sonic weapons. In this chapter, I have focused not on the physical effect of sound but rather on the mental influence sound has on people.

You will obey no matter what it says because the real weapon that brought down the walls of Jericho was the voice of God.... At the Jericho Institute, we like to think of America's deep and abiding Christian faith as one of our most strategically potent natural resources. We have extensive prayer networks throughout the Bible belt and elsewhere and our objective is to synchronize the latent vibrational power of these faith networks with an infrasonic sound that formally replicates the voice of God in terms of its frequency range and overall acoustic envelop. We call this process, "charging the airspace," a process that resembles rubbing on the magic bottle until the genie comes out. Ladies and gentlemen, God is there to hear our prayer.[44]

The biggest sound weapon of them all is the weapon that can instrumentalize a population. The voice of God! It is what mobilizes people to fight, it is what empowers a nation. The belief that *"God is on our side"* is what makes people believe in themselves and the state. When you are alienated in a weird place, fighting against beings you don't understand, on the edge of death, seeing your friends die every day—the belief in a greater cause, in a GOD, as something that justifies what you're doing becomes very appealing. God could be anything here, as long as people believe in it. It could be ecology, science, techno or the creator of all—you name it. Whoever wishes power has to broadcast a vibration that structures the world to their hand. Whoever wishes to resist this structure has to sound louder.

Conclusion

When starting this thesis I knew there was some connection between music and architecture, but I couldn't figure out or explain to myself what exactly it was. This thesis clarified that for me, and I hope it did the same for you as a reader or listener. To conclude, I would like to explain why this thesis is relevant to architecture and how it blossomed from the architectural design department of the *Gerrit Rietveld Academie*.

To sound is to mark a territory. With sound, space is constructed. It can be constructed for the purpose of dominance, as in the example of the Vietnam War, but it can also be constructed through converting a given space into another kind of space, as in the examples of soundsystem and rave cultures. Nevertheless, my thesis research has unveiled the significance of a variety of archetypes, such as the bunker, an inspiration for many architects and designers. What this archetype brings to mind is the concept of an impenetrable structure in which to hide from outside society. This resonates with other spatial archetypes like nightclubs, and particularly techno clubs, including the famous New York club called The Bunker. The desire to make a nightclub impenetrable and hidden from society tells us how these places function and what value they hold.

Meanwhile, the reuse of industrial buildings for night culture is a material condition that speaks about the development of the city landscape. Would *Detroit Techno* exist without the decline of Detroit's industrial economy, would techno be the genre it is today and was in the past? Probably not. Would there be a soundsystem culture without a history of colonialism? What I'm trying to say is that musical culture is a keystone in society, and a source that can be studied to better understand social urban development, politics and architectural change. The factories in the West have vanished, replaced by high-rise office buildings. I wonder what happens when these buildings no longer provide a necessary function? Will a cultural movement take place on the 27th floor of an old corporate headquarter, or would the counterculture prefer the basement? We see how fragile the line of city development can be during the current pandemic.

This text deals with the controversial themes of control and manipulation. Many examples are given in relation to control of the human body and its resistance, whether the body is personal or collective. In my view, the feeling of being controlled is often described in negative terms. However, the receiving body can also exhibit power by choosing to who or what it yields control, who or what is allowed to take over. When control is imposed with force, control feels tyrannical. The same effect can happen when the choice to be controlled by choice is removed, when sound that can control through transcendence is forbidden. It is this distinction between hybridizing and alienating that we should consider when we are in residence to a sonic world.

Through my research, I began to realize that the liberating feeling of going to a club is not because the club has no restrictions, because it allows its crowd to be truly free. It is because going to a club means giving

in to a particular line of control, mainly executed by the music. That makes it an issue of personality: for some it might be a church, for others a rave. I made myself a promise. The theories and examples in this thesis (and beyond) will fascinate me for life. However, I promised myself to not think about it when going out to a musical event. Simply for the reason of not letting it interfere with the rhythm of the night.

Thanks

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My empty page in front of me a fast break beat behind me, it must be around 161 BPM. A sub bass diving down to about 60 Hertz, maybe even lower. My mind is calming down and I can start reaching into sonorous memories. There are many, the amount makes me stressful again. The music playing behind me, a sound reminds me of a reverberating pipe organ and I leave my empty page behind me as words start to evolve.