

Constant Becoming

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Keywords Sound, Space, Listening, Listening culture, Immersion, Mental state, Experience

Constant Becoming explores listening as a sensory practice and investigates immersive experiences. What is immersion and how can it be facilitated by means of sound and space? Which conditions apply to such experiences and what do they imply concerning the relation of spatial and sonic elements? How do presentation formats and context influence us and can we reach a new understanding of what a listening experience is? What is it that makes someone listen?

Through illustrating and criticising the role of sound within our society, the text aims to highlight the importance of listening as an activity and reflects on why we should reassess our listening culture and our relation to sound in general. What does listening entail for ourselves, our perception and the development of our environments, foremost our spaces? Looking into various examples of sound and music presentation, technological innovation, as well as our sensory apparatus, the text tries to sketch a contemporary image of our sonic efforts and speculates on altering them for the sake of auditory sensitivity. Ultimately listening is introduced as a means to pursue enriching experiences and through them, unravel a new understanding of immaterial value in life. The essay will be accompanied by different voices from artists and professionals - poetic, personal pieces related to listening and immersion will serve as illustration.

Dear reader,

I placed this dictionary in the beginning of my thesis to define crucial terms which I use in my project and explain them from my own perspective. Hopefully this helps you to understand what exactly I am exploring and sets us on the same track.

Dictionary**Listening**

In this paper listening is understood as an activity, a sensory practice, a conscious choice and effort and not a passive state of hearing or a subconscious filtering of sound. Listening requires practice and deliberate attention.

Listening Habits / Listening culture

Listening culture describes what we listen to and how. This does not only concern the time and attention we devote to listening as an activity or practice, but equally so how we deal with sounds in our daily environment, addressing both, music and the ambient soundscape around us. It implies, but does not primarily describe the role of listening within communication (listening to one another in a conversation or dialogue, for instance). It does not investigate cultural differences in listening.

Listening spaces / Spaces for listening

Listening is the program of a spatial design of listening spaces. The goal is to reintroduce listening as an activity and practice through offering a dedicated space for it, which, in a detailed version, might simultaneously allow for an immersive experience. The space refrains from offering additional programs. My project is dedicated to designing this type of listening space.

Immersive experience / Immersion

Immersion describes an experience in which one enters a somewhat dreamlike mental state of meditation, relaxation, otherness and transcendence through being embedded in a highly stimulating environment. The senses are opened up to a maximum and perceptual sensitivity is increased. One is able to feel present in this mental state, as much as in one's physical reality. In this paper immersion will be explored by means of sound and space.

Introduction

You can't touch it, you can't smell it, nor can you see it or even cut it in half. You can't paint it, you can't hang it on the ceiling, you can't throw it away. Yet you produce it, you can listen to it, you can move to it, or sleep, you can mould it, feel it, shape it, manipulate it, play with it, get lost in it... The intangibility, the invisibility of sound is fascinating. It does not require but our sense of hearing, our body and attention, and that is its strongest quality. Sound derives from the physical and transports it onwards. It can act as a predecessor of material qualities, already being material itself. It also acts as the consequence of material. It comes in waves, physically speaking and it transfers information and energy from one place to another without transferring matter. It is vibration travelling through different media, at different speeds and different times. What is beautiful about that is its constant flexibility and ambiguity, deriving from the circumstances of the source, the intentions of the creator and the unpredictability of its behaviour in different environments. Sounds already change as soon as you slightly move your head. In that sense it could be compared to water, you just can not hold it in your hand in a static, solid state, yet it allows you to dive into various intriguing experiences. It's always in motion, but still lets you very precisely describe and narrate. From being utterly annoying to a heavenly comfort. Sound is contradiction and harmony and it is always there - it never disappears completely. Thus listening to it is our only way out.

Wind can be deafening.
Smashing through the branches of
trees, it manifests lower frequencies.
A horizontal waterfall in the open,
before the man-made wave of earth,
shallow mud and distant grey sea.

Listening

“Why listen? [...] Sounds come unbidden to our ears; we (generally) have no say in hearing. We feel the beat in feet and cheeks and skull and trunk and sternum, and heart. We can’t unhear. [...]” reads an introduction on the homepage of Liquid Architecture (Liquid Architecture | web).

“I’m unable to close my ears like I am able to close my eyes”, says Maxime Gordon* (MG | interview). Hearing is a constant state - unless impaired - it is one of our senses that helps us to find our way through different environments. It essentially contributes to our being in the world, to an ‘I’, we speak of that ‘is’, that can experience what is around itself. Right after birth, our sense of hearing and the ability to locate sound sources seems to be more developed than our vision (Lagercrantz, P.109). Analysing and processing the sonic information of our surroundings, makes available to us what the eye can not see, what we can not touch, or smell, nor taste. It opens us to the intangible. At the same time it is of major importance to our survival - it enables orientation, helps the search for food and gives us necessary and valuable information about spaces, events and other people, not at last through verbal communication (Rice, P.104). Space is a sensory experience. A fusing of sensorial information which forms a composite awareness of where we are and ultimately makes us able to identify with a place (Blesser & Salter, P.50). Hearing, but more importantly listening makes up a big part of this fusion. Whilst we can only see one thing at a time - we have to move our eyes continuously

*People I have interviewed as part of my research are introduced thoroughly in the Appendix

to navigate and understand a space - hearing allows us to perceive things simultaneously and over time (EvdH | interview). Think of a passing car you did not see coming at first. Or as Juhani Pallasmaa put it: “Sight isolates, whereas sound incorporates; vision is directional, whereas sound is omni-directional. The sense of sight implies exteriority, but sound creates an experience of interiority. I regard an object, but sound approaches me; the eye reaches, but the ear receives. Buildings do not react to our gaze, but they do return sound back to our ears.” (Pallasmaa, P⁴⁹). This subconscious filtering of sound could be called listening. On a more analytic note, listening and dissecting sonic information can also reveal to us what other methods of environmental analyse, such as evaluation of visual data were not able to show. For decades, the recordings of Bernie Krause prove the negative impact of previously considered neutral or positive human activity within natural habitats, affecting wildlife and reversely ourselves (Krause | TED Talk). Krause uses the example of selective logging, a method of harvesting trees where instead of uprooting a large area, only selected trees are cut, so as to ensure minimum environmental impact. Whilst visually, the forest indeed does not seem touched in the slightest, Krause’s recordings and their translation into spectrograms clearly show the diminished soundscape of birdsong in the area after selective logging.

Paul Oomen* says: “the hearing interaction with daily life is actually something like an infinite resolution.

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It is something that has a level of refinement to it, which is unattainable ever, with any technology. [...] I try to really enjoy it. It is in my embeddedness in the world through listening.” (PO | interview) Thus making a choice of what to truly listen to is essential in how we perceive and shape our surrounding, our spaces and guide ourselves through experiences in the realm of sound, space and music. What is listening, really?!

Listening is an activity, “in essence, the act of attention” (Connell | web). As such it can be practiced, trained, understood and used by ourselves to define, enrich and alter our sonic understanding. Connell goes on to point out that listening is in fact in direct connections and relations with our receptive capacities for vibration and acoustic pressure (Connell | web). Leaving the threshold of the detection and acceptance of sounds, we enter into a state in which we consciously and actively deal with these sounds, marking the beginning of listening (Rice, P⁹⁹). The moment we understand that we are in fact actively shaping our sonic environment through listening, instead of passively receiving it is crucial, if we are to pursue a thorough understanding and a refined relation to sounds and spaces. Sound is always spatial and even more so “inextricably omnipresent, diffused and intrusive” (Avidar, Ganchrow & Kursell, P⁴). It simply does not exist without vibration propagating in space. We therefore automatically listen to sound being space, in fact listening “structures and articulates the experience and

understanding of space” (Pallasmaa, p. 49). Cilia Erens* describes listening as something which lets you discover point sources, sound lines, layers of sound, your own sound horizon - listening for her is something circular and always linked to audible space. Karl Russell* searches for musicality in what his ears catch when wandering outside (KR | interview). The subtle tremble of a slightly loose handrail might emit a tone which musically goes well as an introduction to an arriving metro train. The variety of what we can listen to seems endless. It is definitely something that needs time and dedication. For some, listening works well with eyes closed. In shutting down the visual sense, we enter uncertainty, but simultaneously help our hearing to be as precise as possible for the sake of regaining certainty. We avoid visual distraction, which can help to focus in our image flooded world. Yet, listening practices allow us to “see” things through another sensorial lens. All the more so, it enables us to get closer to the very physicality of experience itself (Connell | web) and lets us explore our perceptual system on a deeper level. The moment we actively train ourselves to refine our perception of sound and what it does within our bodies contributes essentially to the idea of experience and identity.

The Ecology of Listening, developed by 4DSOUND subsequently follows the idea that “the way we evolve our listening will be the way we evolve our environment. And the way the environment evolves, will be the way we evolve as human beings. This implies that we can pos-

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itively influence the cycle and bring about systemic change in our environment by listening more attentively” (SSI: Programme | web).

I would also like to describe listening by drawing parallels - some certainly metaphorical - to Vilém Flusser’s *Exile and Creativity* and by applying his ideas to listening. In his text, Flusser interprets “the exile situation as a challenge to creative activity” (Flusser, 1984/85, P.5). (I suggest to view the act of listening as the exile situation - the one who listens, is expelled. Exile is reached either by being “torn out of [one’s] customary surroundings (or else [one] has done it himself)” P.5. The customary surroundings are described as habit, a “cotton blanket” P.5, or “mud bath where it is nice to wallow” P.6. If listening is exile, hearing is habit. The habit of sounds coming to the ear unnoticed is not compatible with the attention listening requires. One could also say, attention is exile. Our customary sonic surrounding reaches from the city’s soundscape to background muzak, but generally concerns everything audible to which we do not devote deliberate attention. The act of expelling, thus, can happen in two ways: either, one decides to listen, or - and that might seem the more interesting option - a sonic event triggers a natural interest to pay full attention to it. Deriving from curiosity, astonishment, fear, or something else. In that case the honest confrontation might lead the expelled into a meaningful or, more hopefully perhaps, into a pleasurable listening experience.

Flusser's thoughts can be interpreted as a circle repeating itself while rolling forward. According to him, the expelled must "transform the information whizzing around into meaningful messages, to make it [the exile] liveable" ^{P.5}. Once this is achieved, and exile becomes liveable it simultaneously, but slowly turns into habit again. One must expel oneself afresh, to go forward.

This is something that listening can adopt very well, especially when encountering unusual sounds, that trigger our sense for discovery. Listening unfolds into a challenge of creative activity.

This activity can be twofold: on the one hand, one has to translate and understand the audible, as to make exile liveable. Translating here means to understand spatio-sonic relations, placement and time streams of sound, or detecting musicality. On the other hand one is very much able to use listening as a way to connect to the self. To reach a state in which the sounds around can be utilised to leave their very reality, to imagine themselves in an elsewhere. Here, the listener would make exile not only liveable, but pleasurable. It could turn into a dream-like blanket of habit ^{P.5}. The pieces written in Yoko Ono's *Grapefruit* even suggest listening as something purely imaginary, thus creative: "Take the sound of stone aging" (Ono, TAPE PIECE I: Stone piece, 1963 autumn).

These deliberations also show somewhat of a paradox within our sensorial capacities. Within exile, we momentarily lose what is known to us, we are disconnected

from the customary surrounding, because we dive deeper into it. This includes positive, working relations with our environment. Yet, in the exhaustion and struggle of exile, by means of creative effort we are able to progress and refine our awareness of sound, space, placement, identity and ultimately other people. Habit becomes a new, richer version of itself every time we overcome exile. Think of an endless staircase which one is condemned to wander, but each time one crosses the first step of a loop it seems a bit lighter to climb than the last. Simultaneously, the staircase builds, at times more difficult loops. Listening challenges us to question the standard and implicitness of habit and lets us alter it for the better. In return, it creates an awareness of how we regard sounds and music in our lives, how we deal with them and what has to be reassessed within our listening culture.

Constant becoming. Ever changing.
Never resting. Always moving.

Spaces multiply and every version is the same in being different. You are enclosed by them. They are around you, without you being in them. You hear water dropping on concrete somewhere behind you. A high note, floating. There is children laughing and their voices get carried by the wind. Before it divides and sudden waves of bright chords break above your head and take you. They are around you without you being in them.

You can breathe under water. Every moment you want to keep gets fractured the very instant you set out to put it in your memory. Releasing another dozen you start to listen to.

You can breathe under water.

What role does sound actually play in our lives? Or better: which role have we assigned sound to play?

There are three main sources of the soundscape, following Bernie Krause's definition: the first is Geophony, describing non-biological sounds that occur in any given habitat, like wind or water. The second is Biophony, generated by organisms in a given habitat at a given moment and a specific place. And the last is Anthrophony, summarizing all the sounds we emit as human beings and which derive from the man made world (Krause | TED Talk). We do not have to embark on a deeper analyse of these - we are most familiar with the Anthrophony in the soundscapes of our western cities. We have learned to navigate them and to react accordingly to sonic events (think of the passing car again). Additionally we are confronted almost on a daily basis with a variety of sonic information, which we put in place intentionally, such as background muzak, ringtones, bad quality music through bad quality headphones, etc. We do this to either mask unsuitable acoustics or escape from our audible surroundings - declared distracting - to pursue a "privatized sound world, which is in harmony with [our] mood, orientation and surroundings, enabling [us] to re-spatialize urban experience." (Bull, p. 58). We create certain atmospheres in public spaces and target the stimulation of desired behaviour. We find ourselves in states of constant sonic manipulation, as it were. "The programmed recorded music of shopping malls and public spaces eliminates

the possibility of grasping the acoustic volume of space. Our ears have been blinded.” (Pallasmaa, P.51). What Pallasmaa pointed out over twenty years ago is even more relevant in today’s hectic world. What follows is the overpowering of our own sensorial capacity due to the high level of constant ambient noise - also referred to as noise pollution, or overstimulation - and ultimately the loss of a refined listening ability (Connell | web). Naturally, the personal use of music for motivation when exercising or emotional joy has its rightful place (MG | interview) and so does a carefully selected playlist for a restaurant, exemplified by acclaimed composer and musician Ryuichi Sakamoto (New York Times | web).

What we miss, though, is the taking of the time and space for deeper ways of listening and engaging with sound (MG | interview). Listening drifts into becoming a tool to defocus (PO | interview), because we get used to hearing something everywhere, instead of consciously focusing on defined listening situations, outside of the concert hall. “People start to live like this. They accept that this is what music and sound does in their lives. While the truth is that we are cutting ourselves off from very deep origins of how our being is developing [...]. Something is really disconnected there and I think it can have great consequences. I think we are not even aware of the scope of what those consequences could be”, Oomen explains. Sound became a subordinate, at our (consumerist) disposal. With every possibility for a more meaningful implementation in our daily lives on a grand scale stripped. Instead, our current relation to it nurtures

a fractured listening culture and actually impacts our well-being (Botteldooren, P. 3).

In search for how to re-appreciate listening and refine our listening abilities, I will look into different situations in which listening is already embraced in order to see how we can pull sound out of its subordinate status. Firstly, what would be beneficial to our turmoil would simply be more silence.

Silence bears the opportunity for one to become aware of what is left audible around oneself, after the mask of all disturbance has been taken off. It allows to experience the details and the refinement of the sonic present, regarding everything audible. Since the acoustic impossibility of silence is apparent (Gautier, p.184), it can become an exile situation in which one deliberately asks: What am I left with, in quiet - and can I make it mine?

It allows for a number of strange observations. If regarded positively, why is there not more silence? Yet, would it be regarded negatively, why do people enjoy the often quoted silence of the countryside so much? It is the wrong question to pose. For it is more a question of format, attention and perspective and the balance between silence and noise, through which an attempt can be made to find space for silence outside the notion of being luxury goods (which it seems to have become in the case of the countryside vacation). To draw a parallel to empty spaces: both, silence and spatial - better: architectural - emptiness can carry negative connotations (Curtis, p.112). and evoke a need in us to fill them. Silence does carry the notion of fear and uncertainty for the unknown (Gautier, p.183). Equally, we find them fascinating, because they uncover potential, lay bare history and appeal to our sense of exploration and our curiosity. We occupy them or transform them into (art) projects, as just recently shown with the work of Rotor: *Da quassù è tutta un'altra cosa* for Manifesta 12 in Palermo. The archi-

tects chose “a remote concrete structure of the housing development [to become] an observatory for a breathtaking panorama” (Manifesta 12 | web). Materials found on site were used to secure the skeleton for visitors and to build a bench and a small garden area. Without imposing any kind of architectural vision, the aim was to make Monte Gallo’s beauty accessible again, while reusing what was present. The notion of a left-to-fate structure elevated to become one of this Manifesta’s highlights. It is these kinds of works which contextualise the seemingly meaningless vacuum of empty spaces and put them in the focus of attention. In this case it is not much more but a simple declaration which achieves healthy activity and discovery, turning the negative taste of the failed and criminal housing development into a modern and humbling nature trip. Hopefully, visitors also paid attention to the sounds of nature on top of the hill and those swelling up from Palermo underneath, because of the positioning of the project and the expectation for experience. There needs to be an indicator for silence to find a place and consequently to open up the needed attention to and re-appreciation of what then is audible. One could think of silence architecturally, as a left-to-fate material, which asks for rediscovery, for manifestation, so as to make the beauty and benefits of listening accessible again. As a thought experiment: imagine the soundscape of a library in a fashion store. Imagine experiencing fashion by listening to different textiles being moved

and touched as opposed to being framed and promoted through ballads, composed by artificial intelligence. Possibly, in joining forces, architectural and artistic projects can very much support measures towards a healthier listening culture through a (re)positioning and a careful placement of silence.

In search for such, nature already provides us with intriguing and often times embraced listening situations, given that “the emotions of human beings are continually aroused by encounters with nature” (Cage, P.¹⁰). This obviously includes sound, think of a whispering forest - but it is hard to be isolated. Cilia Erens found it very difficult to record nature sounds in rural Scotland without the noisy interference of the man made world, the aircraft probably being the most present. In the private realm, everyone is familiar with the feeling of alienation when sleeping in an unknown house. A ticking clock or squeaking staircase might evoke unrest. Again, if we make those sounds our own and listen to them - overcome the exile they put us in - we can benefit from the knowledge these sounds convey to us and turn alienation into appreciation. Of course, this may not include an all night rumbling air conditioning in a dubious hostel, which does not allow for sleep. Such listening situations need to be balanced and transparent, wherein sounds do not occupy a space, but articulate it and allow for distant and subtle noises to also reach us (EvdH | interview).

Floating on a wooden plank, what is underneath me whispers. Sweeps through the fields. Ticks gently and in multitudes. Sometimes it roars, muted.

It's playing with noise. It never bursts through the surface. Captured by endless constraint. It only lifts the plank once in a while to check on me. I'm waiting for the multitudes to take me in.

Other ideas to improve our relation to sound range from legislation on a grand scale - similar to the prohibition of smoking in public spaces (PO | interview) to an honest reassessment of what role sound actually plays within the built environment, rather than being impacted or controlled by acoustic applications. This naturally also raises the more fundamental question of why we build spaces without sound in mind as a purposeful part of design (apart from the concert hall), but only in a way in which we are trying to predict sonic impact on environments. Engineering firm Arup uses their soundlab technology to calculate and estimate such impacts regarding planning infrastructure, for instance (Arup | web). Yet, it would be interesting and beneficial to purposely create sonic effects within the city and, through listening, develop “the capacity to identify them [as] part of a rehabilitation of general auditory sensitivity” (Augoyard & Torgue, P.¹³⁶), as opposed to surprisingly detecting them afterwards.

Any child will yell or clap when in a tunnel and enjoy its reverberation, but the tunnel is not specifically built to experience reverberation. If it were, it may no longer be a space, which provides passage under train tracks. Maybe such creations could even lead to new spatial typologies? Music and the spaces for its presentation have influenced each other progressively over the centuries (Byrne | TED Talk) - why should sound not be doing the same? Although not situated within a city, but well worth the example, the former Yugoslavian monument of Tjentište in today's Bosnia and Herzegovina creates such a sonic effect. Between the two massive sculptures, there is a sort of dead spot. It is absolutely quiet. The words being spoken feel much closer, everything is a bit more numb and dry. It is an intimate point between two witnesses of time that allows you to fully be there, without distraction. It's a delightful invitation for everyone that pays attention - a beautiful and only audible characteristic for a monument. Thus in connecting sonic attributes and the purpose of built structures or even their program, one can connect to them on a level exceeding the practical realm. We should consider the creation of listening experiences as a sculptural-architectural process (SSI Sonic architecture | web). Vilém Flusser writes: "Es häufen sich Anzeichen für ein neues Unbehaustsein. Wahrscheinlich, weil unsere Häuser der Aufgabe nicht mehr gerecht werden, Geräusche zu Erfahrungen zu prozessieren. Wahrscheinlich haben wir die Häuser

umzubauen" (Flusser, 1990, p.67). (Increasingly, there are signs for a new kind of homelessness. Presumably because our houses fail to meet the task of processing noises into experiences. Probably we are to rebuild the houses).

Expanding the question, the context in which listening practice can take place plays a crucial role in the search for a re-appreciation of listening. Different contexts provide for different modalities and consequences of listening (Rice, p.104): where detailed and distributed sounds which articulate a space and build a specific atmosphere ask us to orientate, engage and understand sonic information, overpowering sounds and heavy, long lasting listening formats can very much involve us emotionally and allow for imaginative emergence. Obviously there are many more constellations to be found on this spectrum. Context naturally regards sound and music presentation formats as well, considering that sound, fortunately, has been able to come into a ubiquitous presence, influencing and challenging our listening habits from the perspective of sound art and unconventional, innovative music presentation - embraced by numerous outstanding festivals, such as Sonic Acts, Rewire, CTM, Atonal, Unsound and many more - and to be found as a valuable part of many museum collections around the world. Yet for all the highlights and inspiration that they bring, such festivals also come with "heavy context", as Aloïs Yang* put it (AY | interview). A merging and mingling of different intentions and consequently actions of people,

*People I have interviewed as part of my research are introduced thoroughly in the Appendix

the physical and technological presence of a sound system and the space itself can hinder listening as much as the event aims to support it. At the same time, it communicates to visitors: this is about sound and sets expectations. It is important to keep in mind that any artificial sound space is always imposed on an existing one (Hölzl, P.²⁵), be it inside or outside. They enter a togetherness, which asks for a very clear relation so as to not compete with one another. That this is not always achieved as was shown during a few performances during Sonic Acts 2019 in the Stedelijk Museum Amsterdam. Het Interstedelijk Harmonium Verbond presented their debut album in a small, half open hall behind the big entrance area in the museum. Opening up meditative sound spaces, focusing on the spectral beauty of the harmonium (Sonic Acts | web), their music got opposed by people's movements and disturbing chatter. It is somewhat of a contradiction, since the agreed on, communal silence during a concert should be easily achieved within more unconventional presentation formats, yet the spatial circumstances, the social context of the art museum and the overburdening program of Sonic Acts on that evening seemed to have influenced people's behaviour greatly.

In his intriguing work and performances, Alois Yang therefore tries to de-contextualise the moment, layer by layer. His subtle, detailed compositions invite the audience to be as much part of the development of a piece as he is himself. In a setup only consisting of

sensors, speakers, microphones and desirably spatial neutrality, his feedback sounds are directly influenced by movements of people without imposing a musical narrative, pursuing to simply make his audience (fully) aware of the moment they find themselves in. "Maybe sound art functions only as a reminder to this, to say, hey, you can actually open up this switch and tune it a bit more." (AY | interview).

This brings us back to the first simple fact of listening being the act of attention which everyone chooses to perform or not. What is it that makes someone listen? In the following I would like to frame which conditions facilitate and support listening in relation to space since it can be done anywhere, anytime, these conditions apply to a situation of sound presentation. Every spatial design automatically is an acoustic proposal and draws the outlines of how sound can and will behave in it (Avidar, Ganchrow & Kursell, P.²) Only the built space lets us fully test and experience this proposal. Thinking about spaces that solely pursue the practice of listening, it might not be of importance to achieve acoustic neutrality in the way a concert hall does. It can rather embrace or impact the acoustics already present, when implemented in an existing structure. Considering that reverberation and timbre of sounds let us very clearly detect spatial borders and materiality, you can hear whether a space is soft or hard, dry or wet. In that sense, a listening space can be articulated through its own influence on a surrounding

soundscape - and create sonic effects in exchange with such a soundscape, as mentioned earlier - but it can also be defined during sound presentation or the mixture of the two. Additionally, any existing space which offers intriguing acoustics, such as cathedrals can potentially be seen as listening spaces. This already works well with-in workshops or small scale concerts, pursued by various initiators in the Oude Kerk (Amsterdam) for instance.

Something that greatly informs listening are the ways in which we perceive unknown spaces: whenever we enter a space, we automatically scan it, subconsciously and mostly visually. We detect its borders, volume and openings within a split second (PO | interview). An instinctive relict to ensure our safety, which still greatly informs our perception. As soon as we are in the dark or not fully aware of where we are positioned in a space, there is a sense of uncertainty, which could harm our attention towards sonic information. Yet, at the same time, our sensitivity towards sound increases, since we try to reaffirm our safety. Think of discovering an abandoned house as a child, or exploring a dark cave. There is always a notion of cautiousness and every small, sudden sound teases our adrenaline. Unclear spatial borders also bear the potential of supporting the mental detachment from a space while listening. Where very reverberant sounds and long echoes evoke the feeling of openness, maybe even vastness, it might be undesirable to be aware of the walls around you. In night clubs, fog is used for that

reason, so as to create the sensation of non-space and freedom, in which you can fully embrace the music and get lost. The same might work for a listening space, since it also affects smell and sense of temperature. So, being in a space that is not fully detectable has two sides to it, which both facilitate listening. Orientation and Imagination oppose each other in this, but can be very interesting elements to play with.

This brings me to a third element which concerns the importance of tactility and vibration. Our sensory system starts with the skin as our biggest organ, protector and touch as the mother to the other senses (Montagu, P.3). In the very early stages of life, orientation in water happened through vibration. This ability is still part of our sensorial apparatus (Oomen | TED Talk). We learn that when there is subtle vibration, something has to be moving. It can be a truck passing by, making the rail swing we are holding onto, it might be a metro train deep beneath our feet, and so forth. In a listening space, very subtle vibration could help to stimulate our tactile perception and act as a supporting element. In the end, sound is vibration travelling through air and other mediums (OED). Experimental musician and sound artist Thomas Ankersmit even uses vibration as a tool to literally shake the space he is performing in. It becomes part of his compositions in a unique manner.

Linking to tactility, what we generally do with our body when listening is quite important. As mentioned

earlier, closing one's eyes can help to truly focus on the audible, but one's overall posture is an underestimated factor (PO | interview). We are listening with our whole body, so it should be used to interact with sounds. Already slight movements and twists of one's head change the angle in which sounds come to the ear and are sufficient in order to alter them. When seated, or leaning, we do not have to deal with balance as much as when standing freely (CE | interview). Walking around slowly can also help to discover different perspectives and angles on the space being articulated and the behaviour of sound in it.

Finally, what kind of sound would be facilitating meaningful listening experiences? This question can only be approached, but probably never answered. Sounds should be as spatial as possible, yet even the extreme and monumental sonic occupation of a space can offer a lasting experience (Imagine a distorted, endlessly sustained saxophone note, rich in overtones, played within a very reverberant space). In the end, the more diverse sound is, the more refined and detailed, the more unusual and the more surprising, the more space it has to unfold and the more silence to break, the more we are likely to devote our attention to it. Especially so, if we can not trace its source visually - this confronts us with the way our perception works. Usually the eye and the ear always complement each other. When one of them is left on the search for what the other perceived, we become alert, at best curious. I like to think that listening starts with this

notion of alertness, with discovery and surprise, with the need to find out or to dwell. With the urge to conquer the unknown that is sounding and make it ours, always knowing that it can never be fully ours, once silence has returned. One idea concerning the notion of listening as exile, of the idea of inhabiting sound and the question of what listening experiences have to offer is immersion.

I would like to speak about immersion, because I regard it as one of the beautiful consequences of an active and healthy listening ability. It is an experience which originates in the power of listening to open our senses to their maximum, stimulate imagination and to distinguish between a mental space and the physical space, but always relating to one another. Equally, it is often an over-used term in the promotion of audio-visual installations, music events and whole festival programs. Within this, the “immersive experience” always only seems to communicate a feeling or a treasure one can expect. I would like to explore what immersion is and how it can be looked at through the lens of sound and space.

In the attempt to define or at least frame immersion, it seems obvious to start with a linguistic investigation. This already offers the first clues on how to understand and approach it. The Oxford dictionary speaks of a “deep mental involvement in something” (OED). Agreeing on this, I would like to repeat the definition as found in my dictionary: immersion describes an experience in which one enters a somewhat dreamlike mental state of meditation, relaxation, otherness and transcendence through being embedded in a highly stimulating environment. I would like to point out that I focus on a very physical idea of immersion. The physicality and reality of space and sound facilitate immersion rather than their illusion, as it can occur when using virtual reality technology or as described in gaming culture (Gooskens, p. 182).

Such technology manipulates and tricks our senses, rather than stimulating sensorial sensitivity (PO | interview). The definition already suggests a time frame, or an order in which steps towards immersion can take place. One enters a mental state supposes a foregoing effort of making available to oneself, a certain amount of concentration and openness to be able to “enter”, or to be lead into immersion through the audible. This translates to a trained ear and the right circumstances which I will explore further. For me, immersion happens once someone truly gets absorbed by sound and loses the awareness of and the connection to the physical space layer by layer. What it feels like to be immersed, or live through an immersive experience underlays such individual notions that the bare attempt of defining would be misleading and false. Nonetheless I would like to focus on the idea of entering and leaving such an experience - the sensation of waking up from it, or coming back is something listeners often describe. With the help of a few examples, I would like to explore where and how immersion is facilitated.

Once more, I would like to draw first from nature: If you ever wandered through a forest or landscape covered in fresh, deep snow, you might be familiar with the sensation of silence and peace that goes with it. Especially during an early evening, when everything adopts the violet and blue tones of nightfall. Snow swallows sound, it dampens our audible environment because its ninety percent of air in between ice crystals make sound

waves lose themselves in it (NSDC | web). I always found this sensation very relaxing and sonically appealing. It sort of narrows down your sound horizon and especially in woods, where there is calmness already, this makes for a richer perception of close-by sonic detail. Cracking branches or drips of water underneath the white surface become more immediate, even feel louder. Snow also transforms the environment into a uniform appearance that makes it harder for us to identify spatial conditions, distances and depth. It literally hides what is underneath it. For that reason we might be more attentive and careful in how we move through such landscapes, to not get lost ourselves, just like the sound. Drawing back to the paradoxes listening can produce, getting lost in listening works incredibly well, due to a heightened awareness of our senses and bodies in such a landscape. Why am I using this image? I would like to think of a snow landscape and its described characteristics in terms of a metaphor that can help to think about immersion.

Participants of Karl Russell’s project Dröhner often found themselves being immersed, floating through imaginative natural environments during their experience. “They were speaking about how the body was moving, how its boundaries were dissolved. They were around in space or in the deep sea and positively disorientated when stepping out again”, Russell recalls (KR | interview). “Dröhner is a sound installation that removes all input from the outside. All your attention is focused on the

music and yourself.” (Russell | Web) It is a closed wooden box, painted in gold, coffin-like, equipped with speakers on the inside. Visitors can lay down in it, the lid gets closed and Russell performs unique, one-on-one musical improvisations. Inside, in complete darkness, one is only able to hold onto the tactile and olfactory sensation of the wooden box, its vibrations and to the audible. Originally thought of as a simulation of being high, Dröhner turned into a project that investigates the roles and trust relation between performer and listener within a personalised musical performance. The notion of entering an experience here is very literal and demands commitment from the listener (yet, Russell never failed to convince his audience). Immersion gets facilitated through the deprivation of the visual sense and the exclusion of the outside. “The less input the brain has, the more it rhymes together on its own”, says Russell. The stark contrast produced by the physical conditions of the project and the possibility of mentally detaching oneself from those conditions is where immersion may find its place. It offers to diffuse the very borders of the box and the feeling of enclosure while listening. In fact it asks to solely focus on the self and to seek for experience within this self, guided by the audible and the tactile, denying physical space altogether.

In the work of multidisciplinary artist Nick Verstand, immersion can unfold from a completely different angle. In ESPER, Verstand shapes small, intimate spaces

through laser light, forming organically moving lines on the floor and transcendent light cones above them within an otherwise blackened out non-space. ESPER aims to transform “its surrounding into a meditative environment for quiet contemplation” (Verstand | web), addressing and intriguing the subconscious mind. The light spaces themselves are already very playful in their movement, in their being alive. They clearly communicate an inside and an outside relation, but are supported and further characterised by spatial sound as well. Through the spatiality of the sound, it is easier to project it into Verstand’s light spaces - the sound alters their abstraction and frames them into a sonic world in which they seem to belong. In playing with listening and the light, one can become part of this belonging as well and get immersed in the calm world Verstand is offering. The coherence and togetherness of sound and (light)space in this work is what makes it immersive - in addition to its deliberate construction of isolation from possible outside distraction.

Having mentioned spatial sound, 4DSOUND presentations is where listening practice and immersive experiences are the core. This is due to the outstanding spatial sound technology 4DSOUND develops, enabling artists, scientists, researchers and listeners alike to work with an omnidirectional sound environment. In such, one can experience sounds as independent physical entities, trace them while they are moving through space or walk over to where they are located (Ralston | web). One is enabled

to really understand and use sound as an architectural element and material with which to build unique sound spaces, additionally having the option to manipulate sounds up to a level far beyond physical laws, regarding their nature but foremost their movements. William Ralston is correct in stating: “ It’s something that must be experienced to be properly understood ” (Ralston | web). In long, differentiated listening formats with pieces ranging from fifteen minutes up to whole overnight sessions and a wide range of specific research elements 4DSOUND focuses on different questions circling around listening as a discipline and what this entails for our environment and living together. What makes these sound presentations immersive is mainly the incredible spatiality, which offers an intangible story to follow. More importantly, one is not fully able to trace audio back to the speakers, which project a sound hologram, “appearances of sound that enrich, augment or transform reality as we perceive it.” (4DSOUND | web) In 4D, one can be embedded in sound and I often found myself feeling somewhat inferior to it, to sound as entities, which is greatly motivating to enter a conversation within listening, establish belonging and creating an openness towards the audible world. It can almost feel like an encounter you always wanted to return to.

My head is heavy. I had completely given myself to this world and it embraced me.

The toothpick between my thumb and index finger had gradually lost its pointing sensation. Now, the tweaks and bleeps, the pulling chords and pitching progressions lead my attention through an ever developing space in my mind. The layers of different rhythms allow my attention to shift between them, I am observing different streams at once, the moment I change, the piece seems to change with it. And vice versa. I am warm. The image of the room and the setup does almost not exist anymore in front of my inner eye. I know where I am, but I know I am not there any longer. I am falling and surfing through the different sounds around me, always knowing the heavy, but steady and slow drums underneath me, thickened by base and overlaying frequencies. Reassuring and carrying, they relentlessly pound, like breath, like heart-beat. Only when the sound start to disappear, I feel how I am released, very slowly into the dimly lit space. After a short moment of silence, before the applause I hear the subtle air conditioning of the kitchen, almost suggesting a surface to where I just came from.

When speaking about experience, what do we mean? Experience understood as “an event or occurrence which leaves an impression on someone” (OED). It is something that exceeds the simple act of observation, witnessing or paying attention to. It is the reaction, the answer to this attention given back to us. What is a listening experience? An audible, sonic event or occurrence related to sound which leaves an impression on someone. This occurrence can last for any given duration, be it an instant, a longer sound piece or a whole night - but it is only to be experienced through listening.

In *Essays Against Everything*, Mark Greif introduces the concept of experience as a problem. He refers to experience being a format; it became a method of life which we constantly strive for, so as to satisfy an instilled taste for happiness, referring to the “acceptable philosophy [of] eudaemonistic hedonism” (Greif, p.77). Greif points out, that “the pursuit of happiness needs to enter occurrence, and raw occurrence can’t be saved or savored. Pleasure, like pain will be memorable if it exists only as immediate sensation” (Greif, p.78). Thus experiences of immediacy and surprise are desirable to pursue, in order to collect memories and build containers for “happy” emotions that can be recalled, preserving a feeling of youth. Life becomes a collection of experiences which we take as substance and basis for “our real goals or reasons to live, [when asked about them]” (Greif, p. 79).

When listening, surprises and immediacy are very

likely to occur, it can not be remembered as an act in itself and it surely can result in a satisfactory experience. In that sense, applying Greif's ideas, listening can be seen as problematic. That is, because within our unhealthy relation to sound, listening remains connected to formats and spaces, which already offer an experience without the need to engage in the act of listening. It stays a subordinate, instead of being superior. We do not take the time. Listening requires this in order to see it as something which can be enough, which can stand alone. More importantly, listening does not solely pursue happiness, but "involves the allocation of awareness" (Rice, P. 100) to begin with. Within that awareness, happiness is only one possible resulting emotion. As mentioned in the beginning of this paper, sound never fully disappears - it is always something. Its intricate relation to and influence on emotion, memories and our mental and physical well-being in fact does not leave us a choice: We have to actively engage with sound in a manner that opens us to understanding listening as effort and challenge, within which happiness is not necessarily the aim. Sound can be a conflict, which at times only listening can resolve. It is a dispute with the self to investigate what is the answer given back to one's attention. Thus, I would like to regard listening as a form of experience which can alter for the better what Mark Greif criticises, which can help develop a concept of experience that does not aim for happiness but for

enriching dispute, understanding and knowledge.

Listening means to experience moment to moment (Connell | web) - time loses its pressing character and approaches insignificance. Within listening we learn and grow, we become other, because we ask how we address and process the intangible, how we make it ours, how we react on what sound conveys to us. We enter a state of reassessing the "I" that is experiencing exile, constantly changing the perspective on the self and cracking it open to the other, to a being-with-the other (Flusser 1984/1985, P. 9). A circle repeating itself while rolling forward, unraveling immaterial value and a new understanding of such value in life. Within listening, we enter a state of constant becoming.

There is always something soft, tender almost. Although it is loud, it is white, the layers of noise can get dissected, comfort can be found. Its wildness is not scary anymore. Its harsh cracks are not intimidating. They get warm. Voices speak and drums disrupt them. Long notes get caught from where they seemed to belong and drop onto the carpet of release. Leaving a trace of their travels in reverberation. I smile. I cradle gently in the fog. I am left in eigengrau and the flickers of light within it.

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Appendix

As a main part of my research I spoke to a variety of people, who greatly informed this paper. I would like to point out that all their answers are based on their practice, experience and personal opinion or sensation. Their initials serve as reference points within my text. I would like to introduce them to you below:

Karl Russell karl-russell.de

Karl Russell aims at creating meditative, psychedelic and ecstatic experiences through sound, performance and ritual. He lives and works in Halle (Saale). He graduated from Burg Giebichenstein University of Art and Design with a Bachelors degree in Industrial Design and has been working on different music and art projects ever since.

Cilia Erens cilia-erens.nl

A pioneer of the binaural sound walk, the Dutch sound artist Cilia Erens has been producing sound art since 1982. In her sound walks, sound panoramas and 'soundscapes', she uses predominantly unmixed everyday sounds. Erens' works rely on binaural field recording, a technique which enables us to experience the sound environment as space. To her the world is a series of audible spaces to be explored, each with their own identity which will only become manifest when sound and sight are no longer in sync. Her approach to art making is interdisciplinary; urbanisation and (collective) silence are

recurring themes throughout her oeuvre. She has presented her works at De Appel and STEIM in Amsterdam, Cemeti Art House in Yogyakarta and many other spaces for contemporary art and theatre in the Netherlands and abroad. Cilia Erens works and lives in Amsterdam (NL).

Edwin van der Heide evdh.net

Edwin van der Heide is an artist, composer and researcher in the field of sound, space and interaction. He extends musical composition and musical language into spatial, interactive and interdisciplinary directions. His work comprises installations, performances and environments. The audience is placed in the middle of the work and challenged to actively explore, interact and relate themselves to the artwork. He has presented at renown museums, festivals, galleries and music venues. Besides running his own studio he is a part-time lecturer and researcher at Leiden University and has been lecturer and co-head of the ArtScience Interfaculty of the Royal Conservatoire and Royal Academy of Art in The Hague.

Aloïs Yang aloisyang.com

Aloïs Yang, born in 1986 Dax, France, raised in Taiwan, now based between Berlin and Prague, is a media artist, interaction designer and experimental musician who produces work that explores the relation and interaction between people, sound, and the external world. His work is influenced both by scientific reference and human

imperfection of understanding the nature.

He overcomes the separation of art forms and genres with an integrated creative approach. He uses a wide range of media, from interactive installation to speculative design prototype and live audiovisual performance. Interaction in Yang's work takes place not just in objective reality, but also inside of intimate experience and imaginative projection. These includes traveling among such varied subjects as brain function, facial expression, micro/macro realities, virtual time-space, starlight, apocalypse, and the beginning of the Universe.

Paul Oomen spatialsoundinstitute.com

Paul Oomen, born 1983 in Amsterdam, is a composer, curator and technologist. Oomen holds a BA and MA with Honours in Music Composition from the Conservatory of Amsterdam and Universität der Künste Berlin. Paul Oomen is the Founder and Director of 4DSOUND since 2007 up until today. He has personally worked on more than seventy spatial sound projects to date, in collaboration with numerous internationally acclaimed artists, festivals and institutions - continuously propagating new forms of experiencing sound, such as sound exhibitions, immersive sonic meditation, participative sound theatre or collective sonic sleep-ins. His curatorial practice explores spatial sound as a medium with significant impact on a variety of fields in society, such as music and performing arts,

architecture and public space, consciousness studies and augmented and virtual reality. Oomen currently lives and works in Budapest, Hungary, where he founded the Spatial Sound Institute in 2015. As Head of Development at the Spatial Sound Institute, he supports artistic practice and research at the Institute, driven by his vision on the development of spatial sound as a new medium. Oomen practices a daily philosophy of listening and occasionally publishes lectures and writings about his findings.

Maxime Gordon spatialsoundinstitute.com

Maxime Gordon is a Toronto-based producer and sound artist. Her studies at the University of Waterloo School of Architecture have informed her understanding of space; her sonic interests have pushed her to explore the boundaries of sound, architecture and the human body. Recently, Gordon is interested in the way technology and the human body interact. How can technology enhance our human experience? How does it hinder it? Her art considers answers to these questions. In 2016 Gordon self released her debut EP under the stage name Bénédicte. The album utilizes her voice as an electronic instrument itself. Gordon alters it at times to be almost unrecognisable. In this way she aims to modify the relationship between humanity and technology.

Poetic illustrations

The pieces were written reflecting on the following performances:

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Wind poem was written after a walk in the Dutch landscape

02.2019

p.25

IOANN - Imagining the Hyperspace -16- Cell Spatial Sound Institute, Budapest

06. 2017

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Immanence, presented on the Symphonic Sound SystemSaal 1 - Funkhaus, Berlin

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Driftmachine on the Pentatonic Sound System, reinterpreting "Massive Trance", by Marien van Oers (1955-2013) DeSchool, Amsterdam

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p.55

Whitespace - Casimir Geelhoed, Anni Nöps OT301, Amsterdam

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