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***If seeing is  
believing  
then hearing is  
imagining***

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## Introduction

This work should be regarded formally as a journal of my reading, and the artistic research I've undertaken over the course of the past two years. To this day, I have never held any ambitions as a theorist nor author, and my reflective practice has always been reading based rather than writing based. So instead of adding to the plethora of write-ups on the topic, my aim is to compile, dismantle, reassemble and link crucial fragments of positions which have been of significance to my artistic reflection and practice. Rather than claiming full authorship for this text, I would hope to see myself as a navigator and connector of dots on this explorative cruise.<sup>1</sup>

The core of this investigation is based upon the principles of *acousmatic music* – music whose source remains unseen – and of so called *reduced listening*, a term originally coined by *musique concrète* pioneer Pierre Schaeffer<sup>2</sup>, describing a listening mode «*that focuses on the traits of the sound itself, independent of its cause and of its meaning.*»<sup>3</sup>

It must be said, that while undertaking this exploratory journey into the field of the acousmatic, I'm not necessarily interested in pleading for certain specific listening modes or settings. Rather, I am looking for clues to understand my own individual listening practice, which is not only key to the perception of my personal sonic reality, but also to my compositional work.

My impression is that acousmatic properties are inherent in most of today's electronic music, which is predominantly being consumed in settings where the sources of sound remain unseen (headphones, laptop performances etc.). And it's not only that the sources remain unseen; in many cases the origins of sound also remain *unknown*, as they are being blurred by their means of production.

English musician and author David Toop states that...

«in the digital age, sound finally became fully autonomous: As a pure stream of information it is now amenable to any method of synthesis, transformation, or analysis without the involvement of a sounding body in the conventional sense. [...] As the apparatus of music becomes less apparent, particularly in the digital domain, so sound becomes more completely itself, the purest manifestation of a disembodied, time based art. Freed from the distraction of ranked violinists dressed in black and white sawing at their instruments, guitarists leaping around on stage, entire typing pools of keyboard players, choreographed dancers, drum risers, video walls and pyrotechnics, the intangible core of music, the part that makes some people close their eyes when they listen, is allowed its full power.»<sup>4</sup>

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<sup>1</sup> The title of this text is borrowed from Brian Kane's analysis on Les Paul and his "Les Paulverizer" in Kane, *Sound Unseen – Acousmatic Sound in Theory and Practice*, p. 169.

<sup>2</sup> see Schaeffer, *Traité des objets musicaux*, p. 270 and Chion, *Guide To Sonic Objects*, p. 28. According to Chion, the adjective "reduced" is borrowed from Husserl's phenomenological notion of reduction.

<sup>3</sup> Chion, *Audio-Vision – Sound On Screen*, p. 29.

<sup>4</sup> Toop, *Haunted Weather*, p. 14.

Swiss composer and writer Salomé Voegelin points out that...

«From recording, editing, processing, and manipulating emerges what *could* be: invisible sonic sculptures in time, sonic modulations creating not a two-dimensional progression but a spacious materiality: almost tangible, static, and moving at the same time, fixed-fluidity expanding its own location. The recognizable is covered in synthetic sounds that question its origin and expand what it might be: connecting, reconnecting, disconnecting oddments in timespace, tinkling, clicking, and *breathing existence into the unseen*.»<sup>5</sup>

I find that my own listening is primarily concerned with exactly the above; perceiving *invisible sonic sculptures in time*, mental images, *breathing existence into the unseen*. Daniel L. Barreiro defines these aspects of sonic perception as the *concept of sonic image*:

«The concept of sonic image in acousmatic music [...] is understood as mental representations motivated by sonic stimuli that reach the listener in an acousmatic listening situation and that can be determined by a focus on either the intrinsic or extrinsic aspects of the sounds – or even a combination of both. The intrinsic aspects are related to the inner characteristics of the sounds and are, therefore, accessed through reduced listening. They are not dependent on the identification of the sources that caused the sounds or possible meanings and connotations conveyed by them. The extrinsic aspects, on the other hand, are the connotations, meanings and references that lay outside the sounds themselves and that can be related to human experience in a broader sense, including domains other than the sonic. Since sonic images are not exclusively dependent on intrinsic factors, they can be the result of various kinds of listening attitudes not restricted to reduced listening.»<sup>6</sup>

In order to get a better understanding of the fundamentals of my auditory perception, I've decided to start my inquiry by briefly outlining the basic ideas of acousmatic music and reduced listening as established by Schaeffer.

As stated by Barreiro, it appears that listening in an acousmatic setting not only allows for a reduced listening and focus on intrinsic qualities of sound, but furthermore can also provoke a state of mind where listening becomes inventive and where sound and musical figures may gain corporeal properties, objectness and quasi-materiality. In the second part of my investigation, I will therefore explore a variety of positions dealing with imaginative and generative qualities of the hearing apparatus, along with intersensory aspects of auditory perception.

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<sup>5</sup> Voegelin, *Sonic Possible Worlds*, p. 72.

<sup>6</sup> Barreiro, *Sonic Image and Acousmatic Listening*, in *Organised Sound*, 15, p. 35.

# Fundamentals

## Musique concrète

«[Pierre] Schaeffer pioneered the approach of musique concrète, a music of concrete sounds in the sense both of sounds of the world and of sounds as concrete, discrete parcels of material.»<sup>7</sup>

«When in 1948 Schaeffer gave the name Concrète to the music he invented, he wanted to emphasize that this new music came from concrete sound material, sound heard for the purpose of trying to abstract musical values from it. And this is the opposite of classical music, which starts from an abstract concept and notation and leads to a concrete performance.»<sup>8</sup>

The contrasting adjectives, *abstract* and *concrete*, have proven to hold potential for a great deal of confusion. Not only when used to distinguish classical music from concrete music – which is often confusingly regarded as “abstract” music – but also when used to distinguish between music and painting. Schaeffer himself tried to bring forth some clarity on this issue in his “deuxième journal” written between 1950 and 1951:

«Painting fifty years ago was a representation, and also, it goes without saying, an interpretation. The cubist break with this introduced a new subject for painting, so-called abstract painting. Similarly, with Western music, for centuries music was expression, i.e., language. Suddenly concrete music to some extent breaks with this, and instead of language it introduces an object that no longer has to express itself. The contrasting adjectives – “abstract” for painting and “concrete” for music – in fact demonstrate how alike they are. Classically, music and painting are indeed at opposite poles from each other, at the two poles of reality. Painting is born of an external reality, a spatial and material world. Music, which can be nonfigurative, is born of an inner reality. It is easy to establish connections between concrete music and abstract painting, tangible realities, whereas descriptive music is as illusory as musical painting. Some works of concrete music immediately call for graphic translation, and it would not be impossible, for example, to compose a concrete music based on an abstract painting and which would express the similarities of matter and form. Such a painting would in any case be a better score than notes on a lined paper. And so there are indubitably connections between these two [...] phenomena that build a bridge, this time firm, between painting and music.»<sup>9</sup>

Brian Kane, author of Musique concrète magnum opus *Sound Unseen – Acousmatic Sound in Theory and Practice*, points out that...

«Concrete music was not intended as a reactionary term; rather, it was chiasmically allied with abstract painting, in that both art forms sought direct encounters with their material conditions – on one side, sound unmediated through the note; on the other, a direct experience with color and line unmediated by the figure.»<sup>10</sup>

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<sup>7</sup> Kim-Cohen, *In The Blink of an Ear – Toward a Non-Cochlear Sonic Art*, p. 9.

<sup>8</sup> Chion, *Guide To Sound Objects*, p. 39.

<sup>9</sup> Schaeffer, *In Search of a Concrete Music*, p. 104.

<sup>10</sup> Kane, *Sound Unseen – Acousmatic Sound in Theory and Practice*, p. 51.

## The sonic object

A key idea of Schaeffer's *Musique concrète* is the concept of the sonic object.

«Schaeffer referred to discrete units of sound as “objets sonores”, sonic objects. Such a sound is not treated as a note with a pitch value, to be combined – in adherence to the edicts of either the tonal or atonal systems – with other notes to create harmonic relations. The *objet sonore* is to be accepted for its sonic, acoustic properties; for its texture, its grain, for all the qualities it carries in excess of, prior to, its traditional musical values. To accept the *objet sonore* thus, Schaeffer suggests that we should [...] listen blindly, paying attention only to the characteristics of the sound, ignoring who might have made it, with what materials, for what purpose. [...] The “blind” experience of listening to recorded sound, removed in space and time from the circumstance of production, allows for the *concrète* reduction, ultimately an increased attention to the specificity of the sound in question.»<sup>11</sup>

Schaeffer says that...

«In listening to sonorous objects (objets sonores) whose instrumental causes are hidden, we are led to forget the latter and to take an interest in these objects for themselves.»<sup>12</sup>

...and specifying the means of how to access sound as a sonic object, he says that...

«If I extract any sound element and repeat it without bothering about its *form* but varying its *matter*, I practically cancel out the form, it loses its meaning; only the variation of matter emerges, and with it the phenomenon of music. So, every sound phenomenon (like the words of a language) can be taken for its relative meaning or for its own substance. As long as meaning predominates, and is the main focus, we have literature and not music. But how can we forget meaning and isolate the in-itself-ness of the sound phenomenon? There are two preliminary steps:

*Distinguishing* an element (hearing it in itself, for its texture, matter, color).

*Repeating* it. Repeat the same sound fragments twice: there is no longer event, but music. »<sup>13</sup>

«Repetition musicalizes the sound fragments by removing the dramatic and anecdotal traces of its original causal context.»<sup>14</sup>

Schaeffer concretizes that...

«Repetition of the physical signal, which recording makes possible, assists us in two ways: by exhausting [...] curiosity, it gradually brings the sonorous object to the fore as a perception worthy of being observed for itself; on the other hand, as a result of even more attentive and more refined listenings, it progressively reveals to us the richness of this perception.»<sup>15</sup>

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<sup>11</sup> Kim-Cohen, *In The Blink of an Ear – Toward a Non-Cochlear Sonic Art*, p. 9.

<sup>12</sup> Schaeffer, *Acousmatics* in Cox and Warner (Ed.) *Audio Culture, Readings in Modern Music*, p. 78.

<sup>13</sup> Schaeffer, *In Search of a Concrete Music*, p. 13.

<sup>14</sup> Kane, *Sound Unseen – Acousmatic Sound in Theory and Practice*, p. 16.

<sup>15</sup> Schaeffer, *Acousmatics* in Cox and Warner (Ed.) *Audio Culture, Readings in Modern Music*, p. 78.

According to Michel Chion, a former assistant to Pierre Schaeffer and a composer in his own right, who dedicated a great deal of his compositional work as well as numerous publications to musique concrète and Schaeffer's concepts...

«A series of confusions often occurs about the nature of the sound object:

a) *The sound object is not the sound body*: The *sound body* is the material source of the sound which can be identified from it. In French, with certain people, the ambiguity of the word "objet" adds to the already very common confusion between the *sound* and its causal event. This confusion must be avoided at all costs. The *sound object* as a notion arises precisely from the radical distinction between the sound and its real or imagined causality.

b) *The sound object is not the physical signal*: the latter is not "sound" at all.

c) *The sound object is not a recorded fragment*. It is not the same as the fragment of magnetic tape on which it is recorded, or the groove of the disc or any other piece of recorded material. Indeed the same fragment, read at different speeds by various equipment, or in different ways (forwards or backwards), can be heard as *completely different sound objects*; the sound object itself is solely "of our hearing" and relative to it.

d) *The sound object is not a notated symbol on a score*: For the same reason it is not the same as the more or less accurate written symbol which "notates" it.

e) *The sound object is not a state of mind*: It remains the same across different listening modes, "*transcending individual experiences*". One can therefore analyse it and describe it, giving it an *objectivity* of its own. However, how objects are distinguished and isolated in a "sound chain" is an intentional and non-neutral act.»<sup>16</sup>

And this *intentional act* seems to provide some difficulties as Trevor Wishart points out:

«The sound-object is to be analysed for its intrinsic acoustic properties and not in relation to the instrument of physical cause which brought it into being. However in our common experience, we are more often aware of the source of a sound than not and studies of behaviour and aural physiology would suggest that our mental apparatus is predisposed to allocate sounds to their source. We can see in a very crude way how this ability was essential for our survival in the period before our species came to dominate the entire planet. One needed to be able to differentiate between harmless herbivores and dangerous carnivores, predator and prey, friend and foe. [...] With the arrival of sound recording the question of source-identification of sounds became of great importance. [...] It allowed the electro-acoustic musician to isolate a sound physically from its producing medium by recording it and hence enabled Schaeffer's conceptualisation of [reduced listening] and of the acousmatic.»<sup>17</sup>

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<sup>16</sup> Chion, *Guide To Sound Objects*, pp. 32 - 33.

<sup>17</sup> Wishart, *On Sonic Art*, pp. 129 - 136.

## Reduced listening

In order to perceive the *sonic object* as such and focus on the intrinsic value of the sound itself – and not its extrinsic qualities such as cause or meaning – we must commit to a listening attitude Schaeffer coined *reduced listening*. Michel Chion explains that...

«there are at least three modes of listening, each of which addresses different objects. We shall call them *causal listening*, *semantic listening*, and *reduced listening*. Causal listening, the most common, consists of listening to sound in order to gather information about its cause or (source). [...] I call semantic listening that which refers to a code or a language to interpret a message: spoken language, of course, as well as Morse and such codes. [...] Pierre Schaeffer gave the name *reduced listening* to the listening mode that focuses on the traits of the sound itself, independent of its cause and of its meaning.»<sup>18</sup>

«Reduced listening is the listening attitude which consists in listening to the sound *for its own sake*, as a *sound object*, by removing its real or supposed source and the meaning it may convey. More precisely, it reverses the twofold curiosity about causes and meaning (which treats sound as an intermediary allowing us to pursue other objects) and turns it back on to the sound itself. In reduced listening, our listening intention targets the event which the sound object is in itself (and not to which it refers) and the values which it carries in itself (and not the ones it suggests).

In “ordinary” listening the sound is always treated as a *vehicle*. Reduced listening is therefore an “anti-natural” process, which goes against all conditioning. The act of removing all our habitual references in listening is a *willed* and artificial act which allows us to clarify many phenomena implicit in our perception.

Thus, the name reduced listening refers to the notion of *phenomenological reduction* (*époche*), because, in a way, it consists of stripping the perception of sound of everything that is not “it itself”, in order to hear only the sound, in its materiality, its substance, its perceivable dimensions. Reduced listening and the sound object are thus *correlates* of each other; they define each other mutually and respectively as perceptual activity and object of perception.»<sup>19</sup>

## Acousmatic

In order to allow for a *reduced listening*, Pierre Schaeffer calls for a specific listening situation. He introduces the concept of the *acousmatic* in his *Traité des objets musicaux* published in 1966 and defines it as follows:

«Acousmatic, the Larousse dictionary tells us, is the: “Name given to the disciples of Pythagoras who, for five years, listened to his teachings while he was hidden behind a curtain, without seeing him, while observing a strict silence.” Hidden from their eyes, only the voice of their master reached the disciples. It is to this initiatory experience that we are linking the notion of acousmatics, given the use we would like to make of it here. The Larousse dictionary continues: “Acousmatic, adjective: is said of a noise that one hears without seeing what causes it.”

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<sup>18</sup> Chion, *Audio-Vision – Sound On Screen*, pp. 25 - 29.

<sup>19</sup> Chion, *Guide To Sound Objects*, pp. 30 – 31.

This term [...] marks the perceptive reality of sound as such, as distinguished from the modes of its production and transmission.»<sup>20</sup>

Michel Chion introduces the term in his *Guide To Sound Objects* as...

«a word of Greek origin discovered by [French novelist and poet] Jérôme Peignot and theorized by Pierre Schaefer, [describing] “sounds one hears without seeing their originating cause.”»<sup>21</sup>

And he points out that...

«Radio, phonograph, and telephone, all which transmit sounds without showing their emitter, are acousmatic media by definition.»<sup>22</sup>

Jérôme Peignot, who according to Chion discovered the word that would become synonymous with *musique concrète* and its listening practice, writes that...

«in French, the word “acousmatique” already describes those disciples of Pythagoras who, during five years, only heard his lessons hidden behind a curtain, without seeing him, and keeping a rigid silence. Pythagoras was of the view that a simple look at his face could distract his pupils from the teachings that he was giving them. If one gives the word and adjectival form, acousmatic, it would indicate a sound that one hears without being able to identify its origin.»<sup>23</sup>

Kane specifies that...

«Acousmatic listening is the opposite of direct, which is the “natural” situation where sound sources are present and visible. The acousmatic situation changes the way we hear. By isolating the sound from the “audiovisual complex” to which it initially belonged, it creates favorable conditions for reduced listening which concentrates on the sound for its own sake, as sound object, independently of its cause or its meaning (although reduced listening can also take place, but with greater difficulty, in a direct listening situation).»<sup>24</sup>

## Acousmatic music

French composer Francois Bayle, who in 1958 joined Pierre Schaeffer's *Groupe de Recherches Musicales* – and who was put in charge of the *GRM* in 1966<sup>25</sup> – was amongst a group of composers who would expand the concepts defined by Schaeffer to a more open-ended “acousmatic music” that wouldn't restrict its musical focus solely on the “sonic object”.

«[Francois Bayle] popularized the term “*musique acousmatique*” (a term that Schaeffer did not use to describe his compositional work) to describe his particular brand of *musique concrète*.

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<sup>20</sup> Schaeffer, *Acousmatics* in Cox and Warner (Ed.) *Audio Culture, Readings in Modern Music*, p. 77.

<sup>21</sup> Chion, *Audio-Vision – Sound On Screen*, p. 71.

<sup>22</sup> Chion, *Audio-Vision – Sound On Screen*, p. 71.

<sup>23</sup> Peignot, *De la musique concrète à l'acousmatique*, p. 116, Translation by Brian Kane in Kane, *Sound Unseen – Acousmatic Sound in Theory and Practice*, p. 48.

<sup>24</sup> Kane, *Sound Unseen – Acousmatic Sound in Theory and Practice*, p. 4.

<sup>25</sup> Liner notes *Francois Bayle, Jeïta – L'Infini Du Bruit*, Paris: Magison, 1999.

Bayle introduced the expression *acousmatic music* as a specific kind of music, as the art of projected sounds which is “*shot and developed in the studio, projected in halls, like cinema.*” This music [...] was conceived from its beginnings to be heard without the use of visual intervention. It does not involve any instrumentalist on stage – with the exception of the person who projects the work during a public performance in order to maximize the use of the given space. It organizes morphologies and sonic spectra, “images of sound” (François Bayle), coming from a multiplicity of sources, but that the absence of visual identification makes anonymous, unifies and prompts a more attentive listening. It is a *causa mentale*.»<sup>26</sup>

«[Bayle] refers to his compositional practice as “cinema for the ear”, encouraging the propagation of mental images by placing listeners in darkened rooms exposing them to evocative sounds moving through space.»<sup>27</sup>

I would argue that Bayle’s explicit encouraging of mental images marks a departure from Schaeffer’s rigid strategy of reduced listening, which aims to prevent intersensory sensations in favor of a perception of pure sound matter. Although this doesn’t necessarily contradict Schaeffer’s notion of listening “blindly” while paying attention only to the sound, and ignoring who might have made it, with what materials, and for what purpose. I would say that Bayle’s “images of sound” and his “cinema for the ear” much more encourages an “expanded” form of acousmatic listening. A listening that separates sounds from their sources by placing the listener in the dark, while at the same time allowing or rather animating mental images which don’t necessarily correlate with the sounds actual source or cause.

## Anecdotal music

Another of Pierre Schaeffer’s companions who would go on to broaden the strategies of musique concrète and expand the notion of reduced listening was Parisian composer Luc Ferrari. With his ground-breaking compositions – most famously “Presque rien No. 1 (Le Lever Du Jour Au Bord De La Mer)”<sup>28</sup> – he introduced the *anecdotal* to concrete music:

«To incorporate the social within sound, to capture the voice of people talking in the street, the metro, the museum ... we are like wandering ears stealing sound in the same way you would take a picture. That voice then becomes a found object within dramatic form. So that means incorporating society, intimacy or an expression of feelings ... These sounds represent an image, a memory; they are objects that take part in a creation.»<sup>29</sup>

I believe I was the first composer to use these “found objects” in the music world. Obviously, people in film had been doing it for a while. Literature also used this sort of images: in the Nouveau Roman, in Joyce’s interior monologues, etc. I was making sound films that you could only see in the mind’s eye. As I said, my philosophy consisted in using everyday sounds. I wasn’t interested in the spectacular, but rather in what was happening all the time.»<sup>30</sup>

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<sup>26</sup> Francis Dhomont, *Acousmatic, what is it?*, Liner notes *Cycle D’errance*, Montréal: Diffusion I Média, 1996.

<sup>27</sup> Kane, *Sound Unseen – Acousmatic Sound in Theory and Practice*, p. 51.

<sup>28</sup> <http://www.ubu.com/sound/ferrari.html#rien>, accessed February 20, 2015.

<sup>29</sup> Caux, *Almost Nothing with Luc Ferrari*, p. 36.

<sup>30</sup> *Ibid.*, p. 130.

Exploring the ideas behind “Hétérozygote”, one of his first “anecdotal” compositions, Ferrari says...

«I thought that the sounds I had recorded were like images, not only for me who couldn't remember them, but also for the innocent listener. They conveyed often contradictory images that catapulted themselves inside the mind more freely than if they could actually be seen. I enjoy playing with sound images in the same way that poets play with words. Certain images can be meaningless and others meaningful; some can be frail and others powerful. [...] I called it anecdotal music because I wanted to claim the anecdotal in a world dominated by abstraction.»<sup>31</sup>

As Berraio points out, one of the reasons why Schaeffer considered anecdotal sounds as inappropriate for the composition of musique concrète was that...

«the focus on the intrinsic aspects of the sounds, carried out through reduced listening, can be jeopardised by sounds that reveal their source in an unequivocal way or that make identifiable references of extra-musical nature. If the reference to a source or a meaning is very strong, a sound will probably impose difficulties for reduced listening to be carried out.»<sup>32</sup>

Barreio however states that...

«In spite of [Schaeffer's] belief, the richness of associations that ‘anecdotal’ sounds can trigger on the listener's mind has drawn the attention to the expressive potential they can bring to electroacoustic music, which can be traced back to the works by Luc Ferrari.»<sup>33</sup>

Suk-Jun Kim marks in his study on “Listeners and Imagination”<sup>34</sup> that...

«while listening to electroacoustic music, listeners carry out» what he calls «*acousmatic reasoning* based on the continuous interplay between a semiotic listening mode (centred on sonic images motivated by the identification of a signification or references the sounds may convey) and a spectromorphological listening mode (centred on the identification of the inner qualities of the sounds and related, therefore, to reduced listening).»<sup>35</sup>

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<sup>31</sup> Ibid., pp. 130 - 131.

<sup>32</sup> Barreio, *Sonic Image and Acousmatic Listening*, in *Organised Sound*, 15, p. 35.

<sup>33</sup> Ibid.

<sup>34</sup> Kim, *Listeners and Imagination: A Quaternary Framework for Electroacoustic Music Listening and Acousmatic Reasoning*.

<sup>35</sup> Barreio, *Sonic Image and Acousmatic Listening*, in *Organised Sound*, 15, p. 37.

## Sonic images and invisible sculptures

I find myself consistently failing when attempting to listen in a strict Schaefferian *reduced* manner which only “*targets the event which the sound object is in itself (and not to which it refers) and the values which it carries in itself (and not the ones it suggests)*”<sup>36</sup>. However, as soon as I allow for what Kim calls *acousmatic reasoning* – the interplay of semiotic and reduced listening – an imaginary world unfolds, one that in itself marks what I would define as the foundation of my fascination with sound and music.

Barreiro states that...

«In the process of listening to an acousmatic work, sonic images are constantly generated in the listener’s mind based both on the characteristics presented by the sounds and on the listener’s imagination which ‘completes’ the musical scene presented by the sounds.»<sup>37</sup>

And composer Denis Smalley further explains that...

«Acousmatic music perception is bound up with totality of our sensory-motory experience. In our imagination, what we hear crosses over into what we learn and know of the world via the collaboration amongst the sense-modes. Even if these modes are not directly activated in order only to listen. For example texture we note to be physical – sense of touch – and visual, not just, or even primarily aural. When we mentally take in the motion of sounds, we refer to our kinaesthetic experience and to our visual observation of motion, our multi-facetted experiences of space. So trans-modal sensory experience is implicated in the acousmatic image. Although the image is carried by sound, its meaning and significance can be understood only by reference to trans-sensory experience, to our bodily experience of space, our corporeity. [...] How I relate to the [acousmatic] image depends on how I decode the sonic material and spatial image. And that depends on my previous experience, what I bring to the act of listening. This is difficult and uncertain territory for the composer who cannot know the range of each listeners experience and the facettes of the listeners memory and self-imagination which the acousmatic image might trigger. Here the idea of source bondedness of sounds is a very important factor. Source-bonding being the natural tendency to relate sounds to supposed sources and causes and to relate sounds to each other because they appear to have shared or associated origins. The listener attempts to indentify and deduce the sources of sound. The word bonding is used here to indicate the strength of an almost involuntary reflex. We can’t help trying to decode sources. I am bound to think of or imagine an associated kind of object, substance or sounding body. »<sup>38</sup>

Salome Voegelin points out that...

«Composing and listening reveal the world not “as a set of propositions”, as a linguistic set of truths, but generate a sonic truth of the world, and project it into the world as real, unleashing a multiplicity of realities.»<sup>39</sup>

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<sup>36</sup> Chion, *Guide To Sound Objects*, p. 30.

<sup>37</sup> Barreiro, *Sonic Image and Acousmatic Listening*, in *Organised Sound*, 15, p. 37.

<sup>38</sup> Smalley - *Spatiality in acousmatic music*, CIRMMT Distinguished Lectures in the Science and Technology of Music, City University, UK, 2014.

<sup>39</sup> Voegelin, *Sonic Possible Worlds*, 2014, p. 73.

She furthermore suggests that...

«Rhythms and vibrations produce things that do not exist as counterfactual elements of a visual, actual world, but open a view onto an unfamiliar existence that lives unseen as the mobility of sound. Listening we conjure up shapes from invisible sonic movements that live in the reality of the seen as another truth, that is not an untruth but the truth of that which has no reference and no memory of what it was elsewhere and at another time, but which is itself as sound that triggers my memory to create presently what it might be.»<sup>40</sup>

Composer Ezekiel Honig adds that...

«Sound is intuitive and associative, dream-like and consciousness stirring. In many ways it is even more visual than visuals, because when you're looking at something you are seeing that thing, but if you're listening, especially with no visual accompaniment, you easily imagine pictures in your mind's eye, with varying directions and results. Even with the [...] sounds that are easily identifiable, you can still fill in the blanks of what is occurring around them, or ignite a memory that has its own set of images, which are abstractions of the real experience. This blurriness adds new elements to what could otherwise seem so grounded, allowing a balancing act of connectedness and infinite openness, of reality that veers off into different possible strands, extensions of what could be.»<sup>41</sup>

Elaborating on the fundamental phenomenological differences between visual and auditory perception, Voegelin offers the following analysis:

«Vision, by its very nature assumes a distance from the object, which it receives in its monumentality. Seeing always happens in a meta-position, away from the seen, however close. And this distance enables a detachment and objectivity that presents itself as truth. Seeing is believing. The visual 'gap' nourished the idea of structural certainty and the notion that we can truly understand things, give them names, and define ourselves in relation to those names as stable subjects, as identities. The score, the image track of film, the stage set, the visual editing interface, and so on can make us believe in an object hearing, but what we hear, guided by these images, is not sound but the realization of the visual. The sound itself is long gone, chased away by the certainty of the image. By contrast, hearing is full of doubt: phenomenological doubt of the listener about the heard and himself hearing it. Hearing does not offer a meta-position; there is no place where I am not simultaneous with the heard. However far it's source, the sound sits in my ear. I cannot hear it if I am not immersed in its auditory object, which is not its source but sound as itself.»<sup>42</sup>

And furthermore that...

«The ideology of a pragmatic visuality is the desire for the whole: to achieve the convenience of comprehension and knowledge through the distance and stability of the object. Such as visuality provides us with maps, traces, borders and certainties, whose consequence are communication and a sense of objectivity.

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<sup>40</sup> Voegelin, *Sonic Possible Worlds*, p. 71.

<sup>41</sup> Honig, *Sounds of the Everyday, Listening, and the Potential of the Personal*, p. 9.

<sup>42</sup> Voegelin, *Listening To Noise And Silence*, pp. xi – xii.

The auditory engagement however, when it is not in the service of simply furnishing the pragmatic visual object, pursues a different engagement. Left in the dark, I need to explore what I hear. Listening discovers and generates the heard.»<sup>43</sup>

«The listening subject invents, he practices an innovative listening that produces the world for him in a phenomenological sensory-motor action towards the heard, and his auditory self is part of the heard in reciprocal intersubjectivity.»<sup>44</sup>

Brandon LaBelle adds...

«while listening I hear the possibility of life-worlds that are not delineated by the visible but conjured from the invisible in sound, whose actuality is negotiated continually rather than assumed.»<sup>45</sup>

John Young elaborates in his study on “The Interplay of Realism and Abstraction in Electroacoustic Music” that...

«because in normal real-world experience physical permanence is frequently confirmed through vision and touch, recognition of sound sources is apt to encourage the formation of imagined parallels with other senses. This may include visual correlations such as a succession of mental pictures to match the assumed objects and actions in a given scenario, deductions about the size and shape characteristics of a sound source, or tactile analogies such as the presumed effects of being in physical contact with the sounding object.»<sup>46</sup>

And Voegelin concludes that...

«It's not that sound changes anything on the objective consciousness of time or space, but that it introduces another time and another space that it sounds together as timespace. This is the timespace of the phenomenological subject who performs a reduced listening which does not hear a place but produces its own. This perception is neither idealist nor realist but works on modalities, on possibilities, that remain separate and yet, as concepts of engagement influence and challenge the possibility of the world that we pragmatically refer to as the real one.»<sup>47</sup>

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<sup>43</sup> Voegelin, *Listening To Noise And Silence*, p. 4.

<sup>44</sup> *Ibid.*, p. 10.

<sup>45</sup> LaBelle, *Background Noise – Perspectives on Sound Art*, p. 29.

<sup>46</sup> Young, *Imagining the Source: The Interplay of Realism and Abstraction in Electroacoustic Music*, p. 77.

<sup>47</sup> Voegelin, *Listening To Noise And Silence*, pp. 163 – 164.

## Conclusion

The concept of reduced listening and the sonic object which Pierre Schaeffer and his peers have established, serve as crucial groundwork for strategies of sonic perception, which allow me, as a listener, to fully immerse myself into the matter of sound itself. With this being said, I also believe that in order to not solely focus on the intrinsic properties of sound itself, but also on its extrinsic values and imaginative qualities, I need to apply what Kim describes as acousmatic reasoning i.e. the interplay of various listening modes. I believe that if applying acousmatic reasoning and practicing a more open-ended acousmatic listening procedure – for example as Bayle suggests with his "cinema for the ear" or as Ferrari proposes with his "anecdotal music" – I find myself able to not only immerse myself into sound, but to furthermore perceive intersensory phenomena and thereby gain access to a seemingly infinite imaginary world.

I believe that it is the openness of the imaginary, the endless possibilities of what could be, which fundamentally defines my fascination with the sonic world in general and specifically in acousmatically perceived sound and music. It is this multiplicity of possible realities – be it while perceiving a piece of music, or in everyday situations such as sitting in a busy park or walking down a crowded street – which directs my attention towards my auditory perception and away from the visual.

While this investigation primarily focused on the listening subject, it should be said that the perception of my individual sonic reality is obviously closely linked with my compositional practice. The intersensory potential and the openness of imaginary aspects of the sonic world not only enthrall me as a listener, but equally so as a composer. What I find especially intriguing from a composer's perspective is the dualism of myself being on one hand capable of meticulously molding and colouring every single grain of the sonic material I'm working with, and on the other, having no real control of what my work might trigger within the recipient's mind. No matter how accurately I mold sonic matter and texture, no matter how painstakingly I construct and shape musical figures or how meticulously I capture anecdotal everyday sounds, the outcome remains to some degree uncertain as I will never be able to precisely determine how each individual listener will personally decode the sonic material, nor specifically which facet of his memory or imagination my composition might trigger.

## Bibliography

- Barreiro, Daniel L., *Sonic Image and Acousmatic Listening*, in *Organised Sound*, 15, pp. 35-42, DOI:10.1017/S1355771809990240, 2010.
- Bayle, Francois, *Jeïta – L'Infini Du Bruit*, Audio CD liner notes, Paris: Magison, 1999.
- Caux, Jacqueline, *Almost Nothing with Luc Ferrari*, Los Angeles: Errant Bodies Press, 2012.
- Chion, Michel, *Audio-Vision – Sound On Screen*, New York City: Columbia University Press, 1994.
- Chion, Michel, *Guide To Sound Objects*, London: 2009.  
[http://monoskop.org/File:Chion Michel Guide To Sound Objects Pierre Schaeffer and Musical Research.pdf](http://monoskop.org/File:Chion_Michel_Guide_To_Sound_Objects_Pierre_Schaeffer_and_Musical_Research.pdf), accessed February 20, 2015.
- Cox, Michael and Warner, Daniel (Ed.), *Audio Culture: Readings in Modern Music*, New York: Bloomsbury Academic, 2004.
- Dhomont, Francis, *Acousmatic, what is it?*, in *Cycle D'errance*, Audio CD liner notes, Montréal: Diffusion i Média, 1996.
- Honig, Ezekiel, *Sounds of the Everyday, Listening, and the Potential of the Personal*, New York City: Anticipate, 2014.
- Kane, Brian, *Sound Unseen – Acousmatic Sound in Theory and Practice*, Oxford: Oxford University Press, 2014.
- Kim-Cohen, Seth, *In The Blink of an Ear – Toward a Non-Cochlear Sonic Art*, New York: Bloomsbury Academic, 2009.
- Kim, Suk Jun, *Listeners and Imagination: A Quaternary Framework for Electroacoustic Music Listening and Acousmatic Reasoning*, PhD thesis, Florida: University of Florida. 2008.
- LaBelle, Brandon, *Background Noise – Perspectives on Sound Art*, New York: Bloomsbury Academic, 2006.
- Schaeffer, Pierre, *Traité des objets musicaux (Rev. Ed.)*, Paris: Le Seuil, 1967.
- Schaeffer, Pierre, *In Search of a Concrete Music*, Los Angeles: University of California Press, 2012.
- Smalley, Dennis, *Spatiality in acousmatic music*, CIRMMT Distinguished Lectures in the Science and Technology of Music, London: City University, 2014.  
<https://www.youtube.com/watch?v=G68Q4gkOMc>, accessed February 20, 2015.
- Toop, David, *Haunted Weather*, London: Serpent's Tail, 2004.
- Voegelin, Salomé, *Listening To Noise And Silence*, New York: Continuum International, 2010.
- Voegelin, Salomé, *Sonic Possible Worlds*, New York: Bloomsbury Academic, 2014.
- Wishart Trevor, *On Sonic Art*, Amsterdam: Harwood Academic Publishers, 1996.
- Young, John, *Imagining the Source: The Interplay of Realism and Abstraction in Electroacoustic Music*, in *Contemporary Music Review*, 15:1-2, pp. 73-93, 1996.