



Journal contents

Search

Search history

Archive

Vol. 6 (2014)

Vol. 5 (2013)

Vol. 4 (2013)

Vol. 3 (2012)

Vol. 2 (2012)

Vol. 1 (2011)

Index by author

Contact us

To refer to this article use this url: <http://journal.sonicstudies.org/vol01/nr01/a10>

Journal of Sonic Studies, volume 1, nr. 1 (October 2011)

REFLECTIONS ON SONIC ENVIRONMENTS

Vincent Meelberg, Marcel Cobussen

Abstract

| top | next |

At home, whether in the study or in the bedroom; outside, while shopping or jogging; at a dance event or in a gym – we are always surrounded by sounds. Sounds of (background) music, sounds of sirens, the silent drone of a PC, buzzing mosquitoes during a sultry night, sounds of neighbors, footsteps at the front door of my dwelling, sounds produced by my body. Accidental sounds or results from sound design; disturbing or pleasant sounds; attracting attention or registered (almost) unconsciously ...

This essay consists of 15 short reflections on sounds in our everyday life, sounds which were topical while working on this contribution. A kind of sonic diary.

Introduction

| top | next | previous |

José Saramago's disquieting novel *Ensaio sobre a Cegueira*, published in English under the title of *Blindness* (Saramago 2005), begins with a driver, waiting at traffic lights, going blind. From one moment to the next he must rely on tactile and auditive information to get his bearings. In the lobby of the condominium where he lives, he suddenly remembers that the stairway will only be lit as long as he can hear the mechanism of the automatic switch. The light, this light, has been transformed into noise for him. A car stopping in the street is not his wife's car, as it emits the sound of a diesel engine. The difference between a cab and the vehicle of his spouse is experienced through the ear. Sonic design helps him in orienting himself in his environment.

Being blind, one becomes an earwitness.

Only by becoming blind does this person seem to come to the realization that human beings are also living in an audible world, that we constantly receive all kinds of information through our ears. He becomes aware that listening and hearing play important roles in the way people deal with themselves, with others, and their environment.

There is a constant interaction between the sonic surroundings, the socio-cultural milieu, and the individual listener. In other words, people are giving shape to and are being shaped by their sonic environment. Besides the (natural) sounds that are already there, we fill the world with sounds; and simultaneously, all those sounds regulate our behavior to a certain extent. The ringtone of a cell phone, the sirens of an ambulance, the roar of the sea, the cry of a baby, Bach on an iPod, the heartbeat through the stethoscope of the family doctor, the singing of soccer fans, the rustling of the wind – all these everyday sounds, sounds which we often take for granted, sounds which we perceive consciously or unconsciously, affect our lives.

Below we have set out on a small journey to and through some sonic experiences. You don't need to become blind for this. Just keep your ears open.

The Study

Erratic polyrhythms of heavy showers supplemented by fierce gusts of wind batter the windows of my study while working on this essay. White noise, filled with the rustling of the leaves of the trees in the garden and punctuated by the creaking of a garden door left ajar.

At times it drowns out the regular sounds of the neighborhood: the drone of a nearby highway, the thudding of pile drivers, the irregular sounds of passing cars.

Sounds of my playing kids – speaking, laughing, moving things – enter the present soundscape, which is further formed by the ticking of a clock, the buzz of my PC, the tapping of my fingers on the keyboard, and, every now and then, the grating sounds of my trousers touching the chair and my feet scraping the floor. I scratch my unshaven chin while searching for the right words and sentences. The more I listen, the more I hear. What is this irregular banging? Must be from the boys next door, playing football and using our shared wall as their goal. Surrounded by sound. Immersed in sounds. Everyday sounds. Unimportant sounds. Nevertheless they construct, determine my daily soundscape. I'm living in or amidst these sounds.

These sounds influence my thinking. They determine me as a subject; my life is at least partly organized by what I hear and how I listen. Sounds, too, constitute me as the one who I am, as a unique human being, here and now. They co-determine my behavior; they influence my concentration; they infiltrate and take possession of my ideas as they switch from background to figure. Through the cry of my child, I become a father; the sounds of my fingers touching the keyboard of my PC help to constitute me as a writer; the sounds of the ball hitting the wall undo my concentration.

However, as sounds, they also put my subjectivity at stake. They connect me to a community, to my family, to my social and physical environment, thereby making the distance and border between me and the other less absolute. Immersed in sounds, I am no longer the autonomous and independent subject, opposed to the surrounding world, as Western philosophical tradition has claimed for so long. By penetrating into my body and mind, they disclose my porosity. I am not 'across from' the world; I am part of it, included in it. Sounds thus construct, destruct, and deconstruct my subjectivity.

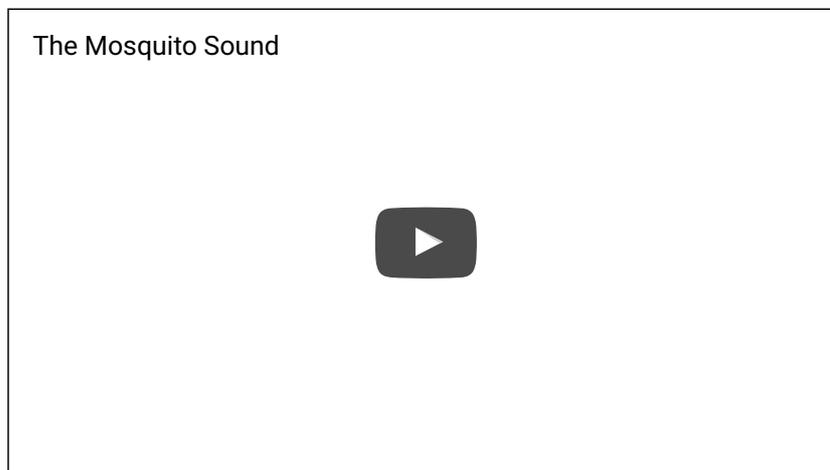
The Shop

Recently the founding father of a Dutch-based, international food company died. In order to commemorate him, no Muzak was played in the branch stores of this company for one day. I remember quite well that I did my shopping in one of these branch-stores on the day he died. I didn't notice that there was no music – I read it afterwards in a daily ...

Did I buy less that day? Did I spend less time in that supermarket? Did I buy different products? I am not sure. I just got through my shopping list.

Nevertheless, sounds or *audio architecture* seem to have a great influence on our purchasing behavior. Muzak or background music induces a feeling of relaxation which ameliorates the shopping experience, or, slightly more disquieting, forms an atmospheric control by a generalized surround sound culture. Sound thus becomes an essential part of a supermarket's infrastructure.

The very fact that shopping malls and expensive shops are playing the (mostly popular) music from my twenties, proves that they consider me a potential customer, a buyer, a spender. Muzak, Mantovani, and Sinatra are gradually replaced by Elton John, Phil Collins, and ABBA. Loud Hip-Hop and other dance music from nearby clothing stores signify at the same moment that the contemporary youth is also quite prosperous. As for me, these sounds produce the same effect as the *Mosquito*



on the young: you're unwanted! The tempo and volume of the music played in those stores targeting teenagers mainly works stupefying: don't ponder, don't hesitate, don't spend too much time here. Instead: consume, satisfy your immediate needs, give way to your impulses! (LaBelle 2010: 178)

In addition to attracting clients through background music, *sonic branding* aims "to catalyze the motivation to consume, creating a sonically triggered tipping point." Sonic branding entails an intervention into the affective sensorium's mnemonic system, modulating emotions by non-verbal means. (Goodman 2010: 145-8) Sonic micropolitics: bodies are affected by rhythms, frequencies, and intensities before their intensity is transduced by regimes of signification. (Goodman 2010: 132)

Sirens

| [top](#) | [next](#) | [previous](#) |

When you are in The Netherlands on any first Monday of the month, you cannot miss it. At exactly 12 o'clock, midday, the functioning of the Dutch civil defense sirens system, consisting of around 4200 sirens placed all across the country, is tested, and the sirens resonate in unison. Listen to one of those sirens, recorded at Bezuidenhout in The Hague, on 2 November 2009. The sirens upset my Serbian wife as they remind her of the bombings of Belgrade in 1999. Steve Goodman states in *Sonic Warfare*: 'A siren obviously signifies alarm, but more interestingly here, its very modulation of frequency produces a state of alertness that can undermine and override cognition.' (Goodman 2010: 66)

Sounds and war are closely connected. In *The Soundscape*, R. Murray Schafer mentions 'the peculiar bending of the Latin word *bellum* (war) into the Low German and Old English *bell(e)* (meaning "to make a loud noise"). (Schafer 1994: 50) Noise equals power; it induces fear. Don't underestimate the psychological effects the mere sounds of gunfights, fighter planes, carpet bombing, sirens, and anti-aircraft guns have on humans. The sounds of war are also a war of sounds: from the din of arms in earlier times to the roaring of low-flying helicopters and fighter jets versus the yelling of the crowds in the streets and on the squares of Cairo, Benghazi, Sanaa, and so many other cities in the Middle East during the first months of 2011.

Throughout history, the audiosphere has been subject to militarization. Sounds contribute to an immersive atmosphere of fear and dread, for example in 2005 when the Israeli air force was using high-volume, deep-frequency sonic bombs in the Gaza Strip. (Goodman 2010: xiii)

Much less audible but not less effective are the experiments with infrasonic weapons by the US Army which seem to be able to attack the immune system of an organism. See for example the HAARP research project in Alaska. Tests with ELF-waves (Extremely Low Frequencies) appear to reveal that they can affect human brains operating in low frequency zones. This holds out prospects of the production of a neuro-telepathic weapon which could destabilize, from a great distance, complete populations by attacking their cerebral functions. (Sloterdijk 2009: 106) Although still in its infancy and not having left the level of conspiracy theories, researches on sounds, hearing, and the subliminal effect of vibrations thus contribute to future ecological warfare with hypersonic weapons.

The Gym

| [top](#) | [next](#) | [previous](#) |

In *Music in Everyday Life*, social scientist Tia DeNora gives a beautiful example of how the human body is organized through music and movement: aerobics. With aerobics the body is configured, reconfigured, composed and decomposed in relation to sounds, to musical sounds. (DeNora 2000: 93) However, DeNora hastens to say that it is inadequate to state simply that music acts on the body, that it will automatically entrain the body in particular ways. The aerobics example shows that the effects music has on the body are “the result of a lot of work oriented to fitting musical material to movement style.” (DeNora 2000: 96) Each component of an aerobics session – DeNora distinguishes five: warm-up, pre-core, core, cool-down, and floor exercises – asks for different sounds, different rhythms, different speeds. Only then, music “can discipline the body’s performative character, configuring and transfiguring the body over the course of a session.” (DeNora 2000: 103)

I frequent a gym in my neighborhood. And over the past few years, I have been a member of several gyms. Entering one, a couple of years ago, I could immediately tell whether the instructor in charge was white or black, Dutch or Antillean. The difference was in the first place audible: techno versus hip hop, acid house versus rap, “eurological” versus “Afrological” music (the latter terms are coined by improvising musician and philosopher George Lewis). In a way, a different soundscape makes you enter a different gym.

I cannot recall if the different sounds, rhythms, and speeds of these music styles had their immediate effect on my performances. (Most likely, many other components should be taken into account: food, sleep, time of the day, weather conditions, motivation, etc.) But one aspect certainly influenced me: the volume. It is striking that DeNora does not mention the influence of volume at which the music is played during an aerobics session. Working out on high volume doesn’t allow you to think about anything but the exercises, as if the loud sounds give the instructor’s commands more authority. Also, a certain volume is needed to propel your body into motion. This is no background music; the volume not only outroars the groaning and moaning of the sportsmen and women, it prompts you to jump, turn, bike, run, row, stretch. Decibels, too, make you forget the smell of your neighbor’s sweating; they allow you to pull faces.

Relaxing in the sauna afterwards, you are able to experience the different strategies by which (musical) sounds are put to use in order to affect your body and mind: here, in contrast to the gym’s noise, the soft easy listening and MOR pop tunes distract your attention from the extreme heat. Here it is the near silence that serves to enhance the impression that this treatment is healthy. Different soundscapes, same effects. There is no one-to-one relation between (the absence of) (musical) sounds and human behavior.

Breathing

| [top](#) | [next](#) | [previous](#) |

I like to run without listening to music. Whereas many joggers let the tempo of their pace be determined by the music they are listening to, I prefer to let my own body determine its speed. More specifically, the sounds my body makes during the run set the tone of the intensity with which I will run.

As John Cage experienced while being present in an otherwise empty anechoic chamber, the body is never completely silent. It produces sounds, always -- that is, until the body stops functioning altogether. As long as the body belongs to a living human being, sounds will emanate as a result of breathing, the beating of our hearts, and even the functioning of our nervous system.

Breathing, in particular, is a sound that I notice while running. I try to synchronize my pace to the tempo of my breathing in and out. One may conclude that I thus set the tempo of my run to the internal clock of my body, but this is not how I experience this process of synchronization during the run. Instead, I experience this sound as something alien to me, as an external entity to which I try to conform. Even though I know that the breathing sound is produced by me and that it belongs to my body, at the same time the sound escapes me, both literally and metaphorically. It metaphorically escapes me because I am not always able to properly sync my pace and my breathing. Consequently, I am struggling with my body in the sense that I try to harmonize two bodily activities that emanate from me, but at the same time are, at least to a great extent, beyond my control. This fallible attempt to harmonization demands a constant monitoring of the two.

Breathing also literally escapes me. It is airealized, as Peter Szendy (Szendy 2002) calls it. The sonic entity that results from the physical activity called breathing no longer is, or belongs to, my individual body. Instead, it appears to me as another, vibrating, body, separated from its origin, that will interact with the human body it originated from, i.e. my own running body. The sound of my breathing is a sonic intrusion that interferes with my other bodily rhythms, such as the pace with which I run. In trying to synchronise these I become more and more aware of the fact that the breathing sound no longer is part of my body, but rather a separate sonic entity to which I need to conform.

The Bedroom

top | next | previous

Even as late as the end of October or early November, the buzz of gnats wakes me up at night. This buzz, caused by their rapidly up and down moving wings, plays an important part in the communication around the mating. Gnat couples are formed through hearing. With a good match, their buzzing sounds in unison: they fly in tune. The female may exert a degree of mate choice by changing her flight-tone to see how well the male follows her, or change frequencies if she wants to “lose” him, for example if she has already mated. (Warren, Gibson, and Russell 2009: 489)

In 2006, British biologists Gabriella Gibson and Ian Russell show, for the first time, interactive auditory behavior between male and female mosquitoes leading to sexual recognition. Individual males and females of the *Toxorhynchites brevipalpis* both respond to pure tones by altering wing-beat frequency. Each mosquito alters its wing-beat frequency in response to the flight tone of the other, so that within seconds their flight tone frequencies are closely matched, if not completely synchronized (Gibson and Russell 2006: 1311).

Buzz 1

 Zoem1



166

[Cookie policy](#)

Buzz 2

 Zoem2



137

[Cookie policy](#)

‘Deaf’ mosquitoes – mosquitoes with cut antennae; they hear with an organ very sensitive to vibrations at the basis of their antennae – do not react to the other.

With *Culex quinquefasciatus* – this nighttime-active, opportunistic blood feeder – the wing-beat frequencies of males and females differ considerably. They converge not on the fundamental but on the nearest shared harmonic (usually female’s third and male’s second). (Warren, Gibson, and Russell 2009: 485)

While testing the flight tones of same-sex pairs, Gibson and Russell discovered that the gnats initially try to merge their wing-beat frequency but eventually diverge dramatically. (Gibson and Russell 2006: 131)

Buzz 3

 Zoem3



98

[Cookie policy](#)

Buzz 4

 Zoem4



80

[Cookie policy](#)

The significance of this research is primarily theoretical: these results show that sound plays an important part in recognition and in the willingness to copulate. A concrete application, a *gnats-trap* on the basis of sound, is not even a distant prospect. Gibson in a Dutch daily: “Female mosquitoes don’t fly towards sounds or from it. They only change their wing-beat frequency in reaction to certain sounds. That is why those devices with ultrasound don’t work against mosquitoes.” (Voormolen 2006: 8, my translation) Which means that the gnats’ buzz in my bedroom will sometimes be followed by a dry slap with a short attack and a short decay; a more animal friendly solution is to turn on a fan which drowns out the mosquito’s buzzing ...

Neighbors

| [top](#) | [next](#) | [previous](#) |

The apartment that I used to rent in Amsterdam did not have very thick walls. As a result, I could frequently hear what my neighbors were doing. I heard them walking around, doing the dishes, laughing, and arguing. On the one hand, these sounds gave indications as to how my neighbors were living their lives. Yet on the other hand, because the sounds gave only partial clues, many aspects of their domestic lives remained obscure.

Particularly their conversations were impossible to understand. I could hear the neighbors talk, but because the sound was muffled, I was unable to make out what they were saying. Only by the tone, i.e. the dynamics, rhythm, and pitch, of their voices I could guess the mental state they were in while talking. I could tell whether they had, say, a quarrel, or if a joke was told, but what the quarrel or the joke was about, I could not make out. The voices and conversations were recognizable as such, yet the contents of these conversations remained incomprehensible.

Given the fact that I was involuntarily involved in these conversations, due to the thin walls of my apartment, gave them an intrusive character. As Jean-Luc Nancy explains, “[the intruder’s] coming does not stop: he continues to come, and his coming does not stop intruding in some way: in other words, without right or familiarity, not according to custom, being, on the contrary, a disturbance, a trouble in the midst of intimacy” (Nancy 2008: 161). I could not close myself off from these conversations unless I left the room I was in, thus leaving the space that I considered my own. The conversations were disturbances that transformed my private, intimate space into one that had lost most of its privacy and intimacy. Moreover, I was forced to eavesdrop on the conversations, an activity that was bound to fail due their incomprehensibility. Thus, on the one hand their conversations where an intrusion of my private space, but at the same time I was intruding the privacy of my neighbors by being a (fallible) earwitness. The only difference was that this did not register as an intrusion to them, as they remained unaware of my listening in on their conversations.

The Ear and/versus the Eye

| [top](#) | [next](#) | [previous](#) |

Why bother about the ear? James Clifford asks himself this question in 1986. According to Clifford, our culture is the result of acts of inscription, reading, and interpretation, acts within the domain of vision, visibility, and perspective. (Erlmann 2004: 1)

One possible answer precedes Clifford’s question. In the very beginning of *Noise: The Political Economy of Music*, Jacques Attali writes:

For twenty-five centuries, Western knowledge has tried to look upon the world. It has failed to understand that the world is not for the beholding. It is for hearing. It is not legible, but audible. Our science has always desired to monitor, measure, abstract, and castrate meaning, forgetting that life is full of noise and that death alone is silent: work noise, noise of man, and noise of beast. Noise bought, sold, or prohibited. Nothing essential happens in the absence of noise. (Attali 1985: 3)

But of course, the strongest arguments against Clifford’s analysis of our contemporary (Western) culture come from sounds themselves, from music, sound art, sound pollution, audio architecture, sonic branding, sound design, etc. Taken together, these sonic events prove that (our) culture cannot be captured or understood through visual means alone. Unmistakably, sounds play an enormously important role in how humans relate to the world, to other beings, to their environment. Simultaneously, sounds often cannot be analyzed through reading and writing alone. So, obviously, there seems to be a need for cultural and historical contextualizations of sonic events.

The rise of *sonic studies* or *auditory culture* in the 1990s seems an explicit reaction against the alleged domination of the eye in Western culture; it seems to parasitize on the often expressed opposition between the ear and the eye where the eye (re)presents intellect, abstraction, distance, objectivity, and surfaces and the ear is connected to

affect, contact, immersion, reception, and subjectivity. (Sterne 2003; Jay 1993; Levin 1993; Berendt 1991; Ong 1982; McLuhan 1964)

Sonic studies suggests that it is possible to conceptualize new ways of knowing a culture and of gaining a deepened understanding of how people relate to each other through the sense of hearing. (Erlmann 2004: 3) However, in his introduction to *Hearing Cultures*, Erlmann makes immediately clear that a counter-monopoly of the ear should not be the aim – with this, following Jonathan Sterne who in *The Audible Past* laconically states that “there is no scientific basis for asserting that the use of one sense atrophies another.” (Sterne 2003: 16) Instead of presenting a new hierarchy of the senses, Erlmann claims that it makes ‘scientific sense to conceive of the senses as an integrated and flexible network.’ (Erlmann 2004: 4) This is corroborated by studies into human cognition: human perception is always synesthetic. All senses influence each other. There is no such thing as “pure vision” or “pure hearing” (Leman 2008; Pfeifer & Bongard 2007; Massumi 2002). Consequently, the simplistic dichotomy between the (modern) eye and the (pre- or antimodern) ear must be replaced by a more nuanced approach. However, to make such an approach possible at all, more attention for the ear, for the influence of hearing and listening is needed.

However, it seems that we are caught up in a paradox here. Is Clifford right after all? Demanding and fixing attention for sounds by producing books, essays, and articles – doesn’t that prove that, in order to be taken seriously, sounds should submit themselves to the high priest of visual culture, to *écriture*? Giving space to the aural sides and sites of culture cannot restrict itself to the praxis of writing and reading alone. Sound should not only be subject for and subjected to discursive analyses; it should infiltrate those analyses with sound, comment on them through sound, support or reject them sonically; what should be explored is how and when sonic events themselves ‘say something’ ...

Sound Design

| top | next | previous |

Last summer I traveled with friends to Switzerland. On the way, on the German *Autobahn*, oncoming traffic consisted of a remarkable stream of old (camper)trucks: Scania, Mercedes-Benz

Mercedes-Benz LK 2623 Baujahr 1968 Sound



, Zil, Ural, MAN, DAF, Deutz.

This event elicits many enthusiastic reactions from my fellow passengers. They recognize makes, types, technical details ... and sounds. The sounds of the engines: the rutting and rough sound of the Scania V8



or the more refined sound of the straight-six or inline-six engines ...

Of course, it is not only the engines of trucks and cars which sound. Specialized companies produce exhaust systems, the sound of which is adjusted to the customer's desires. Toyota equips its newest hybrid cars with sound generators in the front bumper to warn pedestrians, the so-called VSP-system (Vehicle Sound for Pedestrians). The sound, partly developed by Japanese composers of film music, is a hybrid mix of a vacuum cleaner and Star Trek. BMW pays a lot of attention to the sound of the motors of the wipers and the windows. The doors, but also the glove compartment, should have their confident and solid "BMW-clicks". "We design sounds which are not authentic, but the clients take them to be authentic," a researcher on psycho-acoustics in BMW's service explains. (Oosterbaan 2008: 6, my translation)

Sound design. It is becoming a more and more critical component. And not just in the car industry. In other industries too, competing for the favor of consumers happens less and less in the arena of the purely technical features of a product. The look, the feel, and certainly also, the sound matters. For users, sound is not just a supplement, a negligible addition; rather, it is part of a product's identity. Initially sound was something that needed to be suppressed, e.g. the development of silent vacuum cleaners and washing machines. However, too much silence contains a danger: people start thinking the device isn't working properly.

By designing sound, designers can give products an extra emotional content – see above the examples of the V8 and inline-six motors and the exhaust systems. Similarly, CRT-scanners should be relieved of their most terrifying sounds; wide-screen TVs should have a 'wide' sound as well; juicers should produce a pleasant hum instead of a tasteless whining; the disc-tray of a CD player should produce a smooth sound rather than a plastic rattle. All this must be designed and subjected to intensive and expensive research.

Sound can also transfer information. *Sound signals* (Schafer 1994: 10): a bleep indicates that you have touched the screen of your cell phone correctly; a steadily increasing stream of peeps in your car urge you to fasten the seatbelt; a bell-like ping informs you that the microwave oven has warmed up your meal. (Oosterbaan 2008: 6)

Sound design, or *acoustic design* as R. Murray Schafer calls it, brings together the fine arts, the art of sound, and the industrial crafts, the science of sound. (Schafer 1994: 205) In this domain, science and art inform each other; although utilizing different approaches, both investigate the possibilities of technological innovation. At Bell's Labs, for example, artists were involved in sound research, which was instrumental to telephony, electronic voice research, as well as electronic music. Sound design is a form of *artistic research* from which both the scientific and the art world might benefit.

Moving

| top | next | previous |

Listening to Byetone's "Plastic Star" (2008)

BYETONE - Plastic star (session)



is an aural experience that exceeds the purely audible. This music needs to be felt as well as heard. It does something with me, both to my body and to my mind, and it does this in such a way that it bypasses my conscious awareness. The sounds that make up this musical piece incite to movement, and I have no choice but to move along with the music. My body, involuntarily, kinesthetically senses, and subsequently processes, the dynamics, the physical properties, of music. The body thus is literally, unintentionally, moved by musical movement. Not necessarily because I want to dance to the music, but rather as a result of the particular way the sonic vibrations address my body. This kind of bodily movement thus is a far more rudimentary, involuntary, and primal reaction to the music than dancing could ever be. At most, dancing is a partial externalization of these primal bodily movements.

“Plastic Star” is able to intensify and foreground the fact that listening is also an embodied, physical activity, because electronic and digital technology allows for the creation of sounds and gestures that address the listener in ways that make explicit this aspect of music, ways that are impossible to realize via purely acoustic, analog means. Digitization allows for the creation of sounds that go lower, higher, louder, softer, faster, and slower than any purely handmade sound can go. Listening to these kinds of digital sounds is, as Kodwo Eshun calls it, like “[...] being hit by electric currents that convulses you into spasm.” (Eshun 1998: 87) It “[...] alters the reflexes, adapting the human into the electroid, the electronic android who turns electric shock into controlled convulsion.” (Eshun 1998: 87). And this is exactly how I feel while listening to “Plastic Star.”

Moreover, the abstract nature of electronic music such as “Plastic Star” invites the listener to imagine the possible source that could have produced the sounds, since these sounds are often detached from known instruments and other direct causes of the sounds. Being surrounded by such sounds may give an explicit feeling of immersion and being driven by an external force, which, according to Marc Leman, is “[...] close to a feeling of ownership (‘I am moving’) without the sense of agency (‘I am not causing the movement’).” (Leman 2008: 98) Consequently, “Plastic Star” seems to be able to specifically address the embodied, kinesthetic aspect of music.

This raises the question as to what extent we have control over our own bodily movements while listening to music. According to Gilles Deleuze (Deleuze 2003) and David Huron (Huron 2006), these forms of musical affection are involuntary and inescapable. Musical affection invokes a prepersonal intensity corresponding to the passage from one experiential state of the listener’s body to another and implying an augmentation or diminution in that body’s capacity to act. It is prepersonal in the sense that it exists beyond control or influence of the individual subject who is affected. These intensities only become personal after the subject has reflected on these intensities, an act in which these intensities are turned into (subjective, personal) emotions. Furthermore, affect can literally immobilize a person, for instance by putting him or her in a state of shock. The affect responsible for this shock thus diminishes the subject’s capacity to act. The opposite effect can also be generated by affect. Music, in particular, is able to augment the body’s capacity to act. Think for instance of the music joggers listen to while running, or the songs soldiers sing in unison while exercising. The sonic strokes that are generated by these musical events motivate these listeners, and their bodies in particular, to improve their performance according to a certain desired outcome: to perform longer, more regulated, with more force, with more controlled force, more in unison, etc.

In short, affect is an autonomous reaction of the listener’s body when confronted with another sonic entity. And since it is an autonomous reaction, I have no choice but to undergo the effects of affection, and sense and enjoy, or dislike, the movements caused by the intensities elicited by listening to “Plastic Star,” a listening that can never be motionless. “Plastic Star” foregrounds the physical reactions any kind of (musical) listening elicits.

Thinking

[top](#) | [next](#) | [previous](#)

While I am writing this essay many thoughts enter my head, both productive and unproductive, even distracting, ones. Sometimes, these distracting thoughts become so loud that I am no longer able to hear the productive ones. When this happens, I am forced to stop working and try to silence my thoughts altogether.

Yet, what does it mean to “hear my thoughts?” What do I hear when I am thinking? On the one hand, the act of thinking implies silence, at least an external silence in the sense that, as long as I am not thinking out loud, no one can hear that I am engaged in the activity called thinking. Yet at the same time, thinking can oftentimes create a cacophony of sounds/thoughts in my head. My inner voice continuously talks to me. Thus, to the outside world, thinking has the timbre of silence, that is, it sounds like silence, but it is not mute.

But how to conceptualize such an abstract, ephemeral phenomenon like the inner voice? To reiterate my question above: what does it mean, or rather, what am I listening to, when this inner voice talks to me? Is it me talking? Or my subconsciousness? Can I call this conversation “talking” when no actual sounds are produced?

Philosophers such as Edmund Husserl also pondered these questions. He asserts that listening, unlike seeing, which is directed outwards from the seeing subject, includes a dual discourse: listening to oneself and listening to others, hearing one's inner voice and the voice of another. Seeing differs from thinking: listening to my inner voice is directed towards the inner self, whereas seeing only has the outer world as its object. Of course I am able to imagine something visual, but even when I close my eyes, this mental image never becomes lifelike, in contrast to my inner voice, which becomes sometimes far too real.

It might be for this reason, Marcel Cobussen suggests, that many philosophers distrust the inner voice. Referring to Jacques Derrida and Friedrich Nietzsche, Cobussen (Cobussen 2001) observes that the sonority of the inner voice is often considered a threat to the autonomy of the subject. Hearing my inner voice speaking to me implies an otherness that can be attributed to this voice. Consequently, my thoughts, my inner sonic utterances, at the same time both belong to me and feel alien to me. This inner voice sounds so real that it might almost seem like someone else is talking to me. The most intimate of sonorities, my inner voice, may simultaneously feel like a sonic intruder.

The noises in my head do not only consist of a voice (or voices). These mental sounds can be anything. At least in the head of the thinker, they have the potentiality to become any sound imaginable. And to the thinker, they actually do. The sounds of thoughts are at the same time virtual and actual, in the sense of Gilles Deleuze's and Félix Guattari's (Deleuze and Guattari 1988) use of these concepts. They are virtual because the sounds of thoughts cannot be measured in decibels, these sounds do not consist of an alternation of compressed and expanded air. They are composed of another kind of alternation, however, namely the alternation of electric currents generated in the head of the thinker. To this thinker, these sounds are very real. They are actual voices and noises that both help and interfere with the process of thinking. It is up to the thinker to transform these sounds into actual sounds by speaking, making music, screaming, etc. Or, as I am doing by writing this text, create a medium which can induce mental sounds in the mind of you, the reader of these sentences.

Footsteps

[top](#) | [next](#) | [previous](#)

When I stand close to the front door of my apartment, I can often hear the footsteps of people walking in the hallway of the building I live in. These footsteps are always meaningful, in the sense that they stimulate my imagination. The mere fact that they are produced by human beings who are heading somewhere makes them very expressive to me. They are literally the sounds of things to come, the sounds of expectation. It may be the announcement of a visitor, of a salesperson trying to sell me something, the postman with a delivery, or it may be someone who is just walking past my front door. Yet in each and every case the sounds of footsteps mean something to me; they trigger my own imaginary of their owner and motivate me to prepare for another sound that might or might not happen: a knock on my door.

Each footprint is unique. Not only is it possible to distinguish between the sound of male and female footsteps, footsteps of children or pets, these sounds may also give an indication of the mental condition of their producer. By focusing on the pace and intensity of the footsteps, for instance, it is very tempting to interpret these sounds as produced by someone who is in a hurry, to imagine whether he or she is angry, sad, scared, etc. Of course, these interpretations do not necessarily always conform to the actual situation. Nevertheless, the sound of footsteps

invites such interpretations. These sounds can be very telling, regardless of whether the tales they tell are truthful or not.

More specifically, these sounds can be regarded as traces, in the Derridean sense of the word. Footsteps indicate a presence that is at the same time absent. Footsteps signify that someone must be physically present, yet this presence does not have to result in a physical encounter between the listener and the walker. Footsteps are sonic traces of a physical presence, just as they are traces, or perhaps more accurately, expressions of the mental condition and of the possible intentions of the one who walks. Yet these interpretations are always fallible, and I can only be certain of the presence and intentions of the producer of these footsteps when I engage in a physical encounter with him or her, an encounter that can be initiated by a knock on my door.

Rattle and Hum

| [top](#) | [next](#) | [previous](#) |

As a double bass player, I am constantly trying to improve my technique. Develop a more acute sense of timing, play more dynamically, more in tune, and with a better tone, in order to be able to execute the musical ideas I hear in my mind. While it is clear what developing a stronger sense of timing, playing more dynamically, and more in tune implies, the notion of “better tone” is more ambiguous. It is very difficult to come up with objective criteria that enable the determination of a sound as “good” or “bad,” despite the efforts made by teachers, critics, and conservatories to formulate such criteria and rules.

One thing that most teachers tried to teach is how to play as “cleanly” as possible, to let the note sound with as few additional “unnecessary” or “unwanted” sounds as possible. The tones played need to be as clean as possible. Only then can a good tone be achieved. The music one plays should be without rattles, scratches, bumps, or noise. These sounds are considered the “other” of musical sounds, and musical study should be devoted to minimizing these noises.

Since I began playing free improvised music, I have become more and more suspicious of these criteria. Not only because I often use these so-called unwanted sounds as my main musical material, but also because I noticed that these sounds are necessary to create the singular, defining timbre of instruments, or to be more precise: the unique sound of a specific musician playing that particular instrument at that precise moment in time. Without these noises, these sounds, music would literally be anonymous and inhuman.

Hearing these sounds creates a sense of intimacy with the instrument and the player. It is a reminder of the fact that these sounds are produced by a human body. In terms of Susan Kozel’s (Kozel 2007) phenomenology of the body, these sounds are traces of the bodily activity that is responsible for the creation of music. Consequently, the rattles, scratches, bumps, and noise can be considered as sounds about bodily movement, movement that is necessary in order to produce music at all. More precisely, it is about the meeting of two kinds of bodily movement, the movements of a playing and a played body, i.e. the musician and the instrument, respectively. Therefore, the quest to eliminate these sounds is a quest to remove the human in music, as well as to deny the constant struggle playing an instrument such as the double bass implies. Moreover, this conception of “good” musical tone implies that human movement is the other of musical sounds. Movement, the start of all movement, is not supposed to be noticeable in music. Fortunately, there are genres such as free improvised music that celebrate human movement and that place this aspect of music in the fore.

Your Space

| [top](#) | [next](#) | [previous](#) |

Where are you? ... Where are you while reading these words? Where are you while listening to the included sound files? ... Please, stop reading for a moment ... No! Don’t look around to orient yourself! (Probably that won’t even be necessary – you *know* you are: in your office, at home, commuting, in a transit place, a hotel, with your parents or (girl) friend ...) Don’t look: Listen! ... Listen to the sounds of the space you inhabit at this very moment ... What do you hear? ... Perhaps you can make an (imaginary) list ...

Can you describe some of the sounds acoustically, physically? How do you perceive them? Their duration (attack, body, decay), their frequency, their inflections, their dynamic. What are their functions, their meanings? What are their emotional or affective qualities? (Cf. Schafer 1994: 133) ...

Become aware of your sonic environment, how the space you’re in is also determined by its sounds ... Perhaps you would like to remove or add some sounds ... Create your own sonic space (without using your portable audio

devices) ... You don't need to become blind for this. Just keep your ears open.

Notes

| top | next | previous |

Vincent Meelberg is lecturer and researcher at Radboud University Nijmegen, the Netherlands, Department of Cultural Studies, and at the Academy for Creative and Performing Arts in Leiden and The Hague. He is founding editor of the online *Journal of Sonic Studies* and editor-in-chief of the *Dutch Journal of Music Theory*. His current research focuses on the relation between musical listening, playing, embodiment, and affect. Beside his academic activities he is active as a double bassist in several jazz groups, as well as a composer.

Marcel Cobussen studied jazz piano at the Conservatory of Rotterdam and Art and Cultural Studies at Erasmus University, Rotterdam (the Netherlands). He currently teaches Music Philosophy and Auditory Culture at Leiden University (the Netherlands) and the Orpheus Institute in Ghent (Belgium). Cobussen is author of the book *Thresholds. Rethinking Spirituality Through Music* (Ashgate, 2008), editor of *Resonanties. Verkenningen tussen kunsten en wetenschappen* (LUP, 2011) and co-author of *Music and Ethics* (Ashgate, 2012) and *Dionysos danst weer. Essays over hedendaagse muziekbeleving* (Kok Agora, 1996). He is editor-in-chief of the *Journal of Sonic Studies*. His Ph.D. dissertation *Deconstruction in Music* (2002) was presented as an online website located at <http://www.cobussen.com>.

References

| top | previous |

- Attali, Jacques (2003). *Noise. A Political Economy of Music* (trans. B. Massumi). Minneapolis: University of Minnesota Press.
- Berendt, Joachim-Ernst (1991). *The World Is Sound. Nada Brahma: Music and the Landscape of Consciousness*. Rochester: Destiny Books.
- Cobussen, Marcel (2001). *Deconstruction in Music*. Dissertation Erasmus University Rotterdam. <http://www.cobussen.com>.
- Deleuze, Gilles (2003). *Francis Bacon: The Logic of Sensation* (trans. D.W. Smith). London: Continuum.
- Deleuze, Gilles and Félix Guattari (2004). *A Thousand Plateaus: Capitalism and Schizophrenia* (trans. B. Massumi). London: Continuum.
- DeNora, Tia (2000). *Music in Everyday Life*. Cambridge: Cambridge University Press.
- Erlmann, Veit (ed.) (2004). *Hearing Cultures. Essays on Sound, Listening and Modernity*. Oxford: Berg.
- Eshun, Kodwo (1998). *More Brilliant than the Sun: Adventures in Sonic Fiction*. London: Quartet Books.
- Gibson, Gabrielle and Ian Russell (2006). "Flying in Tune: Sexual Recognition in Mosquitoes." *Current Biology* 16(13): 1311-1316.
- Goodman, Steve (2010). *Sonic Warfare. Sound, Affect, and the Ecology of Fear*. Cambridge: MIT Press.
- Huron, David (2006). *Sweet Anticipation: Music and the Psychology of Expectation*. Cambridge, MA: MIT Press.
- Jay, Martin (1993). *Downcast Eyes. The Denigration of Vision in Twentieth-Century French Thought*. Berkeley: University of California Press.
- Kozel, Susan (2007). *Closer: Performance, Technologies, Phenomenology*. Cambridge, MA: MIT Press.
- LaBelle, Brandon (2010). *Acoustic Territories. Sound Culture and Everyday Life*. New York: Continuum.
- Leman, Marc (2008). *Embodied Music Cognition and Mediation in Music*. Cambridge: MIT Press.
- Levin, David M. (ed.) (1993). *Modernity and the Hegemony of Vision*. Berkeley: University of California Press.
- Massumi, Brian (2002). *Parables for the Virtual*. Durham: Duke University Press.
- McLuhan, Marshall (1964). *Understanding Media. The Extensions of Man*. Cambridge: MIT Press.
- Nancy, Jean-Luc (2008). *Corpus*. New York: Fordham University Press.
- Ong, Walter J. (1982). *Orality and Literacy (New Accents)*. New York: Routledge.
- Oosterbaan, Warna (2008). "Geen design zonder geluid." *NRC Handelsblad*, August 13, Economie: 6.

- Pfeifer, Rolf and Josh C. Bongard (2007). *How the Body Shapes the Way We Think: A New View of Intelligence*. Cambridge: MIT Press.
- Saramago, José (2005). *Blindness* (trans. G. Pontiero). London: Vintage Books.
- Schafer, R. Murray (1994). *The Soundscape. Our Sonic Environment and the Tuning of the World*. Rochester: Destiny Books.
- Sloterdijk, Peter (2009). *Sferen. Schuim* (trans. H. Driessen). Amsterdam: Boom.
- Sterne, Jonathan (2003). *The Audible Past. Cultural Origins of Sound Reproduction*. Durham: Duke University Press.
- Szendy, Peter (2002). *Membres fantômes: des corps musiciens*. Paris: Minuit.
- Voormolen, Sander (2006). "Verliefde muggen zoemen in koor." *NRC Handelsblad*, July 13, Wetenschap: 8.
- Warren, Ben, Gabriella Gibson, and Ian J. Russell (2009). "Sex Recognition through Midflight Mating Duets in *Culex* Mosquitoes Is Mediated by Acoustic Distortion." *Current Biology* 19(6): 485-491.

Published by Leiden University Press i.c.w. Digitaal Productiecentrum. Design by Mannschaft