

# **The Role and Position of Sounds and Sounding Arts in Public Urban Environments**

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Program





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# Towards a “New” Sonic Ecology

Marcel Cobussen

## 1. Introduction – Explaining the Title

Before you start reading this text, I would like to invite you to listen consciously to your environment for a couple of minutes. What do you hear? Which sounds do you find pleasant? Which sounds are annoying you? Do you think you could somehow have an influence on these annoying sounds: changing them, covering them, turning them off? How would your ideal environment sound?

Let me begin this text, an extended version of my inaugural lecture given on November 28, 2016 at Leiden University (the Netherlands), by briefly explaining the title.

The term “sonic” refers to almost any vibration that can be perceived by humans as well as animals, to the physical as well as mental affects of sounds, to what can be heard and listened to, but also to what remains inaudible and unheard. It thus encompasses musical as well as non-musical sounds, noise as well as silence, ultra- or infrasounds as well as spoken language and aural communication systems.<sup>1</sup>

The term “ecology” I use here to refer to the analysis and study of interactions organisms (here, specifically humans) have with each other as well as with abiotic components of their environment.

Hence, I regard “sonic ecology” as the aural interactions between organisms – in particular humans – and their environment. And interaction should be understood here as bidirectional: how are “we” listening and, through listening, interrelating with our environment; and how is our sonic environment calling upon us, triggering us to act and react?<sup>2</sup> Put differently, this environment does not merely possess passive acoustic

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<sup>1</sup> Sound studies or auditory culture usually exhibits the need to separate itself from music, discourses around music, and reflections on music; it often excludes music (as well as spoken language) from its analyses and theories. I prefer to regard sonic ecology in an inclusive way, essentially dealing with every vibration, every resonance.

<sup>2</sup> In fact “sonic ecology” can only be a singular issue: each place has its own aesthetic, physical, and socio-cultural characteristics, often also changing with the time of the day, the season, and the type of weather. Conversely, each person brings in her/his own demographics, perceptions, lifestyle, culture, networks, attributes, preferences, and motivation for being there. Interactions between place and people are therefore always

properties but activates its inhabitants to engage with its reservoir of sound possibilities, its sonic instrumentarium, thereby modulating its vibrational effects. We are invited to perform the city; it is a space of reverberation. Steve Goodman calls this the "environmentality of affects," meaning that human bodies are immersed in a vibrational nexus that affects expressions (Goodman 2005: 46). In *Sonic Experience*, Jean-François Augoyard and Henri Torgue can thus describe sonic ecology as "the interaction between the physical sound environment, the sound milieu of a socio-cultural community, and the 'internal soundscape' of every individual" (Augoyard and Torgue 2005: 9).

"Towards a new sonic ecology" should be heard as a proposal to alternative ways of interaction between the environment, the human body, and sound, a proposal to listen and react differently to our sonic milieu as well as a suggestion to reevaluate and perhaps transform this milieu. At the same time the title implies a critical reflection on the work already accomplished by many sound studies scholars before me. Without them this text would not have been possible, although I simultaneously diverge from their *acoustemological* paths.

Moniek Toebosch – "Waiting for Buses and Birds" (Amsterdam, 2016)

<https://www.youtube.com/watch?v=jwy6mnZtEQs&feature=youtu.be>

"Waiting For Buses and Birds" was commissioned by the municipality of Amsterdam, RVE V&OR. It is a son et lumière installation consisting of 4 moving heads and 16 loudspeakers, positioned throughout the complete length (250 meters) of the new bus station at Amsterdam Central Station.

## 2. Beyond Aesthetics

"We are surrounded by sounds, whether we are outdoors or indoors, at work or at play, in cities or in the country. Voices, vehicles, birds, wind in trees, machinery, footsteps, rain, telephones, hum and beeps of our electronics, dogs barking, sometimes blood moving through our bodies. Sound, through speech, is still medium of much of our communication" (Brown et al. in Kang and Schulte-Fortkamp 2016: 1). More and more of our sonic environment is produced and designed by humans: sound design, sound art, and, of course,

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heterogeneous, shaped by all sensory stimulations as well as the knowledge people have of that place.

music – their omnipresence and importance cannot be neglected. Unwanted noises have to be covered, utensils need to sound solid but also pleasant, and music should create enjoyable atmospheres.

Espresso Machine (2015)

<https://www.youtube.com/watch?v=z0PZ-Z8eS1Q>

A more or less random example of houseware for which the sound has been carefully designed.

In *The Birth of Tragedy* written in 1872, Friedrich Nietzsche ascribes to art "the highest task and truly metaphysical activity of this life [...] for only as an aesthetic phenomenon is existence and the world eternally justified" (Nietzsche 1999: 14). Some eighty years later, in 1992, the Dutch philosopher Kees Vuyk quotes Nietzsche to claim that the aesthetics of our being-in-the-world, of how we look – our body, our clothes, our life-style – have become the most important issue as the idea that universally-accepted values, in terms of morality and rationality, are possible has vanished. It is not that art has more social importance these days; it is rather that sexuality, religion, education, politics – Walter Benjamin already pointed this out – are all aestheticized (Vuyk 1992: 56). Another twenty-one years later, in 2013, these thoughts resonate in *Atmosphäre. Essays zur neuen Ästhetik* by the German philosopher Gernot Böhme. He too observes an increasing aesthetization of reality (Böhme 2013: 7 and 15). Böhme's new aesthetics extends from "regular" autonomous art to cosmetics, from advertising to interior architecture, from designing domestic appliances to health care. In line with Vuyk, Böhme claims that advertising, for example, is not so much about selling products as it is about suggesting life styles (Böhme 2013: 45). Aesthetic production has become less important than staging and presentation (Böhme 2013: 248).

Although I will not challenge the reflections of these three wise men, I would like to draw attention to a complementary view as well. In several of my books, as well as in my MOOC which will be launched in January 2017, I have argued how music and other sounds co-constitute our social, political, ethical, religious, spiritual, economic, and of course our cultural life.<sup>3</sup> Sounds – both musical and non-musical – influence our daily lives: we are

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<sup>3</sup> See for example *Thresholds. Rethinking Spirituality Through Music* (2008), *Music and Ethics* (2012), *The Field of Musical Improvisation* (2016), and the MOOC *Music and Society* (2017).

disciplined and controlled by sounds, although they can also be subversive; they regulate our behavior, although they can also disrupt or interrupt it; they are designed in the sphere where functionality and aesthetics meet; we are formed and informed by auditory stimulus, signals, and information. In other words, talking about a new sonic ecology immediately surpasses the mere aesthetic realm: more is at stake. Sound not only influences the social, the political, the ethical; it is thanks to sound, among others, that the social, the political, and the ethical can manifest themselves. In and through music, in and through sound art, in and through sound in general, the social, the political, and the ethical become operative. Sound *is* social, sound *is* political, sound *is* ethical because we affect it and we are affected by it.<sup>4</sup>

Bruce Odland and Sam Auinger – “Harmonic Bridge” (North Adams, 1998-2008)

<https://vimeo.com/29100787>

“Harmonic Bridge” forms a musical gateway between the MASSMoCA museum and the town of North Adams. The formerly forlorn area under the highway overpass has been transformed into a space which is (sonically) more attractive.

### 3. Letting the Sonic Speak

Am I entitled to speak, to write on behalf of “the sonic”? It is a question that has been haunting me for years. In my PhD dissertation “Deconstruction in Music” (2002) I deliberately state that I write *around* instead of *about* music to make clear that words will never be able to capture the sonic or, in the words of Jacques Derrida, “ce qui reste à force de la musique.” Although it impinges on it, the sonic remains inaccessible and inappropriate for any possible discourse (Cobussen 2008: 61).

Paradoxically, while writing about the sonic I am silencing precisely the main subject, excluding what I wish to make present. Therefore, I have inserted references to concrete sonic events at various places throughout this text, to interrupt it, to let it become drowned out by sounds, to let the subject itself sound, to let it speak for itself. As a form of protest against the dominance of a controlled academic essay, of scholarly bias organized by a number of procedures, laws, and rules that so often seem to presuppose that one can dominate one’s subject of research, in this case sounds, silence, listening, and the sonic environment. Still, the essay excludes what it so desperately wants to include.

Mo Becha – “Champ sonique” (Amsterdam, 2005)

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<sup>4</sup> I will return to this in the “Epilogue.”

[<https://soundcloud.com/binauraldiaries/champ-sonique-installation>]

The first permanent sound artwork in Amsterdam, created under the IJtram, consisting of 48 speakers in three tunnels. One walks through the tunnel carried by sounds.

However, at the same time we, humans, are somehow sentenced to think, speak, and write around or about the sonic. But what would it mean to think, speak, and write *sonically* rather than merely to think, speak, and write *about* sound? How can sound alter or influence our thinking, our conceptualizations, our (dominant) discourses? Can our thinking be affected, infected, and inflected by sounds to the extent that we produce not a philosophy of sound but a sonic philosophy? In his inaugural lecture from 1970, "The Order of Discourse," Michel Foucault announces his intent to give more attention to the notion of *the event*, which he connects to what he calls, "a materialism of the incorporeal" (Foucault 1981: 69). I cannot help but hear an advance notice of a *sonic materialism*, now taken up by, among others, Christoph Cox and Salomé Voegelin. The move they are making is from sound as an object of study – the results of which can be articulated through texts, words, and existing concepts – to sound as a medium through which one can understand our being-in-the-world:<sup>5</sup> sound as a possibility for conceptualizing new ways of knowing a culture and of gaining a new understanding of how members of a society comprehend the world and relate to one another. It is a move from "speaking the sonic" to "letting the sonic speak."

#### 4. The Sonic City

How can we let the sonic speak in public urban environments? What is the function and position of sound in our daily encounters with urbanity? How do we experience cities aurally?

At this moment more than half of the human race are city inhabitants; in 2030 this will reach a total number of five billion people. Six hundred of these urban centers currently generate about sixty percent of global GDP. Cities are gaining in importance. In September 2016 the Global Parliament of Mayors, a new worldwide platform, held their inaugural convening in The Hague to discuss and increase possible collaborations between cities. Its main goal is to concentrate on the pragmatic capacities of global cities to deal with and help solve world problems that neither the United Nations nor individual nation states have been able to address effectively. The platform sounds like a faint echo of Jacques Derrida's call to

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<sup>5</sup> To understand, which implies to interact, (also) means to resonate, to co-vibrate.

establish a new (or renewed) status for the city as a place of refuge, presented by him as "an audacious call for a genuine innovation in the history of the right to asylum or the duty of hospitality" (Derrida 2001: 4).

Cities are hot; they seem to represent the future. Whereas nation states are no longer able to effectively engage with contemporary major problems – be they political, social, economic, or ecological – cities are said to present clear-cut actions and radical policies. However, as Jordan Lacey claims in his book *Sonic Rupture*, cities have developed all too often in a unilateral way, almost only accentuating economic prosperity and production. Although functionality serves us well in certain ways, as there is comfort in the predictability it provides, Lacey claims that "the city is more than just a place of work and productivity: it should also be a place for play, curiosity, and creative engagement" (Lacey 2016: 2). In order to achieve more liveable, heterogeneous, and endurable cities, the planning and design of its dwellings and especially its (semi-)public spaces deserves more and more careful attention.

In an interesting article in the Dutch weekly *Vrij Nederland* from January 2014, two opposing groups of future city developers are mentioned: on the one side, promoters of high tech cities like Masdar and Songdo – both still under construction – filled with smart systems and the latest technological innovations concerning transport and hygiene. On the other side, those who question these megalomaniac projects by asking whether they will ever become user-friendly. According to this second group, city dwellers become happy when there is abundant variation: different people; green spaces in between private homes and public buildings; human-scale movement (pedestrians, bikes, slow car traffic); close-by facilities and cultural venues; good public transport; squares with benches, play grounds, trees, and booths; etc. Local inhabitants are fed up with monotony, concrete, bustle, dirt, and ... yes ... noise. Already extant local initiatives in the US, for example, have led to farms on the roofs of tall buildings, to the removal of asphalt in favor of communal gardens, and to the transformation of silent suburban crossroads into lively marketplaces (van Renssen 2014).

That all these initiatives, as well as other urban design and developments, also sound has so far attracted hardly any attention. Sound is among the most significant, yet least-discussed, aspects of public spaces in urban environments (Hosokawa 1984; Kang and Schulte-Fortkamp 2016). Architects, engineers, and urban planners invariably stress the visual and tactile aspects while (re)designing urban environments but often pay less

attention to the aural consequences of their interventions; sound tends to be considered mainly as an inevitable byproduct of industrial areas, traffic, commercial centers, and/or human activities, in short: of economic growth.<sup>6</sup> If sound does attract the attention of policy makers and users of public urban spaces, it is often in a rather negative context: noise pollution which should be eliminated by somehow reducing its decibel level (Devilee, Maris, van Kamp 2010; Elmqvist 2013; Kamin 2015).

Cathy van Eck – Klangverordnung: die verbotene Klänge der Stadt Bern (Bern, 2012)

<https://vimeo.com/76705797>

A performance on the various noise protection regulations in Bern between 1628 and 2012. The performance is meant to bring the forbidden noises that have been silenced by law back into the city.

I am interested in how cities sound, in an urban ecology of sonic affects, in the vibrational experience of a city, in short in the *Sonic City*. While traversing the city, we are surrounded by sounds. However, the urban environment has compressed acoustic space and confused directionality, making it difficult or impossible to locate sounds (Augoyard and Torgue 2008: xv). And it seems that in the course of history the amount of sounds as well as their general loudness has only increased. However, this steady growth of sounds – sounds from digging machines, air planes, sirens, loud music, motor traffic – has hardly been noticed, perhaps with the exception of its most prominent victims. On the other side, as Karin Bijsterveld has made clear in her historical research on noise abatement campaigns, city noises are not only judged negatively: they have simultaneously been tolerated as signs of progress and prosperity (Bijsterveld in Bull and Back 2003: 176). Or, and this might be a third option, noise acts as a potent symbol of rebellion and resistance.<sup>7</sup> In other words, the interpretation

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<sup>6</sup> In *The Ludic City* Quentin Stevens, a lecturer in planning and urban design, writes: "Cities are typically seen as the engines of modern economic life. Cities are thus principally planned to optimize work and other practical, rational, preconceived objectives, and are designed accordingly, with even leisure space serving well-defined functions" (Stevens 2007: 5).

<sup>7</sup> See for example the public pot-banging (*cacerolazos*) in Argentina, Chile, Venezuela, and Turkey as a form of protest that cannot be contained within political discourse, that is, within the flow and circulation of words (Minuchin in Gandy and Nilssen 2014: 201-205).

of increasing sound levels is loaded with cultural symbolism: it can be extremely annoying but also raise excitement.<sup>8</sup>

Today, the World Health Organization (WHO) and the European Union (EU) recognize the problem of too much noise and its affect on human health and well-being, which has resulted in the recent development of the world's first international standard on sound pollution (ISO 12913-1:2014).<sup>9</sup> Too many and too loud sounds obscure and eradicate the intimacies of the social, or those sounds that alert us to the peculiarities and flow of a community, its inhabitants, organic life, ceremonies, rhythms, disturbances, surfaces, and spaces (Toop 2010: 52). Current management of the acoustic environment has predominantly been concerned with diminishing or masking sound levels, thereby reducing the complexity of reality and of context-dependent human perception to controllable variables such as decibels (Lavia et al. in Kang and Schulte-Fortkamp 2016: 270). As Lisa Lavia remarks, so far the world has seen very few examples of concrete soundscape improvement projects, partly due to conventional thinking and methodology (Lavia in Kang and Schulte-Fortkamp 2016: 246).

In short, on the one hand, cities succumb to an overload of sounds, too many and too loud, while on the other hand, serious scholarly analyses and solutions are basically only coming from the hard and social sciences. Input from the humanities and the arts is rather limited. Here, I would like to especially take a stand for increasing the role for artists, both in the analyses of sonic environments and in their potential improvement. However, this also asks for a rethinking of the concepts "art" and "artists," of their role in our current society, of their contribution to urgent issues.

[Peter Cusack – Favourite Sounds \(2012\)](http://favouritesounds.org/about.php?projectid=3)

<http://favouritesounds.org/about.php?projectid=3>

"Favourite Sounds" is a sound-mapping site, based on Google maps, set up to explore the connections between sounds in the environment and their geography, aimed to discover and celebrate what people value about the soundscapes of the cities and neighborhoods where they live and work.

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<sup>8</sup> Sonic elements that compose an urban soundscape are not positive or negative in themselves, but their connotation as such seems to depend on the socio-cultural dimensions that steer one's perception and evaluation (d'Andreta 2011).

<sup>9</sup> [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=52161](http://www.iso.org/iso/catalogue_detail.htm?csnumber=52161)

## 5. Atmospheres

To begin imagining, or audiating,<sup>10</sup> a possible solution to the noise problem in most cities in the world, I return to the afore-mentioned German philosopher Gernot Böhme. According to Böhme, city planning can no longer be content with noise control and abatement but must pay attention to the character of its acoustic atmospheres (Böhme 2000: 14-18). Central to sonic ecology as well as Böhme's emphasis on atmospheres is the idea that auditory milieus can be managed, designed, and improved once they are given proper attention. And this attention should (also) come from the humanities, especially philosophy, and the arts.<sup>11</sup>

Manja Ristic – “Miniature for a Tram Ride in Belgrade” (2016)

<https://audioboom.com/posts/5176456-miniature-for-a-tram-ride-in-belgrade>

“Miniature for a Tram Ride in Belgrade” is a contribution to the project *Cities and Memory*, a global field recording and sound art work that presents both the present reality of a place as well as its imagined, alternative counterpart – remixing the world.

In 2013 Böhme presented a rethinking of aesthetics in his book *Atmosphäre. Essays zur neuen Ästhetik*. According to Böhme, such a new aesthetics is needed primarily for two reasons. First, we are currently facing huge environmental problems. These are typically dealt with by the (hard) sciences. However, they also bear an aesthetic component: because we are living in this environment, it is all about our feelings and experiences. Second, Böhme, like Vuyk before him, sees an increasing aesthetization of reality: from cosmetics to advertising, from politics to interior architecture, and from underground stations to autonomous art (Böhme 2013: 7 and 15). Böhme's new aesthetics is no longer about Kantian judgments on beauty or the sublime; it is more about sensorial perception, about

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<sup>10</sup> I am adding here another audiator-inspired word to the list provided by Pauline Oliveros in her text “Auralizing in the Sonosphere” (Oliveros 2011). I thank Sharon Stewart for suggesting the term.

<sup>11</sup> See for example the site Soundscape of European Cities and Landscapes (<http://soundscape-cost.org/>): “Reducing sound level, the focus of EU environmental noise policy, does not necessarily lead to improved quality of life in urban/rural areas, and a new multidisciplinary approach is essential. Soundscape research represents this paradigm shift as it involves not only physical measurements but also the cooperation of human/social sciences (e.g. psychology, sociology, architecture, anthropology, medicine).” What they tend to forget is the potentially positive input of (sounding) art.

sensing the affective and the imaginative, less about objects as about the creation of atmospheres (Böhme 2013: 15). Atmospheres are ontologically indeterminate – occupying a space between subject (they are subjective because one must experience them) and object (they are “over there,” on the outside, and they can assault you) – but they affect the mind, manipulate moods, and evoke emotions.

Böhme, returning here to the ideas of the 18<sup>th</sup>-century German philosopher Alexander Gottlieb Baumgarten, makes clear that art is not the most important phenomenon of this new aesthetics. This new aesthetics first of all deals with environmental qualities – one of them being soundscapes – and human well-being. And the concept of atmosphere precisely presents the connection between these two, their interrelationship, the “and.” Hence, what counts is the production of atmospheres, be they soothing or energizing. However, Böhme quickly adds, artists of course still have a role here, mainly to develop our sensibilities. Through art we can disinterestedly experience atmospheres so that we can learn to engage with them (Böhme 2013: 16).

Contrary or complementary to Böhme, I see a more comprehensive role for artists in analyzing and (re)shaping our sonic environments, something I will explain in the next section.

## **6. Auditory Culture and Artistic Research**

So, what could and what should be the role of artists on the way towards a new sonic ecology? In my view, artists are indispensable on two levels, on two planes: first, to increase our knowledge of the environments in which we are living; and second, to contribute to an improvement of those environments, of these in-between atmospheres: “soundscape design is the weaving of relationships between sonic environments and human experiences” (Lacey 2016: 26).

Sheaf square water cascade and steel structure (Sheffield, 2006)

<https://www.youtube.com/watch?v=y8Al98ybaGs>

The large steel noise barrier shielding pedestrian area from the busy road might be a good example of the urban sonic design. The water soundscapes refer to the Sheffield's development from the 12<sup>th</sup> till the 19<sup>th</sup> century.

To raise awareness, to become more conscious, and to increase our knowledge of the sonic world that surrounds us, artists can, for example, organize soundwalks, create permanent

or temporary sound installations, make and use field recordings, or develop city sound maps.<sup>12</sup> Regarding the latter, these sound maps can act as a kind of database, containing not only contemporary soundscapes or soundmarks but also historical recordings – how a city sounded some fifty or more years ago. In line with Böhme, sound walks, sound installations, sound maps, and field recordings offer listeners the possibility to enhance a certain sonic sensibility and to experience sounds in a more disinterested way. They contribute to our understanding of how we relate sonically to our environment and empower people to engage with their acoustic environments in a critical way (Ouzounian in Gandy and Nilssen 2014: 168).

However, much more knowledge can be gained from the sonic information provided by these artistic means. As, for example, Christabel Stirling makes clear in her article "Sound Art/Street Life: Tracing the social and political effects of sound installations in London": sound art in public spaces may expose all manner of social and political issues connected to public spaces and how they are used, occupied, or claimed by certain groups of people. Sound art in public spaces may contribute in its unique way to theories in which urban space and the social are seen as co-produced, co-evolving, and inherently mobile. But it may also disclose experiences of the city characterized by fixity, territorialization, and sites of exclusion, thereby challenging the aforementioned theories (Stirling 2015). In short, through artistic events and interventions, we can gain knowledge about urban public spaces and how they are experienced.

QUADMAP (Quiet Urban Areas Definition and Management in Action Plans) (Bilbao, 2015)

<http://www.noiseineu.eu/fr/3652-a/homeindex/file?objectid=3258&objecttypeid=0>

Bilbao has developed the concept of "sound islands" in order to increase acoustic comfort in several public spaces and invites citizens to relax there.

Sound artists working in public spaces have developed several strategies to analyze, reflect on, and improve the sonic atmosphere of cities. Soundwalks, sound mapping, and field recordings disclose the complexity of the urban sonic environment, making us aware of the dominant but also the hidden sounds of the everyday. However, concrete interventions are also a possibility. Sound artists can attempt to *subtract* dominating noise sources from the environment, thereby revealing sounds that would otherwise be masked (Lacey 2016: 153).

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<sup>12</sup> Sound mapping can also become a social affair when people are invited to document and share ideas about soundscapes. It is here that socio-political, cultural, historical, and aesthetic fields convene (Ouzounian in Gandy and Nilssen 2014: 172).

When a noise source cannot be removed, artists can *add* sounds to the environment or augment already existing sounds in order to create a more heterogeneous soundscape (Lacey 2016: 147). Another strategy is to *transform* everyday sounds into new sonic experiences. Through the reworking of site-specific sounds, people are given the opportunity to perceive their environment differently. And there is the strategy of *disclosure*, which demonstrates that beyond the dominant affective forces that shape everyday sonic experience, there are hidden qualities waiting to be revealed (Lacey 2016: 164).<sup>13</sup> All these strategies aim at both recreating an environment and reconfiguring experience, basically by demonstrating, analyzing, questioning, challenging, and eventually changing those public urban spaces that are considered disturbing or unpleasant.

Jan-Bas Bollen – “Pulse FF” (Rotterdam, 2009)

[http://www.beeldrecensies.nl/view/2/pulseff---jan-bas-bollen-\(redsound-festival\)](http://www.beeldrecensies.nl/view/2/pulseff---jan-bas-bollen-(redsound-festival))

“Pulse FF” is a 36-channel surround sound and blue LED lights installation made for the bicycle tunnel underneath the Maas river in Rotterdam. Sounds and light react to the average speed of each individual cyclist.

However, the role of sounding art in public urban spaces is often determined by previously-existing situations. The sound artist as a homoeopathic physician: if nothing else helps, let's ask for her aid. Here I am returning to an earlier remark regarding a more comprehensive, a more inclusive, a more fundamental role for art. I would like to align with a message I have found within two recently published books, *Soundscape and the Built Environment* by Jian Kang and Brigitte Schulte-Fortkamp, and Jordan Lacey's *Sonic Rupture*. In both books

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<sup>13</sup> A special type of disclosure happens when sounds of the past are made audible again. Although, through sound, forgotten moments of our life can be restored and sonic doors can be opened to reunite us with the past, cultural heritage and restoration projects in general show little interest in the conservation and disclosure of the sonic past. However, the cultural value of historical sites, as well as overall visitor experience, could be enhanced by attempting to restore the historical soundscape, as visitors “do not experience fully the daily life of the ancient town, as the soundscape is absolutely not representative of the ancient situation” (Luigi Maffei et al. in Kang and Schulte-Fortkamp 2016: 229). Additionally, municipal archives could become more interesting by including historical, lost or forgotten sounds in the presentation of their data, a “soundscape cadaster whose data are available and can be consulted by the local population, tourists, and stakeholders” (Luigi Maffei et al. in Kang and Schulte-Fortkamp 2016: 238).

it is emphasized that soundscape design should be taken into account early in the planning stage (Kang and Schulte-Fortkamp 2016: 260; Lacey 2016: 176-7).<sup>14</sup> Together with architects, engineers, urban planners, policymakers, and property developers, artists should be involved in the decision-making and designing processes right from the start. Why? First, because the city is more than just a place where functionalist imperatives must prevail; it should also be a place for new creative expressions and experiences.<sup>15</sup> And second, because it is high time to recognize that social health and well-being are also dependent on the sonic atmospheres of public urban spaces. These sonic atmospheres are not simply a given, a supplementary and inevitable side effect of economic and planological developments. Atmospheres are producible, everywhere where design is involved (Böhme 2013: 101).<sup>16</sup> In my opinion, sound artists and artistic researchers are very well-equipped, indispensable actually, to the process of reimagining and co-designing public urban spaces as sites that

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<sup>14</sup> "Embedding creative works at the beginning of the life cycle of design and development could enhance feelings of social inclusion [...] Artists entering the conversation after the fact, via public art programming, does little to relieve the demands of city life [...] If cities are to grow as creative entities then artists must be plugged in at the beginning of the decision-making process [...] [i]n creating ruptures, creative practitioners become the interface that connects the city and its people" (Lacey 2016: 176-7). Urban planners, architects, and sound artists working together can reimagine public urban spaces as sites that simultaneously provide for our daily needs and enable the possibility for more diversity.

<sup>15</sup> This is not meant to create an unbridgeable gap or an ontological opposition between functionalism and creativity. Functionalism is an important, though only one of the many, possible expressions of a city's affective potential. Creativity can increase this affective potential by entering into a relationship with functionalism rather than simply rejecting it.

<sup>16</sup> Acoustic researchers Dick Botteldooren and Bert De Coensel found that the sonic atmospheres of backyards and courtyards are often appreciated much more than those of urban parks, as the latter are more vulnerable to the intrusion of traffic noise (this is confirmed by WHO reports). Therefore, they conclude, strategic placement of buildings would be more effective and efficient than remedial measures such as the placement of noise barriers or absorptive materials (Lavia et al. in Kang and Schulte-Fortkamp 2016: 274). This might be a good example of where collaboration at an early stage between architects, urban planners, and sound artists could occur and make a significant difference in (auditory) experience.

simultaneously provide for daily needs as well as facilitate environmental comfort by affecting the moods and emotions of the ones traversing these spaces.<sup>17</sup>

Björn Hellström/Urban Sound Institute

<https://www.youtube.com/watch?v=WWEPoHP2pN8>

The work is a site-specific sound-art installation for a commercial space – the shopping mall Gallerian in Stockholm – in order to improve overall visitor experience, while taking perceptual, social, aesthetical, temporal and spatial criteria into account.

In short, for the future of art in general and sounding art in particular, I do not (only) see grand and compelling performances and exhibitions taking place within the secluded temples of our alleged secularized society. Instead, art is welcome to become functional again, through micro-political interventions that contribute to a more pleasant life. In order for this to happen, sonic interventions do not always need to become the main point of interest: they can be supportive, that is, enhancing other experiences, or even remain in the background, (almost) unattended. Even when existing in the background, they can become “small wake-up calls to perception” (Scarry 2006: 81), establishing a “standard of care” which can then be expanded to support imaginative and sensual responses to other, less interesting or more annoying, soundscapes.

## 7. Epilogue – Affective Politics

At the end of the second section, “Beyond Aesthetics,” I wrote that sound *is* social, political, and ethical.<sup>18</sup> Here I would like to briefly return to the social, political, and ethical role of

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<sup>17</sup> On May 4, 2012, the workshop “The Architecture of Sound” opened with the question “where does the making of cities happen?” The assumption that cities are made by planners, designers, and architects was considered incomplete, as it is especially the everyday users who remake the spaces in which they live. In other words, design also happens “elsewhere” (see <http://theatrum-mundi.org/activities/the-architecture-of-sound/>). What I would like to add is that artists can play a significant role in raising public awareness about the sonic ecology as well as in offering possible alternatives. A good example, albeit not directly connected to sound, is the Freehouse Project in Rotterdam (<http://www.freehouse.nl/>), an initiative of the Dutch visual artist Jeanne van Heeswijk. Initiatives such as this one may build social cohesion among citizens as they work together with experts to (re)define the role and position of urban public spaces and make shared agreements as to which (sonic) interventions are appropriate.

sound. Not only is there a relation between sound as acoustic phenomenon and the wider (social) context in which sound is experienced (Gandy in Gandy and Nilssen 2014: 9); not only can the sonic environment be read as a reflection of our contemporary socio-political structures (Nilssen in Gandy and Nilssen 2014: 56); sounds "themselves" have social, political, and ethical powers because they occupy time and space and because they affect us.

Who has control over the sonic in urban public spaces? Of course (local) governments can implement all kinds of regulations to reduce noise pollution in spaces that are, in principal, open to all persons. However, as Jonathan Sterne makes clear in his essay "Urban Media and the Politics of Sound Space," stores and shopping malls tend to extend their sonic spheres of influence more and more, for example, in parking lots or their immediate (public) environment. Public urban spaces are thus also becoming increasingly filled with sounds from semi-public spaces. Others who can (temporarily) take control are the ones living in the immediate vicinity of an urban space<sup>18</sup> and the ones using that space: from motorists to musicians, from market traders to protest movements, from skaters to tourists. In all these cases it becomes evident that sounds not only determine the sonic ecology but also influence the social, political, cultural, and economic behavior of people. Specific urban soundscapes organize the sonic and affective sensibilities of the ones who use these public spaces: sonic ecology as spatio-temporal politics.

Urban spaces are being politicized through design. They are being designed to invoke affective responses. Through a particular design of a sonic atmosphere, its impact as well as the ways in which it is experienced can be enhanced, decreased, stabilized, or altered. While it may not be possible to create *hi-fi* soundscapes within contemporary urban soundscapes that are defined by noise, re-designing noise may, for example, augment human resonances. In a more general sense, I would claim that expanding affective potential by creating experiential diversity works to oppose the forces that homogenize

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<sup>18</sup> In much the same way, Steven Connor writes that "a soundscape is sound plus relation, and that relation needs not be fully and in itself sonorous (Connor in Gandy and Nilssen 2014: 18).

<sup>19</sup> Although designating a phenomenon known for centuries, *acoustic gentrification* gets more and more attention these days. Control over sound and silence is used as a force within political class struggles.

environments. As Lacey rightfully writes, "this is not to be confused with an aesthetic act that seeks to beautify the soundscape"; rather, it should be considered as an "ethical act that intends to augment human experience by challenging the experientially diminutive affects of functionalist imperatives" (Lacey 2016: 15-6). The argument I have attempted to make in this text is that sound artists in particular should be able to expand the affective potential of the urban. The track towards a new sonic ecology is simultaneously a track towards a new social, political, and ethical milieu.

## References

D'Andreta, Mario (2011). "The Subjective Experience of Soundscape. A Pilot Survey in the City of Rome." Paper presented at the WFAE 2011 conference *Crossing Listening Paths*.

Augoyard, Jean-François and Henri Torgue (eds) (2005). *Sonic Experience. A Guide to Everyday Sounds* (trans. Andra McCartney and David Paquette. Montreal: McGill-Queen's University Press.

Bijsterveld, Karin (2003). "The Diabolical Symphony of the Mechanical Age: Technology and Symbolism in European and North American Noise Abatement Campaigns, 1900-1940." In Michael Bull and Les Back (eds.), *The Auditory Culture Reader* (pp. 165-189). Oxford: Berg.

Böhme, Gernot (2013). *Atmosphäre. Essays zur neuen Ästhetik*. Berlin: Suhrkamp Verlag.

Böhme, Gernot (2000). "Acoustic Atmospheres A Contribution to the Study of Ecological Aesthetics" (transl. Norbert Ruebsaat). *Soundscape. The Journal of Acoustic Ecology* 1/1: 14-18

Cobussen, Marcel (2008). *Thresholds. Rethinking Spirituality Through Music*. Aldershot: Ashgate.

Derrida, Jacques (2001). *On Cosmopolitanism and Forgiveness* (trans. Mark Dooley and Michael Hughes). Abingdon: Routledge.

Devilee, Jeroen, Eveline Maris and Irene van Kamp (2010). *De maatschappelijke betekenis van geluid*. RIVM rapport 815120004/2010. Bilthoven: RIVM.

Elmqvist (2013). "Designing the Urban Soundscape."  
<http://www.thenatureofcities.com/2013/08/25/designing-the-urban-soundscape/>

Foucault, Michel (1981). "The Order of Discourse." In Robert young (ed.), *Untying the Text. A Post-Structuralist Reader* (pp. 48-78). Boston, MA: Routledge and Keegan Paul.

Gandy, Matthew and BJ Nilsen (eds.) (2014). *The Acoustic City*. Berlin: Jovis.

Goodman, Steve (2010). *Sonic Warfare. Sound, Affect, and the Ecology of Fear*. Cambridge, MA: MIT Press.

Hellström, Björn, Per Sjösten, Anders Hultqvist, Catharina Dyrssen, Staffan Mossenmark (2011). "Modelling the Shopping Soundscape." *Journal of Sonic Studies* 1.  
<http://journal.sonicstudies.org/cgi/t/text/text-idx?c=sonic;sid=c3531ed154a08fa70d228fab7c647132;view=text;idno=m0101a04;rgn=main>

Hodkinson, Juliana (2009). "Instrumentality and the Urban Instrumentarium." *Cambridge Architecture Journal Scroope* 19: 106-113.  
[https://www.academia.edu/5345068/Instrumentality\\_and\\_the\\_urban\\_instrumentarium](https://www.academia.edu/5345068/Instrumentality_and_the_urban_instrumentarium)

Hosokawa, Shuhei (1984). "The Walkman Effect." *Popular Music* 4 (Performers and Audiences): 165-180.

Kamin (2015). "Soundscape of the city is about more than decibels." *Chicago Tribune* 15-08-2015. <http://www.chicagotribune.com/news/columnists/ct-noise-kamin-met-0813-20150814-column.html>

Kang, Jian and Brigitte Schulte-Fortkamp (eds.) (2016). *Soundscape and the Built Environment*. Boca Raton, FL: CRC Press.

Nietzsche, Friedrich (1999). *The Birth of Tragedy and Other Writings* (trans. Ronald Speirs). Cambridge: Cambridge University Press.

Oliveros, Pauline (2011). "Auralizing in the Sonosphere: Vocabulary for inner sound and sounding." *The Journal of Visual Culture* 11/2.

[https://www.academia.edu/26100757/Auralizing\\_in\\_the\\_Sonosphere\\_Vocabulary\\_for\\_inner\\_sound\\_and\\_sounding](https://www.academia.edu/26100757/Auralizing_in_the_Sonosphere_Vocabulary_for_inner_sound_and_sounding)

Renssen, Henk van (2014). "Hoe de stad de wereld gaat redder." *Vrij Nederland* 18-01-2014.

<https://www.vn.nl/de-stad-gaat-de-wereld-redden/>

Scarry, Elaine (2006). *On Beauty and Being Just*. London: Duckworth.

Sterne, Jonathan (2005). "Urban Media and the Politics of Sound Space." *Open. Cahier on Art and the Public Domain* 9: 94-108. <https://www.onlineopen.org/download.php?id=254>

Stevens, Quentin (2007). *The Ludic City. Exploring the Potential of Public Spaces*. Abingdon: Routledge.

Stirling, Christabel (2015). "Sound Art / Street Life: Tracing the social and political effects of sound installations in London." *Journal of Sonic Studies* 11.

<https://www.researchcatalogue.net/view/234018/234019>

Toop, David (2010). *Sinister Resonance. The Mediumship of the Listener*. New York: Continuum.

Vuyk, Kees (1992). *De esthetisering van het wereldbeeld. Over filosofie en kunst*. Kampen: Kok Agora.

# Program

## **TUESDAY NOVEMBER 29**

### Opening – Location: Gravensteen Building

09: 30 – 10: 00: Registration (Entrance Hall)

10: 00 – 10: 20: Falk Hübner/Maarten Zaagman: "I Will Carry You Over Hard Times" (Outside the building)

10: 20 – 10: 30: Welcome (Marcel Cobussen)

### Theme 1: Sound and Urban (Atmo)Spheres (Chair: Vincent Meelberg) – Room 0.11

10: 30 – 10: 50: Miguelangel Clerc: "NS Den Haag-Groningen"

10: 50 – 11: 10: Jean-Paul Thibaud: "Atmospheric Impregnation"

### 11: 10 – 11: 30: Coffee Break + Cathy van Eck: "Für Kopfhörende" (ground floor)

11: 30 – 11: 50: Rene van Egmond: "Soundscapes in Human Product Interactions"

11: 50 – 12: 15: Gabriel Paiuk: "Technological conditions and engagement in everyday listening practices"

12: 15 – 12: 45: Discussion

### 13: 00 – 14: 00: Lunch (Faculty Club)

### Theme 2: Sound Art in Public Spaces (Chair: Jan Nieuwenhuis) – Room 0.11

14: 30 – 14: 50: Salomé Voegelin: "Sound Art as Public Art"

14: 50 – 15: 10: Raviv Ganchrow: "Latent Aurality of Anechoic Chambers"

15: 10 – 15: 30: Irene van Kamp: "Understanding perceived soundscapes"

15: 30 - 16: 00: Discussion

### 16: 00 – 16: 30: Coffee Break + Cathy van Eck: "Für Kopfhörende" (ground floor)

### Theme 3: Contemporary Urban Acoustic Experiences (Chair: Sharon Stewart) – Room 1.11 (upstairs)

16: 30 – 16: 50: Falk Hübner/Juan Parra: "Jukebox"

16: 50 – 17: 10: Gascia Ouzounian: "Acoustic Urbanism"

17:10 – 17:30: Tjeerd Andringa: "Experiencing Sound Annoyance"  
17:30 – 18:00: Discussion

18:30 – 22:00: Conference Dinner – Restaurant *Surakarta*

## **WEDNESDAY NOVEMBER 30**

Opening - Location: Gravensteen Building - Room 0.11

09:30 – 10:00: Registration (Entrance Hall)  
10:00 – 10:20: Justin Bennett: "Hyper-Forum: listening to the social"  
10:20 – 10:25: Marcel Cobussen

**Theme 4: Towards an Auditory Epistemology (Chair: Marcel Cobussen) - Room 0.11**

10:25 – 10:45: Edwin van der Heide: "Son-O-House, Spectral Diffractions, and Schwingungen – Schwebungen"  
10:45 – 11:05: Michael Bull: "Sirens: From Sonic Myth to Sonic Materiality?"

11:05 – 11:35: Coffee Break + Cathy van Eck: "Für Kopfhörende" (ground floor)

11:35 - 11:55: Paul Craenen: "On sound art and listening time"  
11:55 – 12:15: Christopher Williams: "Opening Ears and Selling MorrowSound"  
12:15 – 12:25: Michiel Huijsman: "Is place confinement a form of deafness?"  
12:25 – 13:00: Discussion

13:00 – 13:25: Cilia Erens: "Moving the Masses" (Soundwalk)

13:30 – 14:30 Lunch (Faculty Club)

## Abstracts and Biographies

### **I will carry you over hard times** (with Maarten Zaagman)

Falk Hübner

In *I will carry you over hard times* a percussion player performs a musical choreography without instruments, miming movements that are synchronized with sounds coming out of four loudspeakers, within an absent setup of classical percussion. In the course of the performance the initially empty stage becomes filled with objects related to classical percussion playing: various kinds of mallets, music stands, sheet music. The performer get more and more occupied by changing between the different absent instruments and bridging the distance between them in the stage space, ending in a tour de force in which the boundaries between the possible and impossible become very thin.

Falk Hübner, PhD, is a composer, music theatre maker and researcher. He creates experimental stage work which fall between concert, installation, and performance. Fascinated by (non-)communication phenomena of the individual, isolated human being in our technological age, he uses everyday experiences as inspiration for his artistic work, and reflects on these experiences by translating them into performance frameworks.

In 2013 Hübner finished his PhD research about the musician as theatrical performer. His current research interests are the use of Live Video in music theatre, the concept of Performative Research and the idea of Artistic Research as an Integrated Practice.

Hübner is core teacher for research at HKU Utrecht Conservatoire and is head of the research group music and performativity at the Professorship Performative Processes of Nirav Christophe, also at HKU. He is member of various research groups as the FIRT/IFTR research groups for intermediality in theatre and performance and music theatre, and he is a creative director of the Innovative Conservatoire (ICON).

Maarten Zaagman is specialized in bringing together percussion, theatre and electronics. He is an active player in the Dutch music scene, in which he regularly performs with classical music ensembles, percussion bands and theatre companies. Next working collaboratively, Maarten develops his own creations such as the interactive percussion performance "Revitalizzare", in which the audience can control parts of the work via an online application.

### **NS Den Haag Groningen**

Miguelangel Clerc Parada

"NS Den Haag Groningen" is an electronic composition created with sound samples recorded inside a train in the Netherlands. Repetitive patterns, cycles of acceleration and deceleration, continuous vibrating drones, are all sonic characteristics of the sounds inside trains, buses and trams. While traveling from city to city or from one place in town to another, inside

trains, travelers move in relatively closed sonic environments. The machine-like sounds accompany travelers in their real transportation through physical space. This lecture-performance explores the notions of "liminality" and "virtual spatial movement" which arise when the train's inner sonic environment is relocated to a concert context.

Miguelangel Clerc Parada (Santiago, Chile, 1979) is a composer, guitarist and researcher. Clerc has composed music for dances productions, theatre, installations, ensembles and soloists, in artistic venues in Europe, Asia, and the Americas. He has participated as a speaker at workshops, conferences, and seminars in Chile, England, The Netherlands, Italy, and Belgium. Clerc holds a MA degree in music composition from the Royal Conservatory in The Hague and a PhD in artistic research from Leiden University and the Orpheus Institute in Ghent (docARTES doctoral program in musical arts). [www.mclerc.com](http://www.mclerc.com)

### **Atmospheric impregnation**

Jean-Paul Thibaud

The question of "impregnation" is at stake, whether we define ambiance as the sensitive atmosphere of a place, the diffuse quality of a situation or the affective tonality of a lived environment. What about these sound climates that accompany us over time and which we participate in without realizing it? How do such tonalizations affect us? How does one listen to the atmospheric existence of the contemporary world? By asking such questions I wish to give voice to the diffuse, to the vibration, to the pervasive, to the transient. In this respect, sound is an invaluable traveling companion that helps us to free ourselves from our habits of thought and to highlight the discrete influence of impregnation.

Jean-Paul Thibaud, sociologist, is Senior Researcher at CNRS (Directeur de recherche CNRS - National Center for Scientific Research, France). He holds a PhD and an Habilitation. He is researcher at CRESSON research laboratory (Research Center on Sonic Space and the Urban Environment, UMR1563 *Ambiances, Architectures, Urbanités*). His field of research covers the theory of urban ambiances, ordinary perception in urban environment, anthropology of sound, sensory culture and ethnography of public places, in situ qualitative methodology. He has directed the CRESSON research laboratory and founded the International Ambiances Network ([www.ambiances.net](http://www.ambiances.net)). Jean-Paul Thibaud has published numerous papers on urban ambiances and sensory atmospheres, and has recently published a book entitled *En quête d'ambiances. Eprouver la ville en passant* (Geneva: MétisPresses, 2015).

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## **Für Kopfhörende (2016) - a performative installation**

Cathy van Eck

Which music someone is hearing through their headphones can only be guessed by outsiders, for instance by analyzing the look or movements of the one listening. These small gestures are at the main focus of this performance: the headphones are equipped with all kinds of sensors to capture the listening gestures. Three different sonic structures are composed with the help of the sensor data and can be heard by the audience through three different headphones.

Cathy van Eck is a composer, sound artist and researcher in the arts. Her work includes performances, often using live electronics, sensors, and sound objects, which she habitually designs herself.

## **Soundscapes in Human Product Interactions. Whether to be silent?**

René van Egmond

Research in sound quality of products is often focused on reducing noise. However, in our daily interaction with products we subconsciously depend on the feedback one receives through their sounds. For example, one hears when a water boiler is almost finished, or perceives the power of a vacuum cleaner through its sound. However, perceived power is not only transmitted by loudness. If one cycles and a big truck is approaching at a distance, one hears that it is a powerful machine although the loudness level is low. Conversely, if a small car is right behind you, the sound level is higher but the perceived power is low.

We experience our daily auditory environment, i.e., the soundscape, through the product and environmental sounds that surround us. The optimization of this experience can be achieved by the harmonization of product sounds in a given context. In addition, we are dependent for our navigation in urban spaces on the sounds we hear. These sounds can be intentionally designed (feedback, alarm sounds) or can be the consequence of the functioning of a product, e.g., a car that one hears approaching. In case of cars the urban sound scape will be significantly changing because of the introduction of electrically driven vehicles. This will give designers new opportunities for the design of sounds. In this lecture, I will give some examples of basic sounds and their experience and the shortcomings of measure often used as dB. Furthermore, I will give some examples from practice in order to show that people hear things but do not listen and will emphasize the important role of sound in our environments.

René van Egmond is an Associate Professor of Product Sound Design and Perception at the Delft University of Technology, Department of Industrial Design Engineering since 2000. He received his PhD in cognitive science at the Nijmegen Institute for Cognition and Information of the Radboud University Nijmegen (The Netherlands) in 1996. From 1996 until 1997 he was a post-doctoral fellow at the Ohio State University on a personal fellowship awarded by The Ohio State University. From 1997-2000 he was a postdoctoral fellow and lecturer at the Radboud University Nijmegen supported by a personal grant of The Netherlands Organization for Scientific Research (NWO).

## **Technological conditions and engagement in everyday listening practices**

Gabriel Paiuk

This talk, structured around the presentation of my multichannel sound piece *Affectio* (2012, 8-channel Soundtrack), deals with the role of ubiquitous sound media in the mesh of practices and affordances that constitute the ways we listen. Tackling on the practice of field recording as a tool to re-enact instances of everyday listening, *Affectio* aims to raise questions on the way our engagement with sound is modulated by the memories, protocols, and material imprints of audio technology.

Taking as a primary source a series of field recordings carried out at 3 locations with a diverse range of recording technologies, the work juxtaposes and superimposes the outcomes of these processes, enhancing the ambiguous threshold between what is perceived as a represented space and as the qualities of a particular medium, emphasizing the affective, material, and spatial implications of the procedures used. Through the organization of these sonorous instances, the aim is to expose how we incorporate the codes arising in our interaction with media to make sense of our surroundings.

Gabriel Paiuk (\*1975) is a composer and sound artist, faculty staff member at the Institute of Sonology (The Hague) and PhD Candidate at the Leiden University Academy of Creative and Performing Arts. His work takes the form of sound installations as well as compositions for conventional instruments and audio media. He was awarded the Gaudeamus Composition prize in 2006 for his sound installation *Res Extensa*. His work has been presented at festivals like Sonic Acts, November Music, and Warsaw Autumn, and galleries like W139. It has been performed internationally by ensembles and instrumentalists like ASKO ensemble, Kammerensemble Neue Musik Berlin, Slagwerk Den Haag, Modelo62, NeoQuartet, Francesco Dillon, Ekkehard Windrich, Rank Ensemble and Ensemble 306.

Paiuk has been the director of the Center for Advanced Studies in Contemporary Music in Buenos Aires (2009) and has taught sound design at the Center for Cinematographic Investigations, Bs.As. (2004–2009). In recent years he has articulated his artistic practice with theoretical research, leading to talks and workshops in contexts such as the Master Artistic Research at KABK, KASK School of Arts (Ghent), HKU (Utrecht), the Amsterdam School for Cultural Analysis (University of Amsterdam) and to a publication in *Organised Sound*.

## **Sound Art as Public Art: performing the civic between listening and being audible**

Salomé Voegelin

In this presentation I will propose that Sound Art, whether gallery based, or site specific, in nature or within the built environment, places us in a very particular way within what Chantal Mouffe considers the 'democratic paradox', and what Étienne Balibar calls within the notion of 'égaliberté', since it always engages the listener in the agonistic conflict between individual freedom to hear the invisible material in the formless shape of her auditory imagination and the demand of equality, of a collective hearing, that aspires consensus and a shared vocabulary of what that formless form might be.

The ephemeral materiality of sound ignores the boundaries between the realm of the aesthetic and that of the public. It merges aesthetic identity and civic identity, and questions the politics of art, as well as the politics of citizenship. Its invisible mobility thus makes accessible and thinkable a different sense of materiality and subjectivity, belonging and participation: In sound we are listening while being audible; we are performing a civic participation that allows us to consider the dynamic of the democratic paradox whilst constituting its very condition.

Salomé Voegelin is a Swiss artist and writer engaged in listening as a socio-political practice of sound. Her work and writing deal with sound, the world sound makes: its aesthetic, social and political realities that are hidden by the persuasiveness of a visual point of view. She is the author of *Listening to Noise and Silence: Towards a Philosophy of Sound Art*, Continuum, NY, 2010, and *Sonic Possible Worlds: Hearing the Continuum of Sound*, Bloomsbury in 2014, and together with Thomas Gardner she has co-edited *Colloquium: Music- Sound Art*, ZeroBooks, John Hunt Publishing, 2016. As an artist she works collaboratively with David Mollin (Mollin+Voegelin) in a practice that focuses on text and sound and establishes through written and spoken words conversations and reconfigurations of relationships and realities. She is a Reader in Sound Arts at the London College of Communication, UAL.

## **Latent Aurality of Anechoic Chambers**

Raviv Ganchnow

What is the nature of anechoic experience? What kind of sonic materialities and spatial ontologies are fostered in echoless surroundings, and which sonic models propagate through anechoic practices?

This research probes the anechoic environment for its role in the making of the present-day listener. These specialized echo-dampened facilities, where acoustics, electro-acoustics, and psychoacoustics have been calibrated since the 1940s, create a unique backdrop against which sound is examined. In contrast to the asserted neutrality of such auditory

environments, this inquiry examines the particular framing of sonic attention enabled by the chamber. The hunch is that the designed suppression of acoustic energy within the chamber in fact produces modes of sound and listening that far exceed the confines of the test facility.

Moreover, the specific historical context within which anechoic methods evolve is driven by pressing questions relating to sound propagation and reception in combat situations. The physics of aeronautic vibration, battlefield voice transmission, and advanced psychoacoustic experiments intersect at the anechoic chamber to create a set of problems around mechanical noise, speech comprehension, and auditory fatigue respectively. Acoustic measurement procedures, models of hearing, and electro-acoustic innovations pioneered in the chamber carry over into civilian categories of telecommunication, aviation, architecture, and the auto industry, and can be found today in a vast array of personal and public audio techniques.

What kinds of everyday auditory experiences may be invested with latent anechoic reverb? And what implicit anechoic models of the listener are still active in commonplace audio situations? This project experimentalizes contemporary auditory settings by applying a retroactive hearing to formative anechoic procedures and experiments.

Raviv Ganchrow's work researches the interdependencies between sound, place, and listening, aspects of which are explored through installations, writing, and the development of pressure-forming and vibration-sensing technologies. Recent installations examine context-dependent sites of contemporary listening relating to environmental infrasound (Long-Wave Synthesis), mineral piezoelectricity (Quarzbrecciaakammer), materiality of radio transmission (Radio Plays Itself & Forecast for Shipping), and anechoic chambers (work in progress). His ongoing Listening Subjects project tests an ambient circuitry whereby audibility, surroundings, and subjectivity are mutually conductive. He has been teaching architectural design in the graduate program at TU Delft and is currently a faculty member at the Institute of Sonology, University of the Arts, The Hague.

### **Understanding perceived soundscapes in their physical and social context**

Irene van Kamp (Caroline Ameling, José Ferreira, Jeroen Devilee, Wim Swart, Elise van Kempen)

The association between noise and health is seldom placed in a broader context of acoustic and environmental quality. The few studies that are available focused on the health benefits of natural recreational areas, primarily in rural areas, but did not incorporate the sound characteristics of those places. As a result, evidence on the health effects of areas with high sound quality is still lacking. Perceived soundscapes at different locations could potentially link with health through the restorative function of people's experience in those areas. However this is seldom studied, due to the unclear role of pleasant sound environments and

the difficulties to measure them. As a first step it is important to know how people describe their sound environment in areas with varying levels of transport and industrial noise and at different geographical levels. Available data from a Dutch project allowed us to perform such analyses. The determinants of perceived soundscapes and the general evaluation of the overall sound situation in three conditions – indoors, outdoors and at places people frequent for relaxation - were analyzed by non-parametric statistical prediction methods. Results show that perceived noise sources, annoyance, social cohesion and place attachment were are important predictors of perceived soundscapes and the evaluation of overall sound situation sound quality indoors and outdoors. Noise metrics and in particular a measure of sound variety were important for the sound perception in places which people frequent for relaxation only. These results confirm the importance of the context in which the acoustic environment is experienced (person-place-activity) for soundscape perception and might be of value in an urban planning context.

Irene van Kamp was educated at the University of Groningen and the Erasmus University in Rotterdam (Netherlands) and has a background in sociology (Bsc), psychology (PhD) and epidemiology (post graduate). She has a broad interest and experience in working in interdisciplinary teams and policy preparing research. Since 2000 she is working as a senior researcher and project manager at the National Institute of Public Health and the Environment (Netherlands), with an assignment in the field of urban environmental quality and quality of life, and specific expertise in the field of environmental noise. She is (and has been) supervising several PhD students on the health effects of noise and electromagnetic fields, risk communication and risk governance. Current projects include a review on the evidence for the effectiveness of noise interventions for the World Health Organization's Community Guideline revision with professor AL Brown (Australia); mapping the burden of disease from low frequency noise; the perception of noise and vibration from rail traffic and the health promoting role of positive aspects in the sound environment in their physical social context.

### **Jukebox** (with Juan Parra)

Falk Hübner

Jukebox is both a performance and an installation. As performance, a musician prepares for a concert. He arranges his instruments: keyboards, synthesizer, guitars, organs, a laptop, plenty of cables, a bass guitar and small loudspeakers. During assembling the instruments more and more get the identity of a sculpture, piled up and connected to each other. When the preparations are over, the sculpture of musical instruments is able to play without any further operation by the musician; it becomes an own identity, a slowly changing organism. The concert so carefully prepared doesn't happen. Experiencing his own self-playing music box, the musician has staged his own needlessness.

Juan Parra Cancino (b. Chile, 1979) studied Composition at the Catholic University of Chile and Sonology at The Royal Conservatoire The Hague (NL), where he obtained his MA degree with focus on composition and performance of electronic music. In 2014, Juan obtained his PhD degree from Leiden University with his thesis "Multiple Paths: Towards a Performance practice in Computer Music."

His compositions have been performed in Europe, Japan, North and South America in festivals such as ICMC, "Sonorities," "Synthese," and "November Music." His acousmatic piece *Serenata a Bruno* obtained a special mention at the Bourges electroacoustic music competition of 2003 and in 2004, his piece *Tellura* was awarded with the residence prize of the same competition. Juan is founder of The Electronic Hammer (a Computer and Percussion trio), and Wiregriot (voice and electronics), and he collaborates regularly with Ensemble KLANG (NL) and Hermes (BE), among many others. His work in the field of live electronic music has made him recipient of numerous grants such as NFPK, Prins Bernhard Cultuurfonds, and the International Music Council.

Since 2009, Parra is a fellow researcher at the Orpheus Institute (Ghent, BE), focused on performance practice in Computer Music.

## **Acoustic Urbanism: Critical Perspectives on Urban Sound**

Gascia Ouzounian

In 1984 the musicologist Shuhei Hosokawa decried the lack of attention that urban planners give to the acoustic dimension of cities, writing that the city remains "unheard" when observed from a strictly visual perspective. More recently, architecture critic Michael Kimmelman urged architects to consider sound as an integral part of architectural and urban design, while describing sound as the "unspoken plague" of modern cities. This presentation will explore a wide range of recent initiatives – for example, in real-time acoustic mapping (ex. SONYC), interactive sound mapping (ex. Montréal Sound Map), community-based urban sound (Waldock 2016), and urban sound art (ex. bonn hören, Tuned City) – to propose the concept of "acoustic urbanism" as an acoustic approach to the understanding, design, and planning of urban space. It will show how the framework of acoustic urbanism can enhance our understanding of cities and complicate discourses on urban sound, which are often underpinned by an emphasis on noise pollution. Focusing instead on the tremendous potential of critical and creative practice in sound to reconfigure and reorient urban environments, the presentation will examine acoustic urbanism in relation to contemporary artistic practices, ideas of acoustic space, and cultures of listening.

Gascia Ouzounian is Associate Professor of Music at the University of Oxford. As a violinist and musicologist her work is focused on experimental music and sound art traditions of the 20th and 21st centuries. Her current book project examines the history of acoustic spatiality since the mid-1800s, whether in the context of 19<sup>th</sup>-century scientific studies of binaural audition and auditory space perception; military auditory practices during the First World War; the demonstration of stereophony in the 1930s; and, after 1950, multichannel electroacoustic music,

sound installation art, acoustic mapping, and projects that span urban design, architecture and sound art. Ouzounian co-directs the research group Recomposing the City, and she is Principal Investigator on two AHRC projects: "Hearing Trouble: Sound Art in Post-Conflict Cities", and "Pet Sounds", which develops new technologies for collaborative composition.

## **Experiencing Sound Source Annoyance**

Tjeerd Andringa

Sound annoyance is a commonly used term, however a misnomer. People do not have a problem with sound in general, but with particular sound sources that disturb or agonize them. I propose that the key feature of sound annoyance is the (learned) inability to ignore irrelevant sound sources.

Normally, people ignore most of what they sense and ideally only attend relevant percepts. Sound source annoyed individuals however, are forced to attend an irrelevant sound source that claims their conscious awareness. Highly sound annoyed individuals have even become experts in detecting the sound source they do not wish to hear. Moreover, the most affected people actively search for the sound sources that annoy them, making them suffer from the promise of future exposure, even in the absence of the source. This makes sound source annoyance a life-changing condition, with parallels to chronic diseases.

The more annoyed individuals are, the more alert (and less relaxed) they feel and the more they are locked in high arousal states that make them irritable, nervous, sleepless, and distracted. In fact, the experienced level of sound source annoyance correlates strongly with the absence of perceived quietness and a sense of being prevented – by the source – from enjoying the benefits (e.g., relaxation, quiet enjoyment) of low arousal mind states.

Thus, to come-up with more effective noise policies we need to focus on the experienced annoyance caused by sound sources, rather than focusing on arbitrary acoustical parameters.

Tjeerd Andringa combines a broad scientific, engineering, educational, and entrepreneurial background to produce integrative inter- and transdisciplinary research, education, and innovations. He is an Associate Professor of Sensory Cognition with a focus on how moods and the appraisal of the (sonic) environment influence each other and define our responses. This research is applied in institutes for long-term care as well as in cities. He is also one of the initiators of the company SoundAppraisal that develops practical soundscape solutions.

## **Hyper-Forum: listening to the social**

Justin Bennett

Hyper-Forum is an exploratory work made from 3d (Ambisonic) recordings of public spaces in Rome. The relative dynamics of each space are preserved in order to reveal contrasts and make comparisons possible. It was presented as a spatial installation during the exhibition Open Museum Open City in 2014.

Justin Bennett is an artist working with sound and image. He studied sculpture and electronic music and much of his work combines the two aspects of sound and space. Bennett makes work for public spaces as well as galleries, museums and concert venues. His work with sound combines spatial recordings of environmental sound with the resonances of buildings and materials. He often uses these recordings together with spoken words to immerse the audience in a story or to subtly change their perception of a place.

Recent projects include:

- "Vilgiskoddeoayvinyarvi..." A docu-fiction audio walk, Zapolyarny, Russia. 2016
- "Hyperforum" an installation at Maxxi museum, Rome using 3d sound from public places. 2014.
- "Secret Garden" a sound work for mobile devices Amstelpark, Amsterdam. 2014
- "Dream Map" an audio walk for an area of Sao Paolo, Brazil. 2013.
- "Teletrofono" an audio walk on Staten Island, commissioned by the Solomon R. Guggenheim museum, NYC. 2012.

## **Son-O-House, Spectral Diffractions, and Schwingungen - Schwebungen**

Edwin van der Heide

In this sonic lecture Edwin van der Heide will present three of his works that each create a relation to architecture and public space. He takes his collaboration with Lars Spuybroek on Son-O-House (2004) as point of departure to present his initial considerations and approach. Afterwards he will focus on Spectral Diffractions (2014) a work for the Mies van der Rohe Pavilion in Barcelona and Schwingungen - Schwebungen (2015) a work for the field in front of Fritz Bornemann's University Library in Bonn.

Edwin van der Heide is an artist, composer and researcher in the field of sound, space and interaction. He extends the terms 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.

Besides running his own studio he is part-time assistant professor at Leiden University (LIACS / Media Technology MSc program) and was a lecturer (1995-2016) at and co-head (2014-2016) of the ArtScience Interfaculty of the Royal Conservatoire and Arts Academy in The Hague (1995-2016). He was Edgard Varèse guest professor at

the Technische Universität Berlin (2009), won the Witteveen+Bos Art+Technology Award 2009 for his entire body of work and was an invited artist and guest professor at Le Fresnoy, studio des arts contemporain in France. He has presented his work at renown museums, festivals, galleries and music venues as SMAK (Ghent), Ars Electronica Festival (Linz), Stedelijk Museum (Amsterdam), V2's DEAF (Rotterdam), ICC (Tokyo), NAMOC (Beijing), Transmediale (Berlin), SONAR (Barcelona), Taipei Fine Arts Museum, SFMOMA, FILE (Brazil), SONAMBIENTE (Berlin), Art Basel Parcours Night and Donaueschinger Musiktage.

### **Sirens : From Sonic Myth to Sonic Materiality?**

Michael Bull

The significance of, and analysis of the 'sirens' has been largely conducted in the field of Classical Studies' as myth, when venturing into the field of contemporary culture, work has focused upon issues of gender, filmic representations (Miklitsch 2011), or on the 'Sirens' in musical representation (Austern and Naraditskaya 2006, Fleeger 2014). In these studies the 'sirens' are frequently used metaphorically and illustratively as forms of 'sonic seduction' and increasingly subsumed under the visual rather than the sonic (Peraino 2006). Equally, sirens, in their physical embodiment as objects that warn, whether in everyday life as emitted from police cars and ambulances, as sirens out to sea warning of fog, or as sirens mounted throughout cities to warn of imaginary enemies in Cold War America, – have scarcely been studied ideologically or culturally other than in their illustrative role in the Blitz in World War Two. In this talk I attempt to critically bring together sirens in popular culture, myth and material culture in order to investigate in order to investigate what it means to listen, mishear and to silence.

Michael Bull is Professor of Sound Studies at the University of Sussex. He has published widely in the field of Sound Studies. His single authored books include *Sounding Out the City*, *Personal Stereos and the Management of Everyday Life* (Berg 2000), *Sound Moves, iPod Culture and Urban Experience* (Routledge 2007). He has also published a four volume edited work on Sound Studies for Routledge (2013). Most recently he has co-edited the second edition of *The Auditory Culture Reader* with Professor Les Back (Bloomsbury 2016). He is founding and managing editor of the journal *Senses and Society* (Berg Publishers) and the co-founder and editor (with Veit Erlmann) of the *Sound Studies Journal* (Routledge). He is on the Advisory Board of PortalPlayer (CA), and consultant and Sound Strategies, London. He is a member of Wired Sussex, and core member of the Future Trend Forum (European think-tank by Baninter, Spain). Michael is currently writing a book on sirens which will be one of the first publications in his new book series *The Study of Sound* (Bloomsbury).

## **On sound art and listening time**

Paul Craenen

Sound art works deal with the experience of time in a different way than musical works do. The focus on space, instead of duration has been a main argument in the positioning of sound art as an autonomous art form with specific characteristics and its own playing field. More than 10 years of experience with Klankenbos, a permanent outdoor collection of sound art works, invites us to reconsider the importance of dealing with listening time on several levels: the invitation to *take time*, the creation of an environment with proper time-spaces for listening, the variability of sound output and ultimately the life-span of sounding art works.

Paul Craenen is a composer, lecturer and researcher. He is currently director of Musica, Impulse Centre for Music, a major Flemish art organization for art education, development, and participation. He holds a Master's degrees in piano and chamber music from the Lemmens Institute, Leuven and obtained a PhD from Leiden University for a research on "composed performers" (2011). A translation of his thesis has been published by Leuven University Press under the title *Composing under the Skin. The music-making body at the composer's desk* (2014).

## **Opening Ears and Selling MorrowSound**

Christopher Williams

Bringing sound art and artists to public spaces – i.e. non-art/music contexts – can be tricky when those responsible for these spaces have no knowledge of (or interest in) sound or art. Finding solutions to this problem is part of my bread and butter as a salesman for Charles Morrow Productions (CMP).

CMP is a company of artists in business who create immersive sound experiences for a wide array of public and semi-public spaces such as museums, building lobbies, retail, and hospitals. Our signature product is MorrowSound, a patented 3D sound system we use to develop original soundscapes and themed sound that create a sense of place - "both real and emotionally dynamic," as our brochure states. Our approach is not to fill spaces with art and/or music, but rather to design environments sonically to promote well-being and enhance perception and drama.

Our portfolio includes projects for many prestigious institutional and corporate clients. How do I (attempt to) convince these clients that sound is important, and that CMP has the sonic solutions they need? In this presentation I will demonstrate my own strategy in the form of a mock pitch, recreating an actual pitch I made in October 2016 to a team of designers,

engineers, and business executives responsible for remodeling Terminal 1 at the San Francisco Airport. [www.cmorrow.com](http://www.cmorrow.com)

Christopher Williams (1981, San Diego) is a wayfarer on the body-mind continuum. His media are music and sound. B.A., University of California, San Diego; PhD candidate, University of Leiden (Holland). As a composer and contrabassist, Williams's work runs the gamut from chamber music, improvisation, and radio art to collaborations with dancers, sound artists, and visual artists. He has performed and/or had work presented throughout the usual experimental music circuits in North America and Europe, as well as on VPRO Radio 6 (Holland), Deutschlandradio Kultur, the Museum of Contemporary Art Barcelona, and the American Documentary Film Festival.

Williams' artistic research on improvisation, notation, and his body-mind continuum has been published in Open Space Magazine, The Improvisor, and Critical Studies in Improvisation, and has been presented at major universities and international conferences in North America, Europe, and India. Scholarships, grants, and prizes from the University of California, the Darmstadt Summer Courses, the Arts Council of Catalonia, Goethe Institut, Hauptstadtkulturfonds Berlin, the Festival Acanthes, and the American Documentary Film Festival.

He co-curates the monthly contemporary music series KONTRAKLANG ([www.kontraklang.de](http://www.kontraklang.de)) and manages sales and productions for immersive sound experience makers Charles Morrow Productions. [www.christopherisnow.com](http://www.christopherisnow.com)

## **Moving the Masses: China 1986-2015**

Cilia Erens

"Moving the Masses" is a soundwalk through the historic city center of Leiden, in which Cilia Erens inserts Chinese city noise from different periods in time. The soundwalk is thus an eye-ear encounter in which *coincidence* plays its own role. The sounds and sights of Leiden encounter and bind to the sonic culture of masses in (pre-)globalized urban China. Why China?

"Time Lapse China 1986 – 2015" is the result of Erens' listening research in urban China on Chinese globalization. In 2015 Erens went back to the cities where she had made recordings during her first visit 29 years earlier. The changing tone of mass control in this rapidly commercializing nation has become one of the sound themes of her research. How will these Chinese sounds connect to, disrupt, or transform the Leiden environment?

Formerly a city planner, sound artist Cilia Erens first introduced soundwalks in the Netherlands in 1987. In her soundwalks, sound panoramas, and 'soundscapes', she uses largely unmixed everyday sounds. In the absence of words, her work reaches deeper layers; "audible space" is her specialty.

Listening to Erens' compositions always creates a new reality within existing realms, a form of "augmented reality." Numerous of listeners have already experienced just that during soundwalks in cities including Rotterdam, Taipei, Broekpolder, Amsterdam, Berlin and Yogyakarta.

To her the world is a series of sound spaces to be explored, each with their own identities which will only become manifest when sound and sight are no longer in sync. Her approach is interdisciplinary.

One of her best-known works is "Silencer," a sound show about the stillness of silence (2005), for which she did research on the concept of "collective silences" e.g. in Japan and Austria. "There is nothing to tell me," a sound poem about World War One, is her first interactive GPS soundwalk (2015).

Erens also works as a guest lecturer at institutes such as The Design Academy Eindhoven and The Royal Academy of Art, The Hague. Since 2003 she works on that basis at The Netherlands Film and Television Academy (Nederlandse Film- en Televisie Academie).

"Time Lapse China" is her most recent sound research, on how present-day urban China has evolved in the 29 years that have passed since she recorded binaural sound in the cities she visited for her first sound walk "China Daily" (1987) and which she revisited in 2015.

## Participants

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