# **Urban Sound Design Studio\_L28 –**Urban Sonic Research as Critical Spatial Practice

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ABSTRACT: The undeveloped open space along the Western railway ring L28 has long been marginalized in Brussels planning processes. Thanks to its natural, historical and ecological richness this urban edge area is an excellent research object, especially in the context of urban sound design. The site in question is the L28 railfield, located in Anderlecht and Sint-Jans-Molenbeek, Brussels. To date, Brussels urbanism is little concerned about the quality of the sound environment. Studio\_L28 was conceived as a research parallel to the analysis phase of the urban renewal project for that area. The studio facilitated a critical outsiders' perspective on the current planning process. The studio, was composed of two parts: A morning program with talks and transversal discussions, during which topics related to sound, urbanism and the area were debated. And afternoon sessions with fieldwork on site. In constant dialogue with experts from the fields such as field recording, acoustic ecology and urban planning we reflected on new urban sound strategies for public urban space development along the L28.

**KEYWORDS**: urban transition, public urban space, critical practice, urban sound strategies, transdisciplinar research.

## 1. Introduction

*Urban Sound Design Studio* is an urban platform for transdisciplinary research on the role and position of sounds and sound art in public urban space development. It is conceived as a design practice for counteracting planning situations where sonic awareness and sound design strategies are limited to noise control. Content driven process is considered as the primary force for alternative sonic design strategies – in physical or other manners. Rather than proposing one single design solution for the sonic environment of the area in question, *Urban Sound Design Studio* combines theory with practice to collect thoughts on possible sonic approaches of post–industrial public urban space development.

In what follows, I will explain how it works in practice by describing "Studio\_L281", a studio Caroline Claus (myself) organized in autumn 2016, together with Q-O2, a Brussels workspace for experimental contemporary music and sound art & the public school for architecture Brussels. With "Studio\_L28" we have focused on public space development along the L28 in Molenbeek and Anderlecht, Brussels. Together with (landscape) urban designers, architects, musicians, sound artists and performers the potential of urban sound design for public urban space has been explored from a fourfold perspective: territory, cartography, urban design and site- sounds. The studio happened in four sessions and was organised on two strands: a morning program with talks and a transversal discussion, and afternoon sessions with fieldwork and on site reflection and discussion. A Ph.D. research developed from this project.

# 2. Studio\_L28

## 2.1. Territories

The site in question is a section along the Brussels L28 railway line, located in the municipalities of Anderlecht and Sint-Jans-Molenbeek, with the *Masterplan and Transitional Project for West Station*, the *Canal Plan* and the *Regional Green Network* as priority projects of its development. The L28-railway area is located in a basin formed by three former river valleys which became fully industrialized in the nineteenth century. The construction of the canal between Brussels and Charleroi, the railway L28, and the industrial buildings and housing alongside the rail line, contributed highly to the fragmentation of the original landscape structure. With the reorganisation of the Brussels metro network in spring 2009, West Station became a major hub for public transport in the metropolitan Brussels area. Where frogs once croaked over the ponds of marshland, now freight trains are rumbling, the dull thuds of truck maneuvers, the immersive drone-waves of airplanes, the piercing sounds of

<sup>1.</sup> https://urbansounddesignblog.wordpress.com/

trams and underground trains sliding over iron, and the buzzing drone hovering produced by helicopters flying over the area, can be heard. After decades of neglect with wastelands and empty buildings as result, the open space at West Station receives new attention. Today West Station is one of the strategic areas for Brussels regional development. A recent research by design, realized by Coloco, Devspace and Gilles Clement in the context of the study Metropolitan Landscapes (Mabilde and Loeckx, 2016), argued in favor of more research into the quality of the soil and associated use, but also into the identity and experiential value of the sites. This recommendation is in line with the conclusions of a study conducted by the Brussels Agency for Territorial Development, that acknowledged the temporary physiognomy of the L28 area as an important condition for the future urban development of the area (ADT/ ATO, 2015). In its more recent projects for the L28 area, Brussels has chosen for a dynamic approach to landscape urbanism, hereby challenging the assumptions about the landscape being a mere inert primitive lacuna or pause in the urban of development of its territory. In 2016, Brussels Region commissioned a large scale urban renewal project for the L28 area in Molenbeek and Anderlecht, Brussels. The project was assigned to the consortium of three Brussels based offices 1010, Taktyk and Alive Architecture.

On the first day of "Studio\_L28", architect and urban planner Nadia Casabella from the office 1010 presented her research work on time and mobility and the idea of a metropolitan hub at the West Station. She formulated two research questions for the studio: (1) How can infrastructure become more like a civic hub? (2) How can time become an active part of urban development? At the time of Nadia's presentation, sound had not yet caught the attention of the team working on the analysis and definition of the project for urban renewal.

If sound does attract the attention of Brussels policy makers and users of Brussels public space, it is usually in the context of noise and vibration control. Marie Poupé, head of the noise and vibration control department at Brussels Environment (BE) explained how Brussels wants to control noise pollution by reducing its decibel levels. Marie illustrated this approach by some concrete situations. She explained how her administration and other acoustic experts are mostly consulted only in the later stages of planning and design processes, when it's too late to intervene structurally. With Marie's presentation it became clear that, although sound is among the most discussed aspects of city living in Brussels Capital Region, it stays one of the least discussed in a context of urban planning and design processes.

Following the presentations of Nadia en Marie, Caroline Claus opened up the discussion to some alternative sonic perspectives with a presentation on sonic territories. She started her presentation with an introduction to her work and research on the transforming public space in Molenbeek and Brussels. An introduction to a critique on the "soundscape–" concept, saying that this approach would be too anti–urban (Nadrigny, 2010), brought her to a presentation of alternative sonic approaches such as the sonic ecology of Jean – Francois Augoyard and Henri Torgue (2005), the idea of "sonic territories" as explored by Brandon

Labelle (2010), the concept of "vibrational nexus" as researched by Steve Goodman (2010), and the "sonic rupture-" approach as developed by Jordan Lacey (2016).

The first seminar of "Studio\_L28" ended with a transversal discussion organized by public school for architecture Brussels. The introduction to the official planning revealed some ambition for a more active approach of the urban landscape. But it also pointed to a critical need for an alternative sonic approach. The presentations of Nadia and Marie raised the question of noise control as the only sonic approach for urban regeneration. As urban (sound) designers and sound artists with expertise in initiating social- cultural processes that make a difference in the on-going creation of sustainable and attractive cities, we observed a critical need for reflection and discussion on the sonic dimension of urban regeneration. Theoretical insights, questions and ideas on the position and role of sound in the development of the L28-area, were explored on site through field work and collective reflection during the afternoon session of the first day of Studio\_L28. On site we discussed and mapped different components shaping the existent sonic environment of the area. Insights and some first ideas were tested and discussed during a soundwalk from Beekkant Station to West Station. While walking along the line L28, sound artist Stijn De Meulenaere demonstrated some basic recording methods and techniques.

# 2.2. Cartography

Following Augoyard and Henri Torgue (2005) sonic mapping demands an understanding of the environmental conditions leading to a particular sound. In "Studio\_L28" we approached sonic mapping not merely as representing the movement and experience of sound in space: we think maps inevitable chart how cultures perceive not only the urban environment but also how they live in cities. A typical approach to sonic mapping we wanted to test on site, is the survey, the creation of a catalog, which is essentially a record of all kinds of sounds and sonic experiments in a defined urban space and time.

For the second day of "Studio\_L28," we invited Peter Cusack, a London and Berlin-based field recordist, musician and sound artist with a long interest in the sound environment of places, to talk about mapping techniques he uses for the observation of large urban areas. His sonic approach is based on the idea that people's personal and social interactions with urban areas, including new developments, are deeply affected by the local soundscape. For Peter, city soundscapes are very dynamic and he thinks it's important to know the sounds of an area, also by their spatial diffusion. He uses maps to distinguish between the momentary and the underlying sonic characteristics of an area. Peter considers them both important, not least for predicting and constructing possible future combinations. He concluded his lecture by showing some word clouds based on data obtained from his comparative survey

Favorite Sounds.<sup>2</sup> According to Peter graphical representations such as these can be part of our navigating and intervening in urban space.

Even when not displaying contested territory, the production of a sound map is inherently political. Dr Burak Pak, architectural researcher and coordinator of the Design Studio at the Ku Leuven Faculty of Architecture in Brussels and Ghent, talked about critical cartography and its potential for urban sound design. Countermapping, a niche of the discipline, he described as countering an accepted map or an accepted set of relations within an existing map. Burak confirmed that we need a transdisciplinary approach to challenge dominant sonic approaches to urban development. Via a reframing of Nancy Fraser's (2009) tripartite theory of justice, Burak demonstrated and suggested some alternatives for the categories of knowledge and approaches we use for recognizing, representing and redistributing qualities of urban spaces.

In the afternoon we went outside for a second field recording session on site. Peter and the participants made several recordings we later uploaded to project maps on *Favorite Sounds*<sup>3</sup> and *Radio Aporee ::: Maps* project.<sup>4</sup> Peter experienced this session as the most valuable part of our second day:

Even in the few hours spent there it was possible to recognise that the existing area (pre-development) is sonically rather varied. Busy streets quickly give way to narrow paths with gardens. Transport hub areas with all the associated sounds dissipate across large open spaces. Some places are sonically intimate; others give access to a sense of distance. In this area one moves from one to another regularly and quickly. For me these kinds of ideas – those still to be heard in the existing areas – should inform any new development. In my view planning should aim to maintain sonic variety of the areas that it touches. (Cusack 2016)

# 2.3. Urban Design

Thinking about urban sound design for future public space along the line L28 encouraged a different understanding of the designers' place in the social physical world. Approaching urban space through sound opened up to a more critical approach to urban design as we know it. Engaging with the sounds and music present in an urban environment, enabled us in earlier projects to realize people's existence (including ourselves) as part of a transforming social material environment. How can urban sound designers contribute to urban

<sup>2.</sup> favouritesounds.org

<sup>3.</sup> http://favouritesounds.org/?projectid=53

<sup>4.</sup> https://urbansounddesignblog.wordpress.com/2016/10/14/radio-aporee-project-l28/

transformation? How can they take responsibility in terms of negotiating, enabling relationships so that people can perform, move through, and experience sounds in an urban environment? And by doing so, how can they establish a relationship with conflicting individuals, groups and thus the cultural, social and political context.? Can they intervene in the urban environment by changing its sonic fundamentals or maybe just some elements? Can urban sound designers shape or contribute to inclusive urban space? What is the role of sound artists in this process of intervening? Can we connect disparate sonic topographies with subjects, creating space for new understanding and experiences?

Architect and scholar Petra Pferdmenges opened the third seminar of Studio\_L28 with a presentation on founding her practice *Alive Architecture*. Petra explained how observing and drawing people who appropriate the public realm informed the development of her architectural practice. She revealed how she was triggered by drawing "lived space," a category she uses for researching the ways people experience the spatial dimensions of their day-to-day existence, how her practice evolved through observing and re-producing "lived space," into co-producing together with other people. Petra concluded her talk with a presentation on her most recent project *Parckfarm Tour & Taxis*<sup>5</sup> explaining how *Alive Architecture* became a practice that is initiating "lived space" by curating other people to produce the public realm, hereby allowing for the transformation of an ephemeral event into a durational project.

After Petra's presentation Thomas Laureyssens, artist, interaction designer and Ph.D. researcher at Ku Leuven MAD-faculty, talked about the role of shepherds and platforms in urban intervention design. Contrary to Petra, he sees himself rather as a tool maker than as an activist. He explained how he makes tools for people and that for him, it's up to the social activator to bring it to live. He illustrated his approach by talking about *The Sparrows of Hasselt*<sup>6</sup>, a social urban game based on three interactive whistling sparrows. The goal of this game is to highlight the "hosts" of the sparrows by giving them the task to promote their sparrow via social media, events and audio and visual signs. Thomas explained how the project can be understood as an example of "urban platform design": the idea of not only adding one intervention but rather spreading interventions across the space. He used this multiple or what he termed the "modular component network-" approach, in several projects to trigger various factors of community participation such as perception, relations, sense of control and empowerment. Thomas concluded his presentation with some ideas and suggestions for a more interactive sound environment.

The final presentation on day three of "Studio\_L28" was given by Nicolas Remy, Ph.D. researcher, lecturer at the Department of Architecture of the University of Thessaly in Volos, and member of The Research Centre on Sonic Space and the Urban Environment (CRESSON).

<sup>5. &</sup>lt;a href="https://www.vai.be/nl/project/parckfarm-brussel">https://www.vai.be/nl/project/parckfarm-brussel</a>

<sup>6.</sup> http://www.demussen.eu/

His work deals with the conception of "ambience" as well as a method and a tool for architectural design. More specifically, he focuses on the relationship between physics, perception theories and architecture. At the studio Nicolas introduced us to some strategies for urban soundscape design by explaining some tools he and his research–colleagues have developed at the CRESSON Research Centre. *Esquis'sons!*<sup>7</sup>, is a research project on the sound qualities of intermediate facade space of building. It can be understood as a parametric tool for sketching the sound qualities of future projects and testing the sonic impact of design decisions. The tool combines a 3D spatial model with a real time 3D virtual sound environment. It can be used for cross–analysis of the physical dimensions of built space, the sound environment and user's perceptions of urban space. Nicolas finished his presentation by questioning the perception of sounds, hereby opening up to ideas on sounds as possible design tools, intentions, and strategies to listen differently.

In the afternoon session on site, participants outlined their first ideas for public urban sound strategies. In this stage of "Studio\_L28" some participants had difficulty to produce, hierarchize and visualize their observations and intentions. In dialogue with Thomas and Nicolas we discussed some first lines of urban sound strategies developed by the participants on site. The visit to the Brussels West Station site brought Nicolas Remy to the following observation and suggestions:

The space situated at the level of the train platforms and the subway tunnel is an acoustically complicated space. It is crossed episodically by lines of 'sound leakage' constituted by the railway vehicles. These lines are impassable obstacles for the moving body in action. They create sound masking on others activities (temporal windows), otherwise any sound produced inside this space is strongly reflected on the immense facades of the buildings. On the other side, the very urban sounds of the boulevard (traffic cars, washing car station) are very present but not visible because of the vegetation (can we hear any sounds of nature?). The access for people to this area is denied due to security reasons, because of development projects that want to privatize this neglected space. Space design and sound design should support the same idea and work on the physical and sound strata of space and on the ways of crossing and connecting them (with the body or/and with sound). Temporality of the soundscape in also a major issue and might be thought as the collage of sound sequences in which trains and metro passages are expressing the rhythm of the neighbourhood. (Remy, N. 2016)

## 2.4. Site Sounds

Sound art engages with public urban environments in various ways. Sound artists working in public space develop sonic strategies to analyze, reflect, challenge and/or improve the quality of sonic environments and the listening experience of people using the space. We think, the expertise and knowledge developed through artistic practice can inspire and may lead to new ideas on public urban space development (Claus and Kijowska, 2015).

Flavien Gillié, a Brussels-based sound artist and socio-cultural worker, explained in the final seminar some of his strategies for dealing with public urban environments. Flavien presented three different sonic approaches: the first one is about collecting sounds what he defines as field recording. Flavien emphasized the importance of listening and the positioning and selection of recording material. He considers the archiving of field recordings as important too. Flavien explained how a feeling and probably a fear of loss, together with a memory of moments and places, were the reason for his collection and how the use of geolocation via *Radio Aporee ::: Maps* gave more coherence to it and made it possible for him to work on what he defines as a "relational memory." The third and last approach Flavien talked about was the performance, an approach he considers as completely different than field recording. As a performer, Flavien prefers to take distance from the recordings, he considers as raw material. In a performance he plays with filters and mixes his field recordings in an impure way. On stage he experiments with movement, natural drones and error: what is rejected becomes important. For him performing is about creating a new imprint of the urban recordings and being disrespectful in contrast to his recording and geolocating practice.

Robin Koek, composer, musician and sound designer closed the final seminar with a presentation on sonic strategies based in field recordings, and developed from the perspective of a composer. In his work, Robin explores states wherein acoustic, digital and analog signals intertwine and merge into bodies of sound. His compositions follow a line of research in acoustic ontology, urban transcription and the spatial potential of sound. He currently works on a series of sound structures and systems grounded in city soundscape phonology, electronic processing and scores for instrumental improvisation. At "Studio L28" Robin presented some of his projects and explained different approaches he uses such as capturing, transforming and projecting sonic space. The project "Lines of Hearing," is a composition he made for bass clarinet and electronics (Koek, 2013). The title refers to the sonic horizon that he used as a metaphor, like a physical horizon. The work explores audible horizons of specific locations of New York and Amsterdam and uses open-source geo-tagged field-recordings mapped in a virtual space. Another project Robin talked about was the project "Inner Noises", an 8-channel composition exploring the hidden resonances produced by the urban life (Koek, 2013). Robin explained how, by capturing the urban activity with surface and boundary microphones, he wanted to tune in to the resonating body of a city. The idea

was that urban sound spaces of different cities across the globe would collide and fuse into an immersive sonic environment hereby allowing the listener to hear it from the inside.

Flavien and Robin combined and mixed their methods and techniques for an improvisation session at the end of day 4 of "Studio\_L28." They opted for an abstract improvisation using field recordings they and Caroline collected earlier that week. The recording can be used as a sound map for navigating a possible future L28-area. Participants of the studio finished the workshop part of the studio with a proposal for urban sound strategies. Some participants chose for a tactical rather than a strategic sonic approach. The first presentations of their ideas took different forms such as a plan, a performance and a participatory intervention. By way of conclusion, based on their proposals, we composed a sound walk for a final discussion and reflection on their work and future plans.

#### 3. Conclusion

"Studio\_L28" was conceived as temporary urban platform for transdisciplinary research on the role of sounds and sound art in public urban space development along the Brussels Western ring railway (section L28). In four sessions, landscape and urban designers, architects and musicians, sound artists and performers explored the role of sounds and sound art from a fourfold perspective: territories, cartography, urban design and site-sounds. From these perspectives several possible sonic strategies were proposed, discussed and analyzed on site. Which territories deserve attention when considering urban sound design? How to create a map based on urban sound observations? How can a mapping of urban sounds contribute to the development of new approaches for transforming public urban environments? How to create a sonic cartography that allows you to negotiate and break into the design process? How may a designer shape the sonic environment of a future public space and the possible experience of its users? At the time of this writing the development of Brussels Western Station arrives at a next phase with the finalization of the competition for defining the masterplan. Until today the sounds of the transforming area has attracted hardly any attention of the architects, engineers and urban planners involved in the planning process. When redefining and designing future public space along the railway line L28, designers and planners invariably stress the visual and not the sonic aspects of their projects. They have minimal attention for the aural consequences of their interventions; sound tends to be considered mainly as an inevitable byproduct of traffic, industry, commercial activity. Based on the collected insights and idea, and the proposals of participants at the studio, we develop a guide for future sonic interventions that will be proposed as an additional planning tool in the next phase of the development of the L28-area at West Station.

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