

RESEARCH SOUND THROUGH NARRATIVE

The Sound of Silence

Self-Assessment on Research Methods

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I INTRODUCTION

"Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating".¹

This so-called 'Position Paper' is an essay in which my personal graduation process is reflected through the scope of methodological approaches. Through this paper a critical understanding will be constructed of the different architectural systems of knowledge which have been applied during the graduation process thus far, recognizing their various potentials and limitations.

Looking back at the lecture series, a certain awareness has been made about the design process being derived from fundamental actions. By systematizing one's own approach, you minimize random placement of these actions and integrate them within a design-methodology. One has to still be critical of such methodical moves, because design should still be responsive to certain specificities in which each project takes place or intervenes within.

By setting up a systematic process, opportunities for a focused design are facilitated by a set of deliberate moves. This can be referred to as a code of design, and an attempt to develop a design methodology².

Fundamentally, the final design identifies itself back to the actual spaces that are created, and how one would experience the volumetric projections in a composed space. These conditional moves permit the incorporation of various elements such as sound, materiality, light, movement, whilst acknowledging and conveying the experience of the designed spaces in the context of the existing conditions and constraints of the graduation project.

This idea of systematizing the graduation process is of great importance since it enables the possibility to critically move back and forth between various aspects of the research. In the first half year the graduation project focusses on the exploration of one of the unapparent phenomena of space: the soundscape of the city. In my project I am researching and experimenting how the soundscape of the city challenges the boundaries of space and how architecture can be implemented to provide an 'intensified' sonic experience. This phenomenological approach aims to reveal the surprising interconnectedness between sound and architecture.

The context of this research is within Bogotá, the capital of the Republic of Colombia, which proves to be a fruitful exhibition of a noise polluted urban environment. The city is overloaded with a disorientating soundscape which proves for a weak auditory culture that undermines the appreciation of architecture as well as weakens the communicative dynamic of the built environment³.

My aim would therefore be to place an emphasis on this interconnectedness. Through sound a site can be grounded, better yet define the presence of the buildings that remain in unison with the material and immaterial exchanges that are performing in and around the site.

Given the visually dominated culture in which we live, my position states that the spatial experience has forgotten about the nature of the built environment, namely the auditory sensation. Consequently an aural architecture concerns itself with the experience of sounds that have been changed by the physical qualities of a space. "All sound exists in a space; there is no spaceless sound"⁴. Through this topic a guiding research question has been defined: "How can surrounding sounds be made apparent through architectural form?"

¹ Cage. *The Future of Music: Credo* (1937)

² Di Mari, *Conditional Design* (Delft, Bis, 2016), p.9

³ Rasmussen, *Experiencing Architecture* (MIT, 1962), p. 33

⁴ Blesser & Salter, *Aural Architecture: The Invisible Experience of Space*, (Oase 78, Delft, 2009), p. 50

II RESEARCH-METHODOLOGICAL DISCUSSION

The graduation process was initially triggered by a purely intuitive approach which entailed the physical engagement with the context of a residential neighbourhood in Bogotá. The exploration of the district was carried out through the act of walking and observing events in a natural way. An everyday domestic object would be the leading device; enabling us to spectate, as well as perform in a place which is to be observed without any preconceived ideas – genuinely reading the territorial space.

From this approach, new objects were identified and discovered within the public space through which a certain personal fascination evolved. The discoveries from these ‘intuitive’ findings were then supported by a series of rational operations.

In my case, sonic urbanism is a fascination which arose from the simple interaction with the local environment through the use of a ‘teaspoon’. The object facilitated interactions with materials, patterns, people, dogs, infrastructure, and above all sound. Through the use of video-montage, the experiment was documented. The footage was then collected and observed with a fresh eye. Having the method of montage available to us, allowed us to ‘remix’ the information which we captured to construct new nuances, which would further stimulate the notion of soundscape, and reveal the way local inhabitants react to the spatial-acoustic conditions.

The on-site research was resumed through mapping, photography and sketching. Yet, since our return back from Colombia, my research has been focussing on how to map the non-material aspects of space. The mapping process started to deconstruct the spaces into elements that produce sound, and elements that influence the character of sound.

Since the idea was closer to the phenomenological experience, the use of spatial narrative was introduced as a tool. Perhaps the most unconventional method for discovery was the use of poetic metaphor. As used by the architect Alvar Aalto, who used metaphor as a tool to reach new understanding in an existing condition; the use of metaphor to interpret acoustic conditions.⁵

Using verbs as a design tool also reinforces the idea of design as an active and fluid process – one where the operations illustrate an evolution of changing architectural configurations, inherently showing how the approach could accommodate varied circumstances. The goal of this is to encourage abstract conceptual thinking where the result of spatial interplay and experience is paramount.⁶

Richard Serra’s Verb List (1967 – 1968) stimulates the use of verbs, as actions to relate to oneself by inspiring and/or guiding written stories that are driven by this specific action word. Serra’s list, which includes ‘to fold’, ‘to modulate’, ‘of tension’, ‘of entropy’, carefully balances what can be read as a systematic approach along with its effect on the consideration of spatial character, or essence. It is at once defined and yet limitless in what it could yield formally and experientially.⁷

Following the methodology of Klaske Havik, the territory of sound was further investigated through the act of ‘spatial narratives’. By choosing certain verbs, you forcefully constrain yourself from any ‘distractions’, and therefore can focus on the true experiential essence, which is guided by a consciously chosen verb. This ultimately shows how language can invoke form, as well as one’s experience or interaction with it.

⁵ Cohen, *Other Waves: The Acoustics of Alvar Aalto* (University of Florida, 2000), 173

⁶ Di Mari, Yoo, *Operative Design* (Delft, Bis, 2012), p. 10

⁷ Di Mari, Yoo, *Operative Design* (Delft, Bis, 2012), p. 8

III RESEARCH-METHODOLOGICAL REFLECTION

According to Pallamsaa, “In the modern era, architectural design has been self-evidently regarded as a discipline of the eye and the visual media. Yet, we are beginning to realize that this art form takes place only partly in the visual realm, and even the most significant visual impacts may well be experienced unconsciously, diffusely and peripherally, not in a conscious and focused manner.”⁸ Thus, through experiential descriptions the designer is enabled to touch upon the more ephemeral aspects within architecture and our built environment.

It concentrates itself around the very meaning of architecture, but which is hard to describe in purely factual terms. According to Havik, “the traditional tools of architectural research, often foregrounding rational and formal modes of thinking, fail to address the fundamental ambiguities of architecture, (...) fields of tension which relate to the questions of how architecture is experienced, used and imagined”.⁹

A similar relationship exists in the case of soundscape, which deals with these phenomenological ambiguities such as the experiential and the perceived space realised through sound. It's a direct influence on our atmospheric experience, apparent or unapparent as it may be. One act of literary analysis can be exemplified through narratives as follows;

‘As you move through the covered arcades of the park, one feels the sound of footsteps increase, the sound is intensified, and suddenly the footsteps are linked to strong echoes. The sudden sense; the acoustic texture of the space defined by the transition from a flat covered area to a curved one.’

‘This art-gallery had a domestic atmosphere; with its felt-covered furniture, and deep pile carpets the space felt like a home, yet the space had nothing similar to a home. It was the subtle muffling of high-frequency sounds which creates an aural sense of warmth’.

‘The cathedral was the warmest place on this rainy late-afternoon, yet paradoxically the space had a sense of coldness to it. Was it the cool marble floors, the large glass-surfaces which created an echo and actually increases the high-frequency sounds?’

These literary texts guide not only our sense of reality, but also enhance our imagination. In this sense the two experiences merge and formulate a memory of not only space, but also of atmosphere. To define such a phenomenological experience, one cannot define a work of architecture without triggering vibrations in its place; defining the specific gravity of the ground it stands on¹⁰. Such sonar-sensory experiences would be difficult to translate and communicate through drawings.

As Henry Torgue describes, sound is shaped subjectively, meaning that every individual perceives the soundscape differently according to their auditory capacity, their psychology and cultural background¹¹. This proposed idea correlates with the use of a literary analysis, as it attempts to grasp the human embodiment, based on first person encounters. Using an objective method such as drawings, would automatically pre-define the mental-image and thus weaken the sense of imagination.

On a more abstract note, I would like to argue that the communicative power of spatial narratives transcends the physical ‘exterior’ world. As Leitner argues, sounds becomes part of our body – an internalized phenomenon, thus crafting new interiors within us¹². Meaning that our perception is based on our ‘listened’ space, which takes on the architectural dimensions and proportions accordingly. The

⁸ Pallamsaa, *Urban Literacy, A Scriptive Approach to the Experience, Use, and Imagination of Place* (Rotterdam, Nai010, 2014), p. 6

⁹ Havik, *Acts of Symbiosis: A Literary Analysis of the Work of Rogelio Salmona and Alvar Aalto*, (Delft University of Technology, 2017), p. 3

¹⁰ Zumthor, *Thinking Architecture*. (Zurich, Birkhauser, 1998), 37

¹¹ Torgue, *L'oreille active. Les Relations à L'Environnement Sonore dans la Ville Quotidienne* (Grenoble, 1985)

¹² Fowler, *Architectures of Sound*, (Birkhauser, Basel, 2017), 75

synthesis of this is that this space (Headspace, according to Leitner)¹³ is an expansion of the aural, pushing beyond the acoustic horizon, into other territories and dimensions. Representing this cause and effect through a scriptive approach can hence reinforce our intentions of pursuing the complex intellectual, experiential and emotive dimensions within the research and design process.

IV POSITIONING

*'The fact that the Modernist idiom has not been able to penetrate the surface of popular taste and values is due to its one-side visual emphasis; Modernist design has housed the intellect of the eye, but it has left the body and the other senses, as well as our memories and dreams, homeless'.
(Pallasmaa, 1996, p. 10)*

During Havik's lecture, she defined Narratives as a methodology to be able to describe and comprehend experience, use, and imagination. Words according to her show how people experience space through the use of verbal articulation. Havik specifically highlighted the following set of literary tools which enable to describe, transcribe and prescribe places within our existence: poetry, metaphor, character, narrative, and scenario.

Each tool may be implemented as a departure point of the research and design process, yet the idea of narrative may be an instrument which is effective in different phases.

For instance 'poetry' can be a translation of how something phenomenological appears. As defined by Patrick Healy; poets are born phenomenologists, noting the things that 'speak' to them. A poem can furthermore provide for a rhythm which makes the starting point for the design.

'Metaphor' has the potential to provide a guiding theme. As for example in Alvar Aalto's case, who starts his projects with a strong metaphor to frame his design concept.

The notion of 'characters' unlocks the ability to create, as Havik describes, 'spatial biographies', which distinguish the different uses of the city. A character may be a user, but may also be an element part of the city, or part of a building.

'Narrative' as a tool is best described by Libeskind for his design of the Jewish Museum in Berlin. Namely, that narrative is used to inform the design. Narrative helps to define a story, an experience, a beginning, an end, or even a cliffhanger.

Finally, the 'scenario' tool provides a method to link various episodes together. It could be an act of montage which maps the various actors and the spatial qualities in which they perform. It can be used to describe observations, but also help to generate scenarios that can be fruitful to test one's own design decisions.¹⁴

These tools are in my opinion extremely useful when it comes to aiding the architect to observe, translate and define spatial experiences. Spatial narratives can position the architect in a world with concrete definitions; words weaved together to create a series of images within a certain rhythm, which is then translated into an act of architecture or architectural research. Through narratives the architect is provided with means to (pre-) define architectural experiences before even having to diagrammatize or draw a single line. Meaningfulness is therefore put first, and then the built environment can be given form.

One could argue that drawings are capable of transmitting an acoustical atmosphere, but the play of reverberation, warmth of sound, tone, frequency, can only be simulated in narrative. It can only be in alliance with narrative texts and drawings, or even models through which an architectural representation can be made clear.

Acoustics in a phenomenological sense is the appreciation of orientation, sensation, and the experience provided by the soundscape which is an often neglected layer of a person's experience. According to theory of Blesse and Salter – The perception of sound is central to the observer in relation to sound and space. The invisible character of the space is the aural arena, which shapes the space of the observer¹⁵. Even defining the material qualities of the space, where for example there is an interplay between sound-absorbing and reflecting materials, requires a method which denotes the

¹³ idem

¹⁴ Research Methods Lecture – Klaske Havik

¹⁵ Blesser & Salter, *Aural Architecture: The Invisible Experience of Space*, (Oase 78, Delft, 2009), p. 54

overall quality. Understanding the necessity and the power of this phenomena, defines a self-position in which the power of sound-control can not only ground a space based on its site-specific vibrations, it has to also be able to stimulate and enhance the spatial experience by making the user aware.

By defining the aural layer as a phenomenological phenomenon; its magnitude in relation to the attention dedicated towards the soundscape within the built environment is definitely undermined. For this the conventional sequence of lines, planes and points defined through geometric principles does not have the capacity to solely portray the aural behavior. Sound has its center point in an infinite amount of places, and its boundary, beyond the human ear, is limitless. The role of the architect is to conceive the unapparent similarly to how a person embodies sound into its own 'interior' space. From within, the architect can intervene appropriately, without prioritizing the visual, but enhancing the spatial experience to its fullest potential.