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PRESENTER ABSTRACTS
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Urban Sound Planning And Design – An Emerging Transdisciplinary Field Of Research And Practice

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Today, creative and design-oriented strategies for working with the qualitative aspects of urban sonic environments are an underdeveloped knowledge-field and hence an unused source of information in the working hands of architects, urban planners and other environmental experts. The interacting co-existence of sound, space and the human mind is still a neglected topic of inquiry in our visually dominated world. Specific tools, tactics and strategies needs to be defined, developed and further refined to enhance the conditions for managing supportive, restorative and sustainable urban sonic environments where the life-quality and well-being of urban dwellers are increasingly taken into account. It is certain that a transdisciplinary knowledge development is required to proceed in this direction; from the broad field of architecture, planning and design to the specifics of neuroscience.

1. EXTENDED ABSTRACT

1.1. BACKGROUND

On an academic and practice-based level research and professional competence have hitherto mainly dealt with the physical and measurable aspects of sound. The focus has often been on the negative effects of noise and how to protect us from hazardous sound-exposure through the construction of aural fences and buffer-zones of different scales, from ear mufflers to sound-absorbing construction elements or protecting walls, in order to hinder the transmittance of unwanted sound waves to reach our ears, bodies and minds. One prominent tendency of our time is that we continuously extend the knowledge of how to deal with the problems of both indoor and outdoor sounds but do not have the equivalent competence in regard to how to work with the complexities and qualities of urban sound from a creative and design-driven perspective. We still lack important insights and means to deal effectively with this subject matter in architecture and urban planning practices on an everyday basis.

Some scholars claim that we need acoustic city-planners who are responsible for the overall sound-planning of a city; an expert who is active in developing and implementing concrete action-plans to improve the sound quality of urban environments and raise the general sonic awareness among inhabitants (Hellstrom, 2003). This is not only an intriguing thought but actually is a scenario that doubtlessly will be realized in a near future just because our steadily urbanizing world is getting louder every day and requires stabilization. But still, practical and specific guidelines are needed that includes a profound and transdisciplinary competence concerning the sonic material itself and its connection to the complexity of human experience, if we want to get operational.

1.2. METHODS FOR QUALITATIVE SOUND ANALYSIS - A STEP TOWARDS URBAN SOUND DESIGN

One entry point to this topic of inquiry is through the exploration of means of communication as a way to understand the particularities of sound, space and perception. Being able to share a communicative platform is central to the field as this emerging field of research and practice in the long run will gather competences from diverse professions.

In my doctoral research-work I have sought for and explored various methods for describing urban sonic space with the intention to develop strategies for thinking and action that may have relevancy for spatial and design-driven practices (architecture, urban planning, landscape design etc.). The work has an interdisciplinary approach as it blend various categories of information; qualitative and quantitative, visual and aural, written and non-verbal descriptions in an elaborative and unconventional manner where a great deal of emphasis is put on the communicative aspect (see illustration below of some of the active tactics used in the project) of the spatial and sonic characteristics of an urban district in Stockholm, Sweden.

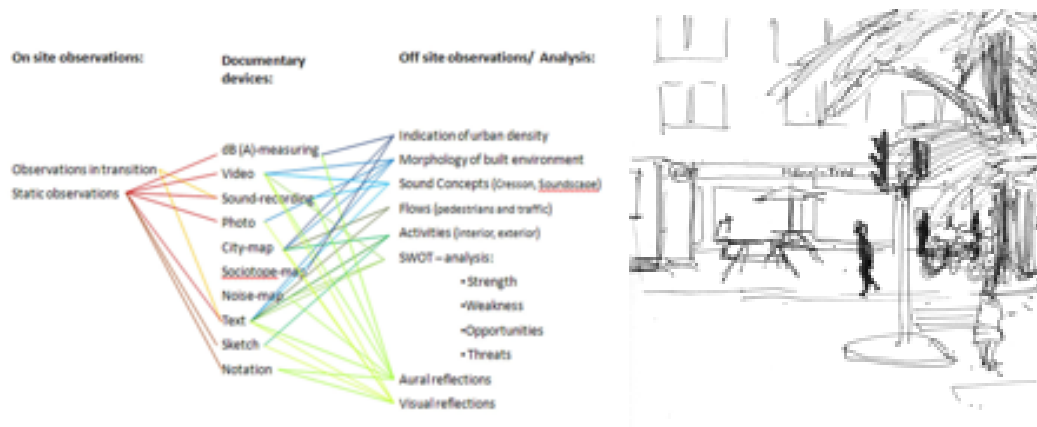
1.3. FUTURE RESEARCH

The fact that we are neurologically affected by the character and quality of the everyday spaces we continuously are moving through is today unquestionable. The question is: in what way? One challenge, as I see it, is to connect studies on urban sonic space with studies of neurological processes in order to find

out more about how we react on complex sonic stimuli while experiencing contrasting and various sonic environments of a given urban context.

For example; which are the neurological reactions and processes in the brain of a person exposed to disparate sonic qualities of a dense urban situation while moving through that particular space, compared to someone experiencing a homogenous and unchanging sonic entity of that same dense urban situation? In short, can we study the intricate relation between sound, urban space and the human mind by eliminating the boundaries between architecture and neuroscience?

1.4. ILLUSTRATIONS



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3. AUTHOR BIO

Nina Hallgren holds a Master in Architecture from The Royal Institute of Technology, KTH School of Architecture and the Built Environment in Stockholm, Sweden. She graduated from KTH in 2008 with the diploma work *Transforming Urban Space - the loss and reconstruction of sound and identity*, in which she explored the intersection between architecture, sound, identity and cultural meaning in relation to an extinct neighborhood in the outskirts of Barcelona, Spain. In 2009 she began her doctoral studies at KTH School of Architecture in collaboration with Konstfack University College of Arts, Craft and Design. Her dissertation project *Urban Sound Design – methods for qualitative sound analysis*, search an integrative understanding of urban sonic space by developing methods for qualitative sound analysis as well as proposing creative strategies for urban sound planning and design.