

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

| Personal information | | |
|---------------------------------------|---|---|
| Name | Noor Astrid Boreel | |
| Student number | 4372808 | |
| Studio | | |
| Name / Theme | Architectural Design Crossovers Graduation Studio (AR3DC100) / The heterogeneous City - London | |
| Main mentor | Johan van Lierop | Design: Architecture and intersecting disciplines |
| Second mentor | Florian Eckardt | Building technology |
| Third mentor | Joran Kuijper | Research: Theory and territories |
| Argumentation of choice of the studio | <p>The possibilities of multi-scalar and multi-disciplinary research and design within the city of London is broadening my field of architecture knowledge and its intersecting disciplines. In the bachelors and previous master projects the designated design or research locations were consistently focussing on familiar surroundings such as Rotterdam, Delft or Amsterdam. The intricacy of the build environment is acknowledged and tackled with a project of this size and European position.</p> <p>Secondly, as a research studio we are examining through different lenses such as urban/architectural morphology, identity, environment and ecologies. It is interesting that within the constraints of this collective framework of the studio, I am able to develop my personal architectural fascination for architecture through sensorial experience to a research frame and eventually formulate a design proposal fitting to my chosen location in London. This will be a new and challenging task to complete.</p> | |

| Graduation project | |
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| Title of the graduation project | Curating the spectrum of city intensities. Between vibrant and tranquil: The unravelled sensory experience in the urban public realm |
| Goal | |
| Location | The three underdeveloped plots within The Borough of Southwark are located along a path of coordinated train tracks. The site is part of The Central Activities Zone south of the Thames in London, United Kingdom. |
| The posed problem, | <p>In the eighteenth century the city centre of the metropolis London was the most chaotic due to its immense industries and excessive noises and smell, a forerunner of the current 'fast-paced life'. A still growing intensification of systems of work, technology, density, production, and consumption all contribute to the city becoming busier and louder. These intensified systems are drivers that cause a lot of sensorial stimuli and have an impact on the well-being and health of its participants. For example, overstimulation of the senses can cause stress and anxiety which will in turn cause self-isolation from the public life. The impact of this 'fast pace' life for its participants in economically developed industrialized countries, including the United Kingdom, has been raised by multiple architects and planners since the twentieth century as a tipping point wherein not only private but also public architecture and urbanism should intervene as a counterpart and allows to disconnect or slow down from this acceleration of city life.</p> <p>The root of the problem is in the experience of the city intensities. It appears that there is an imbalance between vibrant public spaces and more tranquil public spaces in London's Central Activities Zone, which encompasses the ten core boroughs and the highest density of people, dwelling and activity. This disparity in space will result in an imbalance in the sensory systems of its participants, resulting in a disregard for the body and its senses.</p> |

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| <p>research questions and</p> | <p><u>Main Question</u></p> <p><i>How can the use of a sensescape in the urban public realm evoke an inclusive, embodied and multi-sensorial experience for its participants, achieving balance throughout the spectrum of city intensities?</i></p> <p><u>Sub-questions</u></p> <p><i>// How do distinct contextual networks and layers make up the spectrum of city intensities?</i></p> <p><i>// Why and for whom is the balance throughout the spectrum of city intensities important for the impact of the accelerated metropolitan mode of living?</i></p> <p><i>// Which atmospheric and spatial conditions from urban public exterior and interior spaces can be identified to help an inclusive, embodied and multi-sensorial experience?</i></p> <p><i>// How can this atmospheric or spatial perception of the urban public realm be translated into a programme and design for a sensescape?</i></p> <p><i>// Where should the design of a sensescape be introduced in London's Central Activities Zone?</i></p> |
| <p>design assignment in which these result.</p> | <p>The potential architectural challenge is to design a sensescape that creates an inclusive, embodied and multi-sensory experience in order to curate a balance within the vibrant and tranquil public spaces on the spectrum of city intensities in The Central Activities Zone in London. The design outcomes through the different scales that are presented in the next paragraph will comprise a critical reframing of architectural design within the urban public realm.</p> |

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| | <p>Scale XL: A set of guidelines to identify, protect, enhance and create potential sensescapes for implementation in the urban public realm of cities in economically developed industrialized countries.</p> <p>Scale L: A network of sensescapes in London's Central Activities Zone that can restore the balance between vibrant and tranquil zones.</p> <p>Scale M: A path along the spectrum of intensities with architectural interventions mapped out in a masterplan with relative vibrant and tranquil spaces, as well as their interaction.</p> <p>Scale S: A sensescape design, incorporating an inclusive building with public programme and public open space, which demonstrates the aspects of designing with the senses to enhance the participants' experience and, as a result, their well-being.</p> |
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Process

Method description

The methods and techniques that have been and will be used are as follows:

// With an extensive theoretical and historical literature review the phenomena of city intensities, sensory perception and public space will be examined. Associated themes, such as atmosphere, embodiment, psychogeography, vibrancy and tranquillity in urban space as well as the occurring problems and their impact in London bounded to these themes will be included in this research for a better understanding of the theory, relevance and for an insight in the different perspectives of designers, theorists and psychologists.

// Psychogeography, drifting by means of unconscious explorations of urban environments, as empirical research method will be used to help unravel the networks and layers of city intensities in the exterior public space of London. The area of interest and starting points for the drifts are set through several interviews with London residents and architect Maccreeanor.

// During the drifts at day and at night, personal observations will be mapped, photographed, sketched and recorded to eventually document the sensorial layers in smell, sound, texture, time and visual and atmospheric qualities. Conclusions for constructing a sensescape and a potential site location for a masterplan with architectural interventions could be drawn from these drifts.

// A manifesto will be composed as part of the research portfolio with guidelines that were informed by interviews and case studies. The interviews not only formed a huge inspiration for implementing the inclusive layer to the sensescape design, but also, they will provide more information on the perception and utilization of the different senses in the public realm. By producing a questionnaire for people with a sensory impairment, the expertise and individual experiences of the individuals will be gathered to get a grip on what is required, desirable and unwanted as programme and atmospheric and spatial conditions. Additionally, the differences in the experience of the exterior, the interior and the threshold spaces will be discussed.

The case studies of well-known buildings in the Netherlands are interviews on CD's from visually impaired people visiting these sites. The interviews give audible information on the different building typologies and how they deal with or lack in haptic and sonic design. Because individual perception is a driving force behind the project, it is critical to include such empirical data.

// In the systematic data analysis, with the use of GIS and datasets from the GLA, mapping through different scales of the Central Activities Zone of London will be conducted to provide cartographic information on geographical and experiential related data. This data driven research and cartographic mapping will explain the relation between the senses and space and may point to a problematic site of inquiry.

// 12 public buildings and sites as case studies in The Hague and Rotterdam are visited for measuring interior public space in materiality and textures, wayfinding/routing, thresholds, lighting and acoustics. This visual and auditory information, photography and recordings, will complement the manifesto through a more detailed and tangible building layer. The manifesto can be helpful in designing the scope for the sensescape and its experience.

// The past and contemporary architectural interventions linked to research and design for the balance of city intensities and the sensescape are studied through precedents. Other than the chosen case studies, these precedents focus highly on routing and experience along this sequence of spaces and therefore, may be experienced as both an artwork and a piece of architecture. These precedents could be seen as a foundation for future urban and architectural experiments addressing these thematics or context.

// With the writing of the research essay, shaping of the research portfolio and the literature review as foundation, a critical position towards these thematics linked to architecture will be formed. The main domains of anthropogeography, psychogeography and urban geography intersect in this research towards the design of the sensescape.

// A site analysis of the individual plots as well as the surrounding context together with the conclusions of the research will form a design scope that can be expressed through diagrams, 3D models, hand sketches, plans, sections, elevations and renderings. However, this visual narration of the design should be enhanced by more experiential and inclusive output such as physical haptic model making and sound, odor and material sampling.

Literature and general practical preference

Phenomenology

Psychogeography

Debord, Guy. The naked city [Map], 1957.

Joseph-Lester, Jaspar., Simon King, Amy Blier-Carruthers, Roberto Bottazzi. Walking Cities: London. Oxfordshire: Routledge, 2020.

Walter, Benjamin. The arcades project. Cambridge: Harvard University Press, 2002.

Perception of (sensory) space

Borch, Christian. Architectural Atmospheres. Basel, Switzerland: Birkhäuser Verlag, 2014.

Boyle, Sheryl. Sensory Readings in Architecture. Montreal, Canada: Centre for sensory studies.

Degen, Monica Montserrat. Sensing cities. Oxfordshire, England: Routledge, 2008.

Hall, Edward Twitchell. The hidden dimension. Garden City, New York: Anchor Books, 1969.

Havik, Klaske., & Tielens, Gus. Atmosphere, Compassion and Embodied Experience. OASE Journal, 91, 33–53. Rotterdam: nai010, 2013.

Henshaw, Victoria. Urban Smellscapes. Oxfordshire, England: Taylor & Francis, 2013.

Kang, Jian. & Schulte-Fortkamp, Brigitte. Soundscape and the Built Environment. Florida, U.S.: CRC Press, 2018.

Pallasmaa, Juhani. The eyes of the skin. Hoboken: John Wiley and Sons Ltd, 1996.

Zumthor, Peter. Atmospheres. Basel, Switzerland: Birkhäuser Verlag, 2006.

City intensities

Godefroy, Julie, Grant Waters, Ben Warren & Eleanor Ratcliffe. Tranquil City: Identifying opportunities for urban tranquillity to promote healthy lifestyles. Cities & Health, Vol 5: Issue 1-2, 138-144. London, 2021.

Koepnick, Lutz. On Slowness. New York City: Columbia University Press, 2014.

Maccreeanor, Gerard. Interview by author. City intensities. Personal Interview. Rotterdam, November 26, 2021.

Stonor, Tim. Intense relationships: measuring urban intensity. Architectural Review, Issue 1451, 2018.

Reggio, Godfrey. Koyaanisqatsi [video]. United States: Island Alive New Cinema, 1982.

Architectural Design

Urban space (concept)

Crankshaw, Ned. Creating vibrant public spaces. Washington: Island Press, 2008.

GLA, regeneration team. Expanding London's public realm. London, England: Greater London Authority, 2020.

Lefebvre, Henri. The Production of Space. Oxford, England: Blackwell, 1991.

Whyte, William Hollingsworth. The social life of the small urban space. New York: Project for Public Spaces INC, 1980.

Building (concept)

Erwine, Barbara. Creating sensory spaces. Oxfordshire, England: Routledge, 2016.

Jordans, Martijn., van de Kraats, Bastiaan. & van den Wildenberg, Marij. Architectuur door andere ogen. Wezep: De Kunst, 2012.

Lacey, Andrew. Designing for accessibility. London, England: Centre for Accessible Environments and RIBA Enterprises, 2004.

Thiel, Philip. A Sequence-Experience Notation-For Architectural and Urban Spaces. 1961.

Precedents Architectural interventions

Danish Pavilion on the Venice Architecture Biennale, Lundgaard & Tranberg Architects 2021.

Kunstmuseum in Den Haag, Hendrik Petrus Berlage 1935.

Shakespeare theatre in Gdansk, Renato Rizzi 2014.

The Therme in Vals, Peter Zumthor 1996.

Une voyage sans un destination in Paris, Nicolas Dorval Bory 2019.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A, U, BT, LA, MBE), and your master programme (MSc AUBS)?

To do research on and design a sensescape wherein experience is praised as a fundamental design tool, allows to better get grip on the ocular-centric obsession of the contemporary society and breaks with this one-sided pattern wherein conventional architecture and the built environment play a significant role. The design of a sensescape as a solution for creating a balance between different degrees of intensities on a spectrum in the urban public realm explores the curation of the heterogeneous character of a city centre and its impact on the people in it. The context of the Central Activities Zone of London is a test case for the research but on a larger scale the graduation project will be a step towards rethinking the position of buildings, and more importantly, their impact on the society. It therefore crosses the discipline of anthropogeography, a branch of anthropology wherein the relationship between human beings and their (built) environment is being studied. Additionally, it broadens the perspective in how to intervene in urban public space on a larger scale and therefore crosses the discipline of urban geography. The interdisciplinary character of the graduation project fits with the studio focus of Architectural Design 'Crossovers'.

The inclusive nature of the research shows that this experience will be shaped so that a heterogeneous group of participants can potentially be attracted to and identify with the sensescape, and that therefore any personal embodied experience matters. The stimuli and degree of its presence can be different for everyone, but a substrate can be created in which the right conditions regarding atmosphere and space have been formed. These conditions present their own set of technical building challenges which need to be solved in the process of design.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework?

Social Relevance

The graduation project might be an example of how an architectural intervention can re-establish a sustainable relationship between the society and their 'fast-paced life' by shaping the public realm around them instead of avoiding the chaos of the city life. Besides, the project is relevant as experimental research to better grasp current society's ocular-centric obsession and to break this one-sided pattern in which conventional public architecture and the built environment play a significant role. Instead of minimising sensorial stimuli in general, it promotes a positive approach to a complex but outbalanced sensory environment. This alternative strategy should be included in the urban planning of other metropolitan cities to make them more liveable and to raise awareness of the relationship between the built environment and the well-being of its participants.

Professional relevance

In the bigger picture, the designer's role is to respond to human mankind's sustainable and existential questioning. Rather than providing an existentially grounded material and spatial experience, architects have embraced the psychological strategy of advertising, of rapid

persuasion, and their architectural interventions have become image goods disconnected from existential truthfulness. Through this project, the responsibility of the urban and architectural designer is shifting by focusing on designing for impact and affect rather than architectural discourse itself. Designers should let go of their tendency to focus on sight as the most important sense for architecture and instead should try to create architecture that is inclusive of all the senses.

Scientific relevance

The development of urban space is an ongoing and complicated issue worldwide. This project contributes to the knowledge on how the public realm of the city should be shaped concerning an inclusive and sensory-centred society. This will allow the overemphasis on the intellectual, aesthetic, and conceptual aspects of architecture to disappear, making room for the tactile, sensual, and embodied essence of architecture to emerge. The knowledge gap between the built environment and its impact on its society is being narrowed by designing for the balance between vibrant and tranquil public spaces with a sensorial and experiential design approach. It lays the foundation for future research into the links between anthropogeography, urban planning and atmospheric building design.