

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	Koen Stam
Student number	4564634

Studio		
Name / Theme	Architecture Design Crossovers	
Main mentor	Johan van Lierop	Architectural Design
Second mentor	Jelke Fokkinga	Building Technology
Argumentation of choice of the studio	Design studio with cross disciplinary focus and lots of freedom to explore. Researched based and creating a deep level of understanding of a metropolitan and complex city like London.	

Graduation project	
Title of the graduation project	Symbiotic Thames: Rethinking the riparian condition through architectural interventions towards a more symbiotic relationship between the river and the city
Goal	
Location:	Five locations along the Thames waterfront within Greater London. Putney towpath, Tate modern park, Greenland Dock St. George's square, Lyle park Docklands and Barking riverside
The posed problem,	London holds a complex and intimate relationship with the Thames. The river has been engineered to provide specific services and functions to the city, but consequently without intention also out their daily lives and perception. As the Thames lost its functionality the waterfront has become obsolete and therewith losing ground for its existence. The Thames is 'broken'. The land and the water, thus the waterfront, are detached. This impacts the functional totality of London causing underrepresented issues to become serious concerns and demand to be

	urgently recognized. The Thames has changed into a physical border scattering the city and its public spaces.
research questions and	<p>0 How could an architectural intervention along the waterfront emerge as potential resource for a hybridized cultural and ecological space in London enhancing a more symbiotic relationship between the city and the river?</p> <p>1 What is the meaning and role of water in the perception and interaction with the urban collective of London throughout its development, and what should it become?</p> <p>2 What are the waterfront conditions and functionalities along the Thames, and where and why do they occur?</p> <p>3 How could an architectural intervention create a new meaning justifying the river's existence and create a more symbiotic relationship between the public and the river?</p>
design assignment in which these result.	<p>The Thames is London, and we need to start seeing that by listening to it and therewith rethink its meaning and functionality. A water/city synergy could only emerge in a zone mediating the two, the waterfront. But we need to extend its fluidity into the public realm and towards the river. The architecture could become the reconsidered waterfront. Architecture should explore and rethink the way we engage with the non-human and how we find back the identity, meaning and functionality of the river. This will be done through five interventions (see locations) working together in monitoring the river (river program) and extending the public realm (public program). Together they not only help regenerate the Thames as a whole but also allow Londoners to engage with the river in a new way.</p>

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Process

Method description

This research aims to rethink the riparian condition along The Thames by understanding the riverfront and the role of water, at the city and individual level, at first and based upon that evolve towards a more symbiotic relationship between water and the city through architecture. The methodological approach can be split into several elements. A theoretical and conceptual understanding and a design strategy. Simultaneously these operate respectively from macro to meso, to micro level, as a means to first understand and address problems on the bigger territory before uncovering the influence and flows on a micro level. Found knowledge from the literature, including reflection upon new findings, becomes a filtering lens for the design strategies.

theoretical and conceptual approach

The literature review establishes a starting point for the developing role of water in London. A visual representation will be provided through a series of historic and present images or paintings stretching along the waterfront of the Thames within Greater London. The individual role will be observed through street interviews of Londoners and photographs from Chloe Dew Mathews. These methods uncover the social role of water and initiate an understanding of the synergy between ecology and the city. After that, a thematic literature review from an ecological and urban perspective, combined with an understanding of the psycho-geological condition, will be consulted to define the meaning of waterfronts within this study. This will be followed by related literature about their fluidity, processes and limits. A fundamental theoretical understanding of waterfronts can now be established.

As the literature review progresses, a set of existing spatial waterfront appearances will be uncovered through intersections of the Thames. It initiates an understanding of various occurrences, edges and affordances and will be followed by selective cartography mappings within the tidal stretch of the river. These mappings allow uncovering elements and relations to understand the occurrence and placement of certain spatial conditions. The waterfront will be dissected through the thematic layers of fluidity, habitat, man-made and politics. The four layers are analyzed through lenses of Current and Confluence. Current will show the found data in two dimensions, whereas the Confluence focuses on a conclusion and dimension that won't be captured in the Current map. The maps and data will eventually be accumulated into one waterfront condition map, showcasing its character and various conditions. By layering and dissecting, pressure points and nodes of potential can be conducted, suggesting a set of possible sites for architectural interventions.

contextual approach

The found potential locations will be abducted to uncover their influence on the water and urban collective on the meso level. The meso level is characterized by a zone of about 1km x 1km. The maps, backed by GIS data, will be combined with findings

from the site visit in London. It will be the third step in understanding local fluidity and conditions and has thereby a higher chance of uncovering needs and potential.

design approach

This approach starts with the idea that we shouldn't further manipulate nature, but rather adapt ourselves in a better way to time-proven, life-sustaining cycles similar to the river dynamics of the Thames. The Thames is London, and we need to start seeing that by listening to it and therewith rethink its meaning and functionality. Based upon Latour and Casagrande a framework of connected observing oligoptica as urban acupuncture aiming to regenerate the bigger system of the river has been established. More emphasis will be put on the potential of bringing together the act of observing and engaging to surpass a solely symbolic meaning. After that, the research elaborates upon the program, function and materiality of a riparian mediator. It explores through precedence and literature what tools or strategies are necessary for such architecture. In addition, the importance of landscape and architecture integration will be underlined with the help of the books *Groundwork* and *Landform*. Lastly, the role of the designer itself will be highlighted. Designers should be open to the unpredictability of emerging forms and processes, allowing and untamed, for the better of fluidity, something that is unseen along most parts of the riverfront today. It creates an attitude of acceptance towards the water. This knowledge not only guides a general riparian understanding of the essay but also leads the architectural part of the graduation project.

Literature and general practical preference

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Reflection

The studio, Architectural Design Crossovers, focuses on Greater London and aims to research and understand the complex city with a multidisciplinary approach. My graduation project, a symbiotic Thames riparian intervention, addresses the problem of the lost meaning and functionality of the river resulting in a weak relationship between Londoners and the river and explores the role of symbiotic architectural interventions not only helping to restore that relation, but also contribute to regenerated river ecology.

It has become clear that the meaning and functionality of the river have become obsolete. Many of the current problems are a result of neglect, denial and arrogance towards the river as a consequence of our anthropological influences. The Thames has become static. The river and its ecology are unheard of and therewith rejected by the public life, the meaning and its functionality are 'lost'. This has an impact on the economical, ecological and functional totality of London. As we rediscovered the river as a place for recuperation and contemplation tensions between collective memory, ecology and riparian environments have been posed. An urgent need for symbiosis along the riparian rises as we shift towards a new waterfront paradigm as a multi-functional place for flora, fauna and people. This research, therefore, becomes critical. The waterfront as a condition is various but holds similarity in its very marginalized fluid character as it is often reduced as a protective concrete water wall showing only some vertical and hidden mediation of the tidal imprint of water. We shouldn't further manipulate nature, but rather adapt ourselves in a better way to time-proven, life-sustaining cycles. The connecting nodes of symbiotic oligoptica operating in a bigger system are not only re-establishing the lost connection and functionality but even participating in the regeneration of the river. Voicing and engaging with nature through nodes of architectural interventions including both the public realm and river ecology on the same ground, fundamentally creates an interdependent and functional riparian system. The public realm and river will not only be (re-) connected again, leading towards a new meaning and functionality but even exceed its boundaries towards a regenerated river ecology. Herewith the architecture renegotiates its ground and liberates itself from a sole symbolic meaning. We could now consider the interdependent riparian mediator as a new potential waterfront paradigm. As the observed problems don't limit themselves to London, but to many waterfront urban areas elsewhere, the research acts as useful and necessary insight for the approach and tools of waterfront regeneration and synergy. The outcome will provide a new perspective on the possibilities for waterfront development.