



BRING US BACK TO THE WATER

**Redefining the post-
industrial waterfront**

URBAN ARCHITECTURE
GRADUATION STUDIO

FINAL RESEARCH PLAN
02/11/2021

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Walk, Stop and Turn

A sequence of thresholds

The walking experience from the Saint Servaasbrug to the Sphinxkwartier along the Maasboulevard is an unique one, which could be well depicted using a serial vision. Cullen (2012) suggested that the serial vision becomes a useful tool when the movement is not performed along a perfect straight road, where contrasted images are juxtaposed in the mind. The Maasboulevard is a road which has two sharp turns, resulting in drastic changes in the scenes. Along the movement through the Maasboulevard, different types of water bodies could be experienced: the river, the sluice, the inland port, and the canal. Also, the relation with the water constantly changes: next to water, above water and between water.

A friend of the city?

Water in Maastricht

Water, aside from being the key feature of the Sphinxkwartier, has played an important role in the historical development of the city of Maastricht. Until the 18th century, Maastricht has used the water as a geographical barrier to protect the city. In addition to the Maas, an array of fortifications with moat were built to encircling the west bank. (Fig.1) In the 19th century, the presence of the Maas, which has been allowed transportation through waterways, has helped Maastricht involved into an industrial city. The city expanded along with the subsequent establishment of the Sphinx Ceramic factory, the Société Céramique and the Sappi Paper factory in the mid-19th century. The waterfront of these factories has become a nodal point for the logistic of goods (Fig.3). As they are accessible for the public, interactions between people would also take place while the goods were transported on to or off from the ships. In the mid-19th century Maastricht, the waterfront is also where people would be transported. People were being picked up and dropped off at the river shore next to the Saint Servaasbrug, and transported by a paddle steamer (Fig.4).

After 1867, most part of the fortification was removed and flattened to facilitate the expansion of the city, the only remaining parts of the moat are present in the Sphinxkwartier and the Stadspark (Fig.2). Intriguingly, these two segments of the former moat have taken very different routes during their developments. The segment in the Sphinxkwartier, consisting of a sluice, the Bassin and a canal that leads further to the Zuid-Willemsvaart, has an industrial atmosphere. Together with the Maas, it segregates the Sappi factory as an island. The parts in the Stadspark, on the other hand, was integrated into the park as a natural feature.

Along with the modernization and globalization of the city and as well as the industries, the city and its people become more distant to the river. The river nowadays, aside from being used for transporting goods to inaccessible waterfronts and functions as a geographical reference, remains mostly as an element to be looked at. The post-industrial waterfronts, in particular, has been predominantly



Figure 1. Maastricht in 1850

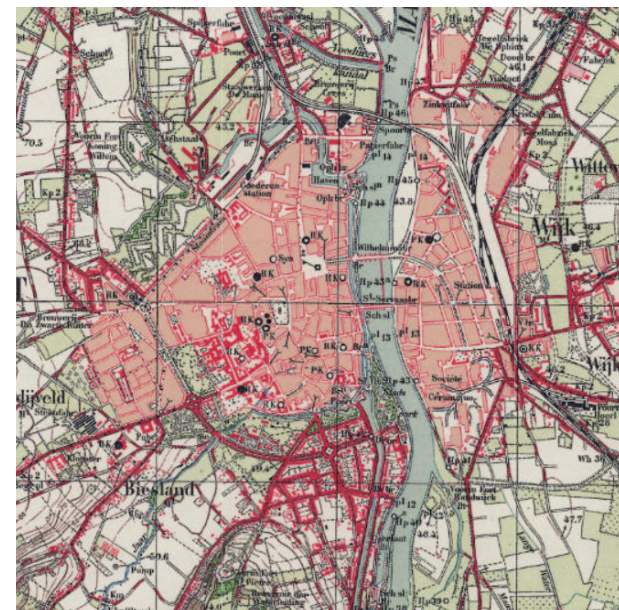


Figure 2. Maastricht in 1950

related to contamination (Knoll, 2017; Marshall, 2004). As a result, the waterfronts have gradually become interstitial spaces which divide the industrial areas and the city. This is a common issue which has been faced or is facing by post-industrial cities around the world, including Amsterdam, Hamburg and Shanghai. After losing their logistic function, the post-industrial waterfronts need to be rescaled to accommodate and attract modern social activities.

Looking at human with human eyes

Research through an anthropological lens

The topic of post-industrial waterfront has drawn academic and professional interest for a long time. However, waterfronts could be studied from various aspects. For instance, ecology and environment, sociopolitical and socio-economical, water management, etc (Knoll, 2017; Marshall, 2004). As for my research I would be focusing on, among other things, the spatial aspects of the waterfronts in relation to human.

My previous design projects and research works have a tendency of focusing on the human dimensions and the social activities. As well as in my photography works I have a preference of capturing the interactions between people and the built environment. I always believe that buildings are built to facilitate human life and hence should be built based on the scale of human. However, industrial landscapes are exceptions which are mostly built according to the scale of machines and for the ease of transportation of goods. After the industrialization, machines have replaced human for higher efficiency and for the purpose of mass production. The paper industries, for instance, were housed in smaller houses before the industrialization, with machines built in human scale. This intimate environment which could provide a ground for social interaction has been long lost in the modern industrial sites.

During the group research, we have been wearing the anthropological lens throughout our research on the social use of spaces. Despite the different focus, namely meeting places for foreign communities in Maastricht, a similar approach and similar ways of visualisation could be applied to the individual research. The findings of the group research, for instance, are illustrated in annotated architectural drawings, with a focus on the spatial dimension, the social use of spaces, and the objects as signs of trace of people.

This research, therefore, will be focusing on the scale of human in relation to the waterfront, including the social use of the waterfront, the movement of people at the waterfront, and as well as the materiality of the waterfront.

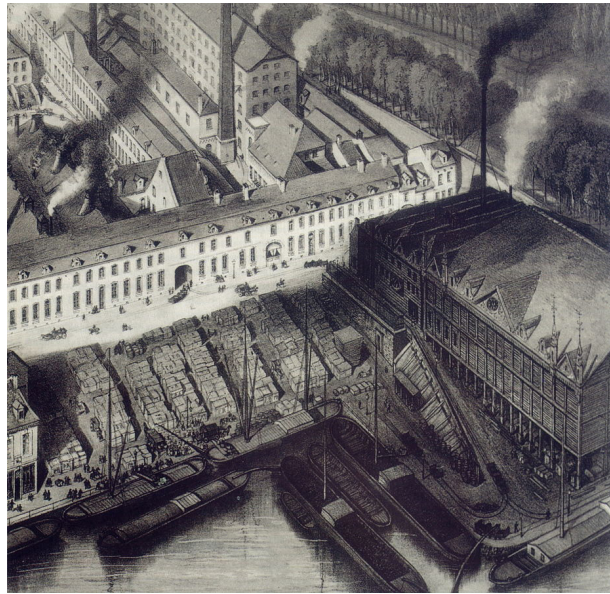


Figure 3. View of the northwest section of Bassin and surrounding factory buildings.



Figure 4. View of a paddle steamer on the river Maas at Het Bat, south of Saint Servatius Bridge in Maastricht

Research question

The case of waterfronts in Maastricht is not unique. The research should be setup with a more general approach which could potentially result in a wider application. The site of Sappi factory could be generalized as a waterfront industrial area. The research aims to investigate the role of human scale and social activities in such post-industrial waterfronts. Therefore the following question could be asked:

To what extent can human scale/dimensions and social activities activate the waterfront(s) of a post-industrial area?

Learning from precedents

Comparative Case Studies

The question stated above could be addressed on the hand of comparative case studies. By studying the approaches that the other post-industrial cities have taken on the tackling of the issues of waterfront, hopefully an appropriate solution could be proposed to the waterfronts of Maastricht. Two case studies, respectively in Amsterdam and Shanghai, are chosen based on their similarities with Maastricht, while also different from each other in terms of program and their initiatives.

Case study 1 - Eastern Docklands, Amsterdam

The Eastern Docklands (Oostelijk Havengebied), is a harbor neighbourhood which was formerly constructed to facilitate the trade with the Dutch East Indies (Fig.5). The harbors were left unused in the 1970s and being redeveloped in the 1980s into a high density residential neighbourhood (Buurman,2007). Similar to the Sphinxkwartier in Maastricht, The Eastern Docklands locates at a walking distance from the historical center of Amsterdam. It would be thus relevant to study the role that waterfront has played in the connection between the old city and the new development.

Case study 2 - West Bund, Shanghai

The West Bund (Xi An), locates in the south of the city center of Shanghai, was a site for production industries for more than a century. In 2008, by introducing the idea of the West Bund Culture Corridor, it is aiming to become the new cultural center of Shanghai. The Culture Corridor is currently the home to numerous cultural institutions, including West Bund Museum, Long Museum, the West Bund Art Center to name a few. The new developments, however, is based on the preservation of the existing industrial buildings. The waterfront has also been developed accordingly into public spaces for recreation and experience of the nature (Fig.6).



Figure 5. Waterfront of Eastern Docklands



Figure 6. Waterfront of West Bund



Figure 7. The imaginary border line at the school in Barcelona

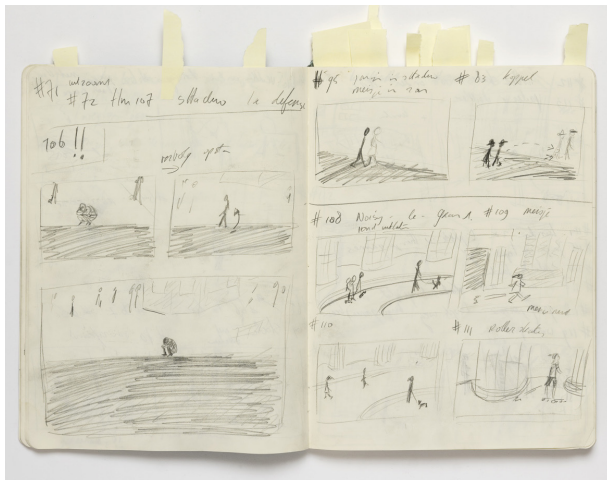


Figure 8. Sketches of the frames of videos

The redevelopment of the Eastern Docklands is a project which helps Amsterdam to densify its urban area. The intimate spaces between the housing and the waterfront, as well as the transition between public and private domain, could be investigated. The West Bund, on the other hand, is a project which aims to reconstruct the image of the city of Shanghai. Large scale buildings with public programs have a different relationship with the waterfront compare to the case of Eastern Docklands. Therefore, the role of the human scale in this relationship would be worth to study in the case of West Bund.

Research Methods

The case studies will also be studied through an anthropological lens, which could be associated with various research methods. This section proposes the research methods that could be used to study the case studies, as well as to study Maastricht and the site. Each research methods will be elaborated with the help of references or literature, and a few examples from Maastricht. The research methods could be categorized in three groups: collect and study of archival materials, fieldwork and annotated section drawings.

Archival materials, for instance old photos or film clips, could portrait the scene of the waterfront in the previous centuries, when the people have a different relation with the water and also use the waterfront differently. A series of old photos have been collected which were have captured the waterfront of Maastricht, mostly that of the Maas (Appendix 1). It is obvious that, early in the last century, the waterfront of the Maas has been a popular location for fishing. It seems to be the most visible and accessible activity which took place on the waterfront, where people from all age groups are involved. In Maastricht today, however, the act of fishing has seemingly disappeared from the most visible waterfront, as people have become more distant to the Maas. The canal next to the Sappi factory, where one can get closer to the water, still provides people a place to wait for fish to bait the hook (cover image).

Fieldwork, or on site studies, is crucial for the study of human behaviour. It could appear in the forms of photography, auto-photography, time-lapse filming and sketches to name a few.

Photography, as a common visual documentation tool, could be even more empowered as a tool to study human behaviour when accompanied by written notes and sketches. Paulien Oltheten, for instance, has discovered an invisible border in a school in Barcelona where the kids would fold up their rolling carts into backpacks (Fig.7). She documented the acts of the kids through a series of photographs, then she made a sketch to help her reads the photographs and analyse the observation. She has also used similar techniques for the interpretation her video footages. Her sketches of the frames in the video freeze the ephemeral moments in the public spaces (Fig.8). This method would be helpful to study the ordinary human behaviours that take places on the waterfront which might usually be neglected.

Auto-photography, on the other hand, is a tool that could be used to study the relationship between the human and its surroundings. The photos taken by the photographer-participant show they orient themselves to their spatial context (Thomas, 2009). This method has also been experimented during the group research phase, where we asked the participants to take photos of places they went to meeting the others, or of objects which they had an interaction with (Fig.9). In particular to the case of waterfront in Maastricht, participants could be asked to take photos of the most desired place or moments they experienced on the waterfront. As an additional requirement, a 50mm lens would be ideal for this purpose, since the view through a 50mm lens is believed to be the closest to human visual perspective (Daigle, 2018). By mimicking the human eye, it could capture what people could normally see on the waterfront and their visual experience of the waterfront. Photography, however, is less suitable for the documentation of the movement and flow of people, and human behaviour in relation to an larger scaled urban context. Whyte (1980) has used time-lapse to document the life on the square in front of the Seagram building in New York, which is later transformed into urban data codes. He has analyzed the human behaviour in a public space through visualizing the pattern of movement.

The observations which are documented through either photography, video or sketch could be then transformed into drawings that are more architectural in essence, such as sections. A series of sections of the waterfront of Maastricht could be used to investigate how the human body and their behaviour reacts to the different spatial configurations along the Maas and along the different types of water bodies in the Sphinxkwartier. The sections in Soft City (Sim,2019), for instance, provides a good example of cinematic documentation of the human scale in relation to the scale of the built environment, while also depicting the social use of the spaces (Fig.10).

As the research proceed, another question could be posed which could potentially initiate the design process which addresses the site in Maastricht in particular:

How can human scale/dimensions and social activities be reintroduced in a waterfront post- industrial area/former industrial building?



Figure 9. Auto-photography by an Italian participant, who captured her friends in front of an Italian store.

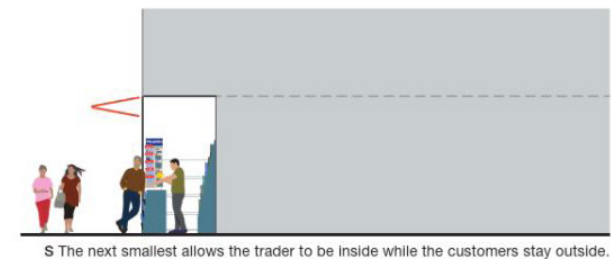
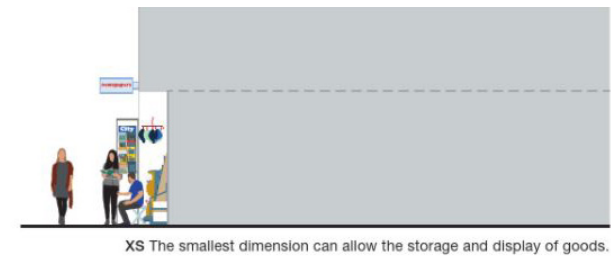


Figure 10. Sections illustrating the possibilities of ground floor.

References

Buurman, Marlies, B. Hulsman, H. Ibelings, A. Jolles, E. Melet, and T. Schaap. "Eastern Harbour District Amsterdam: Urbanism and Architecture." Rotterdam: NAI Publisher (2007).

China Today. "Pursuing a Dream in the West Bund of Shanghai" Accessed November 1, 2021. http://www.chinatoday.com.cn/ctenglish/2018/et/202001/t20200117_800190186.html

Cullen, Gordon. Concise townscape. Routledge, 2012.

Daigle, Allain. "How the 50-mm Lens Became 'Normal'" The Atlantic, May 13, 2018. <https://www.theatlantic.com/technology/archive/2018/05/how-the-50-mm-lens-became-normal/560276/>

Kloosterman, Robert. "Planning for creativity: the transformation of the Amsterdam Eastern Docklands." New Urbanism. Farnham. Ashgate (2012): 61-83.

Knoll, Martin, Uwe Lubken, and Dieter Schott, eds. Rivers lost, rivers regained: Rethinking city-river relations. University of Pittsburgh Press, 2017.

Kraikovski, A., and J. Lajus. "Living on the river over the year: The significance of the neva to imperial saint petersburg." In Rivers Lost, Rivers Regained: Rethinking City-River Relations, pp. 235-252. 2006.

Marshall, Richard. "Contemporary urban space-making at the water's edge." In Waterfronts in post-industrial cities, pp. 11-22. Taylor & Francis, 2004.

Marshall, Richard, ed. Waterfronts in post-industrial cities. Taylor & Francis, 2004.

Oltheten, Paulien. Accessed November 2, 2021. <https://www.paulienoltheten.nl/>

Semprebon, Gerardo. "The multiple dimension of water in the designing and governance of public spaces. The case of Shanghai West Bund Project compared to other Western Waterfronts renovations." *rodowisko Mieszkanowe* 22 (2018): 22-27.

Sim, David. Soft city: building density for everyday life. Island Press, 2019.

Thomas, M. E. "Auto-Photography. Columbus, OH: Ohio State University." (2009).

Whyte, William Hollingsworth. "The social life of small urban spaces." (1980).

Appendix 1



