The particular case of urban waterfronts

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Abstract

The urban waterfront has recently been the site of many municipal development projects all over the world. The popularity of this location has led to raging realestate prices, prestigious landmark architecture and masses of visitors and tourists. Besides the challenges that come with its popularity, the urban waterfront is also required to deal with current ecological challenges. This paper argues that there is another dimension that plays an important role in this scheme: The waterfronts nature as threshold. Considering its existence as a space between spaces may contribute to comprehend the phenomenon of the recent popularity of the urban waterfront and also its contribution to the city as a whole. Keywords: waterfront, urban design, urban conversion, city port, sustainability, threshold, open wholeness.

1 Introduction

All over the world, cities have changed tremendously within the last decades. Shaped by processes of reform and also crisis, heavy industries have vacated ports and urban waterfronts for redevelopment. Old industrial areas became residential areas and centers of culture and creativity with shops and museums. The city and the entire region seem to focus on these developments in all their anticipation and pride. At the same time, these projects are facing numerous challenges: Scarcity of resources, global climate change and a rising sea level confront the area of the urban waterfront with new urgent tasks. On top of that, the particular areas of redevelopment were often confronted with increased crime rates, ghettoization or in some cases raging gentrification, that called for new tools of planning and organization. The urban waterfront is a place of extremes. Hence, the great wide open sea in all its natural beauty and biological diversity on one end – and the dense men made city full of hustling people, noise and pollution on the other. Despite the obvious challenges that come with economic



and social change, global warming and rising sea levels, the construction placed at the urban waterfront commonly serves as a conspicuous landmark. Obligated to manage both, leading the way in sustainable development and standing tall in order to represent a city, a region and in some cases an entire country, decision-makers and planners find themselves in a very difficult position. Thus, the unique conditions that evolve around the urban waterfront shall thus be elaborated on, in order to work out mechanisms and solutions for a sustainable future.

One may identify several main topics of contemporary urban planning of the western world. Certainly, one of the most important will be the question of how cities may become more successful within our global economy. This involves many different fields such as transportation and room for industries but also culture, livability and the creation of a positive reputation. Another contemporary issue of great importance is what we tend to summarize under the term 'sustainability': The implementation of an environment-friendly urban planning that takes future problems such as scarcity of resources, environmental pollution and healthy living environments well into account [1]. Yet another, a third development that manifests itself in modern urban and architectural design is the one of merging spaces and disappearing thresholds. The phenomenon of the emerged culture of the 'in-between' as Christina von Braun [2] puts it, has virtually expanded over all aspects of daily life and also the city with life in and the built separation of inside and outside, private and public, life and work.

The waterfront is to combine all of the above: Economic aspirations, environmental awareness and the creation of an urban identity that the larger public can relate to. Trying to comprehend how this nature of the urban waterfront came to existence one may start by looking back in time.

2 Water, port and city

Reconstructing the development of the urban waterfront historically, one may find that water and cities used to go hand in hand for a very long time. When boats were the most important means of transportation one required ports for them to load. In this sense, as Rinio Bruttomesso points out, in many cases the presence of an ocean or a river was the reason for a city to first come to existence: "In the past, the port/city union has constituted an inseparable combination, both in spatial organization and in the running of activities" [3]. The local natural condition of the shoreline enabled people to construct the first ports in protected bays, creeks etc. It is important to note, that in the past it was characteristic of the city by the water that "city and port were interwoven to each other; the port was located in or at the immediate border of the city" [1] meaning that the waterbody was mostly very near to the city center. In fact, in many places the old marketplace was placed right at the waterfront besides the harbor [1]. From a historical point of view urban planning was closely linked to the water and the shoreline used to be in the center of everyone's attention. Even more so this was the case in Japan and other Asian countries where traditionally "the connection between cities and buildings and water surpass the pragmatic

dimensions of functions and economic activity and there has a more profound value. People sense water to be sacred and perceive spirituality" [4].

However, in the course of industrialization, the construction of large scale factories and new means of transportation as the railway, attention shifted away from the ultimate coast- or shoreline. As Han Meyer points out, the desire for safety from floods and waves resulted in a separation of the body of water and the city center and shifted attention to the protected hinterland. Train stations became the new gateways to enter the city and thus also the new center of urban activity and attention. The ports of the city were maintained by employees of a port authority that cared for the economic functioning of the port and not about its connection with the city or the local population. "Planning institutions became convinced that it was not fruitful anymore to combine the scale of the port with the development of the city" [1]. The same was the case for undeveloped waterfront sites that were largely ignored by planning authorities during that time.

Only recently, when the unsightly industrial zones moved even further away from the city and people were disillusioned about their feeling of safety in the inland, attention was brought back to the waterfront [1]. The introduction of the standardized cargo container enabled a global trade of goods that expanded to an extent that not existed before and that relies heavily on transportation by ship. Regarding the scale of urban planning this development firstly resulted in the need for larger ports that would accommodate the needs of the ever growing transport industry and secondly the redevelopment of the former port areas that are mostly near the urban center. The redevelopment of these newly vacant lots led to immense discussion amongst scientist, planners, locals, environmentalists etc. "There are many experiences in which the waterfront was chosen to serve as a leading value in the perspective of urban and regional development. Most of the more recent regeneration projects have primarily meant that the collectivity has been able to 'reclaim' the areas facing the water' [5].

According to Hoyle [6], the trend for the revitalization of disused harbor areas started in the USA in Baltimore, New York and San Francisco and later swept over the Atlantic to Europe, Australia and also Asia. The urban waterfront has become important part of the cities' strategy to compete for investment in a globally connected world [7]. The fact, that waterfront development has become particularly popular also led a collaboration of German scientists and developers to setup a guideline of "10 Principles for a Sustainable Development of Urban Waterfront Areas" [5]. Amongst these principles are: Ensuring water quality, integrating the waterfront into the existing city, valuing urban heritage, supporting mix-use, providing public access, strengthening public participation, standing for resilient and flexible planning principles in international exchange [5].

It is stated many times that the current popularity of waterfront has to do with reasons of economy. Available space in the cities' top locations that is now available for redevelopment is attracting large scale investment. However, economic success should not be enough of a reason but rather a symptom and one is yet to indentify the true source of the popularity and economic success of the waterfront location. This is particularly true as its popularity, as Hoyle points out, is not ultimately connected with the city port any longer, but has in fact extended to all sorts of settlement also in rural areas [6]. Thus, the idea of developing the waterfront area has become independent from vacant industry lots, perhaps in a sense of a general fascination with the shoreline.

3 The waterfront as threshold

It seems to be a characteristic element of modern waterfront architecture to go beyond their rational aspects and technical ideals of construction. The tangible sphere that directly penetrates our senses gains great importance and becomes meaningful to its inhabitants by transporting semantic messages. In its relation to its surrounding space and the adjacent city, urban waterfront development presents a threshold, a space in between city and nature, density and the wide open. Just as on an architectural level this applies to the larger urban sphere in the sense of a gateway to the city. When talking about the urban waterfront one certainly has to consider this other reality of this threshold area between water and the city – or as Hidenobu Jinnai puts it, in fact "nothing is more thrilling than to approach in a ship when visiting a city (...). It is necessary to reevaluate cities from the perspective of the sea standing on a larger conception" [4].

The waterfront as a threshold is a place of transition in many ways. In case one wants to move from the water to the land, or vice-versa, one has to pass the waterfront area. Clearly, this is also the case for elements that are not human but of physical nature such as light, wind, noise, smell, etc. In this way the waterfront as a threshold area is able to control or steer the flow of the elements that penetrate the sense of the people around. Today, the role and ability of the built environment between land and water clearly exceeds the bare function of shelter and protection that it used to fulfill in the past.

When the cities we live in started to become shaped by the mighty retail industry it appeared profitable to create buildings that would attract customers by architectural design. As Laurent Stalder [8] manages to show very graphically by the example of the door, also the threshold plays an important role in this scheme: The classical door as we have known it for centuries separated the inside of a space from the outside by creating a physical barrier that has to be opened manually. In the course of time and accompanied by technological, social and economic changes is became replaced by a revolving door and later also the automatic sliding door and the newly invented air curtain [8].

The example of the door may be applied to recent processes of change in urban and architectural design within the modern city. One may find that spaces of different function and use are increasingly melting into one unit. For the people living in the city this implies a constant state of being in the middle and in between spaces [2]. Though this development might be temporarily favorable for our economy, the diagnosed consequences for humankind are less positive: "The individuation of experience made in passage across a border fragments the body (...); the body no longer knows inside and outside but only a continuous state of

'being in the middle', no longer knows any borders but only potential margins, no definite point of passage but only a continuous state of transition" [8].

Many of the famous buildings that have recently been designed by well known architects and put into selected sites are following this tendency of creating buildings without clear thresholds and borders. This is particularly true for well known architects such as Zaha Hadid, Daniel Libeskind, Frank Gehry and Coop Himmelb(l)au. Many of their buildings, of which many are situated at prestigious waterfront locations, consist of highly complex steel and glass structures, often without a clearly defined in- and outside and a shape that is rather unconventionally designed, such as Frank Gehry's Guggenheim Museum in Bilbao. In the course of the Expo 2002 in Switzerland, the American architects Elizabeth Diller and Ricardo Scofidio have been emphasizing on this tendency of disappearing thresholds by introducing the 'Blur Building' in Lake Neuchatel [9]. In this building it is only the mist of sprayed water that defines the building in its shape that is strongly depending on weather and daytime. In this way, the beholder becomes ultimately confronted with the vagueness of contemporary architectural form.

The waterfront that clearly opposes this tendency by constituting the sharp border between two spaces of very different kind stands in contrast to this architectonic and social movement. In this sense, the urban waterfront is one of the last remaining spaces within the city that make the threshold so clearly visible and tangible. The experience it offers, the chance to perceive the intersection point of two spaces of very different nature with one's own senses might be part of the reason for the waterfronts recent popularity.

4 Open wholeness

The water-body that is adjacent to the city usually cannot be crossed without the help of technical devices. It is essentially a natural element but yet not suitable for humans to live and settle on. It is well visible, one can hear it, even smell it but yet it has an existence under the surface that seems rather mysterious and unknown. It seems rather ironic that the city that has started to lose its borders and thresholds is today being connected by a space with a very defined and static nature.

As current waterfront development projects and their great popularity amongst the population may serve as a connection point between different parts of the city: "The regeneration of waterfronts represents an extraordinary opportunity for cohesion and for stitching the territory together, where water – a collective legacy – can play a central role and become the engine for sustainable development, recreating the relationship between spaces, uses and visions, building a dialogue between spatial organization, port and city functions, and their economic, environmental and social aspects" [5].

In contrast to the urban realm the water-body is so many things that the city is not: It is clear in its layout and rather simple to comprehend, it is static comparatively homogeneous in its look. In combination with the modern city and famous contemporary architecture in particular, it becomes clear that the



waterfront might serve the city to create the heterogeneous unity that it needs to remain vivid. Together with the landmark architecture that is often to be found at the waterfront it is safe to assume that in many places the area has taken on a function of an urban connection point. In doing so, it contributes to a so called 'open wholeness' of the overall city: By including several antidotes of built form and social life within the urban framework, as oppose to forming one static and homogeneous urban entity, the city remains complete but yet open for structures that are different and new and lead the way into successful and sustainable future.

It has been shown that it does this by offering an antidote to the modern metropolis that is largely losing its thresholds and borders. Both the city and also the waterfront have an impact people's everyday life while the waterfronts role may be to offer a space of clear separation while everything else in one's life is to be found in a constant state of transition. All other expectations that the waterfront is commonly connected with – e.g. economic revenue, creation of an image, sustainability, resilience – are strongly connected to this finding. Regarding the fast development that urban waterfront are going through all over the world it is crucial for planners not to jeopardize its uniqueness and its threshold character.

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