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**WATERFONT (RE)DEVELOPMENT PROJECTS
IN EUROPE:
DIVERGENCE AND CONVERGENCE
OF APPROACHES**

Abstract: Since the 1980s, seaport cities have been characterized by the spatiotemporal concurrence of highly modern terminals away from the city and derelict and/or sub-optimally used inner city harbours and waterfront sites. The post-Fordist city disintegrated into a poly-centric fragmented structure with aggravated social conflicts between older residential areas of dockers and requirements for modern expensive waterfront condominiums. The cranes of the shipbuilders' yards, which used to be a characteristic feature of the city silhouette and a symbol for dynamic port economies, have been dismantled, the land left derelict and contaminated. The formerly close functional and spatial relationship of port and city was relaxed from the end of the 1960s onwards and offered opportunities for transformations. In this article different approaches for redevelopment und revitalization are discussed.

Keywords: Harbours, re)development projects, waterfront.

Introduction

All seaport cities have structural similarities and peculiarities. For several decades now, port cities have been restructuring derelict docks and waterfronts in their inner cities. Many existing case studies look at 'successful' waterfront redevelopment projects from different viewpoints and provide uncritical analysis, lacking objective and comparative criteria. San Francisco, Baltimore and Boston have been the most important examples to demonstrate how derelict waterfronts can be revitalised, revaluated and reintegrated into the urban fabric already in the 1970s [Breen, Rigby 1996]. But differences in cause, procedure, results and planning traditions must be taken into account. But seaports share structural similarities, developed in response to common dynamics. Yet, in a way, no two seaports are alike, and no seaport in the world is like another. Each has its own face, special character and individual history.

Their geographical conditions, technical possibilities, historical development, constellation of stakeholders and transport connections to the hinterland are different [Bruttomesso 1983; Schubert 2011a: 54; Porfyriou, Sepe 2017].

The transformation process of ports and urban waterfronts has been closely connected with world-wide economic restructuring, technological change in shipping and cargo handling facilities, and competition between seaport cities in the global hierarchy. In the last few decades older port areas that lie next to city centres have seen rapid change. These waterfronts – formerly used for cargo handling and its noisy, dirty and dangerous work, have become places for offices, condominiums, cultural uses and flagship projects which have all helped to emphasise the transformation. After a period of derelict and underused docklands, waterfront (re)developments have been hailed as projects full of promise and expectation for the seaports' future and related strategies for growth. The cycle of dereliction, neglect, planning, implementation and revitalisation of old harbour areas as well as the necessary construction of port infrastructures are all part of a complex network of different stakeholders and interests. Derelict waterfront sites offer opportunities for new sustainable uses that no longer require a position close to the water.

Efforts are being made everywhere to compensate for the structural changes in cargo handling, ship building and seaport industries along with the resulting loss of employment through revitalisation projects that aim to exploit structural changes in an attempt to modernise the urban economies. Although a great variety of factors influence these projects – such as size, local and regional office and housing markets, the planning and implementation timeframe, approaches and targets chosen for regeneration and the context of governance and planning cultures – the development sequence is always about the same:

- dereliction, relocation of terminals and port uses
- neglect of derelict areas
- planning concepts and design proposals for sub-optimal use of former port areas
- implementation, construction
- revitalisation and enhancement of port areas and waterfronts.

These changes are occurring in port cities at a rapid pace, almost faster than we can appraise or analyse. They are less a result of planning and design than an expression of social and economic processes on a global scale. In many seaports the demand for these areas by the “creative class” as well as singles and yuppies is increasing. New waterfronts in particular mirror globalisation processes and have become the new locations for work, housing and recreation favoured by the “creative class” in knowledge-based societies. In the following I will focus on different types of transformation, based on dominant new uses:

- “Office-led” (London Docklands)
- “Housing-led” (Amsterdam Eastern Docklands)
- “Culture-led” (Bilbao Abandoibarra)

- “Mixed-use-led” (Gothenburg Norra Älvstranden)

Revitalisation, however, has no precise definition, but embraces a complex field of changing uses, rejuvenation and regeneration, redesign and remodelling at the intersection of diverse interests that are connected at the interface of city/country – port/water.

1. London: From Docklands to Thames Gateway

Although the importance of London’s port is now relatively insignificant in terms of the urban economy, its redevelopment into an office and residential district is the first large-scale project of its kind in the United Kingdom and Europe. North American examples such as Baltimore and Boston provided general inspiration for the London Docklands, but regeneration was on a far larger scale (22 square kilometres). In London, the oldest docks had closed in the mid-1960s, bringing a dramatic shift from good times to hard times for local people. The relocation of the port resulted in more than 80,000 jobs being lost in the East End of London between 1971 and 1991. But Margaret Thatcher had a vision: “Docklands – an exceptional place” [Brownill 1990]. She, along with her advisers, pursued a policy of free enterprise zones, and the first one to be established was in London Docklands. No taxes needed be paid for ten years; there were neither union regulations nor planning restrictions, but free business for free entrepreneurs. Taking the sledgehammer approach, Margaret Thatcher’s “flagship project” at Docklands and Canary Wharf was enforced in the “big bang”.

Development at Docklands was mostly office-led redevelopments, although some luxury housing was also built. The centre at Canary Wharf was built to challenge the financial hub in the City of London, only several miles upstream. The project was implemented in the context of a new enterprise culture, which was based on privatisation, deregulation and neo-liberalism [Newman, Thornley 1996].

The deregulation policies of the Dockland Development Corporation (LDDC) triggered a building boom, mainly in the Docklands core zone, the enterprise zone around Canary Wharf. The (Urban) Development Corporations had been established by central government as Quangos (quasi autonomous non-governmental organisations) to forestall protracted democratic decision-making and participation processes, and to accelerate the process of decision-making, such as building permissions. Leverage planning was meant to speed projects up with subsidies and/or tax relief being introduced to include private capital in order to exert financial leverage. The free enterprise zone and the policy of the London Docklands Development Corporation left London with a fragmented city. New office developments and luxury housing went up next to old public housing blocks.

New jobs were brought into the area, but they were not for local people, which led to segregation and contradictions between old and new. The number of inhabitants

has more than doubled between 1980 and 2008, and the social structure has become more divergent. Since then, the Docklands project has been incorporated in the Thames Gateway strategy, which covers a much larger area, extending from the capital to the Channel. London probably represents the most spectacular transformation of a former port in Europe. A number of recent regeneration projects along the Thames are modelled on the concept of an “urban renaissance”. The redevelopment of Docklands has now been incorporated into the plans for the Olympics and the regional plans for the Thames Gateway, which envision the corridor up to the Thames estuary becoming a dynamic development zone in the future.

What had started 30 years ago as an incremental approach and was initially considered more of an experiment (“trial and error”) has since been integrated into the urban development strategies by political changes and general planning policies, such as the London Plan. Today, Canary Wharf has turned into a regional centre for London, with more new office buildings proposed or under construction. A decade ago, in 1998, the LDDC closed its doors. Meanwhile, a paradigm shift has taken place in the United Kingdom and in London, with a “return to planning”. What had begun as top-down planning was replaced by a partnership approach and is now included in a regional sustainable strategy for social inclusion and proactive planning [Brownill, O’Hara 2015].

Within this urban regional development concept of the Thames Gateway, Canary Wharf is only one important sub-centre among many in a polycentric structure comprising a patchwork of complexity and uniqueness. A lack of strategic urban regional planning policies under conservative reign and the consequential fragmentation in the absence of a single responsible authority for the whole of London has left a hotchpotch of projects. The objective is to incorporate the entire region of the Thames estuary within one coherent plan and to integrate sectoral plans into sustainable perspectives.

2. Amsterdam – Eastern Docklands

After the Second World War rapid structural changes took place in Amsterdam the same as in other seaport cities. The Eastern Docklands development area is made up of several man-made islands. The construction of docks in the west (Western Docklands) after the Second World War contributed to the decline of the harbour in the eastern docks. The port was equipped for transshipment of piece goods and its finger piers were unsuitable for container handling. Passenger shipping was replaced by cheap air travel, and in 1979 the last shipping company closed operations. For many years parts of the Eastern Docklands were in “temporary use” by artists, urban nomads and squatters who lived in caravans, huts, tents and other provisional accommodation [Koster 1995].

Suburbanisation resulted in a reduction of Amsterdam's population by 150,000 inhabitants between 1965 and 1980, which led to an increase in commuter traffic and an underutilisation of the city's infrastructure. This trend was counteracted by the structure plan "De stad central", which was based on the model of the "compact city" and adopted in 1980. Measures introduced to stem migration out of the city included attractive inner city housing areas and concentrated on development and urban regeneration in the centre. The plan also proposed to balance the historic city's "southern axis" by installing the "IJ axis". The axis starts at the railway station and extends across the former harbour up to the northern embankment of the IJ. This was to turn the city's "back yard" into an attractive city frontage.

Against the backdrop of housing shortage and population migration the municipality of Amsterdam decided as early as 1975 to redevelop the area for residential use. The project commenced in 1978 with the municipality developing an urban planning programme. For years large housing estates had been built on the periphery and on the polders, but then a more compact urban structure was aimed for. Not least to keep the tax payers within the city boundaries, high densities of 100 units per hectare and a floor space index of 1.4 were stipulated. A total of 18,000 new homes were to be built in the Eastern Docklands. Almost the entire site is surrounded by water and new residents were to enjoy the advantages of the location. "Blue is green" was the slogan which was to make up for high housing density. It was Amsterdam's most significant urban design project that was located inside the motorway ring on approximately 313 hectares, of which two-thirds were water. The public realm contains more than just roads and green space, but is mainly docks, canals and the open waters of the IJ bay. The station and city centre are within walking distance.

The eastern port area is a laboratory of different urban design concepts and housing types. Sub-areas of very different standards were built. The KNSM area was constructed between 1995 and 2000, laid out after the masterplan by Jo Coenen. Two super blocks by the architects Bruno Albert ("Barcelona") and Hans Kolhoff ("Piräus"), with 300 apartments each, were built on a prominent site. On Javaeiland, which is connected to the city via a dam and a bridge, a mix of blocks of flats and canal houses including the social infrastructure was realised.

On the Borneo and Sporenburg peninsulas terraced houses were built in the east in addition to high-rises (Veemarkt Entrepot West and Middengbied). The linear structure of the finger piers is broken up with "meteorites", which serve as eye catchers and interrupt the rows. Approximately 30% of the flats are social housing.

Now that there is no more building land in the eastern port new sites are being reclaimed from the IJ in the east of the port. In 1996 it was decided to create a man-made archipelago of seven islands using hydraulic pumping. Up until 2012 18,000 new homes will be built here, housing around 45,000 people. In September 2001 the spectacular bridge to IJburg was opened and the first flats were ready for occupation in 2002. Work has also started on the western port areas near the city centre, where

a large number of prefabricated flats for students were built. Future developments envisage a large number of flats with water access by means of constructed pontoons and quays. In addition, areas north of the IJ have now been incorporated in the transformation strategy [Lebesque 2006].

With the redevelopment of former port areas Amsterdam has realised new housing projects in inner city locations. Even if the concept of “building for the neighbourhood” has in the meantime changed to “building for the market”, no other port city has pursued housing development in a similar, uncompromising, deliberate and successful way with the main purpose of furnishing the former port areas with a new use.

3. Bilbao Abandoibarra: a dilapidated industrial city turns cultural metropolis

Only fifteen years ago the rusty relics of a past industrial era were still a conspicuous element in the city of Bilbao, the capital of the Biscay province in the Basque region in Spain. The River Nervión was an odorous cesspool with derelict and abandoned industrial buildings lining its banks. This crisis-torn city became the image of downfall, population decline and de-industrialisation. In the early 1990s, after the shipbuilding crisis and the decline of the steel industry, unemployment exceeded 25%. Bilbao has only one timeframe: before and after the construction of the Guggenheim Museum.

Bilbao is a key example of the comprehensive urban transformation process that was significantly inspired by the Guggenheim Museum (“Guggi” – architect Frank O. Gehry), the lighthouse project that brought about the total reversal of the city’s image (culture-led). The relocation of the industry and harbour to the city’s periphery and to the mouth of the river on the Biscay after the industrial crisis in the 1980s provided the opportunity to completely restructure the city centre.

Abandoibarra is a significant conversion project that plans to reorganise the city centre on the River Nervión and redevelop the river banks as promenades with an “arts centre”. Abandoibarra is an extension of Bilbao’s inner city and complements the area around the Guggenheim Museum, mostly with more cultural uses, offices, high-quality housing, a shopping centre, hotel and with parks linking into a new network of footpaths along the river and with bridges that connect to the northern riverbank. The different project phases are structurally linked with one another; proposals are spatially connected and as a result the river moves to the city centre.

The relevant civil society stakeholders have formed the Bilbao Metropoli-30 (Association for the Revitalisation of Metropolitan Bilbao) to further sustained modernisation and transformation processes. Over 140 institutions and organisations strive to promote Bilbao’s sustainable transformation in a “think tank” of sorts. “Bilbao as a global city” and “making dreams come true” are the key themes coined by Bilbao Metropoli-30 for the continuous transformation of Bilbao in the future.

The Guggenheim Museum (which receives approximately one million visitors a year) immediately to the east of Abandoibarra and the Palacio Euskalduna (concert hall and conference centre) to the west, frame the area that hosts many parks. The 165-metre high Iberdrola Tower is another new landmark. The numerous parks and open spaces are a dominant feature in the area. As well as these public open spaces, which are linked with networks of paths and a river promenade, Euskadi Square is to form a central space with road axes branching off in different directions. The waterfront area is an oasis of calm that invites people to rest, walk or shop. Apart from the residential buildings mainly educational facilities and museums define the character of the area and its immediate surroundings. This rapid boom is due for the most part to the much described “Guggenheim effect”. However, the city has managed to emerge from the slipstream of the Guggenheim Museum by cleverly using its charisma to reorganise its city centre and widen its range of facilities.

Many projects had in fact begun before the museum was built, but it was down to its construction that Bilbao appeared on the world map. In a joint effort on the part of all stakeholders a window of opportunity for a change of image was opened up and exploited. The success of converting a negative image into a very positive image by means of a building came as a surprise not just to Bilbao’s stakeholders and operators, but it cannot necessarily be applied in other large cities. Bilbao and Abandoibarra are an impressive example of urban transformation triggered by a culture-led development, which can be exploited for marketing the city.

4. Gothenburg: From a shipbuilding city to a mixed-use waterfront city

No other seaport city has been as severely affected by the shipbuilding crisis as Göteborg. Up to the mid-1960s state loans and guarantees had helped investments into the latest facilities with a focus on large tankers and bulk carriers. In the mid-1970s more than 30,000 people were working directly in the shipbuilding industry. After the oil crisis and the relocation of shipbuilding to Asia all but one of the shipbuilding yards closed down, and that one only for carrying out repairs. Since the 1970s core port uses have moved both westwards and seawards, well away from the city.

Norra Älvstranden is situated on the northern bank of the Göta Älv River, opposite the city centre and the old town, in between the two bridges of Älvsborgbron and Göta Älvsbron. Norra Älvstranden covers approximately 290 hectares (of which 40 hectares are water). It was in the 1980s that the opportunity for comprehensive redevelopment opened up. A framework development plan was adopted in 1985, which contained the foundation for the subsequent conversions. Around half the area was owned by a former shipbuilding company, the other half was in public ownership. The city council adopted the plan in 1989 and the area was subdivided into six sub-

-plots. The schemes were to be flexible enough to accommodate change at any time, the overarching vision remaining as a constant. An urban development plan was prepared as early as 1993 under the premise of competitive capacity and sustainability.

Once ideas for redevelopment of the derelict port and wharf areas had been discussed in the 1980s the municipality, together with planners and architects, presented a comprehensive development plan for Norra Älvstranden in 1989. It envisioned “enduring” development and new neighbourhoods “for all”. The site was extended in increments with several project development phases going on for over 25 years. A new framework development plan was adopted in 2000 and IT clusters added near Lindholmen. Since then numerous companies have settled in the completed office areas and have boosted the number of wage earners in the area. The exclusive waterfront housing areas are also proving popular, although they are criticised for a lack of affordable homes and house types.

The waterfront revitalisation in Göteborg focuses on mixed structures. 40% of the area is to be used for a mix of housing and offices, 35% for office development and 25% for green open spaces. According to the development plan 25% is for rental accommodation; disruptive uses and industries will no longer be permitted. In addition, the obligatory arts and education facilities were included along with a reduction in private cars in favour of public transport [Pezzei 2004].

In Norra Älvstranden the target was to respond to the closure of shipbuilding yards by establishing educational facilities in the areas (university campus) as well as IT clusters (in the Lindholmen section) and to create a new knowledge centre of sorts besides the housing, offices and shopping areas. By 2010 Norra Älvstranden was to have a total of 15,000 residents and 23,000 people working there plus some 12,000 students.

The municipal development corporation “Älvstranden Utveckling AB” (formerly Norra Älvstranden Utveckling AB) controls the development measures in collaboration with private investors and urban planning authorities in Norra Älvstranden. The aim was to establish a wide mix of uses as well as retain and integrate industrial architecture that is worth conserving or is deemed attractive. The provision of sufficient open spaces and a network of waterfront promenades were important factors. Particularly Eriksberg is trying to incorporate landmark building in future projects, such as its gigantic crane.

Norra Älvstranden contributed to sharpening the profile of knowledge-based technologies both regionally and nation-wide. So by and large the jobs lost in the shipbuilding yards were absorbed by employment created in the tertiary sector and the location was successfully strengthened [Forsemann, Strömberg 2014]. Inclusion (empowerment) of the residents in decision making has been a central component of all of the planning projects. The area was developed with mixed-uses, including housing, offices, service provider industries, arts and education facilities, restaurants, cafes and abundant open spaces with parks and waterfront promenades. Göteborg was early to focus on long-term sustainable transformation strategies with compact mixed-uses; it was not deterred from its strategies by market upheaval and failures.

Summary

As the projects leapt in scale the scientific literature grew exponentially [Marshall 2001]. Questions of governance, sustainability, resilience and future viability have been included and researched by authors with trans-disciplinary and often comparative perspectives. For a systematic comparative study, it is relevant to identify similar and dissimilar structural characteristics [RETE 2014]. Of course, the diverse approaches described above must be seen in the context of different regional relationships, but equally important are the topographical factors, the local urban and port history, the network of stakeholders, governance structures and the planning cultures [Schubert 2011b]. As there has not been a great deal of comparative research carried out in this field to date, such studies offer a framework for identifying different structures of decision making processes, different types of urban development and diverse socio-cultural conditions. In the end there are no “best-practice” solutions [Lorens 2001]. There is both a divergence as well as a convergence of strategies and approaches; however, success is most often linked to satisfying local housing and office markets.

Understanding planning history and planning cultures is crucial for understanding redevelopment projects on the waterfront. In the past there were fewer differences between port cities across civilisation boundaries than there were similarities. Today, cities are growing more alike while ports and shipping have become more specialised. Ports are turning into secluded worlds, separated from the urban context, spatially and mentally severed from the city, with their own employment, operators and administration structures. While older port areas near the city centre have been (re)integrated into the urban fabric, the new port infrastructures are separate from the urban structure and situated in areas where deepwater ports and large areas of land are available. Seaport cities and local port authorities will gradually lose the ability to determine the course of “their” ports, whilst logistics firms operating globally will be setting the agenda.

While the local economy in seaport cities becomes more diversified (“demarimitimization”), the maritime character and culture becomes emphasized for “placemaking”, image formation and marketing (“remarimitimization”). Urban and planning history can help us learn from the past, to analyze new issues of urban development, including resilience, climate change, smart cities and also help us apply new methods and approaches for analysing the incessantly changing port-city relationship and urban waterfronts.

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