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Planning for the North-European Waterfront Cities

Piotr Lorens[1]

[1]Gdańsk University of Technology, Faculty of Architecture, ul. Narutowicza11/12 80-233 Gdańsk, Poland

plorens.pg@gmail.com

Abstract. Redevelopment of urban waterfronts is one of the leading themes in contemporary planning practice. This issue is a subject of interest to many scholars and practitioners, associated with development of waterfront cities. In literature on this topic one can find a lot of information regarding leading examples of this process, discussion of issues and problems associated with this phenomenon as well as analysis of the results achieved. In addition, many specialists in this field managed to develop a sort of "guide of good practice" for cities and planners interested in undertaking an effort associated with reshaping the waterfront site. But one can easily spot that most of the cases discussed are based in climate zones allowing extensive public use of the waterfront sites for the most part of the year. Therefore, the phenomenon of waterfront redevelopment is frequently associated with extensive development of large scale urban structures, in the climate realities allowing extensive public usage of these. On the basis of the "success stories" of many cities undertaking the waterfront urban redevelopment process also municipalities located in "less privileged" from the climate point of view areas as well as small- and medium-sized cities tend to rethink their water related urban structures. This relates both to cities located in the hot and cold climate zones – which to large extent make the traditional type of waterfront redevelopment patterns unviable, both due to climate conditions and – being the result of those – different economic and cultural realities. In result, the design patterns based on the traditional "success stories" seem to be unsuitable for these locations and the designers and developers of waterfront sites located in such cities have to look for the alternative solutions. Same applies to small- and medium-sized cities, which not necessarily bear potential for implementation of the mixed-use, large-scale urban projects. In these cases also the problem of relations between "global" trends associated with development of mass tourism as well as with implementing the typical mixed-use patterns and specifics of local economy and cultural environment has to be taken into account. Within the proposed paper the specifics of small- and medium-sized waterfront cities, located outside the "climate comfort zone" will be elaborated. Within this group the special attention will be paid to the cities located in the northern Europe. Usually these are small and medium –sized municipalities, rarely aspiring to become the leading centers of urban development in their respective countries. At the same time their economy was traditionally based on fishing, small-scale maritime industries and local trade. In addition, in many cases these cities are not extremely attractive for mass tourism and are located aside from major transportation routes. Therefore, it seems necessary to rethink the "urban waterfront development pattern" within these sites, as the strategies based on copying the solutions known from larger cities cannot be effectively used.

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1. Introduction

Redeveloping urban waterfronts is nowadays a part of planning agenda or already implemented practice in many (if not most) of the cities worldwide. Even in case these projects are not fully implemented yet, a number of the successful examples can be identified [1] [2]. Since the phenomenon of waterfront redevelopment is a subject of interest of many scholars, a number of the analysis of this was developed. These included such the issues as generation of the waterfront project, various types of those as well as in-depth analyses of the most appealing case studies [3], [4].

Within these cases tourism development was identified as one of the major driving forces for many of those projects. But tourism depends to some (if not to large) extend on climate realities and associated with these issues. Therefore, these have to be taken into account while considering the design and functional solutions of these structures. Another issue is associated with the attractiveness of the waterfront itself – and it depends (among others) also on the size and attractiveness of the "host city" itself.

Within this paper the specifics of small-and medium-sized waterfront cities, located outside the "climate comfort zone" are elaborated. Within this group the special attention was paid to the cities located in the northern Europe. Usually these are small and medium –sized municipalities, rarely aspiring to become the leading centers of urban development in their respective countries. At the same time their economy was traditionally based on fishing, small-scale maritime industries and local trade. In addition, in many cases these cities are not extremely attractive for mass tourism and are located aside from major transportation routes. Therefore, it seems necessary to rethink the "urban waterfront development pattern" within these sites, as the strategies based on copying the solutions known from larger cities cannot be effectively used.

2. Waterfront redevelopment as the global success story

Redevelopment of urban waterfronts is one of the leading themes in contemporary planning practice. This issue is a subject of interest to many scholars and practitioners, associated with development of waterfront cities. In literature on this topic one can find a lot of information regarding leading examples of this process, discussion of issues and problems associated with this phenomenon as well as analysis of the results achieved [5]. In addition, many specialists in this field managed to develop a sort of "guide of good practice" for cities and planners interested in undertaking an effort associated with reshaping the waterfront site. But one can easily spot that most of the cases discussed are based in climate zones allowing extensive public use of the waterfront sites for the most part of the year. In addition, most of the appraised cases are located in the relatively large cities, which allowed development of the diversified urban program and extensive networks of public spaces. Therefore, the phenomenon of waterfront redevelopment is frequently associated with extensive development of large scale urban structures, in the climate realities allowing extensive public usage of these.

This process has been pioneered by such cities as Baltimore, Boston, London, Liverpool, Oakland, Seattle, and San Francisco. The transformations of water-based areas in these cities began as early as the 1960s. In that period was the building of the famous Sydney Opera in the early 1970s, as well as the Paseo del Rio in San Antonio, Texas. However, it was the Inner Harbour project in Baltimore that played a significant role, being the template for many other ones, e.g. Darling Harbour in Sydney. This similarity goes yet further than the principles for the realization of transformations (in the functional sense), but embraces also the cooperation between public and private sectors that leads to the realization of these projects. Generally speaking, the beginning of the transformations of the former port areas occurred in the United States, (Boston, Baltimore) and blazed trails for other centres [6].

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3. Complexity of urban waterfront regeneration

The revitalization of waterfronts is a complex process of many dimensions, considering the scale of issues it embraces [1] and includes the following:

Economic dimension: the transformation of traditional industrial domains is its main element, realized by such means as the introduction of new technologies and the relocation of factories beyond traditional industrial zones. In effect, changes in the economic structure of cities appear, including the disappearance of traditional forms of production and processing. Hence, the new projects carried out in the areas close to water prove helpful in the economic regeneration of a city thanks to the creation of new domains of entrepreneurial activity and the creation of new work places in the service sector, etc.

Social dimension: social changes – including the growing wealth of societies – foster the interest in tourism and increase the needs for recreation. The notion of *cultural tourism* appears. It denotes the emphasis put firstly on the use of cultural values of a given site, being linked to the raised interest in local color and the need for learning about a given place, as well as on experiencing different cultures and customs. It is also linked to the increasing sense of identity of local communities, expressed by such things as the cultivation of tradition and local customs, including those concerning water, the port and the sea.

Environmental dimension: Since the 1970s, the urge to protect environmental values of valuable places has been increasing, along with the growing interest in removing pollution from degraded sites. The programs for the purification of reservoirs, also in harbor and industrial areas, are the best examples of this urge. Purity of water is an important factor in the revitalization of waterfronts and can largely determine the success or failure of the whole undertaking. The same pertains to the purity of the soil. If the land is polluted (because of former industrial activity) its purification becomes a prerequisite, which the initiators of the functional and spatial transformation project must undertake;

Cultural dimension: the protection of the historic heritage of cities, including the elements related to their identity has also been enjoying the increased interest of both public sector and urban communities. This is particularly related to the preservation of maritime tradition, expressed by cultural undertakings and a respect for particular sites shown by their refashioning alluding to local history. Of chief importance here is the revitalization of old buildings related to the harbor tradition in such a way that their adaptation to new functions can preserve the basic elements of their former design. These buildings, when suitably incorporated into the new urban structure, can even work as catalysts in the development of new urban programs. The return to tradition and cultural values of former harbors is also expressed by the creation of open-air museums, the development of educational institutions (like museums or marine aquaria), and finally, the creation of new objects that develop relations with the former structures of ports both in their scale and character. They serve not only commercial purposes but are also a specific kind of depository of the collective memory of the local community, encompassing the history of former harbors and people related to them [7]. These tendencies have provoked a crucial turn in the paradigms of urban planning, previously dominated by a heritage of modernist urban planning from the 1950s and 1960s.

It can be observed from the above examples that water-based areas have been transformed all over the world and that – in each case of the transformation program – an array of issues had to be taken into account. But – at the same time – it seems to be possible to define a number of key types of waterfront redevelopment patters. These may constitute a general typology of waterfront transformation schemes.

4. Key types of waterfront redevelopment patterns

The analysis of regeneration programs introduced in degraded waterfronts in port-cities may include a number of issues. Among the most important ones one may identify such the issues as: role of a project

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in the city structure, functional program of the project, attitude to the cultural heritage of the city as well as realization strategy adopted. These issues are presented in more detailed way in the following parts of this chapter.

4.1. The role of a project in the city structure

A different definition of a project within the city structure can be formed, depending on the scale and character of a given project:

- **a project of a significant role for the structure and functioning of the city** – this denotes first these ventures which aim at more than the solution of the problems of degraded post-harbor areas and the creation of the new quality of urban environment. Therefore, the basic elements here are the facilitation of city life and the creation of opportunities for the economic development of the city, along with the significant new residential areas and a great concentration of work places. As an example one can quote the **Canary Wharf** in London which has considerably changed the structure of the city causing, among others, shifts in main spatial arrangements;
- **project of minor importance** which do not significantly change the mode in which the city functions. These are small projects, addressing only fragments of degraded urban structures. Among the examples are **Rowes Wharf** in Boston, *South Street Seaport* in New York and particular elements in the revitalisation of the old ports in Barcelona and Genoa.

Certainly, the scheme for a given revitalisation program can be a mixture of different types. Basically, there is a combination of a single or two big projects – called the leading projects – with a series of supporting actions which are only the support and aid for the main one. A classical example of such a program are London Docklands, where the *Canary Wharf* was the main project, realized within the assumed framework and was surrounded by many smaller ones of marginal significance.

However, a slightly different situation happens in many cases. The transformation program is built from a bunch of minor projects. Yet then there is no feeling of the "new quality" being created in the waterfront area of the city and this may affect the success of the venture. The examples of such types of program can be found in Boston, San Francisco, Barcelona, and Genoa. Obviously, sometimes, certain programs became more significant than others, yet they did not gain a clear dominance in the functional and/or spatial structure of the cities.

4.2. Functional program of a project

The projects realized in the framework of waterfront transformations in cities have a very diversified functional program; therefore, some of the projects are determined as to their specific role and location in the entire structure of transformation. The following groups can be enumerated here:

Commercial projects – related to the development of downtown functions, especially service program; these can be divided into two categories:

- ***festival marketplace*** – the introduction of a commercial program addressed to a wide public, such as shops, restaurants, entertainment, safeguarding the vista to the water, space for artistic appearances and extensive public space, i.e. the combination of places of catering and shopping with opportunities for socializing, all of this being a concentrated enterprise. The superior goal here is the creation of a specific *genius loci* as a magnet attracting people to spend time in a carefully created space. The concept of the "festival marketplace", invented by James Rouse from Rouse Development Corporation and designed, among others, in Baltimore by Benjamin and Jane Thompson, was incorporated especially in American programs for the transformation of degraded port structures. This is linked to the lack of the European-type public spaces in

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American urban structures. Thus, the "festival marketplaces" served as the surrogate of such European marketplaces and blazed trails for another phenomenon, namely, artificially created urban spaces.

- ***mixed-use projects*** are multi-function structures, with a large participation of commercial and service functions, alongside a considerable office, hotel and residential programs.

Cultural, educational and environmental projects. Urban waterfronts have always provided unique placement for religious architecture, monuments, public art and big public institutions. This practice is continued today. For instance, the symbol of the post-war Australia is the opera house in Sidney, located on the Bennalog promontory. Similar, contemporary waterfront buildings often become city symbols, as Osaka Aquarium does. Waterfronts are also a logical location for the buildings which testify and document a marine heritage of a city, for example: marine museums (e.g. in Auckland and Stockholm) and historic ships mooring nearby. The buildings of these museums themselves can be significant symbols in these cities' structures as *Suntory Museum* in Osaka is (1994). However, the prerequisite for enterprises like that is the purification of water in the waterfront area. Beside symbolic and aesthetic values, these sites have also an educational value; they inform the public on the importance of water in our life and serve as the source of knowledge – especially for young people – about environmental interdependencies governing our life. As an example, one can quote here huge marine aquaria the construction of which became the starting point for many revitalisation programs on many post-harbor areas (Boston – 1969, Baltimore – 1981). They have an exceptional power to both fascinate and educate people and are one of the most interesting examples for contemporary port-cities.

Recreational projects, An important role of waterfronts is providing leisure for its users and inhabitants. This is realized in various forms: angling, swimming, sailing, quiet musing, etc. Thus, new parks, public spaces, promenades, marinas, children playgrounds and vantage points are being created. It seems safe to presume that recreational areas with related cultural functions will dominate new waterfront projects, taking into account catering and shopping facilities, addressed to the clients of these recreational areas, aimed at the strengthening of "the waterfront experience".

Residential projects. People have lived on waterside for centuries, both for practical and aesthetic reasons. Living next to water is today so attractive that developers will quite often create artificial little lakes and ponds, to later build new residential houses around them. It is an axiom of the real-estate business that a plot near water is more expensive than a similar one, lacking water in the neighborhood. Despite the threat of hurricanes and floods, people are still building their shelters in waterside areas. The increasing demand for houses near water is an important element of the waterfront phenomenon. However, due to the fact that a house – a private space – is located on water – a public space (in a sense) tensions between these two worlds appear. When a given waterfront object is well-devised and carefully executed, a direct vicinity of water is guaranteed to the wide public and the waterside passages and boulevards become attractive and inviting. Unfortunately, an untoward tendency to separate the area from its surroundings in some residential waterfront projects has appeared, especially considering expensive luxury flats. Consequently, fencing and sentry boxes appear to create an impression that a given waterside area belongs to residents and trespassers are really unwelcome. A demanded effect can be achieved by, e.g. the introduction of a certain number of subsidized social flats, as was done in the *Entrepot West* project. The style of the development of such planes depends on location very much.

Industrial-and-port constructions. Many of the most fascinating waterfronts in cities are related with ports functioning still and operating transportation equipment on their premises. A port view with its huge cranes and ships mooring at quays is very attractive. While many of the port functions are now being carried out on the peripheries of urban structures, some have still remained in the city centers; examples of this are Oakland, San Francisco, Hamburg, Rotterdam. Heavy industrial installations, small factories, sewage processing plants, bridges and passenger terminals – all these institutions are located

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on waterfront land and sometimes render great influence over the shape of the whole waterside area of a city. Other elements here are small enterprises and firms linked with port sites for years, even centuries, which are situated in the direct vicinity of city centers. These institutions create a more diversified and authentic image of a given waterfront. Looking at this issue from a strictly economic point of view, such functions as marinas, boat building workshops and small shipyards, bases of fishing cutters and other objects may easily be replaced by more intense commercial functions. Therefore, they quite often leave their old location in the search for cheaper land or, even, cease their activity. Industrial users of waterfronts, especially the larger and more significant ones will remain; however, cities enjoy the possibility of making their installations more attractive, making them an attractive element in the project. In case of small marine businesses, the decision is more complicated: should one interfere to preserve these small enterprises or should one let them go. This type of enterprises, although not so spectacular as large commercial ones, offer work places, anyway, employing unqualified people, and retain the maritime character of a given local community.

4.3. Realization strategies adopted

The kind of land use in waterfront areas is based on the type of realization strategies adopted. Although, it may be possible to identify three key approaches: creation of **new physical spaces;** use of **cultural heritage spaces** and revitalization of **the space for a local community**. But – despite the adopted mode of intervention – it appears that revitalization programs for post-harbor areas usually embrace a series of single investment programs, filling the entire structure of the post-harbor area. Quite often, still abandoned and degraded areas can be neighbors to already completed projects. The projects themselves are of a different scale and character and they perform different functions in the structures of their cities. However, the rule is that they complement each other and make defined functional and spatial relations.

Still, one can distinguish certain characteristic modes of behavior:

- The entire regeneration process is based solely **on individual ventures**; in this instance there is no common idea to link them. As a result, we obtain a rather haphazard set of investment projects, often conflicting with each other in function and space. Therefore, the success of such a venture is rather doubtful. A classical example of this is the Manhattan waterfront in New York.
- Comprehensive revitalization programs are prepared and they assume the considered transformation of the entire post-harbor areas. This has a double dimension: the revitalization (in the sense of organizational and financial structures, along with the working mode) and the design. In this particular case, entire districts are subject to an all-embracing design, which tackles the whole of the architectural and urban form. This is the case with Amsterdam.
- The entire process is divided into smaller autonomous investment tasks within the framework of a general concept. This is an intermediate type of regeneration, assuming a common general regeneration scheme, embracing the realization of necessary infrastructure investment within the entire area (financed from public funds) and then, individual schemes are applied to defined projects, financed and designed according to their own schemes. Examples: London, Genoa, and Barcelona.

Considering the utility of the program introduced into post-harbor areas, one can distinguish at least two situations in the world, where:

- The goal of revitalization is to **regenerate degraded spaces into new downtown functions** of a diversified character. Such is the case of, for example, London Docks or Kop van Zuid in Rotterdam

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- The revitalization program delegates a part of the area to various port functions – both cargo handling and passenger service. As examples, one can refer to passenger terminals and ferry terminals in Genoa and Barcelona or the new port structures in the old docks of Antwerp.

One of the prerequisites for the success of revitalization programs is the **cleaning of the natural environment**, especially water systems; an example is Boston. Usually, the formation **of an autonomous public agency** proves necessary as this body might foster such a process. Example: Baltimore Harborplace.

The key tools guaranteeing the success of such a transformation process are:

- **Development strategy** – that allows for the avoidance of many spatial and organizational conflicts, guarantees a suitable character for the project, its division into stages and the support of the local community. Its framework should be comprised of, among others, decisions on new roads, public spaces, etc.
- **Emphasis on the adaptation of existing structures** – wharves, etc. to new purposes. This facilitates the elaboration of projects of a unique character and, simultaneously, perfectly suits the context of the given site.
- **Social research and consultations** – initiated by both private developers and public agencies, they facilitate the achievement of the best possible projects and the avoidance of unnecessary social resistance, corresponding to the use of all the advantages of the site (e.g. the use of areas of water, preventing them from being desolate, offering the possibility of a wider view of the situation on the water, etc.).
- **Cooperation with the local community** – this not only helps to avoid conflicts with the community but also, rather, gains community support and cooperation in carrying out the project, thanks to the guaranteeing of defined benefits. This also permits the improvement of the project making it more attractive, for example, by facilitating suitable conditions for the development of local artisans or art

The above comparison proves that the key elements in revitalization programs of post-harbor areas are:

- *Defined operations on infrastructure*, new roads and public spaces, bestowing new areas with a defined new structure
- *Varied scale and character of investment programs*, which will impose a defined structure onto entire areas
- *Coherent financial and organizational modes for the realization of particular tasks*, which guarantees a well-organized, efficient realization of particular programs and their parts

Public spaces and infrastructure are designed individually so it is difficult to speak about any sort of classification. However, the issues for particular projects in different cities are often of similar character, so their arrangements can be applied appropriately in pre-defined ways in various places. The case of the organizational-financial team is difficult to classify, as are the organizational and financial modes, of which thorough analysis is a necessary supplement to the discussion of strategy and the realization of particular objects.

4.4. Attitude to the cultural heritage of a city

Historic waterfront areas are inseparable from the maritime heritage of local societies and as such are related to the prosperity years of many port cities. Traditionally, waterfront neighborhoods are counted the most colorful parts of cities, with regard to the medley of historical architecture. In many cases, the option of the purification of architecture from some part of historic structure for preservation and

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revitalisation is decided upon, instead of cleaning the huge areas from the remains, considering such a choice proceeds a rich (in the cultural sense) milieu. However, the process of "gentrification" and the creation of "false history" are often spoken about. Nevertheless, were the redevelopment of old structures does not go along with the income from selling the exclusive flats located in old warehouses and other structures, these structures, often ancient, would dilapidate as unprofitable.

While a former warehouse shines again, now being i.e. a wine shop, the renewed structure becomes even more interesting in its form and atmosphere than many modern buildings, even if it is no longer received as "authentic" old warehouse. **The atmosphere of a city which has been able to preserve its historic waterfronts is now helping the city face an opportunity to profit from modern tendency to maintain links with the past.** There are many examples of operations, each different in its nature, which result in:

- **the removal of the whole of existing structures and the introduction of a new layout**, no links with the site are developed. This type of activity is only exceptional, e.g. the non-durable character of existing building structure or the lack of any aesthetic values. The glaring examples of this approach are Manhattan waterfront in New York, especially Battery Park City.
- **the preservation of old urban layout and single structures** and the removal of the remains of the to-date existing economy. This type of intervention is the most often rendered because it quite often proves impossible to preserve many of historic buildings of little or no cultural value at all. What is preserved, instead, is the wharf layout, extensive water system, while selected objects of high aesthetic values are being renewed. Examples of this are: a significant portion of London Docklands, especially St. Catherine's Dock and Albert Dock in Liverpool.
- **the full preservation of old structures and filling them with new content.** This type of intervention is rather rare because the condition and structure of development hardly ever permit the preservation of the majority of buildings.

5. Climate and location issues vs waterfront redevelopment schemes

On the basis of the “success stories” of many cities undertaking the waterfront urban redevelopment process also municipalities located in “less privileged” from the climate point of view areas as well as small- and medium-sized cities tend to rethink their water related urban structures. This relates both to cities located in the hot and cold climate zones – which to large extent make the traditional type of waterfront redevelopment patterns unviable, both due to climate conditions and – being the result of those – different economic and cultural realities. In result, the design patterns based on the traditional “success stories” seem to be unsuitable for these locations and the designers and developers of waterfront sites located in such cities have to look for the alternative solutions. Same applies to small- and medium-sized cities, which not necessarily bear potential for implementation of the mixed-use, large-scale urban projects. In these cases also the problem of relations between “global” trends associated with development of mass tourism as well as with implementing the typical mixed-use patterns and specifics of local economy and cultural environment has to be taken into account.

In case of those cities one can identify the following key specific approaches associated with the nature, scope and character of the smaller scale and located within the less-privileged climate realities waterfront redevelopment program. These were developed in relation to an overview of the issues associated with this topic as presented in the previous part of this paper.

5.1. The role of a project in the city structure

One has to note that in this case transformation of the waterfront is associated with the redevelopment of the entire city economy – as it takes place of former fishing industry and small port operation facilities. This means that implementation of such a program is based on the fact that traditional small-scale

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maritime industries are fading away and that the new type of economic activity – which is associated with spatial transformation – are taking the place of the "old" industries. This is associated with transformation of the fishing industry, diminishing importance of the small-scale cargo shipping etc. Therefore, since the scale of the intervention is usually medium to large (in relation to the scale of the existing city) and also due to the fact that its associated with transformation of the key economic sector of the city, it can be stipulated that the role of the waterfront redevelopment for the entire urban development process is much larger in case of small-and medium-sized cities than in case of large cities and metropolitan areas.

In this case one can state that the new intervention not only aims to solve the site-specific programs of the degraded post-harbor and post-industrial sites, but also can change the entire economic and spatial profile of the city, including introducing its new water-oriented face. This may be associated with diminishing the importance of the historically developed main streets or urban centers, but this depends on the existing spatial structures of the cities. Also, the functional composition of such an intervention depends heavily on above mentioned role. Similarly to other cases, usually the transformation program is built from a bunch of minor projects, but – usually – due to the scale and character of the intervention – these constitute the new "urban quality" not only for the site involved but for the entire city.

5.2. Functional program of a project

The projects realized in the framework these transformation schemes – in line with the typology presented in the previous chapter – may be very much diversified from the functional point of view. But there are two sets of factors, which make the functional profile of these projects different:

- Climate realities – which make the open-air recreation very limited in time throughout the year;
- Realities associated with the scale of the cities – which decide about the different profile of the users – both in terms of tourists, inhabitants and businesses – than in case of the large cities and metropolitan regions.

Therefore, within each of the functional categories (as listed in the previous chapter) the following specifics of the particular types of the projects may be observed:

Commercial projects – are usually associated with more traditional **mixed-use projects**, with a large participation of commercial and service functions. These may include hotel and residential programs, although most of those are focused on tourist industry and – to some extend – on creating the new offer for the inhabitants of the city. Also, the new office spaces may be part of such the developments, but usually these do not constitute the most important part of the intervention.

Cultural, educational and environmental projects – these may become the very important parts of the transformation schemes of the small- and medium-scales waterfront cities. Especially the projects associated with local history, traditions and culture are of great importance for the success of the entire scheme. In case of some of the cities, these projects may draw attention of tourists and visitors, planning to visit these sites just because of these attractions. The best example may be the small Polish city of Hel, which is famous in the country because of two institutions: center for rehabilitation of Baltic seals (the only one in the country) and fishery museum (occupying the old church).

Recreational projects – are usually limited to the public spaces which are used only for the short periods of time (due to climate reasons) as well as marinas and yacht operation facilities (which are also active only for the fraction of the year). Therefore, on the contrary to the many of the world-famous waterfront projects, the recreational facilities do not play the leading role in the structure of the entire scheme. But at the same time one has to note that these elements still constitute the very important part of the overall "waterfront experience".

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Residential projects – play a very important role in these schemes, although it has to be noted that usually these are places of the "second apartments" or "holiday places" rather than permanent living areas. This comes from the fact that small-and medium-scale cities are not in need of such the prestigious and posh places to live, and their communities are not interested (in general) in moving to these places. Therefore, the rules which are applied to other residential projects, do not work in these cases.

Industrial-and-port constructions – still are (and probably for long will be) still of great importance to the analyzed waterfront sites. Although many of the small-scale maritime industries are gone (like fishing, food processing, small cargo handling etc) due to major shifts in economic realities and globalization (to name just a few), still there is room for niche type of functions – like pleasure fishing, yacht maintenance / repairing / production etc. It has to be noted that these activities usually are not aimed to compete on the larger markets, but do decide about the local identity of the space and are focused on local customers only. In fact, many of these may – due to these factors – actually decide about the attractiveness of the project and / or the city itself. Of course, many of those may have historic origins and long years of tradition, but also the entirely new businesses within this sector (and spatial constructs associated with these) can be identified [8].

5.3. Realization strategies adopted

When discussing the realization strategies, all three models described in the preceeding chapter (namely: creation of **new physical spaces;** use of **cultural heritage spaces** and revitalization of **the space for a local community**) can be employed. It also appears that – in the end – revitalization programs for small- and medium-scaled cities usually are based on comprehensive transformation of the infrastructure (public spaces, embankment improvements etc) along with an array of individual small-scale building interventions (in form of individual building projects).

When discussing the utility of the program introduced into post-harbor areas, usually within the regeneration scheme includes both various small-scale port functions (as described above) as well as downtown / city center type of structures. Of course, in each case one of the prerequisites for the success of revitalization programs is the **cleaning of the natural environment**, especially water systems; but it has to be noted that this usually is not a huge problem and a major obstacle for the regeneration program.

5.4. Attitude to the cultural heritage of a city

As discussed above, historic waterfront areas are inseparable from the maritime heritage of local societies. In addition, these areas usually are home for interesting parts of the maritime heritage, including port cranes, warehouses, embankments etc. But at the same time in case of the small- and medium-sized cities the scope of this heritage is much smaller than in larger cities and ports, and – in addition – the structure and character of these elements are much less important form the architectural and industrial heritage point of view. Therefore, in many cases it is decided to keep a lot of the historic elements, but usually these are reused for the new functions – although keeping their heritage character. This contributes to the outstanding identity of the site as its "unique feature" [9].

6. Conclusions

As discussed in this paper, waterfront regeneration is one of the leading themes in contemporary planning agenda. In addition, it can be perceived as a world-wide urban success story. There are many examples of the successful transformation, although usually only the cases from large cities are taken into account.

It was argued in this paper that the small-and medium-sized cities as well as ones located in the "less privileged" climate zones do require slightly different approach due to their specifics and character. But at the same time it seems that transformation of the waterfronts in these cases may be of much greater importance for the city as such than in case of larger urban areas.

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In addition, it has to be stated that not only the character of the urban structure in these cases is different but also the economic rationale of this transformation is of different character. In the end, the entire process has to be dealt with in an alternative way than in bigger urban centers.

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