

## **Waterfront rehabilitation: a model of spatial intervention**

### **The case of Lisbon Metropolitan Area**

*“El rio fuye sin alterar su forma, o sin necesidad de alterarla; es distinto siendo aparentemente el mismo... Cada momento el rio es otro.*

...

*Si el rio es lo fugaz o huidizo, porque se mueve cambiando, es perfectamente explicable que se le compare a la vida, que fluye sin retorno. Es una de las imágenes más humanistas del paisaje. Nuestras vidas son los rios.*

...

*De esto se deduce que el rio debe fluir. Si no, es una cinta verde; puro elemento estético de color y variedad. No es menester que lleve mucho agua, sino que fluya. Aunque nadie navegue por él, ha de ser un camino en movimiento. Los rios excesivamente mansos tienen el alma muerta de los canales, los estanques y las charcas. La fauna de éstas es la rana; la de rios, el pez.”*

*Munian, 1945*

### **Introduction**

In the past, waterfront areas were primarily used as location sites for factories, industrial plants, warehouses, harbour facilities and railways and were usually significantly separated from surrounding urban fabric.

However, from the mid-20th Century onwards, the economic changes associated with the decline in the importance of harbour activity have altered the traditional association between cities and harbours (van der Knaap and Pinder, 1992). The shutdown and relocation of certain industries, as a consequence of the decrease in logistical and harbour activity and of the emergence and development of new technologies, have rendered many of these areas useless, obsolete and sometimes even dangerous – thus making it possible and desirable to use them for other purposes.

Hence, what we find throughout Europe is a growing tendency towards the rehabilitation of deactivated riverside and waterfront areas, in what amounts to an attempt to (re)draw the city and explore its value to the fullest. Therefore, as this tendency continues to spread and as new and increasingly high standards continue to be set by the projects and measures being implemented, many specialists now speak of the proximity to the water as a new model of spatial intervention, based on the logic of waterfront rehabilitation.

## 1. Waterfront rehabilitation

Waterfront rehabilitation is a process that first appeared on a significant scale in North American urban areas and then spread to Europe and Asia. It is a process whereby old industrial and commercial waterfront areas are taken up by new services, housing, facilities and leisure purposes (Hoyle, 1992).

The first large-scale rehabilitation projects were implemented in the United States in the late 1950s, more specifically in Baltimore and Boston. The Canadian cities of Toronto and Montreal developed similar projects some time after that and it was only later, in the 1980s, that the well-known *Docklands* project saw the daylight in the city of London.

Hoyle (1992) argues that “every North American city with an urban waterfront area... has eventually intervened to rediscover and restructure its reference areas (harbour cities and waterfronts)”.

It is important to begin by reviewing the structural economic changes that have taken place throughout the 20th Century, in order to place the waterfront rehabilitation phenomenon against its proper context.

Between 1950 and 1960, an increasing large share of the urban waterfront areas started to be abandoned. This took place in the post-World War II period, a period in which a transition occurred from the use of cargo ships to that of other container carrier technologies. This process was first experienced in the United States.

According to Mollenkopf (1983), it is also worth pointing out that waterfront rehabilitation initiatives usually occur in cities experiencing processes of post-industrial economic restructuring (from heavy industries to high-tech, information and service-based industries), such as Boston, San Francisco, New York or Baltimore.

After WWII, the industrial and commercial activity of the harbours of these cities experienced a decrease, while the service sectors of the local economy (commercial, health, education, tourism, local administration and industrial development services) expanded and grew increasingly diverse, thus turning these into “post-industrial” cities.

Tunbridge (1998), quoted in H.D.Barata (1996), argues that the restructuring of the old harbours was part of a wider movement that also included the rehabilitation of historical centres, the restructuring of the urban economy into a service-oriented one, the improvement of the quality of the environment and the cleaning of the water and the air.

Therefore, according to Roberts (2000), urban rehabilitation processes are driven by (i) an economic transition, (ii) an interest in the social environment, (iii) physical obsolescence and new territorial demands, (iv) environmental quality and sustainable development. Comparing the twin processes of waterfront and historical centre rehabilitation, this author argues that the latter is brought on by the processes of deindustrialization, harbour shutdown, land vacancy and the need for land for public use (Hoyle et al., 1998; Bruttomesso, ed. 1991; Bren and Rigby, 1996).

Having, as a consequence of the deindustrialization and technological obsolescence of harbour facilities, become vacant and decaying areas adjacent to the central commercial areas, waterfronts came to play a central role in urban rehabilitation processes.

Mann (1988) indicates ten different aims of the waterfront rehabilitation movement that explain its rise and success in the United States:

1. The fact that waterfront rehabilitation processes make available a large and diversified range of land uses;
2. The strong public demand for freely and easily accessible shores and riverbank areas;

3. The removal of the roadways and their substitution with pedestrian infrastructures;
4. The conservation and recuperation of the bank areas of small watercourses and canals;
5. The conservation and rehabilitation of the cultural and historical heritage;
6. The creation of commercial areas destined for the general public;
7. The construction of exhibition halls and other cultural facilities;
8. The creation of places suitable for setting up artistic elements;
9. The possibility of organising music festivals other artistic events;
10. The enforcement of the urban planning regulations.

The aforementioned aims and tendencies, though originally meant to describe the situation in the United States, also apply throughout most of Europe. This is the so-called “Cinderella syndrome”, whereby “both the public and the authorities show an interest in upgrading previously obsolete, decaying or under-used areas by promoting their urban, scenic, leisure and cultural development in such a way as to meet the new requirements and challenges placed by its fruition” (Urban Wildlife Research Center, 1981).

According to H. D. Barata (1996), the rehabilitation of harbour areas was “in many cities in the 1970s and 1980s, explicitly considered as *the* most important of urban interventions, drawing the attention of a plethora of actors, sometimes driven by conflicting interests: public authorities, citizens/users, port authorities, urban planning professionals and private investors”.

## **2. A new model of spatial intervention**

According to Sieber (1999), the new planning and environmental aesthetics award a central role to water, promoting it to “backdrop *par excellence*” of the urban landscape.

Efforts to rehabilitate the waterfronts were thus particularly common in the post-industrial age. The decline of heavy industry and the transition to a service-based economy have brought these concerns to the fore.

The rediscovery of the scenic and environmental value of waterfronts, along with the possibility of bringing the people closer to the water, has increasingly turned this into the predominant model of the contemporary city. In this context, over the past few years many cities have sought to implement land use strategies and projects in precisely these areas. A new way of looking at the surrounding space has emerged that is more concerned with territorial sustainability and with the central role of the landscape.

The new economic role played by these areas translates into new forms of spatial management. New types of activities gradually blossom as the riverside and waterfront areas draw in the population. Through this process, it is possible to meet the challenges of carrying out the economic and environmental restructuring of these areas, improving the quality of the water by managing the sources of threat to it, implementing innovative land use strategies; improving public access to the waterfronts; and fostering public participation in the decision-making process.

### 3. The Lisbon Metropolitan Area and the rehabilitation of the waterfronts

The aim of this text is to provide an overview of the dynamics of urban development and waterfront rehabilitation in the Lisbon Metropolitan Area (LMA). However, some introductory remarks are necessary in order to clarify the relations between these points.

The LMA was created as a territorial entity by Decree-Law no. 44/91 of August, 2nd, 1991 and is subject to public law. Its creation arose from the need to devise new and more effective ways to manage an area that is of vital importance for the country as a whole.

The LMA is made up of 18 municipalities and, according to the 2001 Population Census, has a resident population of 2,682,687 that accounts for 25,9% of the country (INE, 2001). It occupies an area of 3,128 Km<sup>2</sup> in total and its coastline is of great natural, cultural and scenic importance. Generally speaking, the Atlantic coast is characterised by steep cliffs, interspersed with dune formations and extensive beaches, some of which are over 20 Km long. It includes two wide estuaries, the Tagus and Sado rivers estuaries, both of which are characterised by considerable biodiversity.

This sub-region soon achieved a high level of demographic growth and physical, economic and social development that, along with its level of international economic and politics integration, confer it a supra-national role (Gaspar, 1993).

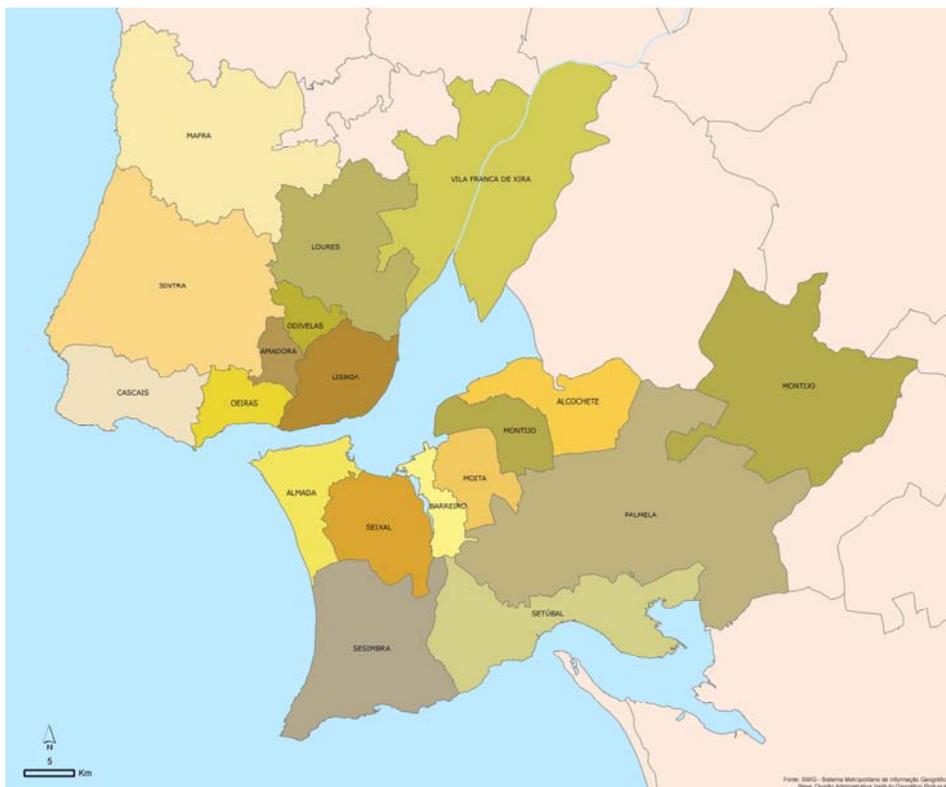


Fig. 1 - The LMA

In spite of the level of population concentration in the LMA, we find that the *city* of Lisbon itself has been increasing a population decrease. This began with the suburbanisation process and was reinforced by the growing terciarisation of the city, which forced the residential function to move out of the centre and into the periphery. The available data show a highly significant ageing process taking place in the most central districts of the city. On the other hand, we also witness a only partially countervailing process of population increase as a consequence of the development of the transports and roadway systems.

Hence, it is very important that basic research be carried out and integrated planning processes be implemented at the municipal and supra-municipal levels, in order for urban and land use planning to allow for the sustainable development of the territory.

As mentioned before, the waterfront rehabilitation movement emerged at the international level in response to simultaneously meet two modern needs: the need to address the negative spatial effects of economic restructuring and the need to safeguard and uphold the quality of the urban environment. It is against this general background that we nowadays witness a diversity of urban changes going on in the metropolitan territory, of which waterfronts are in a sense a case-study.

According to Telles (2004), we find in the landscape of the LMA the basic elements and systems that are required in order to recreate a new landscape, whose sustainability will inevitably depend on the principles, values, procedures and resources that are present in the relationship with nature and in the internal dynamics of the territory.

In accordance with this latter principle, the municipalities of the Lisbon Metropolitan Area have undertaken efforts aimed at (re)creating new spaces. It is therefore extremely important to bring together in harmonious fashion the development of the emerging life-styles of our society with the environmental conditions and resources that make it possible to meet the new consumption needs in terms of urban culture, leisure and recreation.

It is against this background that waterfronts have come to play an increasingly important social, economic and cultural role, namely within the territorial strategies and policies of the seaside or riverside European cities.

Of the municipalities that make up the LMA, 16 have one or more waterfronts: 6 of them by the sea and 10 of them along either the Tagus or the Sado rivers estuaries. Hence follows the inevitable importance of the element “water” in municipal and metropolitan discussions and policies.

In Portugal, the “rediscovery” of the waterfronts as areas susceptible of major urban upgrading initiatives began in the late 1980s. However, it was the EXPO ‘1998 Universal Exhibition and the Parque das Nações project that gave this tendency a decisive push.

Over the last 10 years, in the Metro Lisbon context, several municipal plans and projects were implemented with a focus on waterfronts – some of which benefited from state support within the 3<sup>rd</sup> CSF (such as the POLIS program). The goals of these projects were environmental and urban rehabilitation and the upgrading and upholding of the leisure and recreation areas by the water.

In many of these cases, there was indeed an overall vision that enabled these projects to take into consideration a series of different concerns and to allow for a variety of different land uses and purposes. These municipalities implemented research initiatives and waterfront programmes that were harmoniously balanced and criteriously designed.

The Seixal Bay Project, the Costa da Caparica Waterfront Programme and the PRTEJO Programme for Waterfront Rehabilitation in the Moita Municipality provide particularly interesting examples.

The strategic guidelines and the territorial model of Metro Lisbon’s Regional Land Use Plan (RLUP) area used as a reference insofar as the water, the waterfronts and the Tagus River estuary play a particularly central role.

This RLUP explicitly sets as some of its goals to “recenter the Metro Lisbon area around the Tagus estuary, ensure the conservation of its natural resources and protected areas and develop Greater Lisbon as a city spanning the two banks of the estuary. The Tagus River estuary is therefore explicitly regarded as a strategic scenic and environmental resource, a source of territorial advantage and a factor enabling the promotion of the cohesion and identity of this metropolitan area, through the use of urban planning instruments.

In this context, the rehabilitation of the Tagus River estuary may well hold the key to the international promotion of the role of both the water and the waterfronts in the Metro Lisbon area and itself serve to stimulate the rehabilitation of the other waterfronts in the region. New areas of contact between the urban life and the seaside and riverside natural areas, filled with opportunities and possibilities, are thus being created.

#### 4. Conclusions

From an institutional perspective, upholding and making the most of the value of the water and of the waterfronts at the metropolitan level requires that the strategies, policies, projects and procedures implemented by the various bodies that have authority over these areas and intervene in them converge in a coherent manner. However, that is not the case in the present: predominantly, what we find is the idea that waterfronts are areas that are difficult to manage and in which the institutional differences are exacerbated.

Therefore, considering that the institutional dimension has been a central aspect of the process of waterfront transformation, and that many city councils in the Metro Lisbon area have already implemented this type of projects, a number of recommendations arise as particularly relevant and should be borne in mind:

- i) the importance of the projects aimed at rehabilitating and upgrading waterfronts areas;
- ii) the importance of actively promoting the diversity of these areas, as opposed to the *ad nauseam* repetition of well-known models;
- iii) seeking to understand the dynamics of ownership and identity that bind the population to these areas, within a dynamic view of cultural and social change;
- iv) the advantage of transforming waterfront areas by way of innovative projects within a coherent global vision that encompasses all the factors that are relevant to urban planning (not limited to, but including the social, historical, cultural, scenic and biophysical diversity);
- v) bearing in mind the relationships between the various spatial scales (metropolitan, inter-municipal and municipal);
- vi) protecting the cultural and historical heritage; and vii) enforcing urban planning regulations.

#### References

Barata, H. D. (1996), O Porto de Lisboa, Estudos para o Planeamento Regional e Urbano, nº44, Centro de Estudos da Universidade de Lisboa, Lisboa 187p.

Busquets, J.m(1997), “ Los Waterfront de nuevo una prioridad urbanística”, in Mediterrâneo, nºs 10 e 11, Instituto Mediterrânico, Faculdade de Ciências e Tecnologias, Universidade Nova de Lisboa, Lisboa, pp. 35-46

Chaline, C.m(1999), Avaliação e Reconversão dos Espaços Portuários Abandonados; In Ferreira, V, M; Indovina, F. (Org.); A Cidade da Expo'98; Bizâncio; Lisboa, pp. 116-125.

Foster, J .(1999), Docklands. Cultures in Conflict, Worlds in Collision; UCL Press; London.

Gaspar, J. (1999), "As frentes e água no contexto estratégico do desenvolvimento da A.M. Lisboa"; In Ferreira, V, M.; Indovina, F(Org.); A Cidade da Expo'98; Bizâncio; Lisboa

Hoyle, B. (1989), " The Port- City Interface : Trends, Problems and Examples" in Geoforum, Vol 20, Nº4, Pergamon Press, Oxford – new York, pp 429-435,

Hoyle, B.; Pinder, A. (1992), " Cities and the sea: change and development in contemporary Europe", B. S. Hoyle and D. Pinder (Eds), European Port Cities in Transition, Belhaven Press, London, 207p, pp 1-19.

Pinder, D.; Knap (1992), " Revitalising the European waterfront: policy evolution and planning issues", B. S. Hoyle and D. Pinder (Eds), European Port Cities in Transition, Belhaven Press, London, 207p, pp 155-175.

Sieber, R.T. (1999), "Intervenção nas frentes de água das cidades americanas"; In Ferreira, V.M.; Indovina, F. (Org.); A Cidade da EXPO'98; Bizâncio; Lisboa, pp.63-77

Suykens, F. (1989), "The City and Its Port – an Economic Appraisal" in Geoforum, Vol. 20, nº 4, Pergamon Press, Oxford-new York, pp.437-445

Teixeira, M.B. (1999), "Reconversão de areas urbanas em frentes de água"; In Ferreira, V.M.; Indovina, F. (Org.); A Cidade da EXPO'98; Bizâncio; Lisboa, pp.79-115

Viegas, L., Branco, M., Grande (1997), "Contexto, Cenário e impacto das operações de reconversão urbana em frentes de água", in Mediterrâneo, nºs 10 e 11, Instituto Mediterrânico, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Lisboa, pp.9-19

Vilan, T., Chaline C. (1997), "La reconquête dès waterfronts: logiques et enjeux de la régénération urbaine », in Mediterrâneo, nºs 10 e 11, Instituto Mediterrânico, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Lisboa, pp.21-33