
City-Port of Island: prospective and risks of the redevelopment project

EURAU'12

ABSTRACT. The main value that is assigned to the piece of a puzzle does not lie in the form itself (even if that form is perfect and flawless), but in the complementarity with which the shape of a single piece is able to connect to the other elements in order to generate a whole design, that is, the puzzle. «The element does not precede the whole[...]it is not the elements that determine the whole, but the whole that determines the elements[...]»(Perec, 1978. 7). The validity of an urban redevelopment project (the piece of the puzzle) is supported, not only by the quality of the intervention itself, but by the ability to relate to other parts of the city and the potential to generate new urban equilibria (design of puzzles). With reference to the relationship of the whole framework, we analyze the urban transformations that have recently involved the waterfront of the port cities European Island and the effects of which have a reverberation on multiple levels of scale.

KEYWORDS. Urban puzzle, City-port, Island.

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1. Introduction

As a complex layering of material and immaterial actions in a state of perpetual transformation, the contemporary city is given a vocation aimed at driving constant change. This quality is essential to meeting the contextual needs and the requests at the supra-local level. The change is implemented through works of urban transformation that extend over large areas of the consolidated city, and these actions result in a veritable rewriting of the place; changes in physical and morphological features are accompanied by a renewed functionality, both in terms of the intended use of buildings and the usability of open spaces. Individual projects, spatially restricted in their geographic location, are interpreted as urban synecdoche: the conversion of significant parts of the city leads to substantial change in the whole urban structure (a part for the whole).

Therefore, the change, ascribable to given place, becomes important in its transforming relations with spaces beyond those are closest to it. In reading the evolution of a place, it is essential to broaden the horizon of views. Additionally, is it important to focus on the relational dynamics that structure the whole and define the scope of the works of urban transformation- both in functional and physical terms and in terms of the meaning that is created.

«The knowledge of the whole and of its laws, of the whole and of its structure, is not deducible from the knowledge of the individual component parts.» (*Perec, 1978. 7*).

Georges Perec's metaphor of the puzzle is useful when analyzing for urban analyses to explain in a simple and effective manner form the complexity of an object. This complexity that resides in relationships and in complementary parts of the object rather than the individual parts out of context. In our case, it is the port cities.

1.1 Port-city: a change of relationships among the parts

In recent years, port areas have undergone a radical change, as they are being conceived as special places of urban experimentation and elevated strategic potential. Numerous architectural works were built on the seaside, identifying a specific field of design in the international and European panorama.

The transformations brought about by prominent architectural works have led to a profound change in the urban environment and, significantly, have led to a change in residents' or tourists' perception of the horizon of water. The construction of new urban typologies has led a process of regeneration which, like pieces of a puzzle, is embodied in the alteration of the relationship between port and city. The transformations that have affected the harbor emerge in the open or closed off relationships with the rest of the city, urban models with different characters and vocations.

Industrial era, rigid relationship²: during the rapid evolution in the last century that marked the expansion of urban settlements according to dynamics related to the industrialization of production processes and zoning, port areas have been progressively adapted to industrial, logistical and operational needs related to an efficient handling of goods, therefore reducing the free usability by residents. People were forbidden to erect physical barriers along vast areas overlooking the sea. In order to increase its operational efficiency, which was incompatible with

urban rhythms and dynamics, the port has significantly assumed a contradictory character (an urban "oxymoron"). The port was configured as a specialized infrastructure separated from the surrounding area, an area of marginality separated from the urban system at odds with its original role as the connecting element (between land and sea), a place of trade (tangible and intangible) and a public space.

1980s "waterfront redevelopment", porous relationship: following the technological advancement of transportation (rail, air and sea) in some parts of North America (San Francisco, Baltimore, Toronto) and Europe (with the redevelopment of London's Docklands), the separation between port and city water line was partially disrupted (Fonti, 2010). This period, included under the name *waterfront redevelopment*, it is characterized by the replacement of facilities for operations of the port with new tower buildings for urban activities. The related interventions, however, did not indicate any mending between the port areas and the urban fabric behind the port: the waterfront area was treated as an urban backdrop, not giving the importance to the interfacing spaces that it deserved. The two sides took on a physical relationship of complementarity which did not induce relational interactions between the spaces and functions, especially in reference to interconnecting public spaces.

Port-city liquid relationship: since the 1990s (after the case of Barcelona and Genoa) major European port cities have followed interventions that presented the port as a design laboratory, where large areas of historical and scenic value or port areas undergoing decommissioning were regenerated in terms of form and function. In these port areas, works of high rank have been created: passenger terminals, museums, auditoriums, shopping malls or multi-functional centers. By their very nature, these architectural works are imposed in the urban fabric as generative elements of spatial hierarchies. The introduction of structures of exceptional character has thus led to changing the image and the morphological composition of the same port, so that the port was no longer viewed as an area of infrastructure, but as part of an urban center. Compared to the previous conditions, the process of redevelopment of port areas have reconstituted an environment open to interactions with urban spaces adjacent interconnecting the sea front to the rest of the city. It has caused a general change of the urban: «The changes that took place, or being implemented in the cities of the sea/port cities have given and are giving rise to a novel type of city, *city-port* [...]»(Bruttomesso, 2006. 25).

The harbor was thus revealed by its status of marginality-marked by a specific spatial-independence and was presented to the citizens as a vital place for a renewed usability: typically urban features were introduced among the most decisive in measuring the value added, which acquires the public space as a whole.

1.2 The role of the architectural project within the renovation of the port

The renovation operations within the port are highly complex in terms of creativity and management, both for the plurality of the diverse skills and interests (public and private) put into place and the plurality of the actors involved in the decision-making processes before and after implementation. This complexity finds its synthesis and is realized with the architectural work, which acquires a fundamental importance, becoming a symbol of change. This is especially the case when -as happens with increasing frequency- the process of urban regeneration locates «in the Architecture project a more representative physical size, one which, in many cases, the responsibility of the successes or failures of these initiatives is ultimately attributed.»(Dell'Osso, 2008.V).

The role that the architectural object takes is not, therefore, simply frameable in its physical component: given the expectations are pinned on it that relate to the global process of urban renewal, it shall become symbol and synthesis of such renewal. The single work of architecture, then, emerges as a key element of a strategic nature, a piece of the puzzle that has the potential to trigger a redesigning of relationships beyond the spatial ones within the urban fabric. To fully understand the importance that the single architectural work may have in the redevelopment of ports, we turn our attention to the cases of the island ports of Europe, where such initiatives are a reflection of a larger scale not only limited to the urban system.

2. The redevelopment of the waterfront in island contexts

The opening of the port areas to the urban dynamics and functions is a prerogative that returns the port, also in the collective imagination, to the conditions of the past, where the seafront was one of the main places of social life, of gatherings, and of commercial activity within the city. This trend is also reflected in the ports of the island, where the process of redevelopment acquires a greater importance related to the island's character of its own insularity: «The island city has a specific status, as it is not possible to disregard its close relationship with water, which leads to further research for accessibility and permeability to water without the closures and cuts typical of port areas and cargo storage areas. Moreover, in the island the reality emerges the need to address the issue of redevelopment and regeneration beyond the area of the port.»(Lingua, 2011).

As starting point, we can observe the comparative processes of port redevelopment undertaken in the Atlantic islands of Funchal, Las Palmas de Gran Canaria and Ponta Delgada, and in the Mediterranean basin islands of La Valletta, Palermo, and Palma de Mallorca (Fig.1). In recent years, the sea front of these port cities has been completely redesigned through public and private initiatives. It should be noted that for the purposes of summary, these cases will be treated purely as an example to support and discuss the reflections put forward, without deepening the specificity of the contexts or projects. Starting from the architectural and urban interventions and then to looking to the city and territory, the intent is to identify the interactions that urban design has the ability to develop within the context.

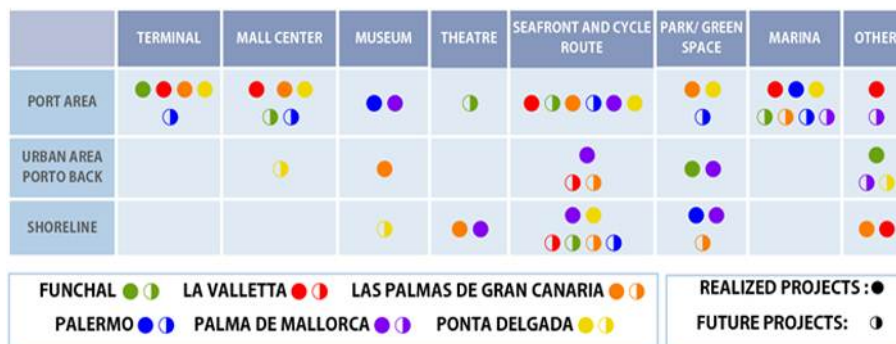


Fig.1

2.1. Relationship of proximity

The architectural object placed in an already structured spatial context is inevitably compared to the environment nearest to it, be it open or closed. The interaction of form, material, color, proportion and size of the work with the neighboring buildings is one of the conditions of attribution of value- on which is aesthetic judgment is based. Intervening in consolidated urban areas always poses the dilemma of the design value of old and new, which is expressed as a duality between change and preservation of the identity of form. The theme of the combination between the new building structures and the existing context becomes more meaningful in the island contexts, as they have an historical port of high architectural value. To this we may add the interaction that can arise between a solid body and a liquid body, between the built environment and the element of water.

The redevelopment of the port system of the Grand Harbour of Valletta was launched in 2007 with the completion of the cruise port of call "Valletta Waterfront"(Fig.2). The theme of the cruise terminal (for its size, aimed to satisfy functional features) presents many design dilemmas to be solved (Bruttomesso, 1998). The difficult balance between a new structure and a historical fortress was resolved by actually starting with the value of the existing environment with an architectural form that, generated since the restoration of the Baroque building by Pinto, grew to fit harmoniously with its surroundings. The complex (by Architecture Project) has led to the redevelopment of the entire surrounding area with the redevelopment and the reorganization of the urban pedestrian and vehicular road network: the creation of a platform for loading / unloading has allowed the separation of pedestrian walkways and the possibility to create a space outside the border between the building and the sea without the overlapping of other volumes.

Unlike the previous case, the intervention of the Parque Santa Catalina in Las Palmas of Gran Canaria (Fig.2), where the urban context has historical layers of more recent foundation, the design approach is not an adaptation, but a complete rewrite of the surrounding space environment. From the complex, placed at the entrance of the port of La Luz, emerges with greater visibility the commercial property of the El Muelle, that with a composition of volumes that are sinuous for their size and strongly emphasized high-tech solutions gives a modern image to the waterfront.

The comparison between the island ports in Europe have, on the basis of spatial, environmental, and historical conformation, two modes of intervention: while in Atlantic ports, the redevelopment is implemented through urban projects of resetting and reconstruction linked to the model of Barcelona, interventions in Mediterranean cities are attributable to an additional model consisting of multiple projects (small-medium and large scale) inserted in a sequential process of modernization and refurbishment, where it is imperative to integrate the new with the architectural and historical permanence.



Fig.2

2.2. Urban relationship

When considering the redevelopment of urban waterfront of Ponta Delgada, it is seen as with Portas do Mar that the operation has achieved a positive outcome both in economic terms and in terms of available spaces. The beach complex and the subsequent reorganization of the Avenue Marginal Road have resulted in a synergistic relationship between the coastal area and the historic center by a path of continuous space between the passenger terminal, shopping mall, promenade and town center. This has boosted frequentation and the flow both towards the waterfront and towards the center with a significant impact in the field of business. The multifunctional structure of the Portas do Mar is located along the road that separates the center and the outskirts, so that with the new construction site on the west side (including the shopping center Pero de Tevie) the balance achieved between the portions of the city may be questioned. The possibility exists that this arrangement creates two conflicting poles: that of the old town and the promenade.

In Palma de Mallorca the lack of free spaces in the port and the presence of the coastal road Av.Gabriel Roca led to a clear separation between the city and harbor, relegating to the harbor the role of commercial port. In the harbor, there were no interventions other than those related to the operating sector, while operations were performed on high quality architectural urban front overlooking the coastline: the Parc de Mar and the Museo de Baluard, which lie, in fact, on the sidelines of the center town along the coastal road. In this case, the spatial and functional union between the city and the seafront is not created by the construction of new public spaces within the port, instead it is generated by a reverse process in which the city is the one that tends to make the approach with new cultural and recreational facilities at the port and at sea.

The inclusion of buildings of high rank in the cultural and commercial destination has conformed the port as a new center of attraction and social gathering. These areas, previously excluded from public accessibility, have been involved in a process of re-appropriation by the citizens. The public city has shifted on the coast, generating a new polarity which, depending on the case, is related to either complement or contrast to the historical center- the place that has always been designated to play the role as the main catalyst for social activities and public life. The distance between the center and the port is thus a key element in the balance within the functional urban system. In the case where the distance between the port and the center does not allow for any spatial continuity, a polycentric system is generated: two distinct poles which, although connected by pathways, remain spatially separated. Instead, when the two sides are close to one another or bordering each other, it causes a sort of perceptual and spatial expansion of the historic center which, expanding its limits, should be redeveloped to incorporate new areas of the harbor (Fig.3). It is, then, reconstituted a relationship that is historically already present in the memory of the place: in many cases, indeed, the redevelopment involving the so-called old port, that the first phase of industrialization and modernization of the port system, was an urban element integrated in the city center.

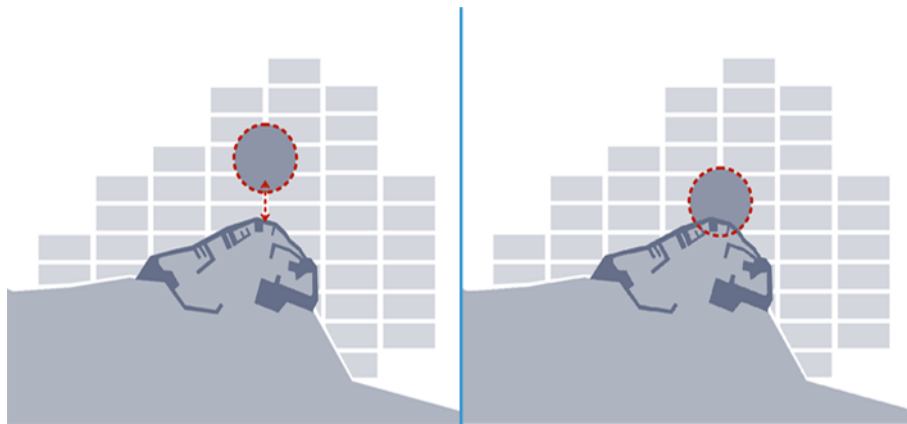


Fig.3

2.3. Territorial relationship

The new ferry terminal, located on the pier Pontinha and inaugurated in May of 2010, appears as the first sign of human presence for those approaching from the sea to the port of Funchal (Fig.4). The building, made up of two floors plus a control tower, has an area of 570 m including the long elevated boardwalk that runs along the pier. The structure is covered by white plaques of Alucobond that characterize the external appearance. The importance of the structure cannot be understood without an awareness that it is the first completed work of the Plano Director do Porto, a plan that outlines a process of redevelopment of the port designed on a territorial scale.

To Funchal, the desire to focus strategically on tourism in the city and the island has forced the redesign of the port sector with the distinction of two port segmentations. The first is an operative type, with the construction of a new port at Caniçal which brings together all the transport freights. The other is an urban type

with the marine terminal and the redesign of the port of Funchal that allows for the merging of passenger transport in order to supply the cruise market (which has continued to grow thanks to the association "the Atlantic Island Cruise").

Similarly, the projects presented in the P.R.P. (Port Plan) of Palermo, including the redevelopment of the pier of Cala- the only project completed, were designed using a framework that was more at the transnational level. In a sort of approach of views, one passes from the new Mediterranean Corridor (designed by Dicoter in 2006) as a setting for cooperation and development gauge for the competitiveness to interconnect the Mediterranean to Europe passing towards western Sicily, to the territorial Platform area of western Sicily, through the view of the complex national programs PIAU "Ports&Stations", and ending with the P.R.P. Palermo and the individual interventions (Fig.4).

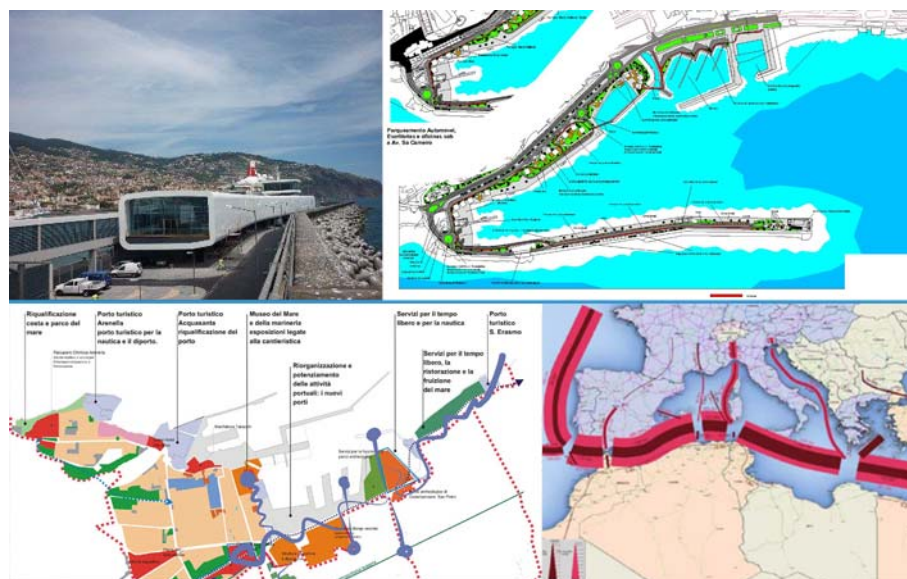


Fig.4

The assignment of new functions for the port areas thus involves moving those operations that are less integrated with urban activities. This implies a strategic vision which relates not only to the individual city but also to the port and transport system on a territorial scale.

3. Conclusions

The increasing trend of port renovation has involved various economic and social sectors, public and private, that share a same intent. These sectors have found its tangibility in the architectural project. In many of the activities underway, there was a correlation between port planning and architectural design, specifying that inseparable link in which the form of what is built takes the form of the final act of the planning process. To the renewed conception of the harbor is reciprocated, in a one-to-one manner, a refreshing interpretation of architectural scale: «We recognize that it is possible to make a city in many ways. And we know [...] that

when one thinks of a city that works in a different way, the architecture also takes on different meanings. It changes, in changing then turns to condition very the same urban organization.»(Goggi, 1989. 24)

Similarly, if the emphasis on the individual work of architecture is not integrated into the urban and regional levels, it may be subject to many criticisms: presenting an architectural language which is standardized and stereotyped, the exasperation of the symbolic and media value of the project, the loss of the local peculiarities, preferring the individual work to the detriment of the overall path of redevelopment, the construction of structures oversized by dimensions and function, creating urban amenities of functional imbalance. To avoid these gray areas in the redevelopment of the waterfront, and the specific realities of the island, it is essential to frame the project according to multi-level relationships in order to compose a puzzle together: It is necessary to consider, under this view [...] that the enhancement of cultural areas and urban structures historically linked to the ports must be conceived not only as a physical operation [...] but as functional and intangible together, in order to find a new contemporary sense of use in connection with new relationships [...]. This means that the project must have a complex and integrated exploration, with particular attention to a multi-scale, multilateral dimension.»(Lingua, 2011)

4. Notes

1 The present considerations are the fruits of a work carried out in the context of a study within the Department of Urban and Territorial Planning at the University of Florence, coordinated by Prof. G. De Luca: "Mediterranean archipelago, Cagliari, Ajaccio, Portoferraio; multilateral cooperation for the strategies of urban renewal in the port areas." The research refers to the second measure of the Operative Plan (Med/Italy-France) entitled "Arcipelago Mediterraneo", connected to the "Urban strategies and policies (improving the cultural heritage of urban areas and structures that are historically linked to the ports)".

2 The three stages, which synthesized the evolution of port areas, correspond to three related characteristics: rigid, porous, and liquid. The adjectives recall in part the distinctions of the port areas of the new P.R.P. (Regulatory Port Plan) of Palermo: a rigid port, a permeable port, and a liquid port (Carta, 2005).

5. Legends

Fig.1 The table shows the urban interventions (realized project and future project) of the six cases, grouped according to spatial location.

Fig.2 Comparison between "Valletta Waterfront" of La Valletta and "El Muelle" of Las Palmas de Gran Canaria.

Fig.3 scheme of spatial relationships between port and city center: continuity vs. discontinuity.

Fig.4 Comparison between Port Plan of Funchal and Port Plan of Palermo.

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