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MEDITERRANEAN WATERSCAPES. IDENTIFYING CHALLENGES AND VISIONS FOR THE FUTURE OF CAMPANIA COASTAL PORT-CITIES

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HIGHLIGHTS

- The challenges of global economy force cities to rethink the role of ports in urban areas.
- The port-city relation is analyzed in the Southern Mediterranean context, considering a multi-scale paradigm.
- Three case study (Barcelona, Marseille, Naples) are proposed, highlighting valuable research-for-design characters.
- A set of tools and good practices for the design and planning of port areas is identified.

ABSTRACT

The new challenges that port-cities are facing in the context of global recession, together with a sensible view towards sustainable development, offer the opportunity to reconsider the role of ports in urban areas. If the direct impact of port-related activities has measured a strong weakening, the presence of large port areas still produces strong repercussions on the urban compound.

The paper aims to analyse the port-city relation in the Southern Mediterranean context, focusing on the highlight of valuable research-fordesign characters. The restricted focus on the Mediterranean city is essential to consider common pre-existent natural conditions and evince the shared historical heritage of urban maritime identity.

The selected case study is the metropolitan urbanization of Campania Region, analysed considering a multi-scale paradigm: the region's Sistema Integrato Portuale, implying effects on the local-territorial scale, need an integrated view, especially considering the updated legislation of Port Authorities.

The result will help to identify a set of tools and good practices for the design and planning of port areas, promoting the definition of an efficient infrastructural model, more respectful of the places' identity and urban maritime landscapes uniqueness.

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1. Introduction, main themes and aims

The research sits in the inter-disciplinary contemporary debate upon the port-city relation in maritime urban centres, finding its basis on the observation of the influence of global changes over the city. The unstable contemporary global economy pushes towards the reinterpretation of the economic role of big infrastructural areas within the urban tissue, such as port-areas, which has been developing as a system involving the non-linear interaction of multiple factors operating at different scales.

At the local scale, it is essential to reconsider the way the adaptation to the global economy affects the changes within the city. Although the direct impact of port-related activities has measured a strong weakening, the presence of large port areas in maritime cities still produces, for logic geographical coexistence, repercussions on the urban compound. Nowadays port industries have lost their solid relation with the city's environment and the most evident effect of the port infrastructure over the city stands in its land use capacity, since it induces the isolation of a big part of the consolidated urban tissue that needs, therefore, to be reconverted into a space of public domain.

The long-lasting regeneration process of waterfronts started by the late 1980s in the European context has left many neglected issues. As a matter of fact, if Public Authorities, on the one hand, have been committed to recover central neglected port areas in order to trigger a beneficial economic process for the city itself, parallel to that, on the other hand, the disconnection between the industrial port and the city has been ignored. Analogously, it has been overlooked the relevant debate on how to manage the interstitial tissue deriving from the separation between two different management entities, operating on the same physical field but responding to divergent economic urges: the city's urban planning department and the autonomous port authority.

Working on these premises, the paper aims to analyse the port-city relation in the Western Mediterranean context, focusing on the identification of valuable research-for-design characters. To do that, three case studies witnessing a long-lasting urban regeneration related to the port were selected: Barcelona, Marseille and Naples. The last one will be analysed in-depth, adopting a multi-scale approach in order to consider the propagation of the economic effects of port activities on the whole region. On the territorial scale, in fact, the port hub of Naples together with the one of Salerno form an Integrated Port System (*Sistema Integrato Portuale*, SIP) whose implications on the local scale need an integrated view. The analysis intends to identify a set of evaluative features for the final focus of Salerno port-city, whose urban transformation related to the port is actually witnessing its first measurable results.

The results will help to identify a set of theoretical tools and good practices for the design and planning of port areas, adding specificity to the definition of an economically efficient infrastructural development model, more respectful of the identity values of places and the peculiarity of urban maritime landscapes.

2. SEMANTIC VALUES OF THE PORT-CITY RELATION IN TIME

Since classical times, urban settlements have been growing alongside the coastline with the aim of benefiting from this strategic position in terms of direct access to goods and commerce. Technology related to navigation made prosperous conditions possible in order for port cities to compete on a global scale on the maritime domain definition. The port infrastructure has traditionally served as an economic engine for cities for three main conditions (Musso, 1996):

- as a primary communication route;
- as a source of natural resources;
- as a possible site for the development of leisure-related activities (or environmental-related conditions).

The port infrastructure has always represented a physical entity where two divergent realities can find their meeting point: the global scale of the commerce network and the local scale of the urbanized areas. This trans-scalar merge has always produced the cultural energy of maritime cities and enhanced their capacity to operate on an international network of commerce, much before the digital revolution had done so. In this context, the port infrastructure played a vital and instrumental role (Meyer, 1999): it received global transportation fluxes and exchanged them with the local dynamics of the city, by operating as an intermediary between global and local scale.

The development of trade technologies in maritime transportation, at least until the Industrial era, has been characterised by the coexistence of various urban values within the public space of the port. In Meyer's words "the new dimension of modern times [...] allowed public space to fulfil [...] various functions simultaneously: new public space was the place where business could be transacted while the latest news was being discussed, where public administration buildings were located alongside cultural facilities, while traffic flowed through on the way to every conceivable destination" (Meyer, 1999).

The privileged condition of embodying different aspects of modern public life started to fade when the improvements made in the technology of transportation lead to a structural change of the port itself. Between the late XVIII and the mid XIX century, the Industrial economic system required the port to act in one step of the production chain as the exchange hub of raw or semi-finished materials.

On an economic level, the application of industrial premises to the city turned out to progressively evict the port centrality in the city. It is generally argued that, up to the mid XIX century, a spatial continuity within the city and the port is measurable, with the two entities developing on a parallel pace with great physical integration. Following the specialization of port-related economies, the osmotic relationship between port and city is fractured by the raising of physical and administrative barriers. This physical segregation progressively eliminated that positive tension that had been characterizing the port-city compound in history.

3. THE CONTEMPORARY SCENARIO: BETWEEN GLOBAL REINTERPRETATION AND LOCAL ADAPTATION

3.1 The dystopic coincidence of port and city: a starting point for mutual urban exchange

The unitization of maritime transportation industry of the 1950s, introduced land use in the port economies. Containerization started to be effective only when big quays for storage were available, with two major consequences: the rapid transformation of existing port into mega port-hubs or the creation of new ports in the outskirts of the city. Moreover, many Mediterranean strategic port-cities, despite the geographically convenient position, started to experience a strong defunctionalisation and consequent decay. In addition, passenger traffic served by ports began to decline consistently due to the overwhelming advancement in the airplane industry and to the relevant diffusion of private car ownership by the late 1960s.

Furthermore, the sectorization above mentioned caused, on a long period, the disappearance of the intermediary character between different scales of port areas. It seems the concept of *dystopia*, coined by philosopher J. S. Mill, could be interpreted as the representative idea of this relationship.

Dystopia, as reported in the most accredited sources, has two main acceptations:

- 1. the displacement of an organ or a tissue from its natural location;
- 2. the representation of an undesirable future, characterised by a totalitarian and technocratic society.

The 'port-organ', intrinsic and essential to the functioning of its natural tissue (the city), if removed from its natural settlement, could produce an undesirable scenario connected to the application of technocratic visions to the urban context.

This interpretation is useful to clarify why, since the beginning of the 1980s, a general reconsideration of the premises of functional planning within urban studies was to become the starting point of the reappropriation for many port-cities of their identity.

3.2 Urban Maritime Identity in the 1980s - The rediscovery of the urban quay as a public space

Starting from the 1980s, the growing impact of the environmental issues and the social changes in action reinvigorated the interest towards maritime cities' urban waterfront. The efforts put in place by Public Administration in that period, from London Docklands and Rotterdam Waterstad to Genova port, were focused on the reactivation of the fundamental long-lost relationship between city and port and on the reconstruction of the attractiveness of the city in terms of port-related and port-induced activities.

Being taken on by the tourism industry – representing a high demand from the local community in terms of number of jobs created – those interventions marked the guidelines for the following years. The coincidence of urban collective destinations, together with housing intervention, commercial and directional functions served to recover the essential character of the ports-cities, the one that had to do with the 'field of tension' (Meyer, 1999) between different actors, and forged the essence of public space, with a fresh new reinterpretation based on the critical reading of the contemporary conditions.

3.3 Beyond the 'Waterfront Renewal' era

Nevertheless, big part of waterfront regeneration projects from the 1990s on suffered from the lack of structural conditions and fell in the hands of real estate development speculation, due to the high profitability of the centric plots. At the same time, the flourishing economic framework of the 1990s changed drastically and realities such as Barcelona, Rotterdam, London, and New York witnessed a unique boom of local investment in the following three decades. This circumstance is essential to recognise the role played by the port economic system in contemporary urban ensembles and clarify how ports can be the starting factor of a much larger structure and source of sustainable urban growth besides architectural chauvinism and real estate dynamics.

The specificity of the local impact of global economic networks is essential to understand the space of the contemporary city. Locally speaking, the first great issue to be highlighted is the administrative-management condition of the intervention. Generally speaking, we could cast three actors in the play: port authority, city government and private investors. The legislative framework in which these actors operate is very different from country to country, undeniably affecting the achievement of a synergic coincidence of interest when these different decisional entities come to a confrontation.

Furthermore, it is worthwhile to mention that in the specific context of the Mediterranean historical port-cities, waterfront renovation projects need to face a series of challenges issued by unpredictable archaeological relevance, historical compounds, existing built environment to be reconverted, as well as geomorphological condition of tight coincidence between consolidate urban texture, maritime

threshold and natural reliefs. It entails a strong reduction of the freedom of action which is merely applicable to the existing interstitials.

4. MEDITERRANEAN PORT-CITIES IN TRANSITION

4.1 Methodological approach

Resuming the complex implications introduced, we could state that the contemporary depiction of the port-city relation stands in the multiple combinations of the following factors:

- Pre-existent conditions (PC): territorial geographic and orographic palimpsest;
- *Multi-scale impact* (MI): great intercooperative bounds between the local compound and the strategic metropolitan area;
- *Public Space* (PS): Strong role of the infrastructure in the local community;
- *Actors* (A): Port Authority, local government institutions, private investors, local community.

The methodology used consists of an analysis, based on the available literature, of a set of case studies within the Southern Mediterranean context in order to establish key aspects of the renovation process related to the port activity, whose generally applicable contribution could help to structure the study of a growing number of urban centres. The key factors, derived by the first three case studies, represent a set of instrumental values to be used to assess the ongoing transformation process of Salerno city.

Within the Mediterranean area, Barcelona, Marseille and Naples are three of the many coastal port-cities whose urban identity have been transformed by the regeneration processes dealing with their port waterfronts. The three great cities, together with their metropolitan area of influence, present an important historical background as strategic port centres on an international scale and, at the same time, have observed difficulties in the process of renovation of their port areas, highlighting peculiarities influencing to a large extent the results of such big scale transformations. The choice to focus the study over the Western Mediterranean area lies into the awareness that the Mediterranean has encouraged throughout history the creation of common cultural attributes, essential aspect of such a structural urban intrinsic condition. The reading of the selected case studies will try to highlight the major measurable facts, in order to schedule a table of contents of the analysed processes.

4.2 The project of the contemporary port-city: Barcelona 1980-2004

Barcelona is one of the best contemporary examples of European coastal metropolis, whose administration has strenuously pursued the reconciliation to its urban maritime identity. The port of Barcelona is the third major Spanish hub and figures in the list of the most important European cargo transit clusters. Its progressively growing success is due to the exploitation of the cruise passenger terminal, since the city is an absolute stop-by in major intercontinental leisure routes. Furthermore, the port of Barcelona can count on several unit storage quays, as well as a free port zone and more than 200 hectares of industrial bulk (chemical and fluids).

Barcelona is in between the few European cities to hold a constant urban development related to the port presence in the local economy, even if the port-city relation has not been constantly linear and direct. During the modern era, the image of the city lost the vital connection to the sea built since the very first decades of the 16th century: the creation of the *Eixample*, the regular grid expansion district planned by Ildefons Cerdà (1859), definitely inverted the urban gravitational weight from the waterfront towards the North of the city, for the local bourgeois benefit of economic localization (Sagarra, 1996).



Figure 1: Localization of the study cases within the Mediterranean context. *Source: Personal contribution over Google Earth geographical data*

Starting from 1980 a set of urban projects changed the historic seafront of the port-city. *Port Vell* was transformed in order to recreate a unique exchange between the old city and the urban port, ensuring continuity in the urban texture between the old city and the *Barceloneta* neighbourhood. It fostered the regeneration impact to the North of the coastal strip, later in time completed with the works for the 1992 Olympic Games and for the 2004 Culture Forum.

Nowadays it is evident the divergence of scopes between the two management entities of the old port areas. Alongside the historic waterfront, it is hard to recognise today the opening to the sea, beside its constant presence. Public space in the port-city sector has been fragmented by the introduction of unfortunate vehicle routes and by the exploitation of the *Port Vell* area for commercial and leisure activities. Moreover, the elevated built volumes cause the enclosure of the whole compound and withdraws any previous attempt of urban maritime landscape reconstruction. The further destination of some areas to the docking of high standard vessels required the realization of protective fencing which lead to the reconstruction of some sort of anachronistic barriers in what today appears to be the most representative public space of the city. Walking from the historic seafront of the old city, the observed landscape misleads one's perception, just until the sea reveals itself, with its strong scenic presence, in the *Barceloneta* waterfront, nearly after 2.5 kilometres of walkable pathways.

In addition, the *Port Autonom* – entity in charge of the commercial and touristic port of Barcelona since the 1950s – in its Strategic Plan 2003-2015, projected the relocation of the industrial functions of the port in a new area identified in the valleys of the *Llobregat* river delta, to the south of *Montjuic*. This area comprises the Free Port, or *Zona Franca de Barcelona*, a tariff-free industrial park and 550 hectares of logistic activities. It led to the growth of another barrier to the southern sector of the port-city texture and to the progressive loss of the urban scale. Moving from the historic waterfront to the south, a strict functional logic orders the territory, proper urban destinations disappear to give room to a complex system of infrastructural fluxes – of both highway and train lines – that runs along the coastline. The truly urban public space is ultimately interrupted by the abrupt impossibility to overcome legally fenced protected areas pertaining to the logistic and transportation hub of the port.



Figure 2: Aerial view of the port of Barcelona. *Source: Photography of the Authors*

Table 1: Analytical table of port-city relation indicators – Barcelona case study

Key Factor	Description
MI	The port of Barcelona holds a strong beneficial territorial impact over its metropolitan area of influence, coordinating the market of regional production
PS	Central <i>Port Vell</i> has a strong public space potential and a unique attractiveness for both local community and visitors, although the open landscape has been altered by private investment dynamics
A	The high speculative pressure played against the cooperation between different authorities; there is a great participation of the local community
PC	Generally plain territory, with singular reliefs such as <i>Montjuic</i> , where now sits the industrial port hub

Source: Personal Contribution

4.3 The port-city governance model: Marseille 1995-2015

The city of Marseille is experimenting, at the present day, a very important urban transformation related to the port-city relation. It shares with the previous case study a very important historical heritage of navigation and background related to port activity. The port of Marseille, indeed, has always represented for the France State the main access to the Mediterranean, and, therefore, to its colonial kingdom of North Africa. Nowadays Marseille, as the second most populous metropolitan areas of the country, is the most important French maritime hub and one of the major European port clusters. The *Grand Port Maritime de Marseille-Fos* is structured in two main hubs: the Eastern hub of proper historical Marseille and the Western separate hub of Fos-sur-Mer, established around mid XIX century. The peculiar condition of maritime-fluvial port is what characterizes the success of such a mega-hub, concentrating the main transportation fluxes of central Europe (its gravitational hinterland is extended up to all the Rhenish valley, in direct competition with the Nordic ports). The traffic is also functionally separated between the two basins, so that the consolidated port of Marseille inbound and

outbound transit deals only with the Mediterranean routes (Maghreb, Italy, Spain), while Fos deals with all other destinations.

The case study of Marseille is relevant since it shows how the regeneration process was addressed on a governance level. By the late 1990s, the city was suffering of major crime growth and the port activity, following the progressive decline of the 1980s, was a great responsible of the urban decay, as it could not guarantee anymore the creation of a considerable number of jobs. The National programme known as the *Euroméditerranée* project bet on the inversion of the negative trend of the city's economy and the bad reputation it went adding in the past two decades. At the present stage, many of the strategical actions included in the plan of development *Euroméditerranée* have been completed, and it is surely astonishing how it drastically improved the structure of the city. The reasons for this success can be found both on the administrative setting of the large-scale intervention and on the semantic values of the port it tried to reconvert when it comes to urban life.

The programme, concerning the city design, not only aimed at the regeneration of the central inner historical harbour of Roman founding, but also at the provision of cultural spaces alongside the coastline mixing up with business districts and shopping areas. In this specific case "the strategic vision varies, therefore, between the cultural dimension of the exchange in the Mediterranean area and the economic dimension of the international trade" (Di Palma, 2014).

It is a significant and interesting fact to observe that the management model activated by the French National Government, disposed the creation of public management entity, leaded by National Govern representatives, as well as local organizations: the board of administrators within the *Euroméditerranée* passes the global budgeting and authorizes the funding for the projects according to the local authorities and public institutions involved in the context. The plan still goes on active with the implementation of its second phase, but it demonstrates already a high return for the city in economic and urban terms.



Figure 3: Aerial view of the port of Marseille. *Source: B. Duplessy (1992). Marseille vue du ciel. Marseille: Edisud*

Table 2: Analytical table of port-city relation indicators – Marseille case study

Key Factor	Description
MI	The port of Marseille holds a strong beneficial territorial impact over its metropolitan area of influence, by disposing of two different hubs within the same organisation: Marseille and <i>Fos-sur-mer</i>
PS	Central Vieux Port has a strong public space potential and a unique attractiveness for both local community and visitors
A	Great integration between state premises of development and coordination with local authorities and stakeholders
PC	Generally plain territory, whose port activity is enhanced by the double condition of maritime and fluvial port-city

Source: Personal Contribution

4.4 Planning over a maritime urban territorial landscape: Campania coastal metropolitan area

The metropolitan area included between the two cities of Naples and Salerno shows an urban development structurally continuous alongside a coastal strip of more than 250 kilometres long. The metropolitan maritime area, determined by the continuity of the urban tissue between the two cities, represents the second larger metropolitan area of the country and the first for what concerns population density. Although it suffers from multiple conditionings, it can count on an exceptional number of opportunities: dense historical, cultural, naturalistic and landscape heritage.

At the local scale of the city, Naples started its urban regeneration process related to the refurbishment of its port-city waterfront by the 1970s, with a visionary plan of recovering urban public space of quays through the restructuration of the public transport system. On the other hand, Salerno has witnessed a relatively recent growth but it is focusing the largest part of European funding intervention to its port-city area, which allowed a series of projects to be triggered by the late 1990s. The ports of Naples and Salerno are the greater commercial ports of the Region, both offering a tourist terminal for cruises. The relevant aspect of management is that, although driving totally different traffic volumes (Naples port is significantly more developed than Salerno), over the last decade they have been competing on logistics and passengers, with the hub of Salerno playing a growing attractiveness in the area. On the other side, the cruise passenger terminal of Salerno port, started by 2006, has been measuring annual boosts which allowed to witness a growth from 20.000 passengers in 2007 to almost 200.000 in 2015 (Assoporti).



Figure 3: Aerial view of the port of Salerno. *Source: Photography of the Authors*

Although the numbers are irrelevant to the ones of Naples (2 million passenger in 2016), the number indicates that the strategic interventions activated on the port system is offering the first results, and that the growing importance of Salerno port hub is already translating into a competition on the local market.

As so described, the regional SIP acts as a structuring element for the whole metropolitan territory and constitutes the neuralgic system of the regional productive fabric.

The measurable data from the statistics describe a controversial position of the two seaports, within this renewed legal framework: the hub of Salerno grows by opening its way into more profitable economic niches compared to Naples, reason for which the local operators see as a dangerous attempt the merge of the two entities; on the other side, operators of Naples' hub are more keen to differentiate the services – logistics, shipyards, warehousing – on a market that don't invest Salerno seaport for its lack of adequate infrastructure. There is no doubt a coordination plan could be a safe measure for the sake of the two economies and its global competitiveness; it is still to discuss, though, on what logics the cooperation could be established.

With the aim of a correct management of the heritage and the environmental safeguard, and of the optimal consideration of the infrastructural system of the case study, it looks desirable the definition of a coastal interprovincial metropolitan area, encompassing the territories extended alongside the two gulfs of Naples and Salerno. The metropolitan coastal area of Campania region could operate in coordination over a selected set of planning previsions starting by the integrated port system (SIP) already defined. The autonomous management of port authorities doesn't guarantee the global comprehension of the role of the port - nor of an integrated system of ports – in a specific region. Based on these details, it looks necessary to identify a territorial system capable of benefiting from the added value of the maritime traffic when it comes to visual exploitation of the landscape from the sea, privileged perspective made possible by the alternative use of maritime routes. The definition of brand new territorial associations could be capable of editing multi-disciplinary strategies extended over a geographic area cooperating for restructuring its urban maritime identity. These considerations lead us to the reflection in favour of two strategic visions:

- a renewed operational context of port planning forming an integrated and cooperative management system;
- a greater sensibility with respect to the environmental context, both locally (port-city interface) and territorially (port-coastal strips interface and inter-municipal areas).

Table 3: Analytical table of port-city relation indicators – Campania Region case study

Key Factor	Description
MI	The ports of Naples and Salerno are the greater economic engine of the region whose economic structuring defines a solid input/output relationship over an extended maritime metropolitan coastal area
PS	At the local scale of the cities of Naples and Salerno, the analysed ports still operates with logics of technocratic separation from proper urban functions and are constricted by the same geography of the city and by the limitations that it imposes over the port infrastructuration
A	Transformation of the port areas runs through an intricate field of action between local entrepreneurs, mid-size companies and public administration, caused by the legislative organization of Italian ports. There is no evidence of local community participation on the planning premises of the ports
PC	For what concerns Salerno the port is set in a strict territory of elevated orography facing the coastline, which in the past worked as a natural protection of the urban compound. Naples' port has a slighter plain territorial configuration, although it acts in a very dense urban fabric. Both ports extensions are limited by the surrounding – environmental or urban – conditions.

Source: Personal Contribution

5. FUTURE CHALLENGES

Port cities and, specifically, their maritime-urbanized soil threshold offer today a duality of character: it represents the main strategic challenge to be addressed on an urban and governance agenda when facing the placement in the global network, at the same time being the greatest potential for urban clusters to bet on in terms of urban renewal and city's resilient adaptation within mutable economy.

Port infrastructure, as previously analysed, can play a driving role for the city's economy and to the extent of a much larger hinterland, variable in terms of extension not only to its surrounding territory but also within strategic areas – national and international – that take advantage from the specific existence of the port.

When analysing the impact of such an infrastructure, it is frequent to be mislead by the measurable results of the traffic data and its effects on the gravitational metropolitan areas. It is acknowledged, indeed, that similar reflections are pursued for airport hubs in their way to become proper significant urban compounds: in this context, the hub development passes by the consolidation of the hub as a regional node of interchange, rather than a unique spot of logistics or transportation. Consequently, it is reasonable to think that the same intermodal condition could be the turning point of integration of an infrastructural node at a regional and global scale (Güller, 2003). By the analysis of the case studies some relevant aspects arose as symptomatic key features of the future of port-city relation. These aspects are also targeted in order to highlight the scale in which they operate and structure the port-city relation and their interactions:

- the definition and the the design of public space (local scale with effects on local scale) in
 interstitial areas pertaining to the maritime port areas, that could be a challenge accomplished by
 the experience of urban renovation in Barcelona and its strategy of middle-scale strategic design
 proposals;
- the definition of a strategic plan of intervention (territorial scale with effects on territorial/local scale) of the port activity, which includes multi-functional management of metropolitan compounds, environmental protection and landscape heritage revalorization; this is an urge strongly revealed by the territorial situation of Campania Region, where the port activity represents one of the key factors of its economy;
- the definition of an efficient management institution (territorial scale with effects on territorial/local scale), whose representatives could operate at multiple scale of interest and whose previsions could be constantly measured and reconsidered depending on the measurable results, such as the case of the *Euroméditerranée* project in Marseille.

As regard the last point, a cooperative port governance entity seems the most reasonable way to go, although variously opposed by the specific economic literature, which instead finds in the free economic activity of single hubs a fruitful aspect of market improvement and port development. It is therefore relevant to implement new management tools for territorial port activity coordination, of interprovincial size. A national scheme, as prescribed by the actual Italian legislation, seems too dispersive and easily disadvantageous, as it would require every seaport to act indistinctively from the extremely varied local conditionings.

Speaking of the Italian case, a second critical point seems to be the infrastructural financing, which, according to the applicable legislation should be approved by the national committee, slowing down an already strenuous decisional process. In result to this, it is reasonable to think of an entity organized in:

• an <u>advisory and cooperative committee at the regional scale</u>, of representatives from the regional and municipal administrations, in charge of the economic previsions of the integrated port

system, and a differentiation of functional and corporate actions, leaving free activity to the local hubs:

• a <u>technical committee at the local scale</u>, of highly specialized professionals, receiving the regional economic directives with a genuine freedom of planning especially on the urban design and management within the city, with the participation of external investors in order to promote project financing initiatives.

These two entities could edit together the definition of a strategic plan of the urban-port activity, articulating structuring urban previsions related to the port activity, rather than just detailing the works to be completed for the inner functioning of the port (as most of the actual specialised plans of ports do internationally).

The reformulation of the urban role of the port infrastructure (local scale with effects on local/territorial scale), through the global reconsideration of the port activity and the aim of reconstructing a new quality of urban space, more representative of the contemporary conditions. The possible renewal of the urban functions related to port areas starts by the relevant global economic fluctuations, acting unconditionally on the urban structure. It is desirable to understand a way to react to such an unbalanced state with an alternative structure of functionality in order to support the global hustle, and therefore rebuild a nexus with the urban compound. Specifically, the alternative destination of port areas could be outlined in a set of functional refurbishments, operating in blocks as a parallel system rather than a sequential one: in this system a global input is received and articulated in multiple possible branches, alternatively activating themselves in respect of the actual conditions, avoiding damaging the local chances of development or the emerging of a new set of obsolete areas, unlikely integrated with the urban tissue. The evidence offers the chance to highlight a set of design strategies that could be considered as structuring functions of port activity alternative to the solely logistics and commercial dynamics. The reformulation of the port-city relation passes by the introduction of a functional mixité within an intermodal maritime-terrestrial transport node of regional relevance. As previously introduced, an urban port capable of holding a strong innovation as all urban structures are asked to in the digital era: a gravitational pole capable of generating innovative services within the directional and logistics apparatus mixed with renewed residential destination not only in terms of building typologies; a desired frame would be one capable of recovering the attractiveness of central port areas while guaranteeing a beneficial irradiance towards the city and its employment structure within a hub of intermodal maritime-terrestrial transport node allowing access to different categories of users. Undoubtedly, the analysis highlighted that it is essential to recover the semantic value of the port in terms of public domain for the city: this implies the elimination of physical barriers existing between the two entities, the familiarization of the use of the port for the great part of the local community. The activation of such practices as the Port Interpretation Centre (of which numerous examples can be observed in port-cities worldwide), could be an intelligent way to recover the local scale of the port in the city, to promote cultural exchange over an infrastructure most of the times segregated.

The case studies analysed highlighted that possible use could take shape of cultural centres, or places destined to host big cultural events at an international level, whose fruition could guarantee the most varied articulation of users categories: may it be groups of residents or transit passengers, these actions could take in charge the reestablishment of a connection between the different scales of the port and recover its function of cultural catalyst. Contemporarily, it is visible that these actions could induce the partial economic income deriving from port-induced activities, which today are generally developed around the hospitality sector for visitors.

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