



Lisbon's waterfront seen from the top of the *Padrão dos Descobrimentos*, José M. P. Sánchez, released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

Chapter 20

Using Heritage to Develop Sustainable Port–City Relationships: Lisbon’s Shift from Object-Based to Landscape Approaches



José M. Pagés Sánchez and Tom A. Daamen

Abstract Port cities face enormous sustainability challenges. In this chapter, we propose a relational view of these challenges and explore how different models of governance connect the three pillars of sustainable development: economy, environment, and society. We also address the contradictions inherent to new port plans or waterfront projects, zooming in on the case of Lisbon, Portugal to evaluate the role of heritage in the sustainable development of its historic maritime waterfront. We assess the extent to which reusing heritage structures strengthens the Lisbon port-to-city relationship with regard to governance and outcome. Our account shows that the city departed from its earlier object-based approach to adopt UNESCO’s approach of Historic Urban Landscapes (HUL). This shift has triggered deeper reflection among key city actors on the connections between city and port in Lisbon, as well as on the role of the waterfront landscape. We argue that its new approach to heritage potentially produces new governance arenas where new port–city coalitions can emerge—coalitions that have the potential to align economic and environmental objectives with the sociocultural motives that underpin the goals of heritage preservation. We conclude by emphasizing both the challenges of public participation and the critical importance of engagement of port authorities. Each is necessary if European port cities are to effectively pursue sustainable relationships.

Keywords Port city · Governance · Historic urban landscape (HUL) · Maritime heritage · Waterfront · Lisbon · Sustainable development

J. M. Pagés Sánchez (✉)
Hamburg Hafencity University, Hamburg, Germany
e-mail: jose.sanchez@hcu-hamburg.de; jsanchez@aivp.org

T. A. Daamen
Delft University of Technology, Delft, The Netherlands

Introduction: Port Cities and the Anthropocene

The world has entered into an era of governance initiatives that aim to reduce the impact human beings have on our planet. Scientists have labeled this new era as the third stage in the Anthropocene, the historical period which began with the Industrial Revolution and during which human behavior has exerted dramatic impact on Earth's crust and ecosystems (Crutzen 2002, 2006). It coincides with the global emergence of the term *sustainability* and, more particularly, that of sustainable development (SD), which the United Nations embraced in 1987 as a leitmotif for a new period of economic growth (as noted in Steffen et al. 2011). The terms Anthropocene and sustainability acknowledge the self-destructive quality of the world's prevailing economic systems. It has become widely understood that unchecked growth will deplete our planet's natural resources and irreversibly damage its environment. The current period is thus characterized by continued efforts to prosper economically—now, in ways that are socially and environmentally sustainable.

If the 2015 Paris Agreement and its aftermath teach us anything, it is that the governance challenges posed by the current stage of the Anthropocene are enormous (UNFCC, 2015; UN, 2015). This is especially true in places where the logic and structure of industries have grown far beyond local authority or state control. Sustainable development asks for governance action in many networks and across many, if not all, scales. Port cities, where industries such as oil and containerized logistics often have had a great impact on a city's economy and on its identity as a place for trade and connectivity on the water's edge (Hein 2011, 2018), experience the emerging transformations especially acutely.

Before the Anthropocene era, relationships between ports and cities were quite symbiotic. Separation started to occur after the early stages of industrialization and continued over much of the twentieth century. Even before the turn of the millennium, however, some scholars started to speculate about a renewal of links between city and port. Although port facilities have largely left their historical waterfront sites behind over the past 50 years, maritime functions and related activities in many of the world's port cities have remained highly urban (Hall and Jacobs 2012). One explanation for this can be found in the relationships valued by port businesses with a wide range of agents: competitors, financiers, insurers, legislators, as well as the schools and universities that supply them with new technologies, insights, and an educated workforce. Recently, scholars have argued that this relational orientation provides a comprehensive account of the diverse developments observed in port cities today (as in Hesse 2017). In contrast to popular spatial-synthetic perspectives, a relational orientation incorporates the fact that ports as part of both competitive global networks and historic landscapes are places with worldly connections, deeply felt cultural meaning, and local symbolism.

In European port cities, relational ties and tensions make governing the future development of a port, its city, and the relationship between them very complex. Responsible agents, like port authorities and city administrations, often have to think and act across multiple scales and sectors. Actors and scholars should not under-

estimate the challenge of governing the port amid the dynamics of private global logistics, trade, and the politics of public infrastructure provision. Moreover, concerns over the sustainability of current and future port operations render this task ever more demanding.

The unsustainability of current port–city relationships is best explained by economic geographers, who highlight the imbalance between positive and negative externalities that appear with port development (as in, Grossmann 2008). In recent decades, city pollution and congestion due to port operations have been seen to increasingly outweigh the employment and economic added value the port produces in the urban or regional agglomeration to which it belongs (Zhao et al. 2017). Furthermore, in Europe, it has been shown that those economic benefits may be felt far beyond the region, or even the country, which hosts a large seaport (Merk 2013). It can then be more difficult for local politicians to legitimate further port expansion and related public expenditure. As a result, there is a growing awareness among responsible actors that local port-to-city relationships have to be rethought, that, further, new governance approaches are needed if growing stalemates between actors in port–city arrangements are to be avoided (Daamen and Vries 2013; Pagés Sánchez and Daamen forthcoming).

A useful way to study the political tensions and governance dilemmas of contemporary port planning is to explore how different actors try to actively connect the three pillars of sustainable development—economy, environment, and society—and to address the contradictions that inhere to new port plans and projects. We report in this chapter on an on-going research project that focuses on the port city of Lisbon as a case study. We are concerned with the role heritage plays in the development of its historical maritime waterfront and assess the extent to which reusing heritage structures strengthens the port-to-city relationship in Lisbon on issues of governance and outcome. Our account shows that adoption of UNESCO’s approach to Historic Urban Landscapes (HUL) has triggered deeper reflection among key city actors on the connections between city and port in Lisbon as well as that of the waterfront landscape. We note that the new approach to heritage management might well produce new governance and, thereby, create opportunities for new port–city coalitions that can align economic and environmental objectives with the sociocultural motives underpinning the goals of heritage preservation.

In order to explain our relational perspective on sustainable port–city development, we elaborate on several historical conceptualizations of these relationships and illustrate them with examples of the evolution Lisbon has undergone. We present the case of Lisbon, identifying two periods that have been marked by a change in heritage management policies: namely, the shift from an object-based to a landscape approach. We conclude by synthesizing the change observed in Lisbon with similar changes that have occurred in other European port cities, in the process, linking heritage management to the governance of sustainable port–city relationships.

Evolving Port-to-City Relationships in Lisbon

Three thousand years ago, where the Tagus River meets the Atlantic, Phoenicians founded Lisbon as a commercial seaport. The Portuguese capital grew in importance, reaching its zenith during the sixteenth century as the capital of a global empire. Many historical depictions show the port of Lisbon in symbiotic relationship to the city, with both its commerce and maritime affairs entrenched in the city's main public spaces. Studies of other ports, which explore the expansion of their associated networks, infrastructure, and the developing relationship between ports and their urban and natural surroundings, often give evidence of similar histories. In fact, geographers often take the spatial evolution of port infrastructure and port–urban waterfront development and redevelopment as a point of departure (Bird 1963; Hayuth 1982; Notteboom and Rodrigue 2005). Hoyle's widely cited six-stage model, for example, is rooted in spatial-historical evolution patterns (2000, p. 405). As is consistent with the case of Lisbon, the first stage of this model runs from ancient times to the nineteenth century. In this stage, cities emerged around port settlements, which were key elements of economic development and urban identity. Relationships between city and port were close and intensive.

The industrial age increased humankind's capacity to change natural landscapes and alter waterways and quays for more and larger ships. This period, dating from the nineteenth to the mid-twentieth century, is indicated, according to Hoyle (2000), by the emergence of break bulk industries in the second stage and early containerization in the third stage. Modern technology and economies-of-scale rationalities triggered changes in the port-to-city relationship, so that ports expanded and separated from the urban core. In this period, the government of Lisbon presented the first port plan (1887)—which included new landfills that distanced the city fabric from the riverfront (Pagés Sánchez 2017)—and implemented it in the following decades.

Hoyle (2000) identifies the fourth and fifth stages in the evolution of port-to-city relationships in the 1960–1990 period. During the fourth phase of the 1960s to the 1980s, container technology revolutionized the maritime sector, pushing the rationalized separation between production and consumption while triggering the emergence of global logistic chains. Lisbon opened its first container terminals during the 1970s and the 1980s close to the city center, and the port expanded along the south side of the Tagus River. Much as in Hoyle's model, new port terminals were located outside historical waterfront areas; in the pursuit of easier access for ever larger ships wider and longer quays on deeper waters were constructed.

Waterfront redevelopment plans, which signify the fifth stage—the 1970s to the 1990s—allowed city authorities to reconnect their urban fabric with the water. The plans also attempted to restructure the city's economy, adding leisure, offices with service functions, more upmarket residential developments, retail, cultural facilities, and public space (Norcliffe et al. 1996; Marshall 2004; Schubert 2008; Schubert 2011). In Lisbon, such redevelopment brought new public attention to the qualities of the waterfront and the city's connection to the river. This change also reinvigorated the port-to-city relationship, alternating moments of opposition to port expansion

with proactive collaboration (Rêgo Cabral 2011). During the 1990s, the northeastern section of the waterfront was transformed into a brand-new district for the EXPO98 event, in a manner similar to regeneration projects in other port cities.

The emergence of global logistic chains in the final decades of the twentieth century coincides with a process of corporatization—even privatization—of port authorities throughout continental Europe. As a handful of multinational corporations started to dominate the world’s transport network, port authorities quickly became pawns in a game between private shipping and terminal operating firms (Olivier and Slack 2006; Hall 2007). In effect, European port authorities redefined themselves as gatekeepers in a globalized transportation network, seeking to position themselves as strategic partners that controlled vital parts of logistic value chains (particularly in the hinterlands). By the end of the second millennium, many port authorities and related global logistic enterprises no longer concerned themselves with local urban issues—or so it is assumed from the transport economics point of view.

The Lisbon Port Authority became a state-owned limited company in 1998; its changing role and perspective generally follow the larger processes described by Hoyle (2000) and other academic studies. But Hoyle also conceptualizes a sixth stage, the 1980s to the 2000s, expanding his five-stage model (of Hoyle 1989) to include a perceived renewal of port-to-city associations. This observation was later confirmed by scholars who argued that ‘ports are more than piers’ (Notteboom 2006) and consist of a heterogeneous community of actors that, in many cases, is emphatically anchored in the urban. To what extent such new port-to-city relationships can be observed in contemporary Lisbon is an interesting research question. Decades of spatial, social, and institutional disconnection have created social tensions and local resistance to port presence. In Europe, port authorities have long defended port activities and expansions primarily on the basis of economic indicators such as added value and employment, neglecting sociocultural dimensions and paying little attention to negative environmental impacts (Van Hooydonk 2007). In Lisbon, the port remains physically close to the city; indeed, several terminals are still located on otherwise urbanizing waterfronts. However, looking at this issue from a relational point of view, it does not seem that the port presence is the outcome of joint planning decisions between port and city authorities—which would be more consistent with port–city reconnection efforts observed elsewhere in Europe (Daamen and Vries 2013). Hence, attending to the relationships that shape the implementation of sustainable port and port-related structure and infrastructure, we ask, what governance arrangements drive the spatial development and redevelopment projects that affect the sustainability of Lisbon’s port–city associations?

Before we dive into our case study of Lisbon, we will first try to explore the answer to these questions in theoretical terms, taking heritage as a focal point of any port-to-city evolution. The crucial question is: How are port heritage and sustainable development in port cities conceptually related?

Port Heritage and Sustainable Development

Ships, quays, and cranes are some of the most visible parts of the urban environment, shaping international connectivity and a maritime atmosphere. Likewise, port heritage structures can create a sense of pride and belonging, not just for port workers but for all citizens drawn to the waterfront. Although the industrial era has disconnected ports and cities, motives for a rapprochement can be found among ports as well as among urban actors. The global sustainability movement, as adopted and promoted by the United Nations, elevates these motives to sheer necessities. In European port cities, preserving our planet's resources means developing a more balanced, sustainable relationship between the port and the urban.

Although there has been a lively academic debate around the definition of sustainable development (Williams and Millington 2004), many governance initiatives aiming for it still use the definition provided by the famous Brundtland report (World Commission on Environment and Development [WCED] 1987). This definition of sustainable development is based on two precepts. First, development should cover the needs of present-day society without compromising the needs of future generations. Second, development should balance three fundamental pillars in order to be regarded as sustainable: economy, environment, and society. In port cities, we observe that achieving such a balance is particularly daunting given the aforementioned negative externalities associated with most port development plans, the predominantly economic logics driving port evolutions, and the current institutional and sociocultural distance between port and urban actors.

Key port actors, including port authorities, have successfully developed strategies to address tensions between the economic and environmental pillars in the SD Framework (Aregall et al. 2018). However, port authorities have only become concerned with the social pillar relatively recently (Verhoeven 2011). In our conceptualization, this pillar includes the cultural 'soft' values produced by and embedded in the history and identity of a port city, expressed in its intangible aspects, such as traditions, songs, as well as in tangible artifacts, such as heritage structures (consider Van Hooydonk 2007, 2009; Warsewa 2011; Pereira Roders 2013; Mah 2014). For example, Musso and Ghiara (2011) and Schubert (2017) explore the socio-economic and sociocultural interface at ports: they describe *demaritimization* as the gradual loss of economic, social, and cultural significance of ports to their cities—a process which eventually affects the public's acceptance of the port presence inside the urban fabric. In contrast, a strong port–city culture and identity supports innovative waterfront plans that combine port and urban uses. Hence, if port–city communities do not acknowledge the port as a vital element of their DNA, they jeopardize the relationship. Scholars observe a process of *remaritimization*: initiatives and investments that generate new economic and sociocultural links between port and urban development, reinvigorating the local maritime economy and port–city identity (Musso and Ghiara 2011; Schubert 2017).

The European Sea Port Organization (ESPO), the main lobbying organization of European ports, published the European Port Industry Sustainability Report in 2016,

a document which confirms that European port authorities are increasingly concerned with the social reconnection between city and port. They often adopt strategies to acquire a Social License to Operate (SLO), a concept explored by Dooms (2014) in which ports maintain or rebuild public support for port activities through social projects such as port festivals or community development programs. International organizations such as ESPO (2010) and the Association Internationale Villes et Ports (AIVP 2015) encourage port authorities to embrace SLO and related concepts, in that way, promoting port identity and culture among local civic and business communities.

In the sections following, we explore to what extent a connection between heritage projects and sustainable development can be observed in the port city of Lisbon. We describe how Lisbon authorities have revitalized some of the city's most prominent maritime heritage structures and evaluate to what extent their recently adopted governance approach stimulates a process that may yield more sustainable results. We studied empirical documents such as plans, policy briefs, media articles, and other research publications, and performed 17 semi-structured interviews with local stakeholders in the period of September 2016 to January 2018. Interviewees included municipal planners and port authority planning experts, presidents of *Juntas de Freguesias*,¹ industry leaders, museum directors, journalists, and leaders of citizen platforms. We asked them about Lisbon's identity as a port city, the city's relationship with the river, and the evolution of the port and its governing organizations. We probed different views on the role of port heritage, discussed the positive and negative externalities of the port, and asked for their view on the future of the port-to-city relationship in Lisbon.

Heritage in Lisbon: An Object-Based Approach, the 1990s to the Early 2000s

The Tagus River is a key element of Lisbon's identity. Numerous artistic representations of Lisbon have historically featured the river, which also feature prominently in the documents and interviews collected for our case study. Interview subjects consider the port to be an important element of the river's imagery, particularly as a reference to its glorious past. Despite this historically significant link between the port and river in Lisbon, most interviewees foresee that heavy port activities in the city will eventually be replaced by green and leisure functions. They consider the modern port to be necessary to the city and region, but prefer that it be located away from the urban waterfront.

The distinction between the historic and modern port in Lisbon is reflected in an object-based approach to port heritage that emerged in the 1990s to the early 2000s. At this time, several port heritage buildings were refurbished to host new cultural

¹*Freguesias* are the smallest unit of government in Portugal. Its leaders are chosen every four years, parallel to municipal elections. These district bodies, or parishes, are known for their close relationship with local residents.

or leisure programs, including the Royal Factory Cordoaria da Junqueira, the Pedro Alvares Cabral building, and the maritime stations of Alcântara and Rocha Conde d'Óbidos. These projects were executed without explicitly making a connection to Lisbon's maritime history or broader ideas of celebrating its *portuality* (Musso and Ghiara 2011).

The Royal Factory Cordoaria da Junqueira, where ship cords and ropes were once manufactured, is an example of an industrial maritime building reconverted for cultural functions. The building, designed by Reinaldo Manuel during the second half of the eighteenth century, has monumental proportions linked to its former maritime activity: it is four hundred meters long and fifty meters wide (Nabais and Ramos 1987). The Cordoaria was originally on the riverfront, but landfilling activity conducted for port and train expansions in the late nineteenth and early twentieth centuries shifted the coastline one hundred and twenty-five meters away from the building (Ayres dos Santos 2012). The new infrastructure also altered the building's geometry, eliminating two lateral sections of the building. Today, the Cordoaria is managed by the navy and hosts historical archives and spaces for events and exhibitions. In 1996, the building and its immediate surroundings were cataloged as a national monument. In 2008, the municipality came up with ideas to visually reconnect the Cordoaria with the river; nevertheless, new constructions on the riverfront and the infrastructural barrier still obstruct the building's connection to the water (as shown in Fig. 1).



Fig. 1 Cordoaria in 2017. The building is used as a container for events and exhibitions. Before the port and railway landfills were built the south façade of the building (in the picture) was on the river. Author: José M P Sánchez; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

Located near the main container terminal on the Alcântara waterfront, the Pedro Álvares Cabral building is another example of port heritage refurbished according to an object-based approach. Due to its warehousing function, this large building, designed by João Simões Antunes in 1939, is characterized by very few openings; it features two bas-relief carvings by sculptor Barata Feyo which represent fishing and agriculture (Fig. 2) (Silva 2012). The government closed the facility in 1992, selling it in 2004 to the Fundação Oriente. This foundation engaged architects Carrilho da Graça and Rui Francisco to refurbish the building for the new Museum of the Orient, which opened in 2008.

In the 1930s, more than three hundred fifty thousand people per year arrived or departed from Lisbon by ship (Brito et al. 2007). Lisbon's Port Authority (APL) planned three maritime passenger terminals to handle the intense flow of people. Eventually, only the Alcântara and Rocha Conde d'Óbidos terminals were built, both designed by Pardal Monteiro, a major figure of Portuguese architecture during the twentieth century. They became important examples of the *Português Suave* architectural style. Almada Negreiros painted the interior murals, raising the artistic value of these buildings.

The maritime terminal at Alcântara was inaugurated in 1943; that in Rocha Conde d'Óbidos was built between 1945 and 1948 (Gama and Miranda 1997) (Fig. 3). Not long after this, the airport became Lisbon's main passenger gateway, and the maritime terminals were converted to cruise terminals. In 1985, a new container terminal in Alcântara blocked cruise vessels from the port (Nabais and Ramos 1987). It later became the APL headquarters, which today organizes public visits to see the building



Fig. 2 Pedro Álvares Cabral Building, 2007. Courtesy of José M. P. Sánchez; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License



Fig. 3 Alcântara passenger terminal, 2007. The building hosts today the headquarters of the APL. Author: José M. P. Sánchez; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

and its murals. The Rocha Conde d'Óbidos station is also owned by APL; it is currently concessioned to Lisbon Cruise Terminals (LCT), which uses it only in exceptional cases.

Along the riverfront are several groups of port warehouses, built during the late decades of the nineteenth century and first of the twentieth. Most lost their original function when port activities changed, but remain the property of the APL, which leases them out as restaurants, clubs, and shops (shown in Fig. 4) (Rêgo Cabral 2011). Some renovations respect the original designs, while others offer a more contemporary interpretation of the warehouse type. Although these are not listed buildings, it is clear that they could be used to contribute to the identity of Lisbon as a port city. Indeed, a governance approach to port heritage that could achieve this has recently emerged. In the next section, we explore this new approach, along with its origins, and present our respondents' perception of its merits in juxtaposition to the object-based practice of the prior period.

Toward a Landscape Approach, the Early 2000s to Today

Since 1988, the relationship between the city, the river, and the port of Lisbon has been discussed publicly several times. In that year, the architectural chamber worked with the municipality, the APL, and the national government to organize a competition for riverfront proposals. The competition brief stipulated that the port would be located inside Lisbon's urban tissue (Brandão 1988). Winning proposals respected



Fig. 4 Former port warehouses refurbished to host bars and restaurants in the docks of Sto. Amaro. Author: José M. P. Sánchez; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

the port–city identity and would combine public access to the Tagus with working port areas. The APL and municipality have since made several plans in which reconnecting the city with the river is a top priority. These include the municipal master plan (PDM), the strategic plan of 1994, and the failed Plano de Ordenamento da Zona da Ribeirinha (POZOR), presented by the port authority in 1994 and 1995.

During the first decade of the millennium, a new law forced the APL to release land that was no longer suited to port activities to the municipality. This motivated the creation of the Plano Geral de Intervenções da Frente Ribeirinha (PGIFR), a plan which merged several partial plans in an effort to create a coherent vision for Lisbon's 19-km riverfront. Its main goals were to recover the symbolic value of the river, to visually and physically connect the river to the city, to reuse existing heritage structures (possibly changing their use), and to use empty spaces for waterfront regeneration (Câmara Municipal de Lisboa 2008). Following this plan, new public spaces were carefully built around heritage buildings that had already been redeveloped in the city's most central waterfront section. Here, we find the Ribeira das Naus, where the archeological remains of a sixteenth-century shipyard are part of the new green area by the river. Another example is landscaped the Campo das Cebolas, where heritage structures are also part of rearranged public space.

Though very few projects have been realized so far, they represent a broader vision of the central section of the waterfront. They recover the historical connection of the city with the river, which in fact has become part of an overall port and



Fig. 5 Area included in the UNESCO application. The boundary of the property is drawn in red, the buffer zone in blue. In dark red are the walls of Lisbon. *Source* CML (2016); released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

maritime heritage management strategy that has recently taken on more formal shape. In retrospect, the PGIFR can be seen as a first attempt in reconciling some of the interests of the APL, the municipality of Lisbon, and the relationship between them. Today, connecting the city to the river is still one of the municipality's planning priorities, as is expressed in the 2013 municipal master plan and the city's 2016 application to the UNESCO World Heritage List, *Historical Lisbon, Global City* (Câmara Municipal de Lisboa, 2013; 2016). In 2017, UNESCO officially included the city's application on the National Tentative List (UNESCO 2011).

Lisbon's 2016 World Heritage application was not its first. In 2011, Lisbon's municipality put forth a proposal called *Pombaline Lisbon*, which concerned only the historical city center. This application to the World Heritage List was based on a conservation plan for the Baixa (the historical downtown area). The plan was officially approved in 2011, to preserve the physical characteristics of its eighteenth-century reconstruction. After a meeting with UNESCO representatives, the city decided to prepare a new application according to UNESCO's Historic Urban Landscape concept, which triggered a redefinition of the heritage boundary to include the riverfront area and Lisbon's intangible qualities like song and culture that contribute to its identity (as shown in Fig. 5) (Câmara Municipal de Lisboa 2017).

Several municipal departments led the new application, using the HUL concept to determine which properties to include and which arguments to use. Lisbon's maritime identity and port heritage were among the most significant elements of the new UNESCO brief. The application is structured around two historical events

in the development of both the city and its port: the discovery era of the fifteenth and sixteenth centuries and the reconstruction of Lisbon in the period after the 1755 earthquake. Other arguments for Lisbon's World Heritage candidacy include the resilience of the urban structure, which was able to overcome the earthquake and other natural disasters; the cultural palimpsest of the city's history of maritime commerce; the identities still visible in its neighborhoods, found in artistic expressions such as the Fado and the azulejos ceramic tiles; and the distinctive light resulting from the reflections in its colorful and rugged urban landscape (Câmara Municipal de Lisboa 2017).

The zone defined for the UNESCO application logically connects actors such as the General Directorate of Cultural Heritage (DGPC), local and national tourism organizations, and associations responsible for preserving artistic expression. The team in charge of the application will consult and coordinate next steps with several organizations responsible for the activities affecting Lisbon's tangible and intangible heritage in the coming years. Although special protection plans already cover up to 70% of the heritage area (Câmara Municipal de Lisboa 2017), the landscape approach is expected to improve current documents, relating existing initiatives to each other—that is, building renovations, public space improvements, and cultural manifestations—that until now were unconnected. Moreover, the approach is seen as an opportunity to establish broader cooperation with additional urban stakeholders, such as the port authority. Whether this cooperation will actually emerge remains an open question.

Conclusion: New Arenas and Next Challenges

In this study, we have placed the present phase in the evolution of port cities within the third stage of the Anthropocene: an era in which humankind has developed the ability to alter the planet's ecosystems and its natural settings in irreversible ways. This ability comes with the responsibility for thinking and acting sustainably, fostering economic growth without depleting resources needed by future generations. We have explained that sustainable development asks for governance arrangements that stimulate key actors to take into account the economic, environmental, and social implications of their actions. In contemporary port cities, where the legacy of the industrial age is often felt heavily, the challenges of sustainable development are paramount. Here, incentives for a rigorous geographical separation of port and city functions are now being balanced by sociocultural and economic forces that seek to renew port-to-city links. Developing a sustainable port-to-city relationship thus implies a governance process in which port and city functions are not regarded as mutually exclusive, but are allowed to prove that they may be elements that reinforce each other.

In Europe, the reuse of maritime heritage can contribute to a renewed and more sustainable port-to-city relationship. We described how in Lisbon, authorities have revitalized some of the city's most prominent maritime heritage structures, evaluating to what extent a recently adopted governance approach to heritage—an approach rooted in UNESCO's Historic Urban Landscape concept—stimulates a process toward (more) sustainable results.

The new approach adopted in Lisbon looks beyond physical buildings and other objects to integrate these with intangible, cultural aspects that define a city and its *portuality*. Port heritage signifies the identity of Lisbon as a port city; and perceiving heritage buildings as part of a larger historic urban landscape helps them to be treated as elements of the sociocultural pillar within the sustainability paradigm. Although Lisbon's application to the World Heritage List was neither a plan nor a vision, it signaled an evolution in how key city actors have learned to understand the urban landscape. It resulted in connecting the old city with the riverfront, creating incentives for the city to renew a dialog with the port and other relevant authorities. The application emphasizes the city-river-port relationship not only as an important historical fact, but also as a framework for the present and the future.

Lisbon is not the only port city in Europe to adopt UNESCO's landscape approach to heritage preservation. In the Italian port city of Naples, for example, this approach has also led to new spaces for dialog between previously separated stakeholders. However, applying the process that moved the city toward a heritage management plan for the historic center excluded experts and elite urban actors participation in these new arenas (De Rosa and Di Palma 2013). Much as in Lisbon, the role of the larger public and that of the port authority—which owns substantial parts of the city's historic waterfront, including heritage objects—still remains unclear. Combining our relational perspective with the premise of sustainable port-city development may be expected to elicit the result that port authorities have sufficient reason to invest and participate in processes with sustainable development themes. However, the agency of these powerful organizations beyond their role in shipping and cargo seems restricted and fraught with both state and European rules and regulations.

Such terms lead us to question what role port authorities should be allowed to play in new sustainable development arenas, such as those focused on heritage management, even as they contribute to the port-cities relationships so desired. Further research in Lisbon and other European port cities is needed to address this governance challenge. Although the HUL approach to heritage management has surely led to more sustainable dialogs in Lisbon, it is important to monitor whether this process also yields more sustainable outcomes.

References

- AIVP (2015) Plan the city with the port: guide of good practices. <http://www.aivp.org/en/2015/06/30/plan-the-city-with-the-port-guide-of-good-practices-2/>. Accessed 18 Dec 2017
- Aregall MG, Bergqvist R, Monios J (2018) A global review of the hinterland dimension of green port strategies. *Transportation Research Part D: Transport and Environment* 59:23–34. <https://doi.org/10.1016/j.trd.2017.12.013>
- Ayres dos Santos S (2012) A flexibilidade na permanência: uma proposta para a reutilização da Cordoaria Nacional. <https://www.repository.utl.pt/handle/10400.5/5457>. Accessed 15 Dec 2017
- Bird J (1963) *The major seaports of the United Kingdom*. Hutchinson, London

- Brandão P (1988) Prefácio. In: Brandão P, Jorge F (eds) *Lisboa, a Cidade E O Rio - Concurso de Ideias Para a Renovação Da Zona Ribeirinha de Lisboa*. Associação de Arquitectos Portugueses, Lisbon, pp 3–4
- Câmara Municipal de Lisboa (2008) Documento de Enquadramento - Plano Geral de Intervenção Para a Frente Ribeirinha. Câmara Municipal de Lisboa - Divisão de Desenvolvimento Urbano, Lisbon. http://www.cm-lisboa.pt/fileadmin/VIVER/Urbanismo/urbanismo/planeamento/prospectivos/ribeirinha/documento_enquadramento.pdf. Accessed 20 Dec 2017
- Câmara Municipal de Lisboa (2013) Regulamento do Plano Director Municipal. http://www.cm-lisboa.pt/fileadmin/VIVER/Urbanismo/urbanismo/planeamento/pdm/AF_REGULAMENTO_PDM_Lx.pdf. Accessed 1 June 2019
- Câmara Municipal de Lisboa (2016) Formulário Para Submissão À Lista Indicativa - Anexos: Lisboa Histórica, Cidade Global. <http://www.cm-lisboa.pt/viver/urbanismo/candidaturas-a-unesco>. Accessed 3 Jan 2018
- Câmara Municipal de Lisboa (2017) Formulário Para Submissão À Lista Indicativa: Lisboa Histórica, Cidade Global. <http://www.cm-lisboa.pt/viver/urbanismo/candidaturas-a-unesco>. Accessed 3 Jan 2018
- Crutzen PJ (2002) Geology of mankind. *Nature* 415:23. <https://doi.org/10.1038/415023a>
- Crutzen PJ (2006) The Anthropocene. In Ehlers E, Kraft T (eds) *Earth system science in the Anthropocene*. Springer, Berlin, Heidelberg, pp 13–18. https://doi.org/10.1007/3-540-26590-2_3
- Daamen T, Vries I (2013) Governing the European port-city interface: institutional impacts on spatial projects between city and port. *J Transp Geogr* 27:4–13. <https://doi.org/10.1016/j.jtrangeo.2012.03.013>
- De Rosa F, Di Palma M (2013) Historic Urban Landscape Approach and Port Cities Regeneration: Naples between Identity and Outlook. *Sustainability (Switzerland)* 5(10):4268–4287. <https://doi.org/10.3390/su5104268>
- Dooms M (2014) Integrating ‘triple P’ bottom line performance and the license to operate for ports: towards new partnerships between port cluster stakeholders. In: Alix Y, Delsalle B, Comtois C (eds) *Port-city governance*. ems - Management & Societe, Cormelles-le-Royal, pp 55–76
- ESPO (2010) Code of practice on societal integration of port. <https://www.espo.be/media/espopublications/ESPOCodeofPracticeonSocietalIntegrationofPorts2010.pdf>. Accessed 10 Dec 2018
- ESPO (2016) European Port Industry Sustainability Report 2016. <http://www.maritime-rdi.eu/media/10488/european-port-industry-sust-rep-2016.pdf>. Accessed 7 Jan 2018
- Gama E, Miranda I (1997) Lisboa Ribeirinha E as Suas Estações - Síntese Histórica. In Caessa A, Martins MG (eds) *Actas Das Sessões Do II Colóquio Temático Lisboa Ribeirinha*. Câmara Municipal de Lisboa - Departamento de Património Cultural Divisão de Arquivos, Lisboa, pp 201–224
- Grossmann I (2008) Perspectives for Hamburg as a port city in the context of a changing global environment. *Geoforum* 39(6):2062–2072. <https://doi.org/10.1016/j.geoforum.2008.04.011>
- Hall PV (2007) Seaports, urban sustainability, and paradigm shift. *J Urban Technol* 14(2):87–101. <https://doi.org/10.1080/10630730701531757>
- Hall PV, Jacobs W (2012) Why are maritime ports (still) urban, and why should policy-makers care? *Marit Policy Manag: Flagship J Int Shipp Port Res* 39(2):189–206
- Hayuth Y (1982) The port-urban interface: an area in transition. *Area* 14(3):219–224. <https://doi.org/10.2307/20001825>
- Hein C (ed) (2011) *Port cities: dynamic landscapes and global networks*. Routledge, New York
- Hein C (2018) Oil spaces: the global petroleumscape in the Rotterdam/The Hague area. *J Urban Hist* 00:1–43. <https://doi.org/10.1177/0096144217752460>
- Hesse M (2017) Approaching the relational nature of the port-city interface in Europe: ties and tensions between seaports and the urban. *Tijdschrift Voor Economische En Sociale Geografie*. <https://doi.org/10.1111/tesg.12282>

- Hoyle B (1989) The port-city interface: trends, problems and examples. *Geoforum* 20(4):429–435. [https://doi.org/10.1016/0016-7185\(89\)90026-2](https://doi.org/10.1016/0016-7185(89)90026-2)
- Hoyle B (2000) Global and local change on the port-city waterfront. *Geogr Rev* 90(3):395–417. <https://doi.org/10.2307/3250860>
- Mah A (2014) *Port cities and global legacies—urban identity, waterfront work, and radicalism*. 1st ed. Palgrave Macmillan, London, UK. <https://doi.org/10.1057/9781137283146>
- Marshall R (2004) *Waterfronts in post-industrial cities*. Routledge, London. <https://doi.org/10.4324/9780203166895>
- Merk O (2013) The competitiveness of global port-cities: synthesis report. OECD Publishing, Paris. <https://www.oecd.org/cfe/regional-policy/Competitiveness-of-Global-Port-Cities-Synthesis-Report.pdf>. Accessed 4 Jan 2018
- Musso E, Ghiara H (2011) Reshaping the economic landscape of port cities. In: Alemany J, Bruttomesso R (eds) *The port city of the XXIst century. New challenges in the relationship between port and city*, Rete, Venice, pp 87–101
- Nabais AJCM, Ramos PO (1987) 100 Anos Do Porto de Lisboa. Administração do Porto de Lisboa, Lisboa
- Norcliffe G, Bassett K, Hoare T (1996) The emergence of postmodernism on the urban waterfront: geographical perspectives on changing relationships. *J Transp Geogr* 4(2):123–134. [https://doi.org/10.1016/0966-6923\(96\)00005-1](https://doi.org/10.1016/0966-6923(96)00005-1)
- Notteboom TE (2006) Ports are more than piers: Liber Amicorum presented to Prof. Dr. Willy Winkelmanns. Antwerp. De Lloyd
- Notteboom TE, Rodrigue JP (2005) Port regionalization: towards a new phase in port development. *Marit Policy Manag* 32(3):297–313. <https://doi.org/10.1080/03088830500139885>
- Olivier D, Slack B (2006) Rethinking the port. *Environ Plan A* 38(8):1409–1427. <https://doi.org/10.1068/a37421>
- Pagés Sánchez JM (2017) Evolution of Lisbon's port-city relation: from the earthquake of 1755 to the port plan of 1887. *PORTUSplus*, the Online Journal of RETE, October 20(7)
- Pagés Sánchez JM, Daamen T (forthcoming) Sustainable port-city relationships: challenges and opportunities in Europe. *Plan Perspect*
- Pereira Roders A (2013) How can urbanization be sustainable? A reflection on the role of city resources in global sustainable development. *Bollettino Del Dipartimento Di Conservazione Dei Beni Architetonici Ed Ambientali* 13(1):79–90
- Rêgo Cabral N (2011) Governability and sustainability. Redevelopment of the waterfront in Lisbon. In: Alemany J, Bruttomesso, R (eds) *The port city of the xxist century. New challenges in the relationship between port and city*, Rete, Venice, p 385
- Schubert D (2008) Transformation processes on waterfronts in seaport cities—causes and trends between divergence and convergence In: Kokot W, Gandelsman-Trier M, Wildner K, Wonneberger A (eds) *Port cities as areas of transition: ethnographic perspectives*. Urban Studies. Transcript Verlag
- Schubert D (2011) Seaport cities: phases of spatial restructuring. In: Hein C (ed) *Port cities: dynamic landscapes and global networks*, 1st edn. Routledge, New York, pp 54–69
- Schubert D (2017) Ports and urban waterfronts. In: C Hein (ed) *The Routledge handbook of planning history*. 1st ed. Routledge, New York, pp 336–347
- Silva MÂSP (2012) Património industrial em Portugal: inclusão do passado em projectos contemporâneos. <http://hdl.handle.net/11067/78>. Accessed 28 Feb 2018
- Steffen W, Grinevald J, Crutzen P, McNeill J (2011) The Anthropocene: conceptual and historical perspectives. *Philos Trans Royal Soc A: Math, Phys Eng Sci* 369(1938):842–867. <https://doi.org/10.1098/rsta.2010.0327>
- UNESCO (2011) Convention for the safeguarding of the intangible cultural heritage. In: Intergovernmental committee for the safeguarding of the intangible cultural heritage. Sixth session. <https://ich.unesco.org/en/6COM>. Accessed 21 Dec 2017

- UNFCCC. Conference of the Parties (COP) (2015) Adoption of the Paris Agreement. Proposal by the President. In: Paris climate change conference—Nov 2015, COP 21 21932 (December): 32. [FCCC/CP/2015/L.9/Rev.1](https://www.unfccc.int/documents/426026)
- United Nations (2015) Transforming our world: the 2030 agenda for sustainable development. <https://sustainabledevelopment.un.org/content/documents/7891Transforming%20Our%20World.Pdf>, <https://doi.org/10.1007/s13398-014-0173-7.2>. Accessed 20 Dec 2017
- Van Hooydonk E (2007) Soft values of seaports. A strategy for the of the public support for seaports. Garant, Antwerp
- Van Hooydonk E (2009) Port city identity and urban planning. *Portus* 18:16–23
- Verhoeven P (2011) Social integration of ports: a key task for port authorities. In: Alemany J, Bruttomesso R (eds) *The port city of the xxist century. New challenges in the relationship between port and city*, Rete, Venice, pp 186–200
- Warsewa G (2011) The role of local culture in the transformation of the port–city. *Portus plus* 2. http://retedigital.com/wp-content/themes/rete/pdfs/portus_plus/2_2011/Temáticas/Laciudadportuariacontemporánea/01_Günter_Warsewa.pdf. Accessed 8 Jan 2018
- WCED (1987) *Our common future*. World Commission on Environment and Development. Oxford University Press
- Williams CC, Millington AC (2004) The diverse and contested meanings of sustainable development. *Geogr J* 170(2):99–104. <https://doi.org/10.1111/j.0016-7398.2004.00111.x>
- Zhao Q, Xu H, Wall RS, Stavropoulos S (2017) Building a bridge between port and city: improving the urban competitiveness of port cities. *J Transp Geogr* 59:120–133. <https://doi.org/10.1016/j.jtrangeo.2017.01.014>

José M. P. Sánchez is an architect and Ph.D. candidate in Urban Planning at Hamburg Hafencity University, Germany. His research and publications focus on sustainable port–city relationships, with an emphasis on Lisbon. He is also external strategic adviser in the Association Internationale Ville et Port (AIVP) on policy and research projects.

Tom A. Daamen is an associate professor of Urban Development Management at Delft University of Technology, The Netherlands. He is an expert on governance strategies for the development of waterfront zones and the reshaping of port–city relationships. In addition to his academic research and teaching, he advises port authorities, property developers, and government bodies on urban waterfront change.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits any noncommercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if you modified the licensed material. You do not have permission under this license to share adapted material derived from this chapter or parts of it.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

