Floating Nautical Heritage. Case Studies and Experimental Proposal for Proximity Museums

Abstract
Floating Nautical Heritage is part of the Italian Cultural Heritage. Within the mission of the PNRR, it is considered to be a strategic branch for the economic, social, and cultural recovery of our country. In this scenario, Design for Cultural Heritage promotes good practices to reconnect heritages, their users and stakeholders through digital technologies and by enhancing the tangible heritage and their intangible dimension. Thanks to this preface, the paper focuses on Nautical Heritage. It is characterized by a great variety of typologies of goods, both material and intangible, which are currently barely enjoyable. Nevertheless, it has great potential from the economic, social, and cultural points of view. By including the Floating Nautical Heritage in the context of the Design for Cultural Heritage, the authors show innovative strategies focused on the concept of museum of proximity. Two case studies are proposed as pilot experiments that are eventually transferable to others in Italy and abroad.

Keywords
Floating Nautical Heritage
Cultural Heritage
Proximity
Phygital
Current Challenge for Cultural (And Nautical) Heritage

The naval and nautical field, a widely renowned sector of Italian excellence, has its primary research centre for design issues within the Università di Genoa and, specifically, at the Department of Architecture and Design. Here, researchers specialised in the disciplines of Naval and Nautical Design have developed their research and projects over the years, engaging with multiple scenarios such as the green economy, sustainability, reuse, refitting, conservation and product restoration as well as the collective recognition of a historical identity, its enhancement and cultural dissemination. Here, moreover, the field of Naval and Nautical Design meets that of Cultural Heritage.

Today the Cultural Heritage is one of the priorities of the PNRR\(^1\). In particular, mission 1: *Digitalisation, innovation, competitiveness, culture and tourism* means to “improve the supply of sustainable accommodation facilities and the field of culture by capitalising on new technologies and a sustainable approach". Culture and tourism are considered key sectors for the recovery of the Italian economy, particularly after the pandemic event of 2020. The cited mission proposes interventions for the enhancement of historical and cultural sites, aimed at improving the attractiveness, safety, and accessibility. These interventions are also dedicated to the protection and enhancement of minor sites, the regeneration of urban suburbs, enhancing places key to identity while strengthening the social fabric of the territory. The operative intention is to adopt a philosophy of environmental sustainability and to fully exploit the potential of the digital, leveraging new technologies to offer new services and improve access to tourist and cultural resources. This plan matches the definition of museum advanced by the International Council of Museums (ICOM) in 2019: museums can be re-imagined as active agents in civic society and re-designed to become, in addition to spaces of conservation, both spaces of discussion, production and re-use or *activation* of the Cultural Heritage. Here the *phygital* (physical + digital) dimension of Cultural Heritage assumes great importance due to the employment of digital technologies and their reconnection with the physical dimension, to re-create continuous engagement and affection for the audience and community.

Moreover, Eleonora Lupo, in speaking of the concept of *heritage continuum* (Ozdil, 2014) affirms:

> heritage thanks to the use of technologies is increasingly connoted as an inseparable *continuum* between material and immaterial, accessible and usable in a widespread, customizable and shared way, through an ecology of content that links the collections of museums, cultural institutions, archives, online repositories and territories in a fluid and layered space between physical and virtual (Lupo, 2019, p.121).

Here, Design for Cultural Heritage plays a prominent role, and it has brought the above-described needs forward.

In 2020, a group of researchers in Design from the Università di Genova, Politecnico di Milano and Università di Camerino, and in Management from the Università Cattolica del Sacro Cuore, submitted a research project for the PRIN2020\(^2\) aimed at responding to the pandemic crisis as an opportunity to rethink and redesign the role, the competences and modes of operation and collaboration of museums, cultural institutions and organisations and of the entire eco-

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1 The National Recovery and Resilience Plan is the plan approved in 2021 by Italy to revive its economy after the COVID-19 pandemic.

2 The project was titled *Design for Cultural Heritage and museums innovation in the age of pandemic and post-pandemic: design, digital and social technologies, continuous learning and management policies for the “museums of proximity”*. Associated investigator: E. Lupo, Politecnico di Milano; C. Vannicola, Università degli Studi di Camerino; M.C. Morozzo della Rocca, Università degli Studi di Genova; P. Fandella, Università Cattolica del Sacro Cuore.
system of stakeholders and infrastructures of the Cultural Heritage, linking them to the digital revolution, in order to help them embrace a sustainable transformation and re-organisation, to build cultural resilience during the post-covid recovery. In order to accomplish these project goals, the concept of proximity, considered of central importance for sustainable tourism (Bertacchini, Nuccio & Durio, 2019), is developed through the museum of proximity. Here the idea of proximity is transferred to the hypothetical connection between museums, the audience, and the territorial network built around their tangible and intangible heritage.

The essay, the result of studies by the research group from the Università di Genoa and working within the discipline described in the first few lines, takes the form of a spinoff of the PRIN2020 project, focusing on the naval and nautical context.

The Italian Floating Nautical Heritage Scenario

The equivalence between Nautical Heritage and Cultural Heritage in Italy is by no means a foregone conclusion, especially if the nautical object is navigating rather than a museum-piece and if it is not yet within the area of interest of archaeology.

Compared to many European realities such as the Anglo-Saxon or French orbits, the territories of which have comprehensive catalogues3 of the national floating nautical heritage as well as many associations, museums, and entities that organise events for the enhancement of this world-renowned heritage, which engages a diverse public, the Italian context is characterised by an important time lag, but not by a generalised lack of interest in the topic.

The collective recognition of historic boats as part of our tradition or our culture is a recent but constantly growing phenomenon, and the scientific debate activated over the past decade4 recognizes the need to consolidate and spread this slice of national culture as well.

The historical boats, according to Italian Legislative Decree 196/2003. nr.42-2004 better known as the Code of Cultural Heritage and Landscape, in many cases, can aspire to be part of the national Cultural Heritage.

On the basis of the existing legislation, heritage vessels are potentially - in a broad and inclusive sense of the term – vintage or classic sailboats, military ships, work boats or traditional boats with particular historical, chronological and ethno-anthropological requirements (Morozzo della Rocca, 2014).

Families and types of nautical units, even very different from one another, whose need to be promoted and salvaged must be considered family by family or case by case.

If, for example, we talk about military ships, it is not difficult to understand that we are dealing with relics to preserve. In this case, we find important allies in institutions such as the Naval Technical Museums, the Maritime Museums and the Italian Navy.

If we are dealing with the ladies of the sea that have made history in yachting and world sailing competitions, those responsible for their enhancement or recovery will on the contrary be working mainly with the private heritage.

In this case, we are lucky to be able to count on a fair number of enthusiasts who wish to restore these artefacts for personal


4 From 2013 to the present, several research projects related to the Nautical Heritage strand have been launched at the Department of Architecture and Design of the Università di Genova. Among the main ones we mention: the 2019/2022 framework agreement Development of research activities on the themes of the enhancement and recovery of the nautical-naval culture and heritage (material and intangible) also through applied research projects on specific case studies signed by the North Navy Command (M.M.I., Ministry of Defense); 2019/2020 University research project Recovery and enhancement of the sailing heritage. Case studies and practical applications (PRA 2018 - Area 08, SSD ICAR/13); 2018/2019 University research project The museums of the sea and the navy: training and network for the consolidation and growth of the nautical heritage on the Italian territory (PRA 2017 - Area 08, SSD ICAR/13); 2016/2018 University research project Nautical heritage, digital tools for the knowledge and enhancement of the nautical heritage (PRA 2016 - Area 08, SSD ICAR/13); 2014/2015 University research project Strategies for the enhancement, protection and recovery of historic boats (PRA 2013 - Area 08, SSD ICAR/13); 2013/2014 University research project The restoration for the nautical product, methodological and disciplinary reflections (PRA 2012 - Area 08, SSD ICAR/13).
use, returning them to their former splendour, seaworthiness and appeal in marinas.

If we turn, instead, to the third large family of heritage boats, the traditional wooden boats, or the working units from our poorest tradition, we notice a total inversion of the trend.

Considering exceptional cases such as the Adriatic coast, characterised by great interest in traditional wooden boats also from the great public, the units belonging to this category, are less versatile for recreational use, and, therefore, of minor interest to the large part of ship-owner. Consequently, as soon as the original business for which they were constructed was discontinued, they were inevitably abandoned, slowly and progressively until most of the original specimens were lost.

It is also necessary to emphasise that the physical extent of the Italian nautical heritage is still unknown even to experts in the sector. In fact, despite many census initiatives having been conducted, a unified and unitary catalogue has yet to be produced.

Therefore, the difficulty of recognition and enhancement also depends on the impossibility of knowing the real extent and location of the heritage itself.

Despite these difficulties, much untapped potential still emerges. Many national or local realities are committed to advancing museum initiatives and public events of interest that can serve to affirm the Italian Floating Nautical Heritage, seafaring traditions and construction techniques that this heritage can hand down and detail.

This is a commitment validated by transnational associations such as the Mediterranean Maritime Museums (AMMM) and the European Maritime Heritage (EMH) which in parallel and on a large scale encourage and inspire the emergence of good practices that can reverberate positively in the various EU countries.

Protagonists in the Enhancement of the Nautical Heritage and Future Goals

In Italy we can find at least three macro-realities corresponding to different scenarios for the enhancement of the Nautical Heritage:

- the most structured institutional museums, including the Museo della Marineria di Cesenatico (Maritime Museum of Cesenatico), the Galata Museo del Mare (Galata Museum of the Sea) in Genoa and the Museo della Barca Lariana (Museum of the Lariana Boat) in Pianello del Lario;
- non-profit associations, less articulated but equally operational, which, in addition to institutional sports or educational-social activities, carry out fundamental actions for raising awareness and involvement of the community and for the conservation, enhancement and collective use of the boats;
- shipyards that in their offices preserve archives rich in historical and unpublished design material.

The small associations, which in Italy exceed twenty for an estimated material heritage of over 3000 units, as well as the shipyards with a long tradition behind them, represent the strategic elements for reinterpreting museum methods of the fruition and dissemination of the heritage itself, by establishing close relations between the major entities rooted in their institutional offices and the more versatile minor realities, distributed throughout the territory.

All of them focused on both the strategy aiming to enhance the floating historic nautical heritage and the application of the restoration process in the yachting field.

Part of the results obtained from the research activities are collected in: Morozzo della Rocca, M. C. (2014); Morozzo della Rocca, M. C. (2018); and Morozzo della Rocca, M. C., Zappia, G. (2019).

Among the most significant references we can mention the cataloguing experiences conducted by the Federazione Italiana Barche Storiche (https://www.fibas.it/catalogo/), by the Associazione scafi d’epoca e classic (http://www.asdec.it/it_IT/home/registro_storico_nautico/registro-storico-nautico) and the Census of traditional boats of Emilia-Romagna (and surroundings) conducted thanks to an European funding by the Museo della Marineria di Cesenatico (http://www.archivimmc.eu/cbr_index.html). The research actions undertaken in the most recent years to arrive to a unique catalogue of the Italian Floating Nautical Heritage are contained in: Morozzo della Rocca, M. C. (2018).
and therefore by their very nature close to interpreting the principle of museum proximity.

In particular, associations and tourist-port docks where boats are moored can aspire to represent that concept of seascape communities anticipated by the AMMM in 2016 as a strong element on which to build a future for the enhancement of the Nautical Heritage.

The 22nd Forum Museums and cultural seascapes. The seascape communities organised in 2016 in Genoa, in fact, introduced the need “to involve museums in caring for and managing their cultural environment, which means to develop a natural vocation of theirs, extending their responsibility from their collections to the territory. [...] The museums may give a significant contribution to the management of a territory attentive to the values of the seascape, through good practices for understanding and promoting the maritime heritage” (AMMM, 2016, p.5).

In the face of a thus-defined scenario, the future challenge, in terms of the concept of proximity and heritage continuum, is concretised in the need to guide and orient a cultural innovation process that can exploit, for mutual benefit, the greater visibility and structure of institutional museums and the still untapped cultural potential of associations and shipyards. It seems more necessary than ever to launch actions and case studies that could help to define a strong network that makes the most of the centrality of museums on the one hand and the timely and widespread distribution of associations and construction sites on the other.

**Pilot Experimentations in Ligurian Territory**

The Liguria region is characterised in this sense as a representative microcosm of the entire nation, acting as a forerunner for the local experimentation of good practices that can be effectively implemented beyond its own regional borders.

In the Genoese capital, we find major museums such as the Galata Museo del Mare e delle Migrazioni (Galata Museum of the Sea and Migrations) and the Associazione Promotori Musei del Mare (Association of Promoters of the Sea Museums) which are counterbalanced by various minor realities established on the eastern coast such as Vela Tradizionale (Traditional Sailing), La Nave di Carta (The Paper Ship), Storie di Barche (Stories of Boats), the Amici del Leudo (The Friends of Leudo) and the Cantiere della Memoria (Yard of Memory). Finally, numerous shipyards based in the district of Il Miglio Blu (The Blue Mile) in La Spezia are characterised by ancient and relevant traditions and hold important private archives. A complex and articulated reality that may be taken as an example of the research-action context of the Italian scenario considering the case studies as good local practices replicable on the media and on a large scale through the partnership and support of national and international realities such as: FIBaS - Federazione Italiana Barche Storiche (Italian Federation of Historic Boats), AMMM- Mediterranean Maritime Museums Association and Confindustria Nautica.

Moreover, precisely in Liguria, the Institution of the Musei del Mare e delle Migrazioni (Maritime and Migration Museums) (Mu.MA), has since 2009 been promoting the Sea Charter 2.0, which is aimed at creating a network of partners united to share values and experiences related to the maritime culture. From the perspective of active citizenship, the main goal is to spot, collect and spread good practices about
preserving and appreciating the seascape and the living community around it.

By interpreting these documents and initiatives open to the scientific community, the specific case studies oriented towards interpreting the proximity museum in relation to the Floating Nautical Heritage considered for its value as both material and intangible heritage, rely on a selection of Ligurian realities to construct a renewed scenario of a widespread museum experience built on different levels of use between analogue and digital.

First Pilot Experimentation: Seascape Communities

Going into the details of the proposals that the project intends to develop, the first pilot application is based on the experience of the Museo Navigante (Sailing Museum) and works directly on the principle of the network and seascape communities (AMMM, 2016). It aims to reinterpret and innovate existing initiatives such as the GOAM museum quay-Galata Open Air Museum in Genoa as a fulcrum around which to set up an open-air proximity museum for the Ligurian capital that, starting from the physicality of the settlement in the Porto Antico (Ancient Harbor) of Genoa, can extend and connect virtually and physically with other cornerstones distributed throughout the territory.

Currently the GOAM is configured as a mooring dock for the traditional and historic boats owned by the Galata Museo del Mare (Galata Museum of the Sea) which, in the future, could be flanked by temporary moorings for the units of the various associations present in the region. A rotating exhibition to enrich and foster communication through interactive digital events and technologies.

A model that, once set up and tested at the GOAM, can be promptly replicated and shaped to respond to the specificities of each case at the various marinas where minor realities find usual mooring for their boats.

This first action is therefore aimed at traditional sailing boats and the intangible heritage they represent, know-how that has been particularly mortified by the pandemic and which the major museums can support and speak for. For this purpose, the aim of the research is to promote a mixed top-down and bottom-up approach that interprets the idea of the museum and local cultural tourism on different levels of inter-relationship (decentralisation of the use of cultural content within associations, marinas or tourist docks and re-centralisation and coordination of the various initiatives at the institutional museums).

The stakeholders involved are the institutions Mu.Ma - Istituzione Musei del Mare e delle Migrazioni (Sea and Migration Museums Institution) and Promotori Musei del Mare (Promoters of the Sea Museums); GOAM-Galata Open Air Museum; the associations Vela Tradizionale (Traditional sailing), Storie di Barche (Stories of Boats), La Nave di Carta (The Paper Ship) and Cantiere della Memoria (Yard of Memory).

Second Pilot Experimentation: Culture and Companies

The second pilot application starts from the experience of the YTEM-Yacht’n Italy Export Museum, an exhibition format – and the related publications – which, from 2014 to 2017, animated the Genoa Interna-
tional Boat Show. It is addressed to the masters of Italian nautical design and pleasure boats that have marked the affirmation of the Med Style as Made in Italy recognized around the world (Caliari & Musio-Sale, 2013-15) (Caliari & Musio-Sale, 2016). It targets the idea of the proximity museum with a timely action in relation to corporate assets and to a specific area of Made in Italy.

This second pilot experimentation intends to highlight the combination of culture and business by working on several different levels: the local and territorial level at the site that owns the archive, the national and international level through an exportable format in the form of a travelling exhibition, and the virtual level via web capable of giving wide-ranging visibility to the know-how belonging to the site and the digitization process necessary to start any action of knowledge and enhancement of the company’s archival assets.

The design intention, in fact, is to implement three coordinated actions: an application case strictly hinged on the principle of physical proximity, to be carried out locally by involving citizens as visitors to the companies’ production areas; the export of part of the cultural content on the occasion of the most significant trade fairs with a mixed event-exhibition format; and finally the digital migration of ad hoc formats for the web, thus favouring large-scale access that can serve to create interest in puntual experimentations activated on the territory or at the companies.

The stakeholders involved in this second experimentation are: Confindustria Nautica; a shipbuilding company to be selected at the start of the project from those based in Il Miglio Blu (The Blue Mile) of La Spezia. Confindustria Nautica is the institution through which it is possible to select the shipyard on which to start the most significant case study in relation to the company’s assets. It also plays the role of contact organisation for the preparation of events and museum occasions that can be replicated during the major national and international nautical exhibitions.

For both pilot phases, digital technologies (AR / VR, multimedia storytelling, interactive multimodal systems and active experience of cultural content, beacons, social media, gamification, etc.) will be functional to the creation of interactive contents for both dissemination and remote connected accessibility of the Italian Nautical Heritage, for a phygital approach of proximity indispensable to involve the user in multi-level and immersive experiential practices during physical events on the territory. In this regard, an opportunity for the development and transferability of pilot cases is represented, for example, by events that gather historic boats from various parts of the Mediterranean and the world, displaying them by constituting temporary “historic docks.” Within the territory of Italy for example, we think of the gathering and regatta organised by the association Vele Storiche Viareggio or the Vele d’Epoca di Imperia, which every year bring together dozens of boats of various origins, each with their own historical background and each afferent to different shipyards, associations, locations. Today’s commonly used technologies such as smartphones and tablets will then enable the reading of QR-Codes associated with boats at the dock, allowing the enjoyment of broad, multilevel digital content, from basic boat knowledge to in-depth scientific and technological insights for experts.

6 The Blue Mile is a manufacturing district dedicated to boating and all related activities (https://confindustrianautica.net/nasce-a-la-spezia-il-miglio-blu/).

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An additional level of enjoyment is the ability to 3D-print virtual models, creating a link between the digital and physical worlds even for those assets that cannot be physically present, through the creation of ad hoc temporary exhibits and installations. One reference is the experience of YTEM’s temporary exhibition during the 56th Genoa Boat Show in 2016, which shows an example of the perfect balance between real and digital. The drawings and projects, AR, 3D printing, and the exceptional presence of the designer to whom the collection was dedicated, as well as some of his motorboats displayed on land or in the water in the context of the Boat Show, contributed to the success of the exhibition dedicated to the designer Renato Sonny Levi and his production.

In conclusion, the concept of the proximity museum and digital technologies, considered here as the engine that can spread and expand heritages, will strengthen the bond between boating, market, tourism, and culture as a powerful driver of the country’s economic and cultural growth.

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