

The Potential of Maritime Museums for Heritage Education

El potencial de los museos marítimos para la educación patrimonial

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ABSTRACT: Maritime museums provide the right setting for integrating different perspectives and approaches to study maritime culture and history. This study presents a qualitative analysis of the educational programs from three museums in the Mediterranean region: the Galata Maritime Museum in Genova (Italy), the Maritime Museum of Barcelona (Spain), and the Maritime Museum of Haifa (Israel). This research evaluates the potential of these museums as agents of heritage education while providing their visitors with opportunities to learn about several aspects of maritime history, culture, and science. The Mediterranean region, with its seafaring history and cultural and ethnic diversity, serves as an ideal location for such museums to actively act as learning platforms of the importance of the sea in civilisation whilst addressing the regional challenges. With this study, we highlight the significance of promoting education via cultural heritage in museums and the potential of maritime museums to facilitate inclusion and dialogue about cultural diversity.

KEYWORDS: Education, heritage, maritime museums, inclusion, cultural diversity

RESUMEN: Los museos marítimos permiten integrar diversas perspectivas y enfoques en el estudio de la cultura e historia marítimas. Este trabajo presenta un análisis cualitativo de los programas educativos de tres museos de la región mediterránea: el Museo Marítimo Galata de Génova (Italia), el Museo Marítimo de Barcelona (España) y el Museo Marítimo de Haifa (Israel). Esta investigación evalúa su potencial como agentes para la educación patrimonial y para el aprendizaje sobre historia, cultura y ciencia marítimas. La región mediterránea, con su historia marinera y diversidad cultural y étnica, constituye un lugar ideal para que estos museos actúen como plataformas de aprendizaje sobre la importancia del mar en la civilización y para abordar los retos a los que se enfrenta la región. Con este estudio subrayamos la importancia de promover la educación a través del patrimonio cultural en los museos y su potencial para facilitar la inclusión y el diálogo sobre la diversidad cultural.

PALABRAS CLAVE: Educación, patrimonio, museos marítimos, inclusión, diversidad cultural

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1. INTRODUCTION

The definition of a maritime museum is not universal and can vary depending on the museum's context and specific focus. While there is no agreed-upon definition or universally accepted classification of a maritime museum, these institutions generally share specific characteristics and themes for their educational programmes. Maritime museums are interdisciplinary in nature, drawing on various fields such as history, archaeology, anthropology, art, and science to explore the many aspects of the sea and its impact on human societies. They may cover a wide range of topics related to the sea, including shipbuilding, navigation, trade and commerce, fishing, docklands, recreational boating, and cultural traditions. Some maritime museums also explore complex and contested histories, such as the slave trade, colonialism, and migration, shedding light on often-overlooked aspects of seafaring culture (Bünz, 2022; Davies, 2012; Beneki et al., 2012; Hicks, 2001).

The history of maritime museums in Europe dates back to the early 18th century, with the first recorded maritime museum opening in Russia in 1709. The Central Navy Museum in St. Petersburg began as a private, royal collection and only became a part of the public education system and scientific community in 1867. This trend of transforming private, royal collections into public museums was observed in other European countries, such as the Musée Nationale de la Marine in Paris, which opened in 1827. As Davies (2012) argues, this transformation was part of a significant 19th-century florescence in public education and scientific curiosity, also marked by a degree of imperialistic boastfulness (p.4-5).

The history of these museums has been marked by a continued effort to bridge the gap between the past and present, and today they are recognised as a critical player in supporting local and national identities and promoting cultural tourism and intercultural connections (Vladimirova, 2016; Inbakaran et al., 2008). Maritime museums face significant challenges as they adapt to these evolving social, cultural, technological, and environmental trends, akin to most other museums. To remain relevant, these institutions have gone beyond conventional interpretations of seafaring history and offered visitors a more comprehensive understanding of the intricate relationship between humans and the sea. This understanding includes a deeper exploration of the relationship between seafarers and their communities, the cultural and historical importance of the sea in shaping identities, namely gendered ones, the effects of technological and globalisation advancements on the maritime world, and demographic and social changes. As such, maritime museums strive to transform themselves into immersive, interdisciplinary spaces for dialogue and debate. This transition is crucial for maritime museums' continuing relevance and success in the 21st century.

For centuries, the Mediterranean's rich maritime trade, exploration, and migration histories have given rise to a complex and diverse cultural and historical tapestry. Within the Mediterranean region, the potential for maritime museums to act as agents of education, learning, and awareness-raising about the area's cultural heritage is considerable. As active custodians of the regional maritime heritage, they have the potential to promote intercultural dialogue and provide a platform for understanding and appreciating the shared maritime history of diverse communities. They can provide valuable insights into the region's extensive seafaring past, including the methods and techniques employed by ancient mariners, advancements in seafaring technology and navigation, and the social and cultural changes resulting from Mediterranean maritime connections. As such, they are ideally positioned to address pressing contemporary issues, such as the impact of climate change on the region, the repercussions of human activity on the marine environment, and topics related to migration and cultural diversity. By taking advantage of this position, these "collective memory houses" may focus on imagining the future to predict it and actively create it.

Furthermore, museums in general underwent significant changes during the latter half of the 20th century, particularly in the Western world. These changes were primarily due to the recognition of the constraints of traditional formal education and the increasing significance of non-school and other sources of information in the development of knowledge and lifelong learning (Monteagudo-

Fernández et al., 2021). Heritage and museum education aim to provide individuals with opportunities to learn and establish connections with cultural heritage, fostering identity, social cohesion, and intergenerational understanding in an informal learning environment. One of their key purposes is to facilitate profound and emotional connections between individuals and their cultural legacy (Gomez et al., 2021; Fontal Merillas et al., 2016). Ultimately, museum education seeks to create an informed and culturally rich society, thereby embracing and promoting the principles of diversity and inclusivity (Sandell et al., 2012). By developing a deeper understanding of heritage, individuals can better appreciate the complexities of their own culture and those of others, leading to a more harmonious and interconnected world. Museums are multifaceted institutions that serve as educational spaces for individuals of all ages and backgrounds, thus contributing to societies' social and cultural development. In this article, we shall be looking at educational programmes provided by three maritime museums in the Mediterranean region to evaluate the potential of maritime museums as agents of heritage education.

2. RESEARCH QUESTIONS AND METHODOLOGY

This study employs a qualitative approach to analyse museum educational programmes. It uses a comparative thematic analysis (Maguire et al., 2017) to examine and compare the educational programmes offered by three maritime museums and their pedagogical approaches and strategies: the Galata Maritime Museum in Genova, Italy; the Maritime Museum of Barcelona, Spain; and the Maritime Museum of Haifa, Israel. This approach helped identify and illuminate significant themes within the data and provided an informed answer to the questions enunciated. A six-step model (Braun & Clarke, 2006, p. 87) was adopted in this study:

1. familiarising oneself with the data
2. generating codes
3. constructing themes
4. reviewing potential themes
5. defining and naming themes
6. producing the report

This model provided a flexible framework and allowed for exploring the complexity and richness of data. The delivery efficacy was also considered in terms of attaining the declared objectives. It also sought to ascertain the programmes' pertinence in tackling contemporary issues and challenges related, for example, to Sustainable Development Goals (SDG) (e.g., reducing inequalities, climate action and inclusivity).

The thematic analysis in this study drew upon two distinct sources of data. The first source consisted of online information regarding the educational services offered by the three museums under investigation. This task encompassed a comprehensive review of their websites, educational materials, programme descriptions, and other relevant online resources. The second data source involved semi-structured Zoom interviews, each lasting approximately 30 minutes, with the staff overseeing the educational services at each museum. These interviews provided valuable first-hand insights and perspectives on the educational programmes, allowing for a deeper understanding of their design, implementation, and outcomes. The use of different sources aimed to provide richer and more comprehensive data by combining information from the museums' websites and interviews.

Hence, the analysis is focused on four research questions:

1. What are the primary objectives of the Maritime Museum's educational programmes?
2. How do these museums effectively engage students in the learning process?
3. To what extent does the Maritime Museum's educational program promote inclusivity and accessibility for all learners?
4. Do they use maritime history and cultural aspects to address contemporary themes and contested subjects such as climate change, slavery, and migration fluxes in the Mediterranean?

The choice of these three museums is associated with their significant representation as maritime-themed museums in a region with a long seafaring history and multicultural identities. Moreover, they offer the possibility to look at museums' education from different perspectives. From the point of view of the theme itself, the importance of the sea for the region, but also because they are three museums with different types of administration, which naturally influences decision-making and, therefore, the management of the different services, including education departments.

As an overall aim, this study aimed to gain insights into maritime museums' educational approaches and strategies, highlighting their significance in promoting heritage education that fosters inclusivity and embraces diversity. For this purpose, we focused on the programs offered to schools.

3. MARITIME MUSEUMS: THREE CASE STUDIES IN THE MEDITERRANEAN REGION

This study focuses on three maritime museums in the Mediterranean region that were created to preserve and share the maritime history of their respective regions. Simultaneously, through exhibitions and educational programmes, these museums highlight the importance of the sea in shaping the region's collective identity and promoting inclusivity in light of contemporary issues.

3.1. The Maritime Museum of Barcelona - Museu Marítim de Barcelona

The maritime history of Catalonia is strongly related to a rich maritime heritage. The Institut Nàutic de la Mediterrània, which inherited the Barcelona School of Nautical Studies, played a pivotal role in collecting funds and artefacts that gave birth to the foundation of the Museu Marítim de Catalunya collection. In 1935, Barcelona acquired ownership and management of the Reales Atarazanas de Barcelona, the royal shipyard that is a significant tangible testament to the historical importance of the sea and navigation in the Crown of Aragon and the Spanish Monarchy. The complex was ideally situated to house a museum. This fortunate circumstance, combined with institutional will and social demand, led to the creation of the Museu Marítim de Catalunya in October 1936 (López, 2012, pp. 631-643). The museum opened in 1941 as the Maritime Museum of Barcelona. Despite the challenges of the Franco dictatorship, the museum sought to improve its facilities and become a cultural reference point both nationally and internationally (López Miguel, 2012, pp. 631-643).

Between 2008 and 2013, the Museu Marítim de Barcelona (MMB) thoroughly renovated its exhibition displays and narratives. The objective was to highlight the values and significance of the "maritime" concept among the people living near the sea by explaining the maritime history of Barcelona and Catalonia (López, 2012). The central theme of the new exhibition at the Barcelona Maritime Museum is the relationship between human beings and the sea and the culture that has evolved from this relationship over time. This culture has resulted in a tangible and intangible heritage generated individually (through creation) and collectively (through tradition). This heritage has endured over time as evidence of the changing nature of this relationship and has been passed down to us today (López, 2012).

The MMB provides on its website information about its educational programmes in Catalan, Spanish, French and English. Here you can find information about the programmes for different types of visitors: "Museums and Schools; Children and Families; Adults; Professionals and Experts". On the page dedicated to "Museums and Schools", the MMB states the educational department's mission: "The Maritime Museum of Barcelona's program of educational activities is designed to promote our heritage, with the sea and navigation always in the picture. Our country is a direct consequence of its relationship with the Mediterranean. A sea that shapes our climate, our landscapes, and our economy. A sea that has been the doorway to goods, people, and ideas. A sea that has influenced what we do and how we are. A sea that had shaped our history and has determined our character. Maritime culture is a wide-reaching concept that can be incorporated into all levels of compulsory education and that

can, as a result, be connected in one way or another with curricula from different educational cycles. This makes it a perfect tool for learning new skills.”¹ On this page, it is also possible to have access to the different activities offered related to exhibitions, the planetary, activities with the fleet of historical boats and outdoor activities in the surrounding area of the Museum. The “School Activities” link leads to another “Educational Centres” page. Here we have access to the description of each activity and where it takes place. The activities are presented according to the level of education, ranging from preschool to upper secondary school, including professional courses. This information is available only in Catalan and Spanish. In total, the museum offers 28 educational activities and also provides activities for children and adults with special needs, including visual and other physical impairments².

3.2. The Maritime Museum of Genova - Galata Museo del Mare

The Galata Museo del Mare opened to the public on August 1, 2004, when Genoa was the European Capital of Culture. Galata, a district of Istanbul, was once the location of one of the most prominent Genoese communities in the Mediterranean until the fifteenth century. As a result, when the Municipality of Genoa constructed a dock district towards the end of the 19th century, the oldest section was named after the ancient colony. However, in the twentieth century, "il Galata" ceased to be used commercially and was abandoned. Towards the end of the 1990s, the Municipality decided to transform it into the headquarters of the Maritime Museum of Genoa. The restoration project of the Galata district by architect Guillermo Vazquez Consuegra has given new life to the space where the galleys of the Republic of Genoa were once built and brought the city closer to the sea.

The Galata Museum, together with four other cultural institutions: the Commenda di Prè, the Naval Museum of Pegli, and the monumental complex of the Lantern, form part of the Mu.MA, Istituzione Musei del Mare e delle Migrazioni, established in 2005. This cultural hub revolves around the themes of the sea, travel, and cross-cultural dialogue. In an extraordinary attempt to promote this dialogue with the public, the Museum opened a section dedicated to immigration in 2011. This new section, called the MeM (Memoria e Migrazioni), was created following the success of a temporary exhibition titled "La Merica! From Genoa to Ellis Island, the Voyage by Sea in the Years of Italian Emigration" (2008–2011). Today represents Italy's first 'permanent' museum space that directly addresses the theme of migration, emphasising recent history (Frasca et al., n.d.).

The Galata Museum offers information about its “Educational Services” on the museum webpage. The page provides access to a brief explanation of the programmes offered, the timetables and contacts of the professionals responsible, both in Italian and English. For further information about the educational activities, we have to download a PDF only in Italian is only available. On the first page of this document, we find the main purpose of the museum educational activities:

Through 4,300 original objects, reconstructions and sets to "get on board" and experience first-hand the history of the relationship between Genoa and the sea. The visit to the museum is a journey through the history of navigation from the Middle Ages to the present day, following key historical periods of seafaring: the age of the oar, life on galleys, the age of sail, the vessels, the age of steam and modern migration, the transatlantic adventure on makeshift boats³.

The museum also includes outdoor activities, namely visits to the Open-Air Museum and the Nazario Sauro submarine. These activities are offered from preschool to upper secondary school. In total the Museum offers 16 educational activities. For non-Italian school groups or other groups, the museum offers two English and French activities, including a guided tour and a workshop about the

¹ Translated from the original - <https://www.mmb.cat/aprendre/museu-i-escola/programa-pedagogic/>

² <https://www.mmb.cat/activitats/accessibles/>

³ Translated from the original - <https://galatamuseodelmare.it/?lang=it#muma-didactic-tours>

history of navigation and migration in Genoa. The museum informs that guided tours and activities can be adapted for children and adults with special needs.

3.3. The National Maritime Museum, Haifa - המוזיאון הימי הלאומי

The National Maritime Museum of Israel, situated in Haifa, was established in 1953 based on the private collection of its founder and initial Director, Aryeh Ben-Eli, an officer in the Israeli Navy. The museum's primary aim was to authentically represent the historical evolution of shipbuilding and seafaring in the Mediterranean basin and the Red Sea. Along the Tigris, Euphrates, and Nile rivers, well known as the birthplace of modern shipping (Ben-Eli, 1966; Biran, 1967), the year 1972 marked the museum's relocation from its previous location in the Sailor's Home rooms to its current building. Subsequently, it was incorporated into the Haifa Museum, a municipal organisation established in February 1976 with the primary objective of serving the interests of the general public. The Haifa Museum manages five other art and archaeology museums and the Education Centre.

The permanent exhibition of the Maritime Museum covers three floors and features a comprehensive account of seafaring history that spans over five millennia. It comprises a vast array of artefacts that provide valuable insights into the “history of shipping in the Mediterranean Basin and the maritime story of the city of Haifa. The museum displays over 5000 years of history and maritime archaeology, allowing its visitors to encounter and learn about ancient ships, anchors, battling rams, and other archaeological findings, such as gold coins that were found in underwater excavations. The museum also displays an exhibition about Pirates and the Hebrew-shipping endeavour.”⁴

The Education Centre declares on its webpage that it aims to provide visitors with a deeper understanding and pleasure, “facilitating a more profound enjoyment of their visit. (...) The team of guides at the Museums’ Center of Education is comprised of experienced professionals with an academic education in the field of art and the various intellectual fields relevant to the museums’ versatile worlds of content. With their help, and for you to extract the best from your time at the center, we will construct the best-guided tour for you.”⁵ This information is available in Hebrew, English, Russian and Arabic. When searching for information about the Maritime Museum, it states that the Museum: “is dedicated to teaching the history of seafaring and documenting the human side of the connection between the sea and the region, dating from ancient cultures until our own day.”⁶ On the Maritime Museum exhibitions landing page, we have access to a brief description of each section of the permanent exhibition and the contact for booking a visit. This visit can include the whole museum or just sections. However, there is no information about what kind of activities are offered, to whom or how the guided tours are carried out. A special highlight is given to the exhibitions on the 3rd floor of the Museum that appears in the “Children and Family” section. These exhibitions are:

Home Port / Sailing: Games of Exploration / Pirates. Myth & Reality / The Lower Deck Yard / SOS!” and according to the website, they seek to call attention to contemporary issues: “The National Maritime Museum declares a State of Emergency and comes aboard to Save the Sea! The museum has taken a stand on critical current issues for the first time ever, especially in saving the seas and oceans from ecological disaster. The new exhibitions and interactive stations are designed to give visitors an understanding of the meaning and importance of the sea for humankind and encourage a connection to and a concern for the ecological issues involved.”⁷

⁴ https://www.nmm.org.il/eng/The_Museum

⁵ https://www.hms.org.il/eng/About_Haifa_Museums

⁶ https://www.hms.org.il/eng/About_Haifa_Museums

⁷ https://www.nmm.org.il/eng/Exhibitions/8870/3rd_floor_time_travel

4. DATA COLLECTING AND LIMITATIONS

4.1. Data Collecting

Considering the objectives of this study and, consequently, the four research questions, the first step of data collection was to analyse the information available online of the educational programmes. The aim was to establish a comprehensive overview of common themes. For each museum, it was created a map including the names of the activities and the school levels to which they are offered. For the Haifa Maritime Museum, the map was built with the thematic sections of the permanent exhibition, which can be transformed into educational activities based on the information provided by the Director, as mentioned above.

A preliminary analysis (Table 1) of these thematic maps allowed the construction of the interview guide and questions (Table 2).

The interview with the Barcelona Maritime Museum took place on the 24 of February 2023, and with the Galata Museum on the 2 March 2023. The interview with the Haifa Maritime Museum was impossible to conduct because the person responsible for the educational programmes does not speak English. After a brief conversation with the Director of the Museum, it was agreed to send the questions by email. The email was replied to on 16 March 2023. The interviews were transcribed using the free online software called mygoodtape. The transcribed data was then compared to the audio recordings and analysed to identify patterns for coding. Additionally, the data obtained from the online programmes were thoroughly examined to determine coding patterns. Once the codes were generated, it was possible to make the thematic analysis.

4.2. Limitations

The limitations of this research relies on the following points.

First of all, the sample size and regional scope. To obtain a more representative understanding of the thematic analysis of maritime museums' educational programmes, a broader range of maritime museums in the Mediterranean region would be beneficial.

Secondly, the language barrier. The availability of activity sheets solely in Hebrew at the Haifa Maritime Museum posed a challenge for complete comprehension and data analysis. This language barrier did not allow direct interviews with the person responsible for the educational programs at the National Maritime Museum in Haifa.

Thirdly, the following methodological constraints need to be taken into consideration: Haifa Museum does not have educational programmes available online, and the email communication to collect the data for the seven questions of the interview introduced potential limitations in the analysis and interpretation of data.

Finally, the lack of comprehensive literature: the limited amount of literature on maritime museums, particularly regarding their educational programs, restricted the depth of insights that could be gained from existing research.

TABLE 1. Preliminary Analysis

	Museu Marítim de Barcelona / MMB	Galata Museo Del Mare / GMM	The National Maritime Museum / NMM
EP - Main objective (online information)	The Maritime Museum of Barcelona's program of educational activities is designed to promote our heritage, with the sea and navigation always in the picture. Our country is a direct consequence of its relationship with the Mediterranean. A sea that shapes our climate, our landscapes, and our economy. A sea that has been the door to goods, people, and ideas. A sea that has influenced what we do and how we are. A sea that had shaped our history and has determined our character. Maritime culture is a wide-reaching concept that can be incorporated into all levels of obligatory education and that can, as a result, be connected in one way or another with curricula from different educational cycles. This makes it a perfect tool for learning new skills.	4300 original objects, reconstructions, and sets allow visitors to "get on board" and experience firsthand the history of the relationship between Genoa and the sea. A visit to the museum is a journey through the history of navigation from the Middle Ages to the present day, following four fundamental ages of seafaring: the age of oars, experienced on galleys, the age of sail, dominated by ships, the age of steam, with its steamships full of migrants, and the age of modern mass migrations , on transatlantic ships but also on makeshift boats. In the section MEM Memory and Migrations, the Italian emigration by sea and the recent immigration towards Italy are told. In the area surrounding the museum, the Open Air Museum tells the story of the historic Darsena: panels, historic cranes, and machinery for handling goods; it also houses the Nazario Sauro submarine, which offers the opportunity to get up close with the living conditions of sailors on a real submarine. Born during the Cold War, today the submarine is a messenger of culture and knowledge.	The National Maritime Museum in Haifa showcases the history of shipping in the Mediterranean Basin and the maritime story of the city of Haifa. The museum displays over 5000 years of history and maritime archeology, and makes it possible for its visitors to encounter and learn about ancient ships, anchors, battling rams, and other archeological findings, such as gold coins treasures that were found in marine excavations. The museum also displays the pirate exhibition and the Hebrew-shipping endeavor. Haifa Museums' Education Center was founded to deepen our visitors' pleasure and understanding. The center aspires to provide our audience with a deeper understanding of the work of the various artists and thereby draw a more profound enjoyment from their visit. The center conducts seminars and workshops for a wide range of audience, ranging from adults, children, families, students, art lovers, and tourists.
EP - Main Themes (Online Information)			
Pirates and Piracy (trade, commerce, treasures)	yes	yes	yes
Navigation (History and use navigational Instruments)	yes	yes	yes
Life on Board (Sailing; crew)	yes	yes	yes
Life at the Port (People; trade; goods)	yes	yes	no
The Sea (Climate change pollution)	yes	no	yes
Migration	yes	yes	no

TABLE 2. Interview Guideline

PROCESS	DESCRIPTION
Context and objectives	Complement the thematic analysis made of the educational programs available online to answer the primary goal of this study: This study aimed to explore maritime museums' educational approaches, emphasising their role in promoting inclusive heritage education and addressing contemporary challenges such as embracing cultural diversity and climate action.
Preliminary analysis of educational programs available online	Interview Questions: 1 – What is the main objective of this program? What do you aim to achieve? 2 – Is your school's educational program aligned with the school curriculum? 3 – How do you engage students in the learning process during your programs? Object-based learning Phenomenon-based learning Digital storytelling learning 4 – Can you describe any specific maritime history or cultural aspects highlighted in your educational programs? 5 – Do you address any contemporary themes or difficult subjects, namely climate change, sea pollution, slavery or the migration fluxes in the Mediterranean? 6 – Do you have any outreach programs for underrepresented communities in schools? Such as students who are from ethnic or racial minorities. 7 – Do you consider your Maritime Museum's educational program accessible and inclusive for all learners? Can you give me an example of one activity?
Whom to interview	The professionals responsible for the Education Departments and /or Programmes in the Museums
Interviewer	Claudia Garradas
How to conduct the interview	Via Zoom
Duration	30 minutes
Language	English
How to book the interview	By email with a brief presentation of the main goal of the study and its purpose. Introduce people involved in the research and refer to the name of the Publication.
Logistics and documentation	Provide one or two possible dates and hour Inform how the interview will be conducted and time of duration Inform who will be presente in the interview Send the consent form Send the Zoom link 24h before the interview and request confirmation
During the interview	Be online 3 minutes before and test your sound and microphone Ask permission to record the interview Explain the goal of the study Take notes Respect the time Don't forget to thank

5. THEMATIC ANALYSIS

The analysis of the online information about the educational programmes offered by the maritime museums under investigation and data from the interviews show consistency in the thematic narratives and the primary objectives of their educational programmes. Specifically, the educational programmes offered by these museums are oriented towards maritime heritage education through the region's connections to the sea and the intrinsic multidisciplinary perspectives the sea can encompass.

Regarding the topics covered by the educational programmes, themes such as pirates and piracy, navigation, sailing and life on board, sea pollution, and climate change are transversal to the three museums, indicating the significance of these topics in maritime history and culture.

Pirates and piracy have been a part of maritime history for centuries, and their impact on global trade and navigation has been significant. For these museums, it seems vital to cover this topic to give students a deeper understanding of how piracy has determined the course of maritime trade and navigation development, either in a bad or good way. While the Barcelona Museum provides a more historical and theatrical view, the Haifa Maritime Museum approaches the theme from a contemporary perspective. On one side, the Barcelona Museum provides a “dramatic activity in which one will get to know the spirit and motivations of many men and some women to plough the seas outside the law, at the hands of a real pirate who will need the collaboration of the little ones to recover a fantastic treasure.”⁸ On the other, Haifa shows how piracy as an act of robbery and sometimes in violent ways have returned to the seas and is growing along the coasts of the Americas, Africa, the Indian Ocean and South China Sea⁹.

Navigation is another central topic covered by these educational programs. Navigation is presented as a fundamental aspect of maritime history, and, as such, students learn about the tools and techniques used throughout history. The activities include celestial navigation, nautical charts, and navigational instruments. Sailing and life on board are other important and common topics in these educational programmes. They offer students an insight into the life of sailors and crew members aboard ships throughout history, namely in terms of the different roles and responsibilities on board, their challenges, and their lifestyle. Barcelona and Genoa offer an exciting and “real-life experience” on board, while Haifa provides this experience through interactive games, primarily focused on the Israeli shipping story.¹⁰ The Genoa Galata Museum Educational Activities Manual describes this activity:

We are in the port of Genoa in the 16th century. Ships loaded with men and goods arrive and depart every day. We will then leave with the Supergalleon: but before setting sail, the hold must be loaded with food, goods, weapons and precious materials to be sold and exchanged. In a large panel that reproduces the section of a flagship, participants work together to load the hold in the right way to sail safely (p.3).¹¹

Sea pollution and climate change have become a pressing issue in recent years that museums are also addressing. As our understanding of the impact of human activity on the environment has grown, it has become clear that these issues significantly impact maritime heritage. Therefore, to raise awareness about that and encourage students to take action to protect the environment, Barcelona and Haifa have included these topics in their educational activities in different ways. The first allows the

⁸ <https://www.mmb.cat/activitats/pirates-a-la-vista-2/>

⁹ The author Claudia Garradas visited the Museum in September 2022 and had the opportunity to see the permanent exhibition and talk with the Director of the Museum about it and the main objectives of the themes displayed. Moreover, she brought a printed material from the exhibition section entitled “Pirates. Myth and Reality”.

¹⁰ <https://www.mmb.cat/en/learning/schools/>

¹¹ <https://galatamuseodelmare.it/?lang=it#muma-didactic-tours>

students to collect water samples from the sea to be tested by a certified authority and get the results. The latter engages the students in games and discussions through an interactive exhibition¹².

Furthermore, Barcelona and Genoa share a topic directly linked to their regions' maritime activities and long seafaring history: life at the port. Both cities have a prosperous trade, commerce, and industry history facilitated by their ports. Their educational programmes focus on providing visitors with insights into the daily lives of people who lived and worked in these ports, the customs and traditions of the time, and the significance of these ports in shaping the cities' history, culture, and identity. Including this topic in the museums' educational programmes highlights the importance of ports as binding sites for economic and cultural exchange, shaping the identity of these cities and their people. At MMB, students from secondary school:

(...) learn the concept of the port and learn about the main areas of the Port of Barcelona. The students work in groups and investigate the path that the goods follow, from when it is decided to open an import company until the product reaches the consumer, while seeing the importance of the Port of Barcelona in this path. What are the main products and goods that arrive at the Port of Barcelona and on which ships they are transported. The second part consists of navigating a Balearic lagoon on tour at the Port of Barcelona, recognising the elements in which they worked previously. At the same time, the students will be able to take the helm of the lagoon with the collaboration of the pattern.¹³

The Galata Museo permanent migration exhibition, MEM (Memoria e Migrazione), is included in the educational activities from primary to secondary schools; however, the topic is carefully tackled according to children's age and school level. Primary and middle school levels discuss the difficulties and expectations one may find when arriving in an unknown country. In contrast, the secondary level is confronted with numbers, data, and the history of the contemporary migration phenomenon in Italy, as stated in the Manual of Activities:

A path dedicated to emigration and immigration in the 1900s through environmental reconstructions. In the first part, we discover Genoa as it was in the eyes of those who set sail for distant lands: the alleys, the shops and the maritime station. After customs controls, you board the steamer "Città di Torino" towards the Americas, embark on the sea voyage and disembark at Ellis Island where you are subject to control by the commissioners. The second part is dedicated to Immigration today. It lies the first-person accounts of those arriving in an unknown country and messages in a bottle on a fishing boat seized in Lampedusa. We will talk about numbers, data and the history of the migratory phenomenon in Italy (p.5)¹⁴.

The professionals interviewed reiterated that the primary goal of their educational programmes with schools is to provide students with an opportunity to understand the importance of the sea in constructing local and national identities and how maritime heritage can contribute to developing multiple skills across different disciplines. All three museums have their educational activities aligned with the school curriculum. However, the Galata Museo clarified that the museum should not be an extension of the classroom. Instead, it should be seen as a complementary space where students can learn creatively and interactively through topics addressed in class rather than exclusively. The head of the Educational Department¹⁵ said that the main idea is to "present the museum as a space of knowledge. As a space of culture. And as a space of public relationship between one and another one through history and culture. So, we can discuss and learn about Genoa City."

¹² The author Claudia Garradas saw this exhibition when she visited the Museum in September 2022

¹³ <https://www.mmb.cat/activitats/el-port-comercial-eso-2/>

¹⁴ Translated from the original document.

¹⁵ Who has been working with the Museum for more than 20 years, but only took the responsibility of the Educational Department a year ago.

Concerning learning processes, object-based learning and phenomenon-based learning are highly used in the three museums. The object-based learning approach makes use of objects to speed learning. Although there are many different kinds of objects, including replicas, collection pieces, everyday items, and symbolic representations, the method usually entails visitors handling and questioning actual artefacts. Using objects as a multisensory tool can help encourage learning and engagement. The shared observation of actual occurrences in the real world is the core of phenomenon-based learning. These phenomena are treated holistically from many angles, naturally spanning disciplinary boundaries and incorporating various topics and themes (Lenzberger, 2022, p. 14). Barcelona and Genoa referred during the interviews that scenography is also a widely used method to promote the active participation of the students and create emotional experiences. The Barcelona Maritime Museum uses actors to create emotional experiences, especially among the younger:

For children, for very small children, five, four, five years old, we've got activities that are a kind of adventure at the museum. They become pirates, and they must look for a treasure. And it's an excuse for us to explain different things about pirates with an actor. It's not an educator but an actor. And the kids like that; we work with emotion.

On the other hand, the Haifa Museum also uses the inquiry-based learning process. Students are encouraged to engage in a dialogue based on three questions: What do I see? What do I ask? What do I like to take with me? (Saban, 2017, p.197). This method was developed by Adi Shelach¹⁶ when she was the Director of the Education Center, a position she held until 2020, and is still used by all the Museums under the Haifa Museums Consortium, including the Maritime Museum.

When queried about the extent to which educational programmes with schools consider the needs of underrepresented communities, including students belonging to ethnic or racial minorities, all three museums evinced a shared commitment to be inclusive and empower marginalised groups. The Barcelona Maritime Museum tries to achieve this by providing space for these students to share their stories and articulate their concerns through close collaboration with schools and the involvement of the communities with the museum. The "Sponsor Your Facility" project, sponsored by the Tot Raval Foundation, aims to promote intercultural activities between different communities and educational centres in the Raval district¹⁷. The Galata Museum, on the other hand, proactively engages with education centres catering to non-native residents, as referred to by the head of the educational department, "bringing the museum" to these centres before group visits. Finally, the Haifa Maritime Museum offers multi-lingual tours that include Arabic and Russian and has expanded its activities to accommodate Ukrainian refugees.

The Barcelona Museum mentioned during the interview that between 2018 and 2019, the Museum changed the narrative of its permanent exhibition so that topics such as the role of women, slavery and migration were integrated and discussed during the visits and activities. One of these projects was "Women and the Sea", which aimed to shed light on the role and importance of women within maritime history and culture, "on such transversal concepts as stereotypes, the salary gap, violence against women and gender inequality."¹⁸ Furthermore, during the interview, it was also mentioned that an exhibition about slavery is in the pipeline of the museum activities plan: "We are introducing some different perspectives, different sides of the sea. We are introducing subjects like women of the sea and migration. And the next year, 2024, at the end of 2024, we will do an exhibition about slavery."

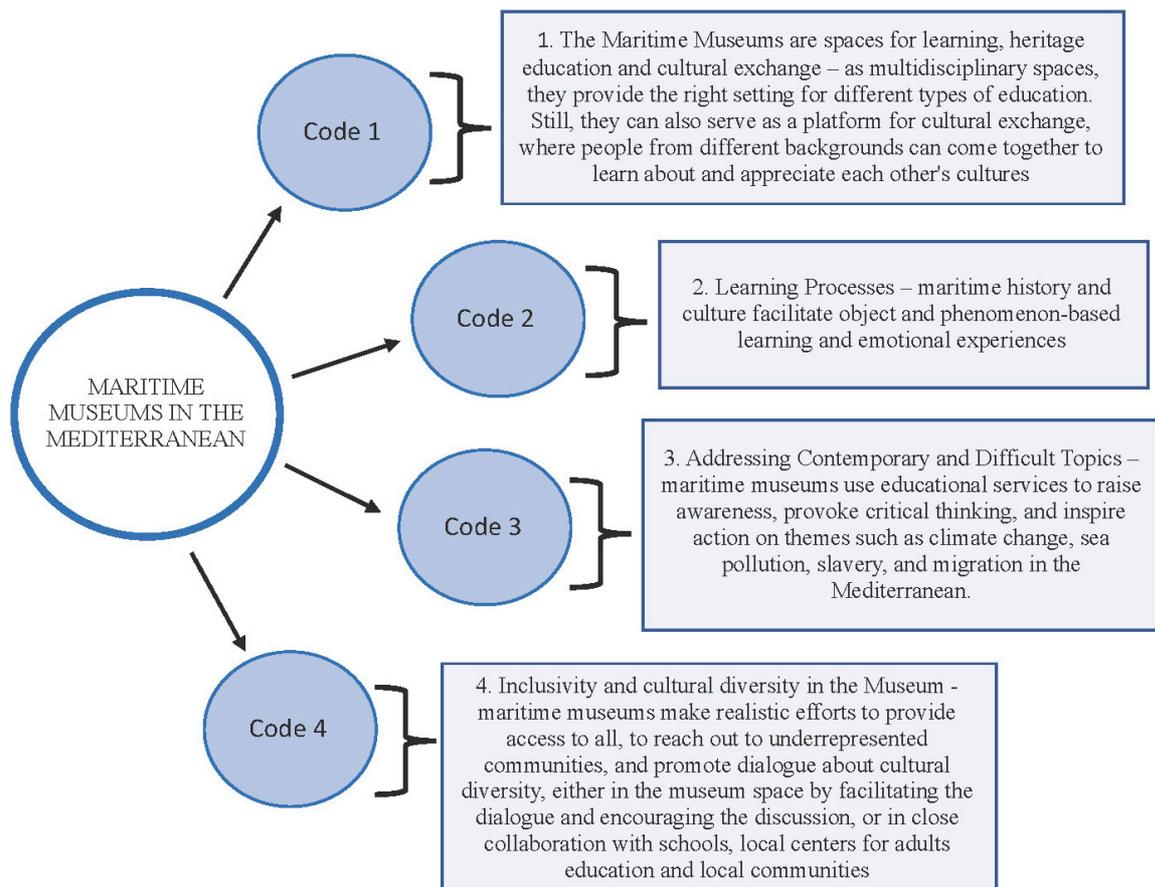
¹⁶ She is currently the Director of the Haifa Maritime Museum and in a conversation with her, she shared that this learning method is applied to all Haifa Museums.

¹⁷ El Raval is a vibrant multi-cultural neighbourhood in the heart of Barcelona - <https://www.mmb.cat/en/projects/sponsor-your-facility/>

¹⁸ Details about this project can be found here: <https://www.mmb.cat/en/projects/donam-la-mar/>

Overall, this analysis generated four interpretive codes (Figure 1) intimately related to the four questions enunciated previously, which in turn led to the identification of four broader themes (Figure 2). The code helped us to arrange and categorise the data from the online programmes and interviews, which were then put into themes that generated the thematic analysis and discussion.

FIGURE 1. Interpretative Codes



Code 1 - The maritime museum is a space for learning, dialogue and cultural exchange.

Code 2 – Object-based, phenomenon-based learning and emotional experiences are widely engaging learning processes.

Code 3 - Maritime themes serve to address and raise awareness about contemporary and difficult subjects.

Code 4 – Maritime Museums provide the right setting to embrace cultural diversity and inclusivity.

FIGURE 2. Research Questions and Thematic Analysis

Research Questions

RQ1 - What are the primary objectives of the Maritime Museum's educational programs?

RQ2 - How do these museums effectively engage students in the learning process?

RQ3 - To what extent does the Maritime Museum's educational program promote inclusivity and accessibility for all learners?

RQ4 - Do they use maritime history and cultural aspects to address contemporary themes and contested subjects such as climate change, slavery, and migration fluxes in the Mediterranean?

Educational Programmes
Thematic Analysis



 Maritime Museum Genoa - MMG

 Maritime Museum Barcelona - MMB

 Maritime Museum Haifa - MMH

6. DISCUSSION

This research paper explores the educational programmes offered by three Maritime Museums in the Mediterranean region. These programmes aspire to educate visitors about maritime history and culture, giving them a deeper understanding of the maritime world and its significance to local and national identities. Their ultimate goal is to demonstrate how maritime societies and cultures are associated with a maritime nation's identity and, consequently, to the rest of the world (Bunz, 2022, p.29).

Through immersive and interactive learning experiences, these museums allow young visitors to simultaneously explore maritime history, cultural heritage, and contemporary topics. Their exhibitions still widely represent traditional themes such as navigational instruments, life on board, trade and commerce, and romantic tales about pirates and treasure hunts. However, they have updated these narratives, giving a context to the use and importance of these themes in today's world (Hicks, 2001; Paine, 2016). On the other hand, current issues, such as the impact of pollution and climate change on the sea, are being addressed through hands-on, encouraging students to engage proactively. Additionally, these museums aim to promote empathy and understanding about cultural diversity. By exploring people's historical and contemporary movements across the seas, these museums give students a deeper understanding of how migrations have shaped societies and contributed to cultural diversity. Engaging in educational activities, exhibitions, and collaborations with different communities fosters students' empathy, respect, and multicultural understanding.

However, since these educational programmes primarily focus on the role of the sea in shaping the region's identity, they tend to prioritise engaging with local communities rather than cross-cultural interaction without categorising people and cultures (Bodo, 2012 p.615) Any changes in these museums' narratives and educational activities may present challenges if they fail to embrace the complexities of intercultural dialogue. Museums must honestly and comprehensively rethink what it truly means to design inclusive educational programmes (Bodo, 2012, p.616-617). Does this include communities actively participating in creating such activities? How to incorporate this cross-cultural work without compromising the alignment with national school curricula? The Galata Museo del Mare states that the museum is not an extension of the classroom but a creative complementary learning space, thus opening space for personal representations and diversity, despite the focus on the local maritime history. On the other hand, although the Barcelona Maritime Museum has made efforts to alter the narrative of its permanent exhibition by incorporating topics like migration and the role of women, these themes still need to be integrated into educational activities. Religion, beliefs, slavery and sexuality remain difficult topics to address in museums, especially maritime museums, despite the efforts taken to bring them into the museum debate (Sandell & Nightingale, 2012; Reeve, 2012; Baker & Stanley, 2016).

Engaging school-aged children and young people in museum activities is a challenge considering all the technology they are exposed to. Educational activities in museums no longer revolve around a one-way transfer of knowledge. Instead, they focus on constructing individual social identities, taking into account personal learning styles and employing innovative emotional and captivating approaches that enhance memorable experiences. Emerging trends highlight the effectiveness of multisensory tools in facilitating learning and inspiring users to delve deeper into their educational journey. (Mazzanti, 2021). This can be done through immersive storytelling and interactive exhibits, although budget restrictions can impose strict limitations on museums. The shift is to use emotions to stimulate the young visitors' attention, curiosity and interest. Different methods can be applied, alone or simultaneously, as long as they provide deeper insights and experiences, enhancing self-discovery and identification with the past and present circumstances (Van Veldehuizen, 2017).

The educational programmes offered by these Maritime Museums in different Mediterranean regions can effectively promote a deeper understanding of maritime history and culture, while committing to fostering empathy and multicultural understanding among young visitors.

7. CONCLUSION

Maritime museums possess the potential to motivate visitors to actively engage in important social matters, both at a local and global level. Additionally, they can serve as influential agents for spreading knowledge and making a social impact through their exhibitions, educational initiatives, and outreach programmes aimed at the community. These museums can empower individuals to shape the future and contribute positively to society by providing a space for introspection, dialogue, and collaboration. Maritime museums encounter significant challenges in the modern world, like other museums. To maintain their relevance, these institutions must be adaptable to the ever-changing social, cultural, technological, and environmental landscapes. Still, maritime museums can celebrate and preserve global maritime history's rich cultural and historical diversity by transcending traditional thematic narratives and embracing inclusive educational programmes.

Maritime museums in the Mediterranean region hold a privileged position due to their intrinsic connections with various cultural, religious, social, and historical aspects to take the lead on this transformation. They can leverage this advantage to offer unique and enriching experiences that showcase the region's rich maritime heritage resulting from the millennial relationship between humans and the sea. Through their educational programmes and outreach activities, maritime museums can offer comprehensive and contemporary representations of maritime history and cultural heritage, but not solely, by adopting a multidisciplinary and comprehensive approach.

Cultural heritage is not just about keeping and preserving the past. Every generation has to reinvent our collective heritage and renew its connections to it. It is our responsibility to keep it alive and most importantly to keep it relevant. We have to retell the stories of our ancestors and connect those stories to our own stories, to our own lives and our own communities. It is what makes cultural heritage such a vital aspect of our society.¹⁹

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¹⁹ Video of the 2020 ceremony Heritage in Motion at minute 28.21 <https://youtu.be/UfdUO7WvbiA>

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