THE UNESCO CHAIR ON THE OCEAN'S CULTURAL HERITAGE: A BRIEF NOTE ON OCEANIC HISTORY, SCIENCE AND LITERACY

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ABSTRACT

The UNESCO Chair "Ocean's Cultural Heritage" held by NOVA University (Lisbon, Portugal) since 2016 is unique worldwide and brings to the spotlight the importance of obtaining knowledge on and of the management of tangible and intangible cultural and natural heritage of the open oceans, underwater realm and coastlines. Supported on a transatlantic network of researchers and their respective scientific and educational activities, topics under the umbrella of the early modern history of oceans such as underwater archaeology, maritime cultural landscapes, marine environmental history, cultures and societies, environments and resources management, are to be addressed and developed. These themes are part of the current international agendas for science, development and cooperation, and the UNESCO Chairs programme offers the adequate framework for the establishment of networking, for new common and integrated projects. This Chair also enhances the UNESCO principles of knowledge sharing, social solidarity, and establishing the basis for the development of good practices. As such, social sciences and humanities can contribute to inform on multiple societal challenges such as the changing conditions of marine ecosystems, climate change, heritage preservation and, also, ocean literacy. Here we are presenting the insights and motivations to develop such a UNESCO Chair and a related networking European project, both including components of research, education and outreach. Not aiming at presenting research or a global review, we intend to present main goals of the UNESCO Chair "Ocean's Cultural Heritage" and to highlight how different disciplines can contribute to the construction of knowledge and preservation of memory about the Atlantic since early modern times.

Keywords: Culture; Nature; Tangible and Intangible; Sea's Heritage; Atlantic Ocean.

A Cátedra UNESCO sobre o património cultural dos oceanos: Uma breve nota sobre história, ciência e literacia dos oceanos

RESUMO

A Cátedra UNESCO "O Património Cultural dos Oceanos" atribuída à Universidade NOVA de Lisboa (Portugal) em 2016 é única a nível mundial e revela a importância da gestão e preservação do património cultural e natural, tangível e intangível, dos oceanos, incluindo o espaço subaquático, e das zonas costeiras. Assim, com base numa rede transatlântica de investigadores e suas atividades científicas e de disseminação, diversos tópicos da história moderna dos oceanos, nos domínios da arqueologia subaquática, paisagens culturais marítimas, história ambiental marinha, culturas e sociedades, gestão ambiental e de recursos, serão abordados de forma integrada. Estes temas fazem parte das atuais agendas internacionais para a ciência, desenvolvimento e cooperação, para os quais o programa de Cátedras UNESCO é uma ferramenta ideal para a criação de redes. Esta Cátedra elege como linhas orientadoras os princípios da UNESCO de partilha de conhecimento, solidariedade social e desenvolvimento de boas práticas. Para tal, as ciências sociais e as humanidades podem contribuir para informar em diversos desafios societais, tais como sejam as mudanças nos ecossistemas marinhos, alterações climáticas, preservação de património e, ainda, a literacia para os oceanos. Aqui, apresentamos as motivações para o desenvolvimento desta Cátedra UNESCO e também de um projeto europeu relacionado, incluindo as vertentes de investigação, educação, disseminação e transferência de conhecimento. Não sendo um trabalho de investigação ou de revisão, pretendemos dar notícia dos principais objetivos da Cátedra UNESCO "O Património Cultural dos Oceanos" e salientar brevemente o recurso a várias disciplinas para a construção de um saber e memória sobre o Atlântico desde o início da modernidade.

Palavras-chave: Cultura; Natureza; Tangível e Intangível; Património dos Oceanos; Atlântico.



INTRODUCTION: THE UNESCO CHAIR AND THE ATLANTIC

The UNESCO Chair "The Ocean's Cultural Heritage" held by NOVA University of Lisbon was launched in 2016 and its main objectives are research, education and dissemination of the heritage of the open oceans, underwater realm and coastlines¹. It aims to develop innovative and collaborative approaches to coastal and maritime histories since the early modern period in the Atlantic world by interconnecting tangible and intangible memories of its cultural and natural heritages.

It is supported on a transatlantic network of researchers and their respective scientific and educational activities. Projects under the umbrella of the early modern history of the oceans, such as underwater archaeology, maritime cultural landscapes, marine environmental history, cultures environments and societies, and resources management, are to be addressed and developed. These themes are part of the current international agendas for science, development and cooperation, and the UNESCO Chairs program offers the adequate framework for the establishment of contacts and new common and integrated projects. This Chair also aims to enhance the importance of knowledge sharing and social solidarity, and establish the basis for the development of good practices according to UNESCO principles (UNESCO, 2016). The ocean's heritage is the central focus of this network², it is the theme that connects all the intervenient stakeholders and encompasses all the Atlantic space. The Atlantic here can be perceived as a single unity, as an oceanic basin that connects different margins of the same "sea" through which contacts, trade and influences are exchanged since early modern times (GREENE & MORGAN, 2008). Scientific research

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and dissemination within such contexts may provide relevant information for a global understanding of the relations established by peoples bordering the Atlantic (MENESES & COSTA, 2007; TEIXEIRA *et al.*, 2015)

The Ocean has been central to human cultures all over the world, especially along its shores, where sea and land touch (MACK, 2011). Although the movement towards the sea has been a long, complicated process, we may trace its beginnings in the late Middle Age and only by the end of the 15th century Europeans were ready to take on transoceanic travel as such (GILLIS, 2012). Even so, the name Atlantic Ocean as we use it today would have been meaningless to people in early of regular transatlantic crossings centuries (KUPPERMAN, 2012). In fact, they did not think of the Atlantic as a body of water or a space on its own. The first crossing of the ocean and the following recrossings inaugurated the Atlantic as an integrated system of exchange for people, commodities and ideas. Even though it was marked both by great opportunities and great loss and suffering, modernity was born there. The intensive vovages and knowledge of other peoples and places that followed the earlier journeys led participants in all four continents to rethink their inherited lore about the world and its history (KUPPERMAN, 2012). The Atlantic was the last ocean to be explored, but journeys across this oceanic basin did change the course of history and human relations (GILLIS, 2012). Portuguese and Spanish made their entrance to the world history being the pioneers in the early modern Atlantic Discoveries. Soon, ships from all over Europe crossed the ocean, and people moving in both directions assimilated the knowledge newly available to them.

The 15th century heralded the onset of Europe's global ocean exploration. New views of the world started to take place over medieval conceptions and changes in human societies started to emerge (COSTA & LACERDA, 2007; COSTA 2011). From the late 15th century to the early 19th century, the pace and magnitude of change increased in human societies in every part of the world. In this same period, human societies developed the largest, most complex, most efficient

¹ http://www.cham.fcsh.unl.pt/ext/catedra_eng/index.html/ consulted on May, 30 2018.

² The UNESCO Chair "The Ocean's Cultural Heritage" aims to contribute directly to the United Nation's Goal 11: Sustainable Cities and Communities, by strengthening the joint efforts to protect and safeguard the world's cultural and natural heritage (http://www.un.org/sustainabledevelopment/cities/_consulted on May, 30 2018).

state and private organizations known since classical antiquity (RICHARDS, 2003). During the early modern centuries, trade linked different coasts, new and old port cities emerged and maritime landscapes were transformed. Plants and animals, some brought deliberately, but many more unintentionally, dramatically change life in lands and cultures bordering the ocean. New commodities flowed to world markets in increasing quantities and variety, leading to a growth in the exploration of ocean resources (RICHARDS, 2003; KUPPERMAN, 2012).



Figure 1. Illustration of a shipwreck in Terceira Island (Azores archipelago) as an example of the availability of iconographic and visual sources for the period and the thematic. For instance, besides the record of a storm and ship wreck situation, this image represents the assistance given by local population to shipwrecks events as well as the loss of goods and valuable commodities. In Jan Linschoten (1610) *Tertia pars Indiae Orientalis qua continentur*.

different research, dissemination Using and networking strategies - the UNESCO Chair but also different national and European funding opportunities -, we aim at constructing a "sea story" in which the ocean is a fundamental part of that history (BOLSTER, 2006, 2008; MACK, 2011; BOLSTER, 2012; JONES, 2013). We, thus, take a broad view on the oceans' past, paying attention to all relevant agents, including natural species and ecosystems, also aiming to a deeper understanding of present day problems. Following United Nations

words regarding the Sustainable Development Goal 14³, we are working towards a "careful management of the ocean as an essential global resource [that] is a key feature of a sustainable future" for humans and non-humans alike.

Here we are addressing the general motivations to develop the UNESCO Chair and a related networking European project, both including components of research, education and

³ http://www.un.org/sustainabledevelopment/oceans/ (Goal 4: Life Below Water), consulted on May, 30 2018.



outreach. Not aiming at presenting research or a review, we intend to highlight how different disciplines integrated in an interdisciplinary framework may contribute to the construction of scientific knowledge and the recovery of heritage and memory about the Atlantic since early modern times. Particular attention is given to maritime and underwater archaeology and to marine environmental history.

MARITIME ARCHAEOLOGY AS A WAY OF ADDRESSING EARLY MODERN OCEANIC NETWORKS

Since early times that man tried to overcome the physical and mental barrier of the sea. Firstly, by exploring nearby coastlines and regional marine resources and secondly by building ships to move on larger distances, sailing and discovering what was beyond the horizon line. These maritime activities left traces in local history and in material cultures of different societies worldwide. Maritime archaeology research deals with multiplicity of themes and uses multiple approaches that can help understand societies, individuals and their relationship with the sea.

One of the most common research themes is nautical archaeology (e.g. BETTENCOURT et al., 2009: BETTENCOURT, 2013). Shipwreck archaeology allows studying the evolution of shipbuilding techniques and the adaptation of man to its surrounding environment, among many other aspects (Figure 1). As the oldest machine invented by man, ships grew, both in size and complexity, becoming an example of live cities above the water. The study of ships that sailed the Atlantic in the early modern time, for example, can provide a vision of those days' societies, the accurate response given to the adversities of navigation in the Atlantic Ocean and trading opportunities and challenges (GRAFE, 2005). Studying cargoes found on shipwrecks can also provide information's about goods that circulated in the Atlantic. Moreover, analysis of ships' timbers can show evidences of technical solutions used to build and repair these ships and analysis of artefacts can reveal multiple aspects about on-board societies and hierarchies, type of cargo, commodities or trading routes (GARCIA 2005-2006). Shipwreck archaeology also allows understanding the archaeological site formation's processes. Ships may dismantle due to erosion adversities and in this process archaeologists can collect information about climate changes or extreme events like earthquakes, tsunamis, landslides or volcanic eruptions that accelerate ships' erosion and destruction process (e.g. ALCOFORADO, 2012; SCHWARTZ, 2015; COSTA *et al.*, 2016).

Studying the coastal realm - the contact zone between land and sea - allows for relevant insights into the ways oceans were historically perceived and used. Seaports, human constructions built upon natural settings, were linking points open to the outside world, being crucial to navigation, supporting trade, sea power and settlement. In this context, ports constituted a microcosm and a space of intense cultural and social miscegenation. Moreover, ports and islands were gateways for people and goods, a meeting point for the exchange of ideas and new worldviews. It is also necessary to remember that each port, integrated in a specific insular context, generated given dynamics and responded - or not - with different rhythms to the waves of global history (e.g. POPE, 2009; RODRIGUES & GARCIA, 2016).

Studying maritime landscapes allows deepening our understanding of the development of local communities across time and geographies, as well as their relationship with the oceans, exploitation of natural resources, socio-economic aspects, and devotions, myths and religion (WESTERDAHL, 1992; BETTENCOURT & CARVALHO, 2015; CARVALHO et al., 2016). Underwater archaeology and maritime history studies focusing on the Atlantic world is undoubtedly linked to the discovery of the new worlds by Europeans and the circulation of people, products and ideas. Similarly, using methodologies that combine natural and social sciences and humanities, can inform about past uses of marine ecosystems and natural populations, as well as about overtime trends and historical trajectories of exploitation and nature conservation. Studies related to local practices and perceptions changing over time (e.g. BRITO & VIEIRA, 2016) also provide inputs to the environmental history of any coastal region.

All these different disciplines can be integrated so that a common response can be given to a certain scientific or societal problem or question. The connection between research, preservation and fruition is one of UNESCO principles that the UNESCO Chair on "The Ocean's Cultural Heritage" aims to achieve. This was already successfully conducted with some of the maritime and underwater archaeology projects based in the Azores. Azorean shipwrecks have been studied for many years now and they provided first hand information on past coastal contexts and events and show how methodologies can be used and how problems can be addressed (BETTENCOURT et al., 2009; BETTENCOURT, 2013; GARCIA, 2012, 2016; GARCIA 2016b). In fact, they show why and how a shipwreck can be seen and analyzed as an underwater landscape with interest both for researchers as well as for recreational divers (e.g. BETTENCOURT et al., 2009; GARCIA, 2012).

MARINE ENVIRONMENTAL HISTORY OF THE EARLY MODERN ATLANTIC

Historians have written extensively about human cultures in the Atlantic Ocean, as they have written about human and environmental changes in landscapes (e.g. PASTORE. coastal 2014: FREITAS, 2016). But rarely have they considered other species as significant actors in the creation of Atlantic histories (JONES, 2013). While some authors pointed out the ways in which the ocean must be accounted for in the well-established field of Atlantic history, marine environmental history also has the potential to help historians recover hitherto overlooked oceanic worlds that embrace both humans and animals (e.g. BOLSTER, 2006).

Thinking about life beneath the waves transforms our view of events on the surface. It uncovers new historical actors, reshapes traditional geographies, and complexifies older stories of the Atlantic as a projection of imperial and commercial power (JONES, 2013). Especially because whenever and wherever humans and marine animals came to contact with one another, a history of common interactions and relations began to be written (Figure 2).

This type of research may include different kinds of historical sources, such as written, iconographic or material sources, and all types of accounts from the period since the late 15th century. European reports of Atlantic journeys (or other oceanic basins) contain information about natural elements and marine mega fauna and represent invaluable sources for research. The exploitation of marine resources, their uses, trading, and impact in coastal settlements, their importance in natural history, medicine, material culture, and the consumption of luxury goods, is consequently object of our study (e.g. BRITO et al., 2015) as it is of many other contemporary scholars (e.g. WARSH, 2018). For a more recent period (from late 19th century onwards), scientific articles, newspapers, illustrations, maps, non-published scientific reports and some other grey literature, such as unpublished thesis, may also be used. And, similarly, literature can be used as a source of information to address human relationships with the sea, and related seascapes and ecosystems (e.g. FREITAS, 2016).

The North Atlantic was built on whaling and fishing, which in terms of shipping and manpower (but probably not in wealth) surpassed that of the south (e.g. ALSOP, 1982). Different coastal and oceanic ecologies produced different forms of colonization and settlement. Northern fishing, whaling and trading penetrated the Iberian market (e.g. BARKHAM, 2003; GRAFE, 2004: AMORIM, 2009; GRAFE, 2011). Following the depletion of local marine resources, people migrated from Europe searching new resources in offshore grounds and new coastal regions, such as the early modern hunting of whales, and of other large marine animals, both in the North and South Atlantic (e.g. BARKHAM, 1984; HOLM, 1995; BRITO & VIEIRA 2016; BRITO et al., 2016).

In the Azores archipelago, for instance, whaling (either the scavenging of stranded whales or the active hunt of large whales over the



centuries) has been a topic of research in a multitude of layers, ranging from sociology and anthropology (e.g. HENRIQUES, 2012), to fisheries and biology (e.g. PRIETO *et al.*, 2013). First references to stranded whales and use of their oil and ambergris in the Azores date from the 16th century work by the Portuguese chronicler Gaspar Frutuoso [1522-1591] (FRUTUOSO, 2005). Later, from the late 18th century, as a central node in the North Atlantic, the Azores was a stopping and supply point for American offshore whaling fleets and developed, as a consequence, a long tradition of land-based sperm whaling that lasted almost until the end of the 20th century, when it was replaced by whale-watching and other touristic activities (VIEIRA & BRITO, 2009). This resulted in strong cultural bonds to the sea in several islands and the growth of a material heritage and an immaterial legacy of the sea and the whale that last until today.



Figure 2. A depiction of marine animals, in this case sperm whales, a seal and other marine animals in the Atlantic, that illustrates the visual sources available to address early modern marine environmental history. In this image the relationship between people and the animals is highlighted both by the stranded animals and the capture scene represented. In Adriaen Collaert (after 1598-1618) Rijskmuseum collections.

A very effective way to produce and disseminate knowledge is through framing it within interdisciplinary boundaries, as highlighted in the abovementioned examples. Similar case studies can be explored in other parts of the Atlantic, such as the Cape Verde Islands or other Atlantic archipelagos, as well as on the coastlines bordering the South Atlantic, where little research on these topics has been conducted to this day (e.g. SCHWERDTNER- MÁÑEZ *et al.*, 2014). In fact, the consistent study of marine habitats, resources and derived products, still is a much-neglected theme in the history of oceans. Considering the living ocean as a dynamic player in the history of human societies will generate significant contributions to our understanding of different peoples' historical relationships with their natural environments (BOLSTER, 2012; JONES, 2013).

DISCUSSION: OCEAN'S CULTURAL AND NATURAL HERITAGE IN AN INTEGRATED PERSPECTIVE

The UNESCO Chair "Ocean's Cultural Heritage" represents a collaborative effort to contribute to a better understanding and valuing of maritime cultural heritage and local maritime communities. It also aims to contribute to its preservation and management through the development of sustainable activities about cultural and natural resources' uses by the involved countries and institutions. The record, analysis and evaluation of this important and multi-layered heritage can be developed through local and national archaeological programs in the framework of local administrations and managed and assembled in national databases available to policy makers, professionals and stakeholders. To accomplish this, the potential value of these resources must be acknowledged by all involved stakeholders, ranging from the scientific community to politicians and decision-makers, civil society and local users.

Social sciences and humanities can contribute to inform on multiple societal challenges such as the changing conditions of marine ecosystems, as underwater cultural heritage studies may be used in the context of ocean literacy and climate change. The geographical distribution of the Chair partners also complies with this framework, generating a common heritage that can be analyzed from the partners' different points of view, contributing to a broader perspective in the Atlantic history.

Following the UNESCO spirit of international cooperation, a strong network was created involving the States parties (UNESCO, 2016), ranging from Europe to Africa and America, encompassing academic and non-specialized public to raise institutional and public awareness regarding the oceans cultural heritage. This network, focused on the Atlantic, will carry out joint efforts to develop research, teaching, educational and outreach activities concerning maritime heritage, complying with the UN millennium development goals: to develop a global partnership for the development and promotion of gender equality and empower women. Moreover, this network will be a powerful tool in gathering and sharing experiences among partners of different institutions, ranging different levels of development and different society groups. It can be very useful in collecting information regarding tangible and intangible heritage among different societies in the Atlantic and also in the identification, development and enforcement of risk assessments regarding this vulnerable heritage (UNESCO, 2016).

So, under the umbrella of the UNESCO Chair on "The Ocean's Cultural Heritage", new research will focus on the Atlantic Ocean, the key oceanic space for the first world globalization, allowing for the contact of researchers from the three Atlantic continents. Particular attention will be paid to the Portuguese and Spanish navigation, as well as to the maritime activities occurring in the Islamic world, or even the more recent agents in the maritime traffic and trade such as the Dutch, English, French and American. Seaports, trade routes, circulation of products, people and ideas, navigation techniques and skills, on-board daily routines, shore-based life of coastal communities, as well as aspects of humans' relations to the marine environment will be addressed.

As abovementioned, the UNESCO Chair builds on the work of the different partners and will put new strategies of sharing data and knowledge into practice. For that, the consolidation of already established networks is needed as well as the development of new nets of contact allowing the increasing of collaborative research. The network of international partners was rapidly mobilized and enlarged, which enabled applications to various EC funds in 2017. One of the applications, H2020-MSCA- RISE-2017 (777998), culminated in the financing of the project CONCHA - The construction of early modern global cities and oceanic networks in the Atlantic: an approach via Ocean's Cultural Heritage⁴.

Taking place between 2018 and 2021, CONCHA will leverage many of the research, education and dissemination aims of the UNESCO Chair. CONCHA's main goal is to address the different ways that port cities developed around the

⁴ http://www.cham.fcsh.unl.pt/ext/concha/index.html consulted on May, 30 2018.



Atlantic from the late 15th to the early 18th century in relation to differing global, regional, and local ecological and economic environments. This analysis will be framed around a distinction between two separate navigational systems that existed in the Atlantic during the age of sail (1400-1800): the equatorial and the North Atlantic passages.

Speaking to different literatures on port cities in the Atlantic, material and immaterial culture, and environmental history, CONCHA aims to produce an Atlantic history of seaports in which the ocean – its ecosystems and species – is included as a dynamic player. CONCHA analyses the history of seaports using historical data as well as geomorphologic, environmental, and archaeological studies. As case studies, it uses different locations in Northern Europe, North America, Iberia, the Atlantic archipelagos, Brazil and Colombia, which were central nodes in the circulation of people, resources, and knowledge in the early modern Atlantic world.

Considering all the above, the partners' work dynamics will be deepened and new strategies of data sharing and of knowledge transfer will be put into practice. This is an agglutinating concept through which we expect to bring together cultures. history and heritage of different geographic locations in the Atlantic. The focus is on the creation of new human geographies and frontiers resulting from these transatlantic interactions, including those established across Atlantic latitudinal coasts and those created across the hemispheres. Instead of aggregating a few discrete European histories and several regional histories of European, African, and Amerindian peoples, the project takes an integrative or global approach to construct a truly oceanic history. Indeed, Atlantic history cannot be merely additive; when properly done, it must be more than the sum of its parts and go beyond the formal and legal structures of its time (BAYLIN, 2005). Fundamental features of the early modern Atlantic like the slave trade, the rise of experimental science and long-distance commerce and the proliferation of religious confessions - were transnational in character (CAÑIZARES-ESGUERRA & BREEN, 2013). Counteracting traditional visions of an Atlantic centered in a European space or solely in

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the North Atlantic boundaries, we expect to develop research and outreach approaches to the tangible and intangible oceans' heritage that can be further applied and replicated.

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