anthropozoologica

2019 • 54 • 3

The wonder whale: a commodity, a monster, a show and an icon

Cristina BRITO, Nina VIEIRA & Joana G. FREITAS





DIRECTEUR DE LA PUBLICATION: Bruno David, Président du Muséum national d'Histoire naturelle

RÉDACTRICE EN CHEF / EDITOR-IN-CHIEF: Joséphine Lesur

RÉDACTRICE / EDITOR: Christine Lefèvre

RESPONSABLE DES ACTUALITÉS SCIENTIFIQUES / RESPONSIBLE FOR SCIENTIFIC NEWS: Rémi Berthon

Assistante de Rédaction / Assistant Editor: Emmanuelle Rocklin (anthropo@mnhn.fr)

MISE EN PAGE / PAGE LAYOUT: Emmanuelle Rocklin, Inist-CNRS

COMITÉ SCIENTIFIQUE / SCIENTIFIC BOARD:

Cornelia Becker (Freie Universität Berlin, Berlin, Allemagne)

Liliane Bodson (Université de Liège, Liège, Belgique)

Louis Chaix (Muséum d'Histoire naturelle, Genève, Suisse)

Jean-Pierre Digard (CNRS, Ivry-sur-Seine, France)

Allowen Evin (Muséum national d'Histoire naturelle, Paris, France)

Bernard Faye (Cirad, Montpellier, France)

Carole Ferret (Laboratoire d'Anthropologie Sociale, Paris, France)

Giacomo Giacobini (Università di Torino, Turin, Italie)

Véronique Laroulandie (CNRS, Université de Bordeaux 1, France)

Marco Masseti (University of Florence, Italy)

Georges Métailié (Muséum national d'Histoire naturelle, Paris, France)

Diego Moreno (Università di Genova, Gènes, Italie)

François Moutou (Boulogne-Billancourt, France)

Marcel Otte (Université de Liège, Liège, Belgique)

Joris Peters (Universität München, Munich, Allemagne)

François Poplin (Muséum national d'Histoire naturelle, Paris, France)

Jean Trinquier (École Normale Supérieure, Paris, France)

Baudouin Van Den Abeele (Université Catholique de Louvain, Louvain, Belgique)

Christophe Vendries (Université de Rennes 2, Rennes, France)

Noëlie Vialles (CNRS, Collège de France, Paris, France)

Denis Vialou (Muséum national d'Histoire naturelle, Paris, France)

Jean-Denis Vigne (Muséum national d'Histoire naturelle, Paris, France)

Arnaud Zucker (Université de Nice, Nice, France)

COUVERTURE / COVER:

Affiche du théâtre de la Baleine de Villerville: Ouverture du théâtre-baleine. Bibliothèque nationale de France, Fonds Maxime-Fabert (1899-1978). https://gallica.bnf.fr/ark:/12148/btv1b52504148b, dernière consultation: 14/02/2019 / Poster of the Villerville whale entertainment show: Ouverture du théâtre-baleine. National Library of France, Maxime-Fabert collection (1899-1978). https://gallica.bnf.fr/ark:/12148/btv1b52504148b, last consultation: 14/02/2019.

Anthropozoologica est indexé dans / Anthropozoologica is indexed in:

- Social Sciences Citation Index
- Arts & Humanities Citation Index
- Current Contents Social & Behavioral Sciences
- Current Contents Arts & Humanities
- Zoological Record
- BIOSIS Previews
- Initial list de l'European Science Foundation (ESF)
- Norwegian Social Science Data Services (NSD)
- Research Bible

Anthropozoologica est distribué en version électronique par / Anthropozoologica is distributed electronically by:

- BioOne® (http://www.bioone.org)

Anthropozoologica est une revue en flux continu publiée par les Publications scientifiques du Muséum, Paris, avec le soutien du CNRS.

Anthropozoologica is a fast track journal published by the Museum Science Press, Paris, with the support of the CNRS.

Les Publications scientifiques du Muséum publient aussi / The Museum Science Press also publish:

Adansonia, Zoosystema, Geodiversitas, European Journal of Taxonomy, Naturae, Cryptogamie sous-sections Algologie, Bryologie, Mycologie.

Diffusion – Publications scientifiques Muséum national d'Histoire naturelle CP 41 – 57 rue Cuvier F-75231 Paris cedex 05 (France) Tél.: 33 (0)1 40 79 48 05 / Fax: 33 (0)1 40 79 38 40 diff.pub@mnhn.fr / http://sciencepress.mnhn.fr

© Publications scientifiques du Muséum national d'Histoire naturelle, Paris, 2019 ISSN (imprimé / print): 0761-3032 / ISSN (électronique / electronic): 2107-08817

The wonder whale: a commodity, a monster, a show and an icon

Cristina BRITO Nina VIEIRA

CHAM – Centro de Humanidades, Faculdade de Ciências Sociais e Humanas da Universidade Nova de Lisboa, Avenida de Berna 26-C, P-1096-061 Lisboa (Portugal) and APCM – Associação Para as Ciências do Mar, Rua Violante do Céu, 8, 1° dto, P-1700-369, Lisboa (Portugal) cbrito@fcsh.unl.pt

Joana G. FREITAS

IELT – Instituto de Estudos de Literatura e Tradição, Faculdade de Ciências Sociais e Humanas da Universidade Nova de Lisboa, Avenida de Berna 26-C, P-1096-061 Lisboa (Portugal) and APCM – Associação Para as Ciências do Mar, Rua Violante do Céu, 8, 1° dto, P-1700-369, Lisboa (Portugal)

Submitted on 13 March 2018 | Accepted on 12 June 2018 | Published on 1 March 2019

Brito C., Vieira N. & Freitas J. G. 2019. — The wonder whale: a commodity, a monster, a show and an icon. *Anthropozoologica* 54 (3): 13-27. https://doi.org/10.5252/anthropozoologica2019v54a3. http://anthropozoologica.com/54/3

ABSTRACT

Whale, a common name, a simple word, but so many meanings. An animal, a good, a belief, a surprise, a part of these aspects or the encompassing of them all. It is, for sure, a being of some kind, but one that is described, depicted and appropriated in several forms, in a multitude of ways. To the whale is always assigned a role, but its relevance to distinct groups of society and its presentation to diverse audiences, across history, can be very different from one type of source to another. Working from the question—what's in a whale?—we present a study on the long-term human-whale relationships (from the 13th century onwards) connecting history and literature, to highlight the deep entanglement of societies and cultures with the marine environment. We aim at understanding the significance of whales and how culture, knowledge and values determine human behavior and actions towards these mammals. For that, we run through a long timeframe analyzing the whale, mostly based on Portuguese written sources, in comparison with European data, to discuss it as a commodity, a monster, a show and an icon. What we find is that the whale—real or conceptualized—has continuously been an element of human fascination. It is not merely a whale, but a wonder whale. An animal that still attracts crowds of people when it strands on nearby shores or when its blow is spotted in the horizon. The wonder whale allows for a close connection of people with the strange, enormous, paradoxical, ambivalent, still much unknown, oceanic realm.

KEY WORDS Cetaceans, stranding, whaling, perceptions, values.

RÉSUMÉ

La baleine magique: une marchandise, un monstre, un spectacle et une icône.

Baleine: un nom commun, un simple mot, mais avec tant de significations possibles. Tour à tour ou simultanément un animal, un bien, une croyance, une stupéfaction. Il s'agit, bien entendu, d'un être concret mais dont la nature, la description et la représentation peuvent assumer les formes et les contours les plus divers. Bien qu'elle se voie toujours attribuer un rôle, son importance change substantiellement au long de l'histoire, aussi bien en fonction des groupes sociaux et du public où elle apparaît, que du type de sources que l'on interroge. Partant d'une question initiale – qu'y a-t-il de si spécial avec les baleines? – nous cherchons dans cette étude à interroger, sur la longue durée et en liant histoire et littérature, la relation entre les hommes et les baleines, dans le but de mettre en relief cet enchevêtrement profond qui unit sociétés, cultures et milieu maritime. Il s'agit de comprendre la signification des baleines et de savoir comment la culture, les connaissances et les valeurs déterminent le comportement et les attitudes humaines envers ces mammifères. Pour ce faire, notre étude parcourt une vaste période et analyse plusieurs sources écrites, portugaises pour la plupart, bien que celles-ci croisent souvent d'autres sources européennes, qui mettent en évidence la fonction et la nature polyvalentes de la baleine, tour à tour considérée comme une marchandise, un monstre, un spectacle et une icône. Nous constatons ainsi que la baleine - réelle ou conceptualisée - a toujours fasciné les hommes et qu'elle revêt incessamment une dimension merveilleuse. Un animal qui attire les foules quand il approche les rivages ou quand son souffle est repéré à l'horizon. La baleine magique permet ainsi de tisser un lien étroit entre les hommes et cet énorme monde océanique à la fois étrange, paradoxal, ambigu, énigmatique et inquiétant, car encore très largement inconnu.

MOTS CLÉS
Cétacés,
échouages,
chasse à la baleine,
perceptions,
valeurs.

"Não era o seu passado que nos escapava: era agora, agora, que ela se afundava no mistério, um mistério ao qual tanto queríamos tê-la arrancado [...] Tudo o que nos podiam ter dito sobre a baleia, tudo o que a ciência ou a história poderiam ter para nos ensinar, não nos teria ensinado nada. Porque a única coisa que queríamos saber era aquele segredo escondido, aquela palavra da criação que ela representava. Era aí que estava o que restituía àqueles destroços uma importância, um sentido —uma ameaça— que directamente nos diziam respeito."

(It was not her past that evaded us: it was now, now, that she sunk into mystery, a mystery we wanted to get her from so hard [...] All that could have been said about the whale, all that science or history could have had to teach us, would have taught us nothing. Because the only thing we wanted to know was that hidden secret, that word of creation that she stood for. It was that what gave to those wrecks an importance, a purpose –a threat – that directly concerned us.)

Gadenne 2017

INTRODUCTION

In January 2016, in the shore of Parede, a city in the mouth of the Tagus estuary close to Lisbon (Portugal), a fin whale (*Balaenoptera physalus* (Linnaeus, 1758)) stranded (Fig. 1). Although it may occur in Madeira and Azores Islands, as well as in Portugal mainland, this species is rather unknown for most people. In fact, the death of a fin whale led many to the seashore, including reporters from TVs and newspapers.

The fin whale is the second major species of the suborder Mysticeti and the young stranded animal, already in its eight to ten meters long, offered a great spectacle for those who rushed to the beach to see it, or those who saw the images in the media. Affluence to the shore in those winter days was quite impressive and the authorities had to close the access road to remove the body (Suspiro 2016). However, this was not the first time a fin whale beached in the same region. In 2005, a similar event occurred. Over the twentieth century many other stranded whales appeared in the coast of Portugal, some in the Tagus estuary area. Looking back into the past, it is possible to verify that this kind of episodes happened before, in the Tagus area and along the Portuguese coast, the Iberian Peninsula and the European shores (e.g. Sequeira et al. 1992, 1996; Kinze 1995; Barthelmess 2003; Szabo 2008; Sousa & Brito 2011). There are many reports, from several countries and different periods, showing that stranded whales have always driven people to the seashore, in a mix of dread and attraction (e.g. Kinze 1995; Barthelmess 2003). But in the 21st century, when almost everybody has seen whales, at least on TV, why are these mammals still such a wonder? How are they able of attracting so many people to the beaches, just to see them laying there dead?

This paper aims to provide answers to these questions. According to Schwerdtner Máñez *et al.* (2014), the way people perceive and value marine environments and their resources determine preferences, practices and strategies concerning the oceans, influencing the institutional structures that manage marine systems. Perceptions, values and attitudes are the keys to understand the driving forces that, in different cultures and in different times, connect humans with the marine realm, helping to explain how things became how they are now.



Fig. 1. - Beached fin whale (Balaenoptera physalus (Linnaeus, 1758)) in Parede (nearby Lisbon, Portugal), January 2016. Photo by Inês Carvalho.

Historical studies about human interactions with life in the oceans are not new. But still there is much work to do when compared with research on terrestrial environments and animals. Most studies connecting people and marine systems are about fisheries, resources exploitation and their present management problems (e.g. Pauly et al. 1998; Jackson et al. 2001; Costello et al. 2010). Archaeological investigation has also provided insights into these long-term relationships (e.g. McCartney 1995; Monks 2005). But despite the long fishing traditions of maritime populations all over the world, just recently, Schwerdtner Máñez et al. (2014) mentioned that only in the last fifteen years, there has been a main effort to joint collaborations from different knowledge areas to study marine animals in a long-term perspective (e.g. Ojaveer & Mackenzie 2007; Holm et al. 2010; Orton 2014). In the same way, most of the works on whales are limited to just one or some specific approaches. These are the cases of review studies on the biology, ecology and conservation of the species (e.g. Ellis 1991a; Laist 2017), the history of whaling (e.g. Barkham 1984; Aguilar 1986; Francis 1990; Ellis 1991b; Basberg et al. 1995; Dolin 2007; Hansen 2010) and literature analysis on the symbolic aspects of these mammals based in

the biblical and classic texts, and in the inevitable *Moby Dick* (e.g. Buell 1986; Peretz 2003; Bez 2014). Most of these works provide only a perspective on the predatory human-whale relationship, without acknowledging other ways of interactions and the resulting myths, fears and dogmas created and perpetuated about whales. Talking about sharks, Mojetta et al. (2017) wrote that despite the abundant historical records on these animals, information on human-shark relations along the time is still scanty. The statement is also true for whales. There are exceptions, of course, such as Szabo (2008) that combines archeological remains, zooarchaeological techniques, biological knowledge, history, folklore and literature to study human exploration of whales in the Medieval North Atlantic, and Brito (2016) that uses historical information to analyze whales as sea monsters in the early modern production and knowledge transfer about the natural world.

Following the footsteps of the mentioned works (Szabo 2008; Brito 2016, 2018), this paper presents a study on the long-term human-whale relationship (from the Middle Ages to current days) connecting history and literature, to highlight the deep entanglement of societies and cultures with the marine environment. The purpose is to understand

the significance of whales and how culture, knowledge and values determine human behavior and actions towards these mammals. The research is supported on scientific knowledge on whales, combined with historical and literary sources such as lawcodes, newspapers, charters, reports, travel accounts, naturalists' reports, myths, legends and oral traditions. The period in analysis runs from the 13th century onwards. Most of the primary data being used is from the Ibero-American world, mainly Portuguese historical sources that are not well known outside the Portuguese speaking countries. This article is an opportunity to disseminate relevant and scattered materials collected in libraries and archives, such as the National Library of Portugal, the National Archive Torre do Tombo, and the library of the Lisbon Academy of Sciences. Despite the focus on the Portuguese Atlantic world, comparisons with other European (e.g. the Icelandic literature and history) and American realities are made to provide a global vision on humans and whales, and all in-betweens, that explain how these "archetypal sea monster(s) ha(ve) become the darlings of conservationists" (Gillis 2015: 178; Murray-Bergquist 2017). The underlying logic of this paper is that the wonder whale features a myriad of views, ways of use, perspectives and perceptions, being the star of many stories and events.

THE ROYAL FISH: PRAGMATISM AND IMAGINATION

In Portugal, long before the Age of Discoveries, the resources of the sea and the maritime activities associated with them –like fisheries, salt production and trade – were important industries, being responsible for the development of villages and cities located in protected areas of the coast (Freitas 2016). These activities took place in the shore and in the neighboring sea, the seascapes that fishers and traders roamed through as part of their livelihoods. In medieval times, navigation in the Atlantic was based on the Mediterranean experience, the coastline was used by travelers as a guide to keep within the familiar and navigable sea (Fonseca 1990; Mattoso 1998). Something totally different was the open boundless ocean thought, according to classical and biblical references, as the place of prodigies and wonders, where monsters lived (Lopes 2009).

These conceptions about the sea of sustenance and the unknown ocean coexisted deeply interlinked. For instance, whales and mermaids were both believed to be living creatures of the limitless ocean, but sometimes they would get closer enough to be seen by seafarers or even came ashore were they were found stranding (Freitas 2016). The limits between reality and imagination were then quite fluid, especially in all subjects concerning the watery realm. The whales, being part of this world, were simultaneously "marvelous and mundane" (Szabo 2008: 3). A perception that survived, long after the end of Middle Ages, attached to these animals, as part of their intrinsic features.

Human-whales' relationships in medieval times were set in two plans with thin borders between them. The literate elites – and, through them, the general population – would have

known the monster-whale from the classical myths, the saints' lives and the bestiaries (Szabo 2008; Lopes 2009). Monsters were extraordinary or unnatural creatures, physically or behaviorally abnormal, and in some cases exceptionally wicked (Bovey 2002: 5, 6). Pan-European traditions built upon classical and biblical works for moral and spiritual edification perpetuated the whales as dangerous to humanity (Szabo 2008: 32). But, at the same time, the Norse, the Basques and other nations were hunting cetaceans in the Atlantic waters, so there was also an empirical knowledge, based in the animal behavior and in antique practices of butchery and exploitation of this resource (e.g. Aguilar 1986; Szabo 2008; Brito 2011).

Despite proximity, no evidence was found so far connecting whaling in Portugal and the Basque country (Brito 2011). Written sources, however, attest the existence of whaling and scavenging of stranded whales in the Portuguese coast (on the meaning of stranding see Sousa & Brito 2011). The available information – scarce and scattered – shows that whale exploitation was a reality, at least, since the 13th century. In some areas, like Pederneira, Grijó (Castro 1966), Ericeira (Alves 1993) and Atouguia da Baleia (Calado 1994), this activity may, however, have started earlier in the 12th century. Whaling in Portugal, except in the Azores which is much more recent (18th to 20th centuries), was never the object of a deep historical study and there are still many blank areas on the subject.

Szabo (2008: 3) wrote that in North Atlantic, evidence exists for the use of cetaceans as a resource, but information on the "process, quantity, frequency and appreciation of the whaling is scant". This is also applicable to Portugal. In the 13th century, the village charters (known as *forais*), given by the king or noblemen to some townships to establish the rights and duties of its inhabitants, are one of the first proves of whaling in the Portuguese coast. In 1206, King Afonso II confirmed the taxes that should be paid in Atouguia for trade. The list of goods included slaves, cattle, whale meat and fat (Teixeira et al. 2014). In the Ericeira village charter, from 1229, the landlord, master of the religious order of Avis, defined that the order would receive one-twentieth of each captured whale, and prohibited people from other places of whaling in those waters (Brito 2011: 296). In the village charters from Loulé and Silves (1266), Castro Marim (1277), Aljezur (1280) and other places in Algarve, the king determined that whaling was reserved to him and his successors (Martins 1985; Andrade & Silva 2004; Brito 2011). Other documents make references to whaling and royal rights during the 13th and 14th centuries, along the Portuguese shore (Brandão 1632; Lopes 1841; Barros 1949; Brito 2011), especially in the south of the country, where the activity seems to have been quite important. In 1504, the charters granted by King D. Manuel, like the ones of the villages of Portimão and Silves, reinforced the royal monopoly, specifying that all the whales and other royal fishes, beached on shore or killed by any means, belonged to the Crown, and that the almoxarife, the king's officer, would collect the profits. These documents also mention taxes levied on fish oil (azeite de saim), produced from the



Fig. 2. — Oil painting from a private collection depicting the shore-based sperm-whaling off the Azores (19th century). Photo by the authors.

bubbler of cetaceans (Marques & Ventura 1990; Andrade & Silva 2004), showing that this was one of the uses given to whales. Unequivocally, these animals were commodities and merchandise, and although the evidences do not show if common or rare, whales and related products were valuable enough for kings to inscribe them in the village charters, assuring that successive Portuguese crowns would benefit from the business profits.

Some authors (e.g. Godinho 1983; Franco & Amorim 2001) state that whaling lost its relevance in Portugal's mainland in the 15th century. North Atlantic right whale (Eubalaena glacialis (Müller, 1776)) bones found in an archaeological site in Peniche, in the western coast, show that at least in some places the activity was, in some way, going on around the 16th to the 17th centuries (Teixeira et al. 2014).

But, in fact, the Portuguese expansion to new lands and oceans offered the opportunity of exploring areas where whales were more abundant. The first permit to hunt cetaceans in Brazil was granted in 1602, and in 1614, whaling in Brazilian waters became a royal monopoly, with the first station being established in the island of Itaparica (Ellis 1969; Edmunson & Hart 2014; Hansen 2016). Since the moment whaling lost its importance in Portugal – it would be introduced again in the Azores islands in the 18th century and in Madeira island and Setúbal (in the mainland) in the 20th century - most historical registers on whales from the early modern period are connected to the new territories where commercial activities were being established, and the waters where the Portuguese ships were sailing.

For instance, Pedro Lopes de Souza navigating along the coast of Brazil, 1530-1532, described so many whales, so large and so close to the ships that people on board were terrified (Varnhagen 1867: 69). In Bahia, in 1587, it was said that cetaceans joined in groups of ten or twelve and caused great fear among the ships, sometimes destroying them with their tails and killing people (Sousa 1989: 254, 255). Some years later, a group of religious men arriving at the shores of the same country was attacked by a big whale, which followed the boat, splashing water all around and running into it (Vasconcellos 1663). In the moment it was going to hit the boat with the tail, the priests raised their hands to heaven and asked for God's help. God tamed the marine monster and saved his servants. The holy men considered that the monster should have been instigated by an evil spirit to eliminate the Church's representatives (Vasconcellos 1663: 367). Another example, in his way to India, in 1596, the San Francisco vessel was approached by a big fish that appeared for two or three days always at the same hour. No one, even the most experienced on board, had ever seen such a monster. It was believed to be a witch and it was decided to shoot her. But the fish never appeared again. The chronicler says that this could be a case for laugh, an imagination story, except that a monster such as that had been seen near the Santiago ship, just before it hit some underwater rocks and sunk (Brito 1736: 351). These reports of travelers crossing the Atlantic or settling in Brazil reveal that the whale was considered an animal whose behavior was not understood, like persecuting ships or hitting them with the tail, inspiring fear. Some even associated this cetacean with evil spirits or bad omens, signs of misfortune or advent of tragedies (Brito 2016). Not simply relying on direct observation of new marine fauna, seamen were also inspired by medieval European religious connotations usually attributed to these animals or hybrid representations of them (e.g. Murray-Bergquist 2017; Leclercq-Marx 2018)

The written sources here presented show that the whale was, no doubt, a mundane animal, provider of valuable resources. But, at the same time, in an ambivalent vision between pragmatism and imagination, there was a profusion of perceptions, feelings and values concerning these cetaceans, fear was among them (Fig. 2). Another example of the whale's value as a symbolic element is the presence of whale bones in churches and other sanctuaries, like the one displayed in the São Leonardo Church in Atouguia da Baleia (e.g. Redman 2014; Brito 2016). From oral history and local memory, it is said the whale bone is, at least, 500 years old and used to be part a ceiling beam, but this is still to be confirmed both by historical sources and laboratory analysis.



Fig. 3. — Stranded whale depicted in Adriaen Coenen's 1580 Fish Book. http://publicdomainreview.org/collections/adriaen-coenens-fish-book-1580/, last consultation: 16/01/2019.

STAYING ON SHORE: DANGER AND FASCINATION

Clearly different perceptions coexisted about whales for a very long time. If the living whales seem to have been terrifying for the ones traveling across the oceans and arriving to new lands, dead cetaceans laying on shore appeared to have inspired surprise and interest. In the old books of the Insua de Caminha Monastery – in the north coast of Portugal – the monks wrote down that two whales beached nearby, in 1548 and 1582. The annotation of such episodes means they were extraordinary events and should be registered to future memory. But there is no fear or apprehension in the descriptions, the whales were not signals of something bad. Curiosity and amazement are the main feelings in the accounts: one of the animals was measured, the other was not, because the sea took it before it could be done. One of the monks explains that it was a "beautiful monstrous thing to see because of the place where it came from" (Anonymous 1641-1832).

This attitude of curiosity concerning the cetaceans was also shared by the Portuguese fryer João dos Santos, who dedicated a chapter of his book about Mozambique to the whales. He described the animals' behavior, based on what he had seen and heard, mentioning also how the natives used the stranded cetaceans: they produced oil, ate the meat and made trestles with the bones. Everybody would take a piece of the precious resource laying in the sand (Santos 1891). Other sources reinforce this idea: the Italian writers Faber and Bricci describing stranded whales did not depict them as bad omens or sea-monsters (Azzolini 2017: 309, note 40). Bricci's booklet on a whale appeared near Rome, in 1624, is a mixture of written and oral data, based on the testimonies of those who had seen the animal first-hand, his observations of the bones, fins, teeth, flesh and fat brought to Rome, and information collected from other authors. It seemed that the sighting of these big cetaceans was relatively uncommon -especially in the Mediterranean - and "whales were an intriguing topic of discussion among early modern European natural historians" (Azzolini 2017: 307). The exception being orcas, as they inspired fear from Pliny work, through all Renaissance naturalists up to its description by Linnaeus (Colby 2018: 9).

Many of those writing about whales have never seen them, dead or alive, but the use of information brought by sailors, missionaries, merchants and soldiers travelling around the globe (Azzolini 2017), improved the knowledge about these animals. There was a progressive shift from the supernatural monsters of the myths and bestiaries to monsters that were examples of the wonders of nature. Exotic, gigantic and bizarre, these creatures have become, nevertheless, natural phenomena subject to the laws of nature, and therefore, object of scientific inquiry (Landrin 1870; Brito 2016). The Bluteau's dictionary (Bluteau 1712-1728) is a good example of this. The entry on "balêa" (whale) is an interesting mix of informations derived from oral and written sources. Bluteau says that the whale is a fish from the sea with extraordinary greatness, having dark hard skin full of fur. This animal gives birth like the terrestrial ones and breastfeeds its calf. He mentions habits and behaviors, reproducing information from anatomists and navigators, and uses it to rebut previous opinions, saying that what Eliano and other natural philosophers wrote about whales is not true (Bluteau 1712-1728). Most information on the biological features of the animals reproduced in the dictionary is not accurate, although it represents an effort to bring up new knowledge based on empirical observations of the natural world, relying less in the classical and biblical authorities, myths and legends.

Curiosity about new animals reached all levels of society, that urged for news from distant places, leading to the production of a series of printed leaflets and books widely spread through different European nations and intended to distinct audiences (Fig. 3).

One example is the case of the *Gazeta de Lisboa*, the first Portuguese official journal which, in January 1723, issued a small news on a fish from an unknown species, brought to a beach in Lisbon, that some people believed to be a whale (Mascarenhas 1723a). Days later (Mascarenhas 1723b), a more detailed report was published: the animal was still called a fish, but it was said to be a kind of whale, that had entered the Tagus river and was caught in some underwater rocks, where it died. A complete description of its main features and a drawing were presented to make the information provided to the readers more accurate and lively (Brito 2016; Brito & Costa 2016).

The stranded whale must have been a major event in Lisbon, since other sources also referred to it, also spreading through different places in Europe (Brito 2016). According to an unpublished manuscript found in the library of Lisbon Academy of Sciences (Santa Maria 1723), the entire city ran to the shore to see it. This priest dedicated some verses to the occasion, describing the mob that filled the beach to get a glimpse of the novelty, a swollen and smelly dead body that left Lisbon bewildered. Santa Maria had seen many whales in Brazil, so he was rather amused with the surprise of his folks. But alongside with many other sources and copies of this new, it really emphasizes the value and relevance of such a stranding.

The Gazeta de Lisboa divulged other news on whales and strange fishes. In November 1725 (Mascarenhas 1725), a whale appeared in the beach of Penafirme, and many were those who went to see it. In 1731 (Mascarenhas 1731), an unknown fish stranded between Vila do Conde and Póvoa de Varzim. The carcass was burnt because of the stench. This new is accompanied by an illustration that is, in fact, a copy of the whale depicted in the Tagus stranding of 1723 (Fig. 4). Most news provided a description of the form and size of the animals (e.g. Mascarenhas 1735a), a reflection of the sensitivity of those times to measure and describe what was new or uncommon (Azzolini 2017).

In 1733, a bizarre incident occurred: a Dutch ship sunk, after a great blow. According to the crew it had hit a big fish - the sea became blood-colored. Other accounts stated that many monstrous fishes -in size and shape- had been seen near the coast of the city of Oporto (Mascarenhas 1733). Despite the words used to describe the animals, such as "monstrous fishes" and "marine monster", there was nothing marvelous or supernatural in the reports. It was the animal, its rareness, form and size that amazed the ones that saw it. Even surprised, people adopted a practical behavior in these encounters.

The inhabitants of San Pedro de Muel beach made oil from the meat of the whale found on shore (Mascarenhas 1735b). In Algarve, when ten fishes, identified as cetaceans, beached in Albufeira, the journal's correspondent deplored the lack of means to produce oil from their fat, because it would have fill more than 200 barrels (Mascarenhas 1784). This indicates that the whale never ceased to be a resource. Organized hunting might have disappeared from mainland in Portugal, but coastal populations kept exploiting occasional stranded animals.

The Gazeta de Lisboa, providing information on serious business like government decisions and laws, circulated amongst a wide range of people, but probably was more circumscribed to the elites. Other kind of readings, the booklets, sold by blind people in the streets, had a more broad and popular audience (Lanciani 1979). In the 18th century's pamphlets collection conserved in the Portuguese National Library, there are some about marine monsters or animals. One of these booklets, titled Account of the monstrous fish, which appeared on Tagus beaches the 16th May of this year of 1748 (Anonymous 1748), describes an animal caught by a fisherman in the Cascais bay, near Lisbon. The fish was identified, by Brito (2016: 87) and Brito & Costa (2016), as a basking shark (Cetorhinus maximus (Gunnerus, 1765)). The introduction of the leaflet is quite interesting: it is about the prodigies of nature shaped by divine powers. God created animals to provide food for humans, but since these did not obey Him, animals rebelled against humans. Several dangerous animals (lions, elephants, wolfs, snakes, amongst others) are mentioned saying, however, that the biggest is the whale-a monstrous machine that causes great pain to sailors (Anonymous 1748). The author then talks about (if based in his own experience we cannot attest) the whales in Bahia (Brazil) that are known to pursuit ships and describes the dangers of whaling. His main concern is to show to his readers how big and amazing is such animal, knowing that most of them will be bewildered with his narrative. In the same way, the author

povoação; e se continua ajuntando-se os Academicos todas as quintas feiras em cafa de Loutenço Carneiro de Vasconcellos, fidalgo da Casa Real, e Gove nador do Castello da Villa de freixo de Espada cinta, dandose-lhe principio, e fim com huma Sonata, e composição de varios instrumentos. Em cada conferencia se lem muitos discutsos discretos, e elegantes, e muitas Poesias. Nesta ultima quinta feira primeiro de Março presidio nella, e sez hua erudita oração Paulo Botelho de Moraes, irmão de Francisco Botelho de Vasconcellos, autor do Poema intitulado El Alphonfa, e não menos versado na literatural Faleceo a semana passada Josó da Silva de Vasconcellos, fidalgo da Cifa Real, Commendador na Ordem de Christo, Governador que soy da fortaleza de S Lourenço da Cabeça seca, e ultimamente da Cidade de Portalegre Escreve-se de Villa de Conde, que entre aquella povoação, e a Villa da Povoa de Varzim, fahira em terra hum peixe, desconhecido de todos os Pelcadores, e homens maritimos que o virao, com mais de 70. palmos de comprimento, e dezaseis de altura; que a sua grossura se compoem de huma cama de banha como toucinho, e outra de carne magra; e nella forma le vas alternando por todo o coro: que se tinhão apenado os lavradores para levarem lenha áquel-



Sabinà luz o fegundo tomo de Moraes de Executionibus: vende-fe na logea de Car Subis à luz o segundo tomo de Motaes de Executionibus: vende-se na togea de Carte da Sylva Correa na vua rova. Na messma legas se abora à os sivvos seguintes: bum Monual da Misso um o titulo de Pia Christandade, com estampas finas. Agricultos 1. Acuta com estampas finas a Agricultos 1. Acuta com estampas se antenente lativa luz, institulade Historia Chronologica dos Papas, Emperadores, e Reys que tem reynado na Eutopa do Nascimento de Christo aré o presente, ovaduzido de Francez, e acorescentado pela P. Damia o Goneto e Systua, Libonemse, com bia muivia exastados luperios, e Reynos, obra muyto curios, e usis, tambem se vende esta ultime, na logea de Miguel Rod igue: às portas de Santa Calbarina, e no Real Mosseiro de S. Viente de Fóra, com Crimbia na logea de Antonio Simbia Ferreira; mo Porto na de Paulo da Systua; e em Guinas acas na de Jevonimo Ribeiro de Castro.

Lambem sabio à luz bum sivi inho em oitavo intitulado Modo facil para ensinat azons teturs, & C. Vende se na Oficina de Pad a Ferreira, Impresor da Corse, ao arco de Issua.

Na Othe - PEDRO FERREIRA, Imprellor da Corre, Co todas es figigas por farias

Fig. 4. - Whale depicted in Gazeta da Lisboa (1731), referring to a stranded unknown fish in Póvoa de Varzim (Portugal). http://hemerotecadigital.cm-lisboa.pt/Periodicos/GazetadeLisboa/1731/Marco/ Marco item1/P16.html. last consultation: 16/01/2019.

of another leaflet (Anonymous 1765) also reveals this need of producing a credible story – saying it was based on the description of reliable people - about a stranded whale near Naples, in Italy. According to him, animals produced by God are admirable, and that is why people from all over the city and the neighboring areas ran to the beach to see the unknown beast, no one had ever seen before. Like in the Gazeta de Lisboa, these reports were real, and their authors recreated the stories in detail to captivate their readers. The interest of the narrative was not on an imaginary animal, but in one of God's creatures that was still able to fascinate people.

The fabulous whale, however, did not completely disappear from these stories; it was pushed far away to remote regions, like Tartaria. A pamphlet from 1740 described the adventures of a Dutch Capitan and his crew travelling through uncharted seas, that detected a mountain in a beach with a cave (Anonymous 1740). Exploring the dark hole, they discovered they were

inside an animal, and there they found a ship and an island with its inhabitants. This kind of story has old roots in the classics, since the Syrio-Roman author Lucian had already given an account of people living inside a big cetacean (Szabo 2008: 45). Imaginary adventures were read side by side with real reports: were people at the time able to discern between the narratives? It is difficult to tell. Marine monsters like the one that appeared to the Turks (Fernandisi 1732) or the marine-men found in Marseille (Vuillimont 1755) seemed to be as popular as the fearsome whales of Brazil. In this sense, the whale was truly, as depicted by Sebastião da Rocha Pitta (1880), the "useful monster of the sea".

At the end of the 18th century (in 1779), in the Age of Enlightenment, time of cabinets of natural history and curiosities, was created in Portugal the Royal Academy of Sciences. Men of science connected to this institution were particularly interested in producing knowledge on the natural world and explaining the economic relevancy of exploring its resources for the beneficial development of the country. In this context, some important reports on fisheries and whaling were produced. The most famous is the account from Silva (1789) on whale hunting and the ways of increasing oil production rentability in Brazil. In the first section of his Memoirs, he makes a brief description about the physical features of the cetaceans, indicating eight known species of whales, admitting his ignorance on the species captured in Brazilian waters, which he believes to be the fin whale, referring that naturalists had not been able to classify them properly, because they didn't have precise descriptions nor knowledge on their economical uses. This work is particularly relevant as it is marked by a vision of the world founded on the economy of nature, the defence of the economic progress and the application of scientific knowledge to production techniques, and the critique of the destructive exploitation of natural resources. At the same time, when describing whales' behaviour, Silva (1789) abandons the objective character of the text, adopting a literary tone, describing whales as having feelings and motivations like humans, a type of narrative in line with the 18th and 19th centuries questioning of animals' rights and the intrinsic value of nature (Pádua 2000; Vieira 2018).

All this information attests that in Portugal and other European countries, the perception about whales was an amalgam of feelings and values, combining their use as a resource, and fear and fascination because of their unusual size and shape. It also prevailed a certain degree of curiosity about this God's creature that was almost totally unknown to most of the society.

THE PRODIGY OF NATURE: FEATURING ON ART AND LITERATURE

"During the monumental expansion of commercial whaling in the 18th and early 19th centuries, the animal attained its most menacing dimensions, playing the villain to the heroic seafarers of the day" (Gillis 2015: 178). Stories of these extraordinary size cetaceans associated with shipwrecks are a thematic that left marks in literature. Famous writers, like

Walter Scott (1822) and Fenimore Cooper (1859), based their books on the accounts of whalers "who projected onto their prey their own aggressiveness" (Gillis 2015: 178). A sperm whale (Physeter macrocephalus Linnaeus, 1758) attack and the sinking of the ship Essex in 1820, inspired Melville to create the world-famous Moby Dick (Melville 2007). Around 1837, the British painter Turner produced a small-scale watercolor called Whale on Shore, inspired by Walter Scott's novel. The image presents Orkney's islanders securing a beached right whale with cables and attempting to kill it. The tormented prey throws its tail in the air, overturning boats (Hokanson 2016: 6). Whaling was an important topic in Turner's work (Fig. 5), who was always looking for contemporary subjects "with the potential to express profound meanings", like his two paintings on Whalers (c. 1845). "Whales, and particularly sperm whales, were quasi-mythological creatures. Most people had never seen one of the animals, and existing images and descriptions, even scientific ones, were generally inaccurate. The public imagination focused on their grandiosity and power [...] and on the human ingenuity, courage and ferocity to pursue and kill them" (Hokanson 2016: 14, 15). Hunting whales was a hazardous, grisly task, but it had a certain romance attached to it (Hokanson 2016: 14, 15).

Melville's masterpiece, the famous Moby Dick, was built upon this sublime worldview -a blend of old myths and legends and the stories of whalers - and his own empirical knowledge on the subject. The author was the first to point that maritime life was fertile in wonderful and fearfulness rumors and whalemen were not unexempt from the ignorance and superstitiousness that characterized all sailors (Melville 2007: 197). Melville's narrative rests on an obsession, made up of the fabulous accounts of those crossing the wild watery realm and on people's imagination, influenced by the narratives of the ocean's greatest marvels, that "all that most maddens and torments; all that stirs up the lees of things; all truth with malice on it; all that cracks the sinews and cakes the brain; all the subtle demonisms of life and thought; all evil [...] were visibly personified, and made practically assailable in Moby Dick" (Melville 2007: 203). The (white) whale hunting tale -the last of the supernatural sea-monsters - represents the epic confrontation between humans and the natural world, and Captain Ahab is the humankind's hubris, "which leads to both victory and tragedy" (Hokanson 2016: 40).

The idea of the whale as the incarnation of the worst fears of men (e.g. Gadenne 2017), the deep dark feelings they have inside and their dread of the mysteries of nature and life, is also clearly expressed in the words of Sir Ernest Shackleton, the polar explorer, trapped in the Antarctic ice with his crew for more than a year (1914-1916). "A school of killer whales had languidly drifted around the boats, their sleek, sinister black forms surrounding them on every side for the duration of the long night. Of all the memories the men would carry with them, this – the slow, measured rising of the white-throated whales in the dark waters around their boats – remained one of the most terrible and abiding. In their long months in the ice, the men had borne abundant witness to the great beasts' ice-shattering power. Whether they would attack humans,



Fig. 5. — "There are two whales in this watercolour. One, its tail raised, is diving. The back of the second is indicated by a long, curved pencil line below the tail of the first. A harpoon appears to have struck one of them, for the sea is stained red with blood." A Harpooned Whale (1845) by Joseph Mallord William Turner (1775-1851), part of Ambleteuse and Wimereux Sketchbook. © Tate Collection, CC-BY-NC-ND 3.0 (Unported). http://www.tate.org.uk/art/artworks/turner-aharpooned-whale-d35391, last consultation: 16/01/2019.

no one really knew. For the men, these were prodigies of the deep, mysterious and evil, possessed of chilling reptilian eyes that betrayed disconcerting mammalian intelligence". He ends his description saying that was the "night that began to break the will of many" (Alexander 2001: 123).

Not all writers shared this negative impression on the big cetaceans. The French Michelet (1875) dedicated a full chapter of his book La Mer [The Sea] to whales, describing them as dulcet and sensitive mammals, tender mothers, sublime expressions of the powers of creation, simultaneously great and fragile. And in Melville's American literature masterpiece we can find a bit of it all.

In addition of being a literary piece on a special symbolic whale, Moby Dick is also a whaling manual, "with encyclopedia-like entries and opinion essays on various aspects of whales, whaling, and seafaring culture" (Berkun 2010). Using his own experience on board a whaling-ship, Melville makes an impressive report on these animals, trying to correct the misinformation that dominated public opinion and even the scientific spirits concerning whales. According to him, the systematization of the whale species was a chaos. In the im-

possibility of following the specimens into the unfathomable waters, there was an impenetrable veil of ignorance covering the knowledge on cetaceans. There were plenty of books on the subject, however, little was the real information on them. Most of the men who had written about the theme had never seen a living whale. And the ones who had, like the whalers, did not wrote books. Melville pointed Captain Scoresby (1820) as an exception, and Beale's (1839) and Bennett's (1840) books, both surgeons on British whaleships, as the best at the time in describing the sperm whale. He then considered that the science of cetology was in the beginning, since in some groups it was still in discussion if the whale was a fish (Melville 2007: 144-146).

Cuvier (1836: III, 260), in his natural history on cetaceans, explained that it was very difficult to work on these animals because they lived in the deep seas, so they could only be observed partially and briefly in the water and occasionally in the beaches, death and affected by putrefaction. Based in these incomplete and isolated observations, it was impossible to know the general physiognomy of the animals to compare the differences between the species. Knowledge about whales

was built upon the individuals or groups found in the European shores, described, drawn and shared among the illustrated elites and published in newspapers, like the *Gazeta de Lisboa* or the *Mercure de France*. Cuvier described his historical and natural sources presenting a list of stranded sperm whales on the coasts of Holland, UK and France, between the 16th and the 18th centuries (Cuvier 1836: 264-273).

This information and the Portuguese historical sources already mentioned clearly show that beached whales were extraordinary events, worthy of being registered for posterity, and that this data circulated amongst the European elites. Another example of this are the many copies and a translation of the news of the Lisbon beached whale in 1723 (Brito 2016; Brito & Costa 2016), published in *Gazeta de Lisboa*. Another translation of such news was recently identified at the archives of the Royal Society, in London (Samuda 1723).

Nevertheless, despite all the interest and information collected on the subject, the whale is still a mystery to humans. Melville's most relevant source, Thomas Beale, dedicated an entire book to the almost unknown sperm whale, saying that this animal was constantly misrepresented, based in inaccurate and false sources, like the accounts of voyagers, a mix of fiction and truth, miracles and wonders. Despite the relevance of sperm whale hunting to the British whale industry, people in general had little idea about the external aspect of the animal and its habits. Thousands of persons, since 1775, had been involved in its pursuit and no one has stepped forward to correct the absurd information circulating about it (Beale 1839: 2, 3, 21). Common mistakes, pointed Beale, were even originated among naturalists who, as Cuvier also stressed, did not have real knowledge on the subject. For instance, some were still discussing how many sperm whale species existed - seven, four, six or eight—, when Beale knew, from his personal experience on whaling-ships, that there was only one (Beale 1839: 9, 10, 22). Up to the middle of the 19th century, the history of the sperm whale was full of blanks. In 1870, Landrin still called the whale the most monstrous of all animals. Not in the sense of an evil or unnatural beast, but because it was an unusual creature of prodigious proportions when compared to other cetaceans (Landrin 1870: 143, 3, 4). It seemed that the label "monster" was glued to the whale and it was used alike for positive and negative characterization of the animal (Brito 2016).

Even today, this label can be found on essays and literature pieces (e.g. Hoare 2011; Gadenne 2017), in which the whale is the main star. In Gadenne (2017), for instance, stranded and dying whales on shore are used as literary elements of clashing worlds.

THE WHALE'S SHOW: A STAGE FOR ENTERTAINMENT

Numerous historical sources and studies (e.g. Mascarenhas 1723a, b, 1725, 1731, 1733, 1735a, b, 1784; Bernaert 1829; Cuvier 1836; Michelet 1875; the forais [Andrade & Silva 2004]; Szabo 2008; Sousa & Brito 2011; Azzolini 2017; Tosi 2017) reveal that along history, stranded whales or

other marine animals were an attraction, bringing people to the shore to see the uncommon creature, to take advantage of the resource, or both. Stranding whales had the power to evoke fear and allure, dread and appreciation, even utility in the form of blubber, meat, bones, baleen and teeth (Sousa & Brito 2011). In the 19th century, they would also become a show, the object (and place!) of entertainment.

In November 1827, the stranding of a "monstrous inhabitant of the seas" (Bernaert 1829), in a beach of Flanders, was quite an event. Bernaert, who wrote a brochure on the subject, mentions that there were others before, but the present generations did not know them. The "new" spectacle took the people of the surrounding areas to the shore; the fortified walls of the village were covered with viewers. For some time, the township of Ostende became the visiting spot of the crowds: men, women and children from all ages, social ranks and different languages. Herman Kessels, a local business man, decided to buy the carcass to the fishermen that brought it to land. Famous naturalists, like Cuvier, were consulted to determine the whale species. The animal was dissected and analyzed, and the skeleton conserved for exhibition. It was offered to the king and a big party was prepared to celebrate the occasion. During a day the pavilion where the whale was exposed was open for free. People's affluence was uninterrupted, all wanted to satisfy their curiosity. One night, a concert was given inside the whale model. After the party, the animal was prepared and boarded in a ship (Bernaert 1829): the whale's show had become an itinerant spectacle, integrating a tour that would take it to Paris in 1829 and London in 1831 (Tosi 2017: 59).

The Ostende cetacean became a celebrity and aroused people's curiosity for a long time (Redman 2015) but it was not the only travelling whale. There was also the Villerville whale, a Balaneoptera musculus (Linnaeus, 1758) beached alive in the shores of that French village in 1893 (Fig. 6). The flesh was send to the Havre for oil production and the skeleton sold to the director of the Villerville casino (Anonymous 1893-1895) that used it to build a replica of the animal. Some newspaper clippings on the whale topic, collected at the time and conserved at the Bibliothèque nationale de France [French national Library], tell the story of how this amazing whale used to entertain the bathers of the beach of Villerville (Anonymous 1893-1895). In the 1894 summer season, the whale was the great attraction of the casino: as Jonah, the bathers were swallowed by the sea monster and came out later. Parties were made inside, theatre plays – such as *Jonah* in the house of the mermaids - were presented in the animal's belly and there was also a maritime museum (Anonymous 1893-1895). After Villerville, the theatre-whale moved to the Paris' Casino, where it was a success. The stage was placed in the head and the best seats were in the larynx and stomach of the animal (Anonymous 1893-1895). The show would suddenly come to an end in February 1895: the second life of the Villerville's whale was consumed in a fire that destroyed part of the Paris' Casino (Anonymous 1893-1895). In the same way, Dolin (2007: 47) mentions that in the USA promoters transported dead whales' carcasses, travelling through the country, exhibiting them to paying viewers.



Fig. 6. — Poster of the Villervile whale entertainment show. Théâtre et musée de la Baleine de Villerville, Bibliothèque nationale de France, fonds régional : Basse-Normandie. https://gallica.bnf.fr/ark:/12148/btv1b53019465v, last consultation: 16/01/2019.

There is a clear contrast between the whalers' stories of fearful cetaceans and the elites' amusement with whales lying death in the strand. The firsts were struggling for their lives in a harsh environment, killing animals that were considered an important economic resource. The others were enjoying a recently rediscovered pleasure - the seaside -, taking advantage of the therapeutic benefits of sea bathing, of strolling in the sand and of contemplating the watery landscape. Beached whales -death and for that not harmful-were one of the many delights of the maritime experience in the 19th century. As the European elites converted the beaches into recreational areas, previously empty coasts, that Corbin (1990) called the territoire du vide, would become in the following centuries much-sought environments. These same seascapes transformed by the masses, in the 20th century, in their main holiday destination. More people on the coast meant more spectators for the beached whale's show. It also resulted in more information, but likewise more curiosity on the subject.

In the last century, humans approach to the oceans – the main biggest cities of the world are now located on the littoral –, also connected with the development of the scientific knowledge and technology to exploit the deep blue, brought new perspectives on marine animals. New perceptions, new values, new utilities are now determining the relations between humans and whales. But cetaceans (both whales and dolphins) keep being a kind of show able of attracting people. This is true for zoological parks and delphinaria that for decades during the 20th century flourished across the world, so that people could have a closer experience with these animals (although not observing the true natural behaviour of the species). As, in more recent years, the developing of the whale watching industry.

The whale, always a wonder, still a commodity, represents today a significant economic income for some regions. The conversion of whaling practices and villages into eco-tourism ones is also clear in the transformation of former factories into science museums or industrial archaeological points of interest. Natural history museums have always featured whales as key elements in the exhibitions and collections, and timely as it is for the blue whale of the London Natural History Museum, even display them as the star and iconic symbol of the institutions. Present-day scientific knowledge on whales, the new consciousness on environmental issues and the need to protect these highly endangered animals transformed them into conservation icons.

During all this time, social, economic and cultural aspects determined the way whales were perceived. However, despite the changes in knowledge and in societies, there is something that seems to persist in human relations with whales: the as-



Fig. 7. — Wall paintings in the Horta's boat marina (Faial, Azores) 2017, depicting the whale as a symbol of love and fidelity. Photo by Sérgio Magro Jacinto.

tonishment felt in their presence and the contemplation of these animals (Richter 2015). Today, in the Age of Technology and virtual emotions, the whale is still such a wonder that most people are bewildered by it.

CONCLUSIONS

The word "whale" is a concept with many meanings: an animal, a good, a belief, a surprise, an omen, a part of these aspects or the encompassing of them all. As other cetaceans, the whale wore different labels (Colby 2018): a moving island, a large fish, a sea monster. It is, for sure, a being of some kind, but one that is described, depicted and appropriated in several forms and in a multitude of ways. Living in the open ocean as well as in the edges of land, the whale is constantly intruding upon human space, alternating between mysterious monsters, valuable resource and catalyst of human conflict (Richter 2015; Murray-Bergquist 2017).

To the whale is always assigned a role, but its relevance to distinct groups of society and its presentation to diverse audiences, across history, can be very different from one genre of sources to another. It illuminates concepts such as the division of land and sea (Richter 2015), complicates modern categories of natural and supernatural, sheds light on

stories that compose scientific and socio-economic concepts (Murray-Bergquist 2017). The identity of the whale and the value given to it may have changed along time. However, its wonder attribute is always present (Brito 2018).

The early modern whale, no matter how it is described on oral stories or written accounts, is always connected to power and influence. The whale is mundane. It was present at the table of European kings and noblemen; it was the royal fish, monopoly of the Crown. This high status attributed to the whale is, moreover, reflected in the need of appropriation of the animal both through chase and hunting as well as through exhibitions (of the animal in whole or in part or even its representation). This is shown by the timeless whaling practices by different peoples, an indication of the human subjugation of the natural world and of the most untamed of the natural habitats—the boundless ocean. The practices of whale hunting and the use of all its parts, either as food, as transformed resources or as artefacts, reflect the super imposition of humans over the non-human, in all times.

The whale is nonetheless magical. This can be seen in many ways. The news reports from the 18th century onwards about whales and other large marine animals, very much as tabloids and social media nowadays, lead to the sensationalisation of the whale, the great fish, the monster. Sometimes depending on local contexts, the whale could

either represent the Good or the Evil. Despite the way the whale has been, or still is, conceptualized – as an element of divine providence or as a bad omen -, it has continuously been an element of human fascination. This is well reflected in its appropriation, in all its symbolic meanings across time and cultures (Fig. 7), in religious practices, magic rituals, natural history and philosophy, art, literature, science and nature conservation.

The whale is not merely a whale, but it is the wonder whale. An animal that still attracts crowds when it strands on nearby shores or even when only its blow is spotted on the horizon. An amazing cetacean that allows for a close connection of people with the strange, enormous, paradoxical, ambivalent, still much unknown, oceanic realm. The whale did not simply become an icon, by the middle 20th century with the emergence of the global conservationist movements, it has always been one.

Acknowledgements

This study was funded by APCM (Associação Para as Ciências do Mar). It was supported by the EU Framework Programme H2020 (COST Action IS1403 "Oceans Past Platform" [European Cooperation in Science and Technology]), the H2020 MSCA-RISE (777998 "CONCHA-The construction of early modern global Cities and oceanic networks in the Atlantic: An approach via Ocean's Cultural Heritage") and is within the tasks of the UNESCO Chair in The Oceans' Cultural Heritage (FCSH, Universidade NOVA de Lisboa). This study was also supported by CHAM Strategic Project (FCSH, NOVA, UAc) sponsored by FCT (UID/HIS/04666/2013). NV is supported by a PhD scholarship by FCT (SFRH/BD/104932/2014) and CB is supported by a research contract by FCT (IF/00610/2015). The authors would also like to acknowledge the contributions and comments of their colleagues Carlos Carreto, Carla Vieira, Maria Dávila, Carla Alferes Pinto, Sara Pinto and Inês Carvalho, and of the manuscript's reviewers.

REFERENCES

- AGUILAR A. 1986. A review of old Basque whaling and its incidence on the right whales of the North Atlantic, in BROWNELL R. L. Jr., BEST P. B. & PRESCOTT J. H. (eds.), Right whales: past and present status. Reports of the International Whaling Commission Special issue 10: 191-199.
- ALEXANDER C. 2001. The Endurance: Shackleton's Legendary Antarctic Expedition. Knopf, New York, 224 p.
- ALVES J. L. 1993. A linguagem dos pescadores da Ericeira. Assembleia Distrital de Lisboa, Lisboa, xii + 260 p. [1st ed. 1965].
- ANDRADE M. F. (trans.) & SILVA M. S. (notes) 2004. Forais de Silves: Foral Manuelino de 1504. Câmara Municipal de Silves, Silves, 162 p.
- Anonymous 1641-1832. Cartório muito antigo do Convento de Nossa Senhora da Ínsua de Caminha. Fonds of the Arquivo Distrital de Braga, Braga.
- Anonymous 1740. O mayor monstro da natureza, aparecido na costa da Tartaria Septentrional no mez de Agosto do ano passado de 1739. Exposto em huma relaçam escrita na língua hollandeza pelo capitam Christiano Schoemaker. Na Officina de Luis Joze Correa Lemos, Lisboa Occidental.

- ANONYMOUS 1748. Relação do monstruoso peixe que nas prayas do Tejo appareceo em 16 de Mayo deste presente anno de 1748. Manoel da Conceição Livreiro, Lisboa.
- Anonymous 1765. Nova e curiosa relação de hum monstruoso peixe, que appareceo no porto de Cayeta. Na Officina de Pedro Ferreira.
- Anonymous 1893-1895. Fonds Maxime-Fabert (1899-1978): coupures de presse. I, Famille Simon-Girard. I.2, Simon Max et Juliette Simon-Girard. Simon Max. Casino de Villerville (1893-1913). Baleine de Villerville. https://gallica.bnf.fr/ark:/12148/ btv1b525041361, dernière consultation: 16/01/2019.
- AZZOLINI M. 2017. Talking of animals: whales, ambergris, and the circulation of knowledge in the seventeenth-century Rome, in COCKRAM S. & AND BOWD S. (eds), The animal in Renaissance Italy. Renaissance Studies 31 (2): 297-318. https://doi. org/10.1111/rest.12291
- BARKHAM S. H. 1984. - The Basque whaling establishments in Labrador 1536-1632 – A summary. Arctic 37 (4): 515-519.
- BARROS H. G. 1949. História da administração pública em Portugal nos séculos XII a XV. Livraria Sá da Costa Editora, Lisboa, 502 p.
- BARTHELMESS K. 2003. Stranded whales in the culture and economy of medieval and early modern Europe. ISANA (27): 1-4.
- BASBERG B. L., RINGSTAD J. R. & WEXELSEN E. 1995. Whaling and History: Perspectives on the Evolution of the Industry. Sandefjordmuseene, Sandefjord, 214 p. (Coll. Kommandør Chr. Christensens Hvalfangstmuseum; 29).
- BEALE T. 1839. The Natural History of the Sperm Whale. To which is Added a Sketch of a South-Sea Whaling Voyage, in which the Author was Personally Engaged. J. Van Voorst, London, vi + 393 p. https://doi.org/10.5962/bhl.title.110064
- BENNETT F. D. 1840. Narrative of a Whaling Voyage Round the Globe, from the Year 1833 to 1836. Comprising Sketches of Polynesia, California, the India Archipelago, etc. with an Account of Southern Whales, the Sperm Whale Fishery, and the Natural History of the Climates Visited. Richard Bentley, London, 422 p.
- BERKUN S. 2010. Book Review: Moby Dick. http://scottberkun. com/2010/book-review-moby-dick/, last consultation: 10/01/2019.
- BERNAERT A. 1829. Notice sur la baleine échouée près d'Ostende, le 5 Novembre 1827, et sur les fêtes données par H. Kessels, à l'occasion de la prise de possession, au nom de sa Majesté le Roi des Pays-Bas, du squelette de ce cétacé. Le Normant Fils, Paris, 62 p.
- BEZ M. 2014. Lexique poétique maritime. Arthaud, Toulouse, 137 p. BLUTEAU R. 1712-1728. — Vocabulario Portuguez e Latino. Collegio das Artes da Companhia de Jesu, Coimbra.
- BOVEY A. 2002. Monsters and Grotesques in Medieval Manuscripts. University of Toronto Press Incorporated, Toronto, Buffalo, 64 p.
- Brandão A. 1632. Quarta Parte da Monarchia Lusitana: que contem a historia de Portugal desdo tempo del Rey Dom Sancho Primeiro, até todo o reinado del Rey D. Afonso III. Impressa em o Mosteiro de S. Bernardo por Pedro Craesbeeck Impressor,
- Brito B. G. 1736. Historia Tragico Maritima Em que se escrevem chronologicamente os Naufragios que tiveraó as Naos de Portugal, depois que se poz em exercicio a Navegação da India. Tomo Segundo. Na Officina da Congregação do Oratorio, Lisboa, 566 p.
- BRITO C. 2011. Medieval and early modern whaling in Portugal. Anthrozoos 24 (3): 287-300. https://doi.org/10.2752/1753037 11X13045914865303
- BRITO C. 2016. New Science from Old News. Sea Monsters in the Early Modern Portuguese Production and Transfer of Knowledge about the Natural World. Escola de Mar, Lisboa, 120 p.
- BRITO C. 2018. Beauties and beasts: whales in Portugal, from early-modern monsters to today's flagship species. Arcadia (21). (Coll. Water Histories). https://doi.org/10.5282/rcc/8449
- BRITO C. & COSTA L. 2016. Baleias em circulação: uso de imagens na produção e transferência de conhecimentos de história natural marinha em Portugal do século XVIII. Arquivos de Zoologia 47 (2): 33-42. https://doi.org/10.11606/issn.2176-7793.v47i2p33-42

- BUELL L. 1986. Moby-Dick as sacred text, in BROADHEAD R. (ed.), New Essays on Moby-Dick. Cambridge University Press, New York: 53-72.
- Calado M. 1994. *Da ilha de Peniche*. Author Edition, Peniche, 117 p.
- CASTRO A. 1966. A evolução económica de Portugal nos séculos XII a XV. Portugalia, Lisboa, 430 p.
- COLBY J. M. 2018. Orca: How we Came to Know and Love the Ocean's Greatest Predator. Oxford University Press, Oxford, 408 p.
- COOPER J. F. 1859. *The Pilot: a Tale of the Sea.* W.A. Townsend & Company, New York, 528 p.
- CORBIN A. 1990. Le territoire du vide: l'Occident et le désir du rivage, 1750-1840. Flammarion, Paris, 400 p.
- COSTELLO M. J., COLL M., DANOVARO R. HALPIN P., OJAVEER H. & MILOSLAVICH P. 2010. A census of marine biodiversity knowledge, resources and future challenges. *PLoS ONE* 5: e12110. https://doi.org/10.1371/journal.pone.0012110
- CUVIER M. F. 1836. De l'histoire naturelle des cétacés, ou recueil et examen des faits dont se compose l'histoire naturelle de ces animaux. Roret, Paris, 2 vol. [lii + 416 p., 22 p. de pl.].
- DOLIN E. J. 2007. *Leviathan: the History of Whaling in America*. W. W. Norton & Company, New York, 512 p.
- EDMUNSON W. & HART I. 2014. A história da caça de baleias no Brasil: de peixe real a iguaria japonesa. Disal Editora, Barueri, 312 p.
- ELLIS M. 1969. A baleia no Brasil colonial: feitorias, baleeiros, técnicas, monopólio, comércio, iluminação. Melhoramentos, São Paulo, 235 p.
- ELLIS R. 1991a. Marine Mammals: American Cetacean Society Sea Guide. American Cetacean Society, New York, 27 p.
- ELLIS R. 1991b. Men and Whales. Knopf, New York, 542 p.
- FERNANDISI J. 1732. Onomatopeia oannense ou annedotica do monstro amphibio, que na memorável noite de 14 para 15 de Outubro do presente anno de 1732, apareceu no Mar Negro, e saindo em terra falou aos Turcos (...). Na nova Officina de Mauricio Vicente de Almeyda, Lisboa Occidental.
- FONSECA L. A. 1990. A visão do Oceano no século XV. *Jornal de Letras* 13 (401): 16, 17.
- Francis D. 1990. A History of World Whaling. Viking, New York, 188 p.
- Franco I. & Amorim I. 2001. Baleeiro, *in Madureira L. & Amorim I.* (coord.), *História do Trabalho e das ocupações. II, Sector das Pescas.* Editora Celta, Lisboa: 96, 97.
- Freitas J. G. 2016. Landscapes of fear: the Portuguese coast. The Nautilus. A Maritime Journal of Literature, History and Culture VIII: 27-59.
- GADENNE P. 2017. A Baleia. Antígona, Lisbon, 120 p.
- GILLIS J. R. 2015. *The Human Shore: Seacoasts in History*. University Chicago Press, Chicago, 241 p.
- GODINHO V. M. 1983. Os descobrimentos e a economia mundial. Presença, Lisboa, 4 vol., 358 p.
- HANSEN F. V. 2016. Balleneros vascos en Brasil. *Itsas Memoria : Revista de Estudios Marítimos del País Vasco* 8: 725-740.
- HANSEN F. V. 2010. Los Balleneros en Galicia (Siglos XIII al XX). Fundación Pedro Barrié de la Maza, A Coruña, 591 p.
- HOARE P. 2011. *The Whale: in Search of the Giants of the Sea.* Harper Collins Publishers, New York, 480 p.
- HOLM P., MARBOE A. H., POULSEN B. & MACKENZIE B. R. 2010. — Marine animal populations: a new look back in time, in MCINTYRE A. D. (ed.), Life in the World's Oceans: Diversity, Distribution and Abundance. Wiley-Blackwell, Oxford: 1-24. https://doi.org/10.1002/9781444325508.ch1
- HOKANSON A. 2016. Turner's whaling pictures. *The Metropolitan Museum of Art Bulletin* 73 (4), 52 p. https://issuu.com/metmuseum/docs/spring_2016_bulletin, last consultation: 11/01/2019.
- JACKSON J. B. C., KIRBY M. X., BERGER W. H., BJORNDAL K. A., BOTSFORD L. W., BOURQUE B. J., BRADBURY R. H., COOKE R., ERLANDSON J., ESTES J. A., HUGHES T. P., KIDWELL S., LANGE C. B., LENIHAN H. S., PANDOLFI J. M., PETERSON C. H., STENECK

- R. S., TEGNER M. J.† & WARNER R. R. 2001. Historical overfishing and the recent collapse of coastal ecosystems. *Science* 293: 629-638. https://doi.org/10.1126/science.1059199
- LAIST D. W. 2017. North Atlantic Right Whales: from Hunted Leviathan to Conservation Icon. Johns Hopkins University Press, Baltimore, 432 p. https://doi.org/10.1111/mms.12543
- LANCIANI G. 1979. Os relatos de naufrágios na Literatura Portuguesa dos séculos XVI e XVII. Instituto de Cultura Portuguesa, Amadora, 146 p. (Coll. Biblioteca Breve; 41).
- LANDRIN A. 1870. Les Monstres Marins (2e éd. rev. et augm.). Librairie de L. Hachette et Cie, Paris, 316 p.
- LECLERCQ-MARX J. 2018. Entre tradition classique et imaginaire germano-celtique: les monstres anthropomorphes des mers septentrionales, au Moyen Âge et au début de l'époque moderne, in Jacquemard C., Gauvin B., Lucas-Avenel M.-A., Clavel B. & Buquet T. (éds), Animaux aquatiques et monstres des mers septentrionales (imaginer, connaître, exploiter, de l'Antiquité à 1600). Anthropozoologica 53 (3): 53-65. https://doi.org/10.5252/anthropozoologica2018v53a3
- LOPES J. B. L. 1841. Corografia; ou, Memoria economica, estadistica e topografica do Reino do Algarve. Tipografia da Academia das Sciências, Lisboa, 694 p.
- LOPES P. 2009. O medo do mar nos Descobrimentos. Representações do fantástico e dos medos marinhos no final da Idade Média. Tribuna da História, Lisboa, 319 p.
- KINZE C. C. 1995. Danish whale records 1575-1991 (Mammalia Cetacea). Review of whale specimens stranded, directly or incidentally caught along the Danish coasts. Steenstrupia 21: 155-196.
- MARQUES M. G. M. & VENTURA M. G. M. (trans., notes) 1990. Foral de Vila Nova de Portimão 1504. Câmara Municipal de Portimão, Portimão, 95 p.
- MARTINS I. M. R. (trans.) 1985. O Foral de Loulé de 1266. Universidade do Algarve, Faro, 46 p.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1723a. Gazeta de Lisboa (2), 14-01-1723. http://hemerotecadigital.cm-lisboa.pt/ Periodicos/GazetadeLisboa/1723/Janeiro/Janeiro_item1/P9.html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1723b. *Gazeta de Lisboa* (8), 215-02-1723. http://hemerotecadigital.cm-lisboa. pt/Periodicos/GazetadeLisboa/1723/Fevereiro/Fevereiro_item1/P25.html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1725. *Gazeta de Lisboa* (47), 22-11-1725. http://hemerotecadigital.cm-lisboa.pt/ Periodicos/GazetadeLisboa/1725/Novembro/Novembro_item1/ P25.html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1731. Gazeta de Lisboa (10), 08-03-1731. http://hemerotecadigital.cm-lisboa.pt/ Periodicos/GazetadeLisboa/1731/Marco/Marco_item1/P9.html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1733. *Gazeta de Lisboa* (14), 02-04-1733. http://hemerotecadigital.cm-lisboa. pt/Periodicos/GazetadeLisboa/1733/Abril/Abril_item1/P1.html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1735a. *Gazeta de Lisboa* (19), 12-05-1735. http://hemerotecadigital.cm-lisboa.pt/ Periodicos/GazetadeLisboa/1735/Maio/Maio_item1/P13.html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1735b. *Gazeta de Lisboa* (22), 02-06-1735. http://hemerotecadigital.cm-lisboa. pt/Periodicos/GazetadeLisboa/1735/Junho/Junho_item1/index. html, last consultation: 16/01/2019.
- MASCARENHAS J. F. DE MONTERROIO (ed.) 1784. *Gazeta de Lisboa*. Supplemento (11), 19-03-1784. http://hemerotecadigital.cm-lisboa.pt/Periodicos/GazetadeLisboa/1784/Marco/Marco_item1/P29.html, last consultation: 16/01/2019.
- MATTOSO J. 1998. Antecedentes medievais da expansão portuguesa, in BETHENCOURT F. & CHAUDHURI K. N. (eds), *História da Expansão Portuguesa*, vol. I. Círculo de Leitores, Lisboa: 12-25.

MELVILLE H. 2007. — Moby Dick or The Whale & an Extract from Narrative of the Most Extraordinary and Distressing Shipwreck of the Whale Ship Essex by Owen Chase. Trafalgar Square, London, 648 p. (Coll. Vintage classics). [1st ed. 1851].

Institute, Edmonton, 360 p (Coll. Occasional Publications Series).

- MICHELET J. 1875. *La Mer*. Michel Lévy Frères, Paris, 428 p. [1e ed. 1835].
- MOJETTA A. R., TRAVAGLINI A., SCACCO U. & BOTTARO M. 2017. Where sharks met humans: The Mediterranean Sea, history and myth of an ancient interaction between two dominant predators. *Regional Studies in Marine Science* 21: 30-38. https://doi.org/10.1016/j.rsma.2017.10.001
- MONKS G. G. 2005. The Exploitation and Cultural Importance of Sea Mammals. Proceedings of the 9th Conference of the International Council of Archaeozoology, Durham, August 2002. Oxbow Books, Oxford, 192 p.
- MURRAY-BERGQUIST K. 2017. To Talk of Many Things: Whales, Walrus, and Seals in Medieval Icelandic Literature. Thesis for MA in Viking and Medieval Norse Studies, University of Iceland, 79 p.
- OJAVEER H. & MACKENZIE B. R. 2007. Historical development of fisheries in northern Europe—Reconstructing chronology of interactions between nature and man. *Fisheries Research* 87 (2-3): 102-105. https://doi.org/10.1016/j.fishres.2007.08.011
- ORTON D. C. 2014. Archaeology as a tool for understanding past marine resource use and its impacts, in SCHWERDTNER MANEZ K. & POULSEN B. (eds.), Perspectives on Oceans Past: A Handbook of Marine Environmental History. Springer, New York: 47-69. https://doi.org/10.1007/978-94-017-7496-3_4
- SAMUDA I. S. 1723. [Translation of a Portuguese Report of a Whale Stranded in the Tagus], Lisbon, 21 January 1723. [Manuscript from the Royal Society, London].
- PÁDUA J. A. 2000. A profecia dos desertos da Líbia: conservação da natureza e construção nacional do pensamento de José Bonifácio. *Revista Brasileira de Ciências Sociais* 15 (44): 119-142. https://doi.org/10.1590/S0102-6909200000300007
- Pauly D., Christensen V., Daalsgard J., Froese R. & Torres F. Jr. 1998. Fishing down marine food webs. *Science* 279 (5352): 860-863. https://doi.org/10.1126/science.279.5352.860
- PERETZ E. 2003. Literature, Disaster and the Enigma of Power: A Reading of Moby-Dick. Stanford University Press, Stanford, 192 p.
- REDMAN N. 2014. Whales' Bones of France, Southern Europe, the Middle East and North Africa. Redman Publishing, Teddington, 254 p. (Coll. Whales' Bones of the World; 5).
- REDMAN N. 2015. *The Travels of the Oostende Whale Skeleton*. Redman Publishing, Teddington, 119 p.
- RICHTER V. 2015. 'Where things meet in the world between sea and land': human-whale encounters in littoral space, *in* KLUWICK U. & RICHTER V. (eds), *The Beach in Anglophone Literatures and Cultures: Reading Littoral Space*. Ashgate Publishing, Farnham: 155-173.
- ROCHA PITTA S. DA 1880. Historia da America Portugueza desde o anno de mil quinhentos do seu descobrimento até o de mil e setecentos e vinte e quatro. Francisco Arthur da Silva, Lisboa, xxviii + 404 p. [1st ed.1730].
- SANTA MARIA M. 1723. *Neste anno appareceo na ribeira de Lxa huá balea* (...). [Manuscript from the Biblioteca da Academia das Ciências de Lisboa].
- SANTOS J. 1891. *Ethiopia Oriental*. Mello d'Azevedo, Lisboa [1st ed. 1609]. (Coll. Biblioteca dos Clássicos Portugueses).

- Schwerdtner Manez K., Holm P., Blight L., Coll M., Mac-Diarmid A., Ojaveer H., Poulsen B. & Tull M. 2014. — The future of the oceans past: towards a global marine historical research initiative. *PLoS ONE* 9 (7): e101466. https://doi.org/10.1371/ journal.pone.0101466
- Scoresby W. 1820. An Account of the Arctic Regions with a History and Description of the Northern Whale-fishery. A. Constable & Co., Edinburgh, 2 vol., 674 + 644 p.
- Scott W. 1822. *The pirate*. A. Constable & Co., Edinburgh, 3 vol., 322 + 332 + 346 p.
- SEQUEIRA M. L., INÁCIO A. & REINER F. 1992. Arrojamentos de mamíferos marinhos na costa continental Portuguesa entre 1978 e 1988. Estudos de Biologia e Conservação da Natureza (7): 1-48.
- SEQUEIRA M. L., INÁCIO A., SILVA M. A. & REINER F. 1996. Arrojamentos de mamíferos marinhos na costa continental Portuguesa entre 1989 e 1994. Estudos de Biologia e Conservação da Natureza (19): 1-52.
- SILVA J. B. A. 1789. Memória sobre a pesca das baleas e extracção do seu azeite com algumas reflexões a respeito das nossas pescarias, in Memórias Económicas da Academia Real das Sciencias de Lisboa para o adiantamento da Agricultura, das Artes e da Industria em Portugal, e suas Conquistas. Vol. I. Na Officina da Academia Real das Sciencias, Lisboa: 388-412.
- SOUSA G. S. 1989. Notícia do Brasil, Descrição verdadeira da costa daquele Estado que pertence à Coroa do Reino de Portugal, sítio da Baía de Todos-os-Santos. Lápis de Memórias, Lisboa: 195, 196. (Coll. Biblioteca da Expansão Portuguesa; 11) [1st ed.1587].
- SOUSA A. & BRITO C. 2011. Historical strandings of cetaceans on the Portuguese coast: anecdotes, people and naturalists. *Marine Biodiversity Records* 5 (e2): 1-7. https://doi.org/10.1017/S1755267211000959
- Suspiro A. 2016. Marginal cortada na Parede para remover baleia. *Observador* Jan. 11. http://observador.pt/2016/01/11/marginal-cortada-na-parede-remover-baleia/, last consultation: 14/01/2019.
- SZABO V. E. 2008. Monstrous Fishes and the Mead-Dark Sea. Whaling on the Medieval North Atlantic. Brill, Leiden, Boston, 326 p.
- TEIXEIRA A., VENÂNCIO R. & BRITO C. 2014. Archaeological remains accounting for the presence and exploitation of the North Atlantic right whale Eubaleana glacialis on the Portuguese Coast (Peniche, West Iberia), 16th to 17th century. *PLoS ONE* 9 (2): e85971. https://doi.org/10.1371/journal.pone.0085971
- TOSI A. 2017. Un ritratto per la balena, *în* TOSI Â. (ed.), *Balene*. Edizioni ETS, Pisa, 128 p.
- VARNHAGEN F. A. 1867. Diario da Navegação de Pedro Lopes de Souza pela costa do Brazil até o Rio Uruguay (de 1530 a 1532). Typ. de D. L. dos Santos, Rio de Janeiro, 111 p.
- VASCONCELLOS S. 1663. Chronica da Companhia de Jesu do Estado do Brasil. Na Officina de Henrique Valente de Oliveira, Lisboa, 528 p.
- VIEIRA N. 2018. A comparative approach to historical whaling techniques: transfer of knowledge in the 17th century from the Biscay to Brazil, in POLÓNIA A., BRACHT F., CONCEIÇÃO G. & PALMA M. (eds.), Cross-cultural Exchange and the Circulation of Knowledge in the First Global Age. CITCEM; Edições Afrontamento, Porto: 125-143.
- VUILLIMONT 1755. Nova maravilha da natureza ou noticia rara, curiosa de hum homem marinho, que appareceo nas praias da cidade de Marselha em o reino de França, com cuja occasiam se refere outro incesso similhante acontecido na China. S. n., Lisboa, 6 p.

Submitted on 13 March 2018; accepted on 12 June 2018; published on 1 March 2019.