

‘Um Grande Peixe, Dona Baleia da Costa’: The Whale in Portuguese Early Modern Natural History

Cristina Brito

1 Introduction: Setting the Stage for Whales

Today we could sit anywhere along the coast of Peniche – in Papoa, within sight of the island of Berlenga and Cape Carvoeiro, on the small “island” of Baleal or on the isthmus that connects it to the mainland, or even further inland in the village of Atouguia de Baleia – and see before our eyes cetaceans that today populate the coastal waters and those that once populated the waves of this region’s environmental history. In the past, when different species of whales migrated along the western Portuguese coasts, specimens would have run aground or been captured by local fishermen; only a few lost bones, local stories, and a couple of written records that survived in historical sources remain.

Beyond what we see today, we can imagine a naturalist, an enthusiast of the natural world, sitting in his home fishing village sometime in the early 18th century, who must also have observed his present and his past in search of these giants of the sea and many other creatures. Doctor Domingos Franco Quaresma must have seen and read, studied, and written about the marine animals of Portugal, and he left us a testimony of the regional biodiversity of his time and clear evidence of the importance of the whale to Portuguese society, as we will describe.

History, natural sciences, and art, including more recently visual and digital media, have placed whales as relevant elements of oceanic and natural realities and different socio-cultural realities. Whales are now known and seen as the largest living animal, an archetypal sea monster, a deep-swimming marine mammal with highly developed cognitive and behavioural characteristics, the aquatic species that connects to land. Whales have a long history of interactions with human coastal communities. As whales have continued to approach the same regions on the coasts during their long-distance oceanic peregrinations, they have become sources of food and fuel, mythological and literary

figures, and ultimately symbols of human ruthlessness and ecological danger.¹ Whales served – and still serve today – as agents and subjects of history and science and became a place of cultural meaning.² They are marine mammals that represent the interface between water and air, and between water and land. They are somehow hybrids and dual; and in all their paradoxes they can be perceived and analyzed as a hyper-object. In their own kaleidoscopic and multi-existing forms of cognitive beings and conceptualized entities, whales shape humans in their quest for knowledge and understanding, which influence their distribution and movements in the oceans, as well as their practices and choices on land.³

Considering that people have been using aquatic systems – inland, coastal, and ocean – for thousands of years, with strong impacts in the last few hundred years, and have been modifying these environments, the human component is also essential to understanding the long-term dynamics in these ecosystems. We must begin to consider the existence and influence of humans in ecological systems and niches that coexist with other natural elements. Likewise, it is essential to include non-human agents in the construction of historical and cultural narratives. As elements of the same biomes, humans and other species are interdependent and interrelated. We must come to assume, in understanding the human past and in constructing historical narratives, the “multi-species” systems that populate the Earth.

Whales have never been (and are not) just one animal, one place, or one geography, but rather a complex atlas of multiple ecologies, states, and emotions. Studying the multiple meanings of the whale allows us to understand (or come close to better understanding) the importance of marine ecosystems to different human societies or maritime and coastal communities. The whale allows us to recreate concepts, complicate and disorganize categories

-
- 1 Ritcher V., “Where things meet in the world between sea and land’: Human-Whale Encounters in Littoral Space”, in Klueck U. – Ritcher V. (eds.), *The Beach in Anglophone Literatures and Cultures: Reading the Littoral Space* (Farnham: 2015) 155–173.
 - 2 Colby J., “Change in Black and White: Killer Whale Bodies and the New Pacific Northwest”, in Nance S. (ed.), *The Historical Animal* (New York: 2015) 19–37; Brito C., “Beauties and Beasts: Whales in Portugal, from Early-Modern Monsters to Today’s Flagship Species”, *Arcadia* 21 (2018) doi.org/10.5282/rcc/8449; Giggs R., *Fathoms. The World inside the Whale* (New York: 2020); Brito C. – Vieira N., “Uma construção cultural de ser baleia: A história ambiental de dois arrojamentos na Lisboa ribeirinha e das pessoas que os observaram e descreveram”, *SCAENA – Revista do Museu de Lisboa – Teatro Romano. O rio como horizonte: o outro palco do teatro romano*, no. 3. EGEAC, EM / Museu de Lisboa – Teatro Romano (Lisbon: 2022).
 - 3 Brito – Vieira, “Uma construção cultural de ser baleia”.

of the natural, illuminate stories and feed beliefs, and become constituents of socio-economic and eco-cultural systems.⁴ This is particularly important for Portugal (or Iberia), where much is still unknown about the evolution of natural history and natural philosophy in relation to the ocean and the coast. However, an interesting amount of written and iconographic sources produced in Portugal on the marine life of Portugal have come to light in recent years and may shed new light on this topic.⁵

We hope to address the development of early modern maritime knowledge about the use and perceptions of marine mammals and the development of Iberian perceptions and practices about the peoples-animals-oceans relationship. Supported by, but not limited to, two unpublished and mostly unknown manuscripts of natural history or fish and fisheries history in Portugal, we will reveal not only the background of the documents and their authors, but also a narrative of the perception of nature from the point of view of naturalist-humanists and Portuguese society in general. Other categories of sources that are not formal scientific productions also offer good insights into the occurrence and importance of whales and local perceptions and knowledge about them.

2 The Portuguese Natural History of Aquatic Animals

Portuguese historiography on fish and fisheries goes back mostly to the middle or late 18th and early 19th century,⁶ and this period can be referred to as the landmark for the start of ichthyology – the branch of zoology dedicated to the study of fish. In Portugal, first studies of natural history came around at the same time, together with the arrival of Domingos Vandelli⁷ to Portugal and the establishment of the country's main scientific-museological complex, the Botanical Garden and Royal Cabinet of Natural History of Ajuda, in 1768 (which would later turn into the current institution, that is the National Museum of Natural

4 Brito – Vieira, “Uma construção cultural de ser baleia”.

5 See the full review of the documentary sources that served as basis for the narrative presented in this chapter, in an open access document produced by the author and colleagues: Lacerda T. – Vieira N. – Brito C., *Fontes documentais para uma história natural das baleias em Portugal*. Zenodo. <https://doi.org/10.5281/zenodo.6417799>. Online document (2022).

6 Ceriaco L., *O 'Arquivo Histórico Museu Bocage' e a história natural em Portugal*. Professor Carlos Almaça (1934–2010) – *Estado da Arte em Áreas Científicas do Seu Interesse* (Lisbon: 2014).

7 Domingos Vandelli (Pádua, 1735–Lisboa, 1816). Italian naturalist who came to Portugal, where he developed studies on natural history and chemistry. He directed the first works for the creation of the Ajuda Botanical Garden and was its director between 1787 and 1788.

History and Science) in Lisbon⁸ and the foundation of the Royal Academy of Sciences. The emergence of ichthyology in Portugal draws on the *memórias* written by Constantino Lacerda Lobo and published by the Lisbon Academy of Sciences in 1812 and 1840,⁹ even though it only really took off on a national level from the mid-19th century onwards with the investigations and publications of Baldaque da Silva, Barbosa du Bocage and Britto Capello, Balthazar Osorio, and King D. Carlos, while the first national aquarium, marine stations, and exhibitions were being established.¹⁰ Since the mid-18th century, and within the enlightenment spirit of the period related to the scientific knowledge about nature in Portugal and in other regions of the Portuguese overseas empire,¹¹ authors such as the above-mentioned Domingos Vandelli and Constantino Lacerda Lobo dedicated some time to the study of marine fauna, revealing a renewed interest in this subject. The unparalleled work of Baldaque da Silva's *Estado actual das pescas em Portugal*, dating from 1891, is truly a significant mark in the study of fish and fisheries in Portugal, but in fact, more than a century before its publication Doctor Domingos Franco Quaresma, a poorly renowned naturalist and physician, and a native of Peniche in Portugal, wrote a natural history of Portuguese fishes. He was doctor of the king's party, of the Peniche place and its royal hospital. Domingos' father, Francisco Franco Quaresma, graduated with a bachelor's degree from the University of Coimbra, and also a native of Peniche, which means that the Quaresmas were members of the educated small nobility.¹²

8 Ceriaco L., *O 'Arquivo Histórico Museu Bocage'* (Lisbon: 2014).

9 Amorim I., "A decadência das pescarias portuguesas e o constrangimento fiscal – entre a Ilustração e o Liberalismo", in Ribeiro da Silva F. – Cruz M.A. – Martins Ribeiro J. – Osswald H. (eds.), *Estudos em Homenagem a Luís António de Oliveira Ramos* (Porto: 2004) 153–164.

10 Gamito-Marques D., "A Space of One's Own: Barbosa du Bocage, the Foundation of the National Museum of Lisbon, and the Construction of a Career in Zoology (1851–1907)", *Journal of the History of Biology* 5 (2017) 223–257; Amorim I. – Pinto B., "Portugal in the European Network of Marine Science Heritage and Outreach (19th–20th Centuries)", *Humanities* 8.1 (2019) 14. <https://doi.org/10.3390/h8010014>; Pinto B. – Amorim I., "A Biodiversidade Marinha nos Museus de Portugal continental: Uma introdução", *Museologia & Interdisciplinaridade* 7.14 (2019) 107–127.

11 Brigola J., *Domingos Vandelli e a circulação de conhecimentos na rede de naturalistas europeus* (Évora: 2016); Roque A.C., "Towards a Scientific Approach of Natures: Looking at the Southern Africa Biodiversity throughout the 16th-Century Portuguese Records on Marine Fauna", in Polónia A. – Bracht F. – Conceição G.C. – Palma M. (eds.), *Cross-cultural Exchange and the Circulation of Knowledge in the First Global Age* (Porto: 2018) 75–100.

12 Francisco Franco Quaresma qualified for the position of familiar of the Holy Office. Cf. IAN/TT, Tribunal do Santo Ofício, Conselho Geral, Habilitações, Francisco, mç. 16, doc. 475.



FIGURE 13.1 Quaresma Domingos Franco, Index of *Piscilegio lusitano, Nova, Exacta, Natural, e Medicinal Noticia dos nomes e qualidades dos Peixes que se pescão nos mares e rios da Costa de Portugal damnos e proveitos que do seu bom, ou mau uso no comer podem resultar aos sãos, e enfermos*, unpublished manuscript (c.1750). Reproduced with the permission of Samuel Iglesias

In mid-18th century Domingos Franco Quaresma wrote what seems to be the first comprehensive treatise on the Portuguese aquatic fauna, the methods used to catch the fish. The manuscript is titled *Piscilegio lusitano, Nova, Exacta, Natural, e Medicinal Noticia Dos nomes e qualidades dos Peixes que se pescão nos mares e rios da Costa de Portugal*,¹³ hereafter *Piscilegio lusitano* [Fig. 13.1]. The 650-page-long manuscript, possibly dated c.1750, is devoted primarily to the study of ichthyology, and marine and freshwater fisheries; the author lists and describes 135 aquatic species (including bony fish, elasmobranchs, aquatic mammals, and invertebrates), highlights topics such as whaling, the quality

13 *Piscilegio lusitano, Nova, Exacta, Natural, e Medicinal Noticia Dos nomes e qualidades dos Peixes que se pescão nos mares e rios da Costa de Portugal damnos e proveitos que do seu bom, ou mau uso no comer podem resultar aos sãos, e enfermos; Com outras raridades e curiosas advertências importantes ao bem comum da Saude (...)* Exposto pela curiosidade do Sr. Dr. Franco Quaresma natural da Praça de Peniche, médico de S. Mag., (*Piscilegio lusitano, New, Exact, Natural, and Medicinal News of the names and qualities of Fishes that are caught in the seas and rivers of the Coast of Portugal ...*). Unpublished manuscript by Domingos Franco Quaresma (c.1750).

and use of fishery products or ambergris, and the virtues of hot springs. He includes a wide variety of fish, using the scholarly knowledge of classical and Renaissance authors, but also the experience of “seafaring men”. The author does not follow Carl Linnaeus’ biological classification of fish. This is a manuscript with only one known copy. The work was certainly composed in the first half of the 18th century, as Barbosa Machado¹⁴ wrote that “it was in the licenses of printing”, but why it never came to know the printed form is unknown.

Piscilegio lusitano significantly precedes the pioneering work of the 19th-century naturalist Baldaque da Silva. The erudition and completeness of this document should have marked the coeval Portuguese scientific panorama, possibly like the *Traité général des pesches* by Duhamel du Monceau and La Marre (1769–1782) in France, or the *Ensayo de una historia de los peces* by D. José Cornide (1788) in Spain. But the devastating Lisbon earthquake in 1755 and its consequences for economic activity¹⁵ certainly thwarted the publication of this work, which has remained unpublished and not unknown to the scientific community.

The first readings of this text reveal valuable and original information on the exploitation and use of marine animals and products in 18th-century Portugal. *Piscilegio lusitano* deals with marine species and their exploitation on a national scale. At first glance, it appears quite different from the Renaissance European ichthyologist treatises, such as the ones by Pierre Belon, Guillaume Rondelet, Conrad Gessner, Adriaen Coenen, Ulisses Aldrovandi, and Ippolito Salviani,¹⁶ both in structure and purpose. No documents alike are found in the Portuguese production of natural history for the 16th to the 18th century. The one we might be able to compare with it is the 16th-century Spanish natural history treatise titled *Bestiario de Don Juan de Austria*.¹⁷ The memoirs on the fisheries of Lacerda Lobo from the late 18th century onwards and the lists

14 Machado, Diogo Barbosa, *Bibliotheca Lusitana, historica, critica, e chronologica, na qual se comprehende a noticia dos authores portuguezes, e das obras, que compozerao desde o tempo de promulgaçao da ley da graça até o tempo presente*. Vol. IV. (Lisbon, [Lisboa Occidental: Na officina de Antonio Isidoro da Fonseca]: 1759) 159.

15 Pereira A., “The Opportunity of a Disaster: The Economic Impact of the 1755 Lisbon Earthquake”, *The Journal of Economic History* 69.2 (2009) 466–499.

16 Gudger E., “The Five Great Naturalists of the Sixteenth Century: Belon, Rondelet, Salviani, Gesner and Aldrovandi: A Chapter in the History of Ichthyology”, *Isis* 22.1 (1934) 21–40; Kraemer F. – Zedelmaier H., “Instruments of Invention in Renaissance Europe: The Cases of Conrad Gesner and Ulisse Aldrovandi”, *Intellectual History Review* 24.3 (2014) 321–341; Egmond F., *Eye for Detail: Images of Plants and Animals in Art and Science 1500–1630* (London: 2017).

17 García Gil J.J. – Molinero Hernando P. (eds.), *Bestiario de D. Juan de Austria. S. XVI. Estudios y transcripción de la edición facsimilar* (Burgos: 2000).

of fishes by Balthazar Osorio in late 19th century, by the Lisbon Academy of Sciences, the *Apontamentos para a ichthyologia de Portugal* by Barbosa Du Bocage and Britto Capello (1866), the *Catalogo dos peixes de Portugal* by Britto Capello (1880), and the late-19th-century treatise by Baldaque da Silva also deal with this topic. Preliminary research reveals that this manuscript is cited only in publications in 1759, 1878, and 2018.¹⁸

The rediscovery of this “ready to be printed” manuscript by the French biologist Samuel Iglesias¹⁹ is a unique opportunity to complete a history of Portuguese natural history, notably concerning ichthyology, sea and freshwater fishing, and whaling. We do not intend to go deep into this and other historical sources but rather to briefly review them to address knowledge about whales in Portugal prior to modern times. Future endeavours regarding *Piscilegio lusitano* will include its full transcription, and translation of relevant parts to English, with comments and notes from biologists and historians.

Before *Piscilegio lusitano*, we can find sparse indications of the value of knowledge about marine fauna as well as true compilations of the Portuguese marine fauna and biodiversity, as shown recently by Herold, Horst, and Leitão²⁰ (see also Bernardo Herold’s and João Paulo S. Cabral’s contribution to the present volume) in their study of a mid-16th-century manuscript, which includes a list of aquatic animals. The manuscript, untitled but dubbed ‘The Natural History of Portugal’ (1555–1556) by the research team responsible for its study, is divided into different parts revealing the author’s interests. In the German text, Leonhard Thurneysser often refers to plants, animals, etc. by the Portuguese names he collected in loco. In addition to the obvious botanical, pharmacological, zoological, geographic, palaeoecological, and anthropological interest of his observations, certain commercial and industrial aspects that he intersperses with the afore-mentioned main themes are also noteworthy. The Second Part has a full title by the author but regarding our main interest can be reduced to ‘Small Aquatic Animals from Lisbon’ (*Animaizinhos*

18 Machado, *Bibliotheca Lusitana*; Anonymous, *Catalogo dos preciosos manuscriptos da bibliotheca da casa dos marquezes de Castello Melhor. Documentos officiales, grande numero de autographos obras originaes e ineditas* (Lisbon: 1878); Iglésias S.P. – Mollen F.H., “Cold Case: The Early Disappearance of the Bramble Shark (*Echinorhinus brucus*) in European and Adjacent Waters”, *Oceans Past News* 10 (2018) 1–2.

19 The manuscript was found and purchased at the Salon International du Livre Rare et de l’Objet d’Art 2017 in Paris (Grand Palais, 7–9 April 2017), and is currently part of a private collection of antique books and manuscripts dedicated to ichthyology, in Concarneau (Finistère, France).

20 Herold B. – Horst T. – Leitão H., “A ‘História Natural de Portugal’ de Leonhard Thurneysser zum Thurn, ca. 1555–1556”, *Ágora. Estudos Clássicos em Debate* 19 (2017) 305–334.

Aquáticos que se encontram em lisboa) (fols. 111r–127v).²¹ And here are listed several species from Portugal, including marine and estuarine fish (namely from the Tagus River), mollusks, and crustaceans, and among the fish, dolphins and whales are included. The manuscript, written in German by Thurneysser, an academic friend of Damião de Góis, shows that the author was aware of the Portuguese scientific scene at the time, providing relevant information for a better perception of Portuguese scientific thought of that period.²² Unfortunately, a translation of the document transcript for this part of the fish list is not yet accessible, and so far, the index is the only information available for analysis and comparison.

Possibly coeval to this work another one of relevance for the understanding of local studies and interest in marine fauna must have existed. What has reached our present day are mere fragments of a document that we are calling here a ‘Portuguese Latin dictionary of marine animal names’,²³ but it is enough to enlighten us about a “scientific” interest in marine fauna. The translation of fish names from Portuguese into Latin indicates a concern on the part of the author or humanists of the time to understand, categorize, and eventually transfer information about the natural world and particularly animals of the seas.

Whether with complete and rich documents, or with pamphlets, single pages, or even poems, we can begin to draw a history of the natural and cultural history of whales in early modern Portuguese society. The first evidence of such a conceptualization and categorization of species, in an attempt to understand the natural order of the ocean and its animals, seems to emerge in Portugal as early as the 16th century. At this point, as it needs to be systematized, I will start with one of the “first” animals, the whale, the mighty Leviathan.

21 *Índice e Descrição de vários Animais e especialmente de Animaizinhos Aquáticos que se encontram na Lusitânia, mas que na nossa Terra não se costumam ver. Iniciado em Lisboa. Ano de Cristo 1555 e 1556. As viagens e caminhadas de uma pessoapensadora profunda e hábil são superiores a quase todos os AcademiárumStudijs ou dedicação à filosofia. Plutarco: Peregrinatio alit sapientiam. Quem caminha por país estrangeiro, fica a conhecer muitas coisas estranhas; alcança assim sabedoria, compreensão e muitas vezes grande fortuna.* According to Herold – Horst – Leitão, “A ‘História Natural de Portugal’” 318.

22 Herold – Horst – Leitão, “A ‘História Natural de Portugal’”. Herold B. – Horst T. – Leitão H. (eds.), “A *História Natural de Portugal* de Leonard Thurneysser zum Thurn, ca. 1555–1556” (Lisbon: Academia das Ciências de Lisboa, 2019).

23 [Dicionário português-latino de nomes de animais marinhos], Biblioteca Pública de Évora, Cód. CLXIX, 1–26, no. 42.

3 Mrs. Whale, *'Um Grande Peixe, Dona Baleia da Costa'*, in Natural History

According to Domingos Franco Quaresma, fish exceed land animals both in number and in beauty. The erudite author supports his opinion with Pliny, Aristotle, and the Bible. Among the fish, he highlights the whale, writing: 'and it seems that this one was enough for no terrestrial animal to dispute majorities'.²⁴ But he also goes about describing local events of sightings or strandings of large whales, according to those who have witnessed them in prior times. He states, on 22 April 1575, in Peniche, a 'monstrous fish' appeared on the beach that 'no one knew about'. This news was noted by Father Luís de Granada²⁵ in his work *Introduction to the Symbol of Faith*, and a drawing of the monster was sent to D. Henrique of Portugal [Fig. 13.2]. Again, on 10 January 1723, another sea monster, already dead, was shipwrecked on the Cacilhas pontoon and nicknamed 'sombreiro'.²⁶ As we will see further down in the text, such an astonishing event inspired several poets, made headlines in the press, and was disseminated across and beyond Portugal [Fig. 13.3].

In *Piscilegio lusitano*, Domingos Franco Quaresma copies a piece by an anonymous poet who wrote about the event using both an informative poetic way and a fable kind of wording. Observing it in real space and time, the poet portrayed the great interest and expectations of the people of Lisbon and Almada.²⁷ They crowded around to observe its grandeur and strangeness, as well as to witness the human effort to rescue it from the waters of the Tagus. Using fable as an approach to the world of humans, the poet used marine fauna to comment on the inequality between the strong and the weak. 'You have been eating the little ones / with great tyranny / that in the belly of the whale / no eel escapes you'.²⁸ Whether the result of direct observation or the exercise of imagination, the poet described the agony of the animal after it ran aground in Cacilhas. The rocks destroyed its body and the 'fresh water' from the 'Ocean Tagus' made it vomit. Doctors and medics were called to relieve the animal, but nothing more could be done. The author of the poem, in addition to his knowledge of marine fauna, was also comfortable with the medical issues of the time. Interestingly, the hypothetical treatments applied to the sea

24 Quaresma, *Piscilegio* 40–41.

25 Granada Luís de, *Obras de Fray Luis de Granada* (Madrid, La Publicidad, Imprenta de M. Rivadeneyra, 1848) tomo 1, p. 238.

26 Quaresma, *Piscilegio* 44.

27 Quaresma, *Piscilegio* 46.

28 Quaresma, *Piscilegio* 49.

OBRAS DE FRAY LUIS DE GRANADA.

§. único.

De otros animalillos pequeños, y nocivos al hombre.

Al fin deste capítulo (donde habemos tratado destes animalillos pequeños) preguntará alguno, por qué causa el que todas las cosas crió para servicio y bien del hombre, crió muchos destes animalillos, que no solo no sirven al hombre, mas ántes lo molestan y maltratan, como son las moscas, los mosquitos, las pulgas y otros semejantes, que ese pedazo de tiempo del año, en que descansamos de los cuidados y trabajos del día, muchas veces nos lo impiden, y nos desvelan y quitan este poco de reposo. A eso respondo, que así como todas las penalidades, y trabajos, y fatigas desta vida junto con la muerte, nos vinieron por el primer pecado (en que todos los hijos de aquel primer hombre fuimos comprehendidos): así tambien las plagas destes animalillos nos vinieron por él. y muy justamente. Porque así como el hombre

en alto, y la boca no la tenía en la cabeza, como los otros peces, sino en la barriga. Los colmillos era cada uno de ocho codos. Tenia tambien en la boca diez y seis dientes de cada banda, y cada diente tenía medio codo en redondo, y de un diente á otro había un palmo de anchura. La figura del quise poner aquí, la qual se trajo al rey Don Enrique, que es en gloria.

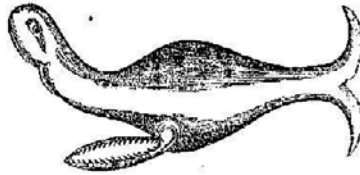


FIGURE 13.2 Granada Luís de, *Obras de Fray Luis de Granada* (Madrid, La Publicidad, Imprenta de M. Rivadeneyra: 1848), part I, 238 (detail). Biblioteca Digital Hispanica with open access license CC-BY: <http://bdh-rd.bne.es/viewer.vm?id=0000052692&page=1>

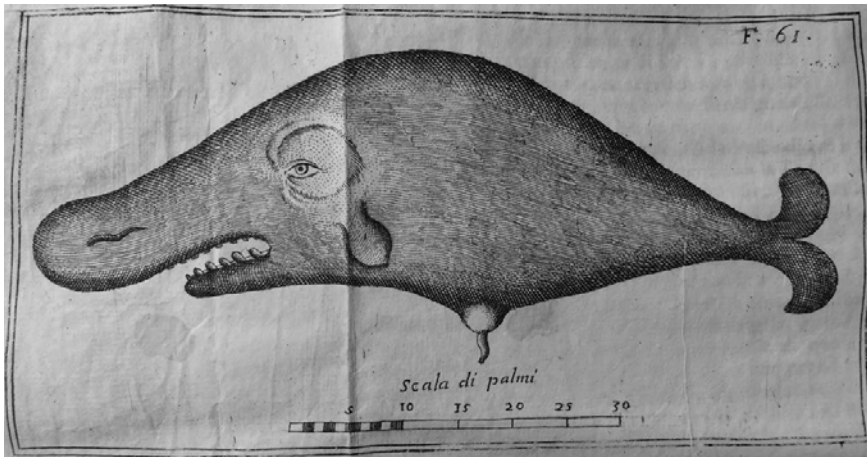


FIGURE 13.3 Montigore Antonino, *Della Sicilia ricercata nelle cose più memorabili* (Palermo, Francesco Valenza: 1742–1743), vol. 2, 61. Illustration of a sperm whale that was stranded along the coast near Mazzara, Sicily, on 20 November 1734. This illustration was used by Antonio Mongitore as the basis for *Physeter urganantus*, Rafinesque-Schmaltz C.S., *Précis des découvertes et travaux somiologiques de Mr C.S. Rafinesque-Schmaltz entre 1800 et 1814 ou Choix raisonné de ses principales découvertes en zoologie et en botanique* (Palermo: 1840)



FIGURE 13.4 Stranded whale in Quaresma Domingos Franco, *Piscilegio lusitano, Nova, Exacta, Natural, e Medicinal Noticia dos nomes e qualidades dos Peixes que se pescão nos mares e rios da Costa de Portugal damnos e proveitos que do seu bom, ou mau uso no comer podem resultar aos sãos, e enfermos*, unpublished manuscript (c.1750). Reproduced with the permission of Samuel Iglesias. This illustration of a stranded whale in Cacilhas (Lisbon) bears the caption “*Própria figura do peixe a que chamão Sombreiro e naufragou no pontal de Cassilhas*”; it is the only illustration included in the manuscript *Piscilegio Lusitano*. Reproduced with the written permission of Samuel Iglesias

monster were the same as those used on humans. Among the possible causes of the animal’s death, the author pointed out dropsy. After being removed from the Tagus, the monster was taken to Ribeira das Naus, where it was exposed for three days, arousing the curiosity of the people of Lisbon, who could not stand the stench, ‘that one could feel from afar’ [Fig. 13.4].²⁹

While Domingos Franco Quaresma was writing his *Piscilegio lusitano*, other news reached him that he included in his manuscript – in the port of Viana do Castelo an already dead sea monster appeared that was also not identified with any species. The animal was already in a state of putrefaction, which is why it was burned to avoid an epidemic.³⁰ After being pulled from the sea, the ‘monstrous fish’ were displayed in the Ribeira da Naus, a large and airy space where they could stretch out the creatures’ bodies. After a few days, when

29 Quaresma, *Piscilegio* 53–54.

30 Quaresma, *Piscilegio* 56.



FIGURE 13.5 Jonah and the whale in Adriaen Coenen's *Visboeck*, 1577–81, Ms 78 E 54, fols. 259v–260r

© THE HAGUE, KONINKLIJKE BIBLIOTHEEK. OPEN ACCESS IN PUBLIC DOMAIN REVIEW [HTTPS://PUBLICDOMAINREVIEW.ORG/COLLECTION/ADRIAEN-COENEN-S-FISH-BOOK-1580](https://publicdomainreview.org/collection/adriaen-coenen-s-fish-book-1580)

the animal was already showing signs of rotting, the corpse was burned. The news also shows aspects and characteristics of the whales' lives and behaviors, or at least attempts to offer such a view of the eco-ethology of the animals. For instance, Quaresma refers to the whale's instinct to protect its young. In case of a storm or the proximity of a possible predator, the whale swallows its young to protect them, throwing them back into the sea as soon as the danger passes. The author compares this behaviour to the that in the biblical story of Jonah [Fig. 13.5]. This news about the harrowing of sea monsters testifies to the impact that these events had on the populations, arousing the interest of various social groups, from the humblest to the most educated, and even the aristocracy. As we have seen, the drawing of one of these animals reached the eyes of King D. Henrique.

Domingos Franco Quaresma, dealing not only with the biology of the species he addresses but also the products and activities of the extraction and utilization of the animals, concluded in his work that the ambergris was not whale sperm. This would be easily verified, he wrote, because in Bahia, where

whale fishing was organized in a contract, which yielded many hunters, there were no reports of ambergris being found inside these animals.³¹ To support his claim, Quaresma resorted, beyond experience, to the opinion of the Spanish physician and botanist Nicolás Monardes (c.1493–1588). According to him, the cause of the confusion was due to the fact that ambergris is light and floats and fish eat it. However, few whales could hold amber in their stomachs for long, as the smell of amber nauseated them. The arguments presented in the previous chapters made credible the hypothesis that amber was marine bitumen. Against this opinion was the argument of Dr. Jacob de Castro Sarmiento that amber was generated in the sacs in the genital region of male whales called *sperma ceti*. Quaresma contested this position because ambergris was found on all the coasts of the world, and whales are not found in all seas.

He also mentions that Father Benedict Jerónimo Feijó helped spread the false idea that the whale had an esophagus so narrow that it could only swallow one sardine at a time. Such a difficulty resulted from the divine punishment meted out to the whale that swallowed Jonah. Father Benedict's theory was discredited by the testimony of the Florentine scholar John Fabri, who claimed that a man on horseback could fit down the throat of a whale that sank off the Italian coast in 1624. Fishermen in Portugal and Brazil also said the same thing. In addition, he claims that some authors have classified the whale as a cartilaginous animal, basing this claim on Aelian's work. However, this is a misinterpretation of the Roman author, whose intention was only to affirm that the whale was not scaly. According to Quaresma, the whale and other "monster fish" were not scaly or cartilaginous, because their spines are bony, as is notorious to anyone who knows the whale's beard and back. The taste of the meat of this animal was bad and in Brazil only slaves ate it, he writes.

There is also a very vivid description of a fight between a swordfish and a whale: 'the whale rises from the water with his tail in the air, and strikes him with it and comes upon the swordfish with his whole body and height tries to kill him; he at the same time tries to hurt it and take its life with blows, always looking for it on the sides, where he knows the skin is softer.' Quaresma is said to have witnessed these battles in the seas of Peniche, and this empirical knowledge, whether the piece just described or another about different marine mammals and fish, is an indication of his motivation to approach the

31 See the PhD monograph by Nina Vieira for a review of the Basque-style shore-based whaling developed by the Portuguese in colonial America: Vieira N., *A taxonomia da baleação portuguesa entre os séculos XV e XVIII: Uma história atlântica do mar, das baleias e das pessoas*. Faculdade de Ciências Sociais e Humanas da Universidade NOVA de Lisboa. Tese de Doutoramento (2020).



FIGURE 13.6 Stranding of sperm whales in Adriaen Coenen's *Visboeck*, 1577–1581, Ms 78 E 54, fols. 51v–52r
 © THE HAGUE, KONINKLIJKE BIBLIOTHEEK. OPEN ACCESS IN PUBLIC DOMAIN REVIEW [HTTPS://PUBLICDOMAINREVIEW.ORG/COLLECTION/ADRIAEN-COENEN-S-FISH-BOOK-1580](https://publicdomainreview.org/collection/adriaen-coenen-s-fish-book-1580)

natural history of animals while compiling a long and exhaustive list of existing marine species. He was a renowned physician, certainly a well-read scholarly author who paid attention to the source of information he shared with his readers while critiquing it according to his own interpretation, but he was also an on-the-spot observer. Possibly living, or knowing very well, the local peculiarities of a lively and developing coastal fishing village, he would have taken advantage of this fact and accumulated experience of his own. Whale catches, strandings, and coastal sightings could have been quite common in the region, as in many other coastal areas throughout Europe [Fig. 13.6] and, of course, in Portugal. In the long run of this story of Portuguese natural history (or of marine animals) he was not alone in these kinds of observations.

In the above-mentioned manuscript by Leonhard Thurneysser, a list of the species approached is available to our current analysis. His work includes, among many different fishes of the Portuguese shores, and some marine mammals, sea monsters in what may be seen as a reminiscence of the medieval bestiaries. From folio 64 until almost the end of the first part of this book, there

is a new narrative and description of the fish caught in Lisbon. There we can find the ‘*Balena*’ and the ‘*Balena altera species balenae*’ as the first two entries under “Pisces in Portugallia”.³²

The ‘Dictionary of marine animal names’ is a manuscript with four unnumbered pages, which contains an armillary sphere under a six-pointed star as a watermark that can be dated to the 16th century.³³ No information about the document itself or the author is available. Although the references to classical authors are many, an excerpt from the Dictionary mentions the French naturalist Pierre Belon (1517–1564), which allows us to say that the document was written in the second half of the 16th century. We simply have an index or a list, from ‘M’ to ‘T’, where we find: dolphin (*toninha – plinio aeste Tursiograece focena*); and manatee/the ox-fish of Brazil (*peixe boi do brazil – latine vitulus maris oceani*). With only two references to marine mammals, and whales not among them, we are left with our imagination to believe that whales (under the ‘B’ for the Portuguese *baleia*) might have been included in it.

4 Mrs. Whale, ‘*Um Grande Peixe, Dona Baleia da Costa*’, in Poetry

As to imagination, there is also plenty of room for the admiration of these large and impressive animals in the literature – mostly poetry – found in Portuguese documentary sources.³⁴ An unpublished manuscript from the Lisbon Academy of Sciences is an example of such; with no specific title, the poem is included in the hand-written book by Father Manoel de Santa Maria (1723).³⁵ Here, he describes in amusing satirical verses the royal critter, Mrs. Whale of the shores, ‘a bixa real, Dona Baleia da Costa’.³⁶ The extraordinary animal fulfilled the people’s taste for novelty.

32 Herold – Horst – Leitão, “A ‘História Natural de Portugal” fols. 124v to 127v.

33 The document is found among writings from the 16th to the 18th century, some of which came from convents in the district of Évora and was part of the estate of Joaquim Heliodoro da Cunha Rivara, director of the Évora Public Library from 1838 to 1855 (Silveira L., *Manuscritos de filologia latina da Biblioteca Pública e Arquivo Distrital de Évora* (Évora: 1941) 37–41).

34 Freitas J.G. – Brito C., “A Bixa Baleia. Ou a história de um manuscrito sobre o maravilhoso do mar”, in Clamote Carreto C.F. – Moreira Sousa L.M. (eds.), *Imaginários do mar: uma antologia crítica* (Lisbon: 2021) 203–209. Lacerda T. – Vieira N. – Brito C., *Fontes documentais para uma história natural das baleias em Portugal* (2022).

35 *Este Livro he uso do P.M. Fr. Manoel de S^{ta} Maria Leytor de vespera neste conv.^{to} de N.S.^{ra} de Jesus na era de 1723 tem noventa e oito folhas. neste anno appareceu na ribeira de L^{xa} huá balea p^a cuja vista concorreo toda a gente da cidade* (Santa Maria: 1723).

36 See Academia das Ciências de Lisboa (1986) – *Catálogo de Manuscritos, Série Vermelha*, II (no. 500–980). Lisbon: Publicações do II Centenário da Academia das Ciências de Lisboa.

The poem “Testament in verse of a whale to the *baleato*”³⁷ is undated, but the lyrics appear to be from the 18th century.³⁸ The verses seem to be inspired by real facts, possibly in the 1723 stranding in Cacilhas, similarly to the above-mentioned poem. In this one, the whale character expressed the desire to be embalmed, probably this would be the end that the author of the poem would like a real whale to have known, since its magnificence and strangeness impressed the curious and knowledge-lovers. In his will, the whale determined that his body should be accompanied by the people of Cacilhas to the Ribeira das Naus on the other bank of the Tagus. This is yet another poetic evocation of what would happen when a whale was beached. The capture of the animal and its transport created a commotion among the people, and it is easy to imagine the curious jumping onto boats and battalions to watch the pulling maneuvers up close. In Ribeira, those attending the funeral ceremonies would be treated to ‘beer, oranges, wine, and brandy’, evoking the possible festive atmosphere that the rushing would cause. The whale burial mimicked in many ways the human one and should be ‘English style’ because ‘it made more nobility’. To demonstrate the dead man’s importance, a procession was essential, as such, the whale ordered that ‘on the wharf some boys follow, / And the Dutch, who are most able’. Like royal wills, the whale’s fictional will also named the executors. Later in the poem, there is the confession ‘that all that was said, was lied about’, going on to relate what happened to a bold whale. The dead animal was butchered, and its flesh divided. The poem mentions the parts that were used: the guts, the lungs, the heart, the bacon, the neck, the throats, and the large loins.

The poem ‘To the Most Reverend Father Br. Vicente for not having fulfilled the Testament of *Balea*’³⁹ is a satire to expose the bad behavior of the executor. The choice of the ‘swimmer, brave and strong monster’ who came to die on the sands of the Tagus as a motto for satire is due to the possible ocular observation of a boldness or simply to the fame that these phenomena garnered. It also served the purpose of ridiculing the executor, since he was compared to a whale: ‘for with him [the sea monster], there you only resemble / That figure of yours, so tremendous / That another one but seen, even more hideous’. The executor was accused of not doing his job properly, wanting to

37 *Baleato* is the Portuguese name for a small whale, or a different species of whale.

38 It is part of a miscellany of various bound handwritten documents that includes sonnets, verses, and satires. *Testamento em verso de uma baleia ao baleote*, Biblioteca Geral de Coimbra, Ms. 512.

39 *Ao Reverendíssimo Padre Fr. Vicente por não haver dado cumprimento ao Testamento da Balea*. Biblioteca Geral de Coimbra, Ms. 512. This is an undated manuscript, also included in the former miscellany, and it possibly dates from the late 18th century as it refers to an observed occurrence, most certainly the Cacilhas stranding.

misappropriate the testamentary property – ‘that you want, to put everything, into the Belly.’ In the poem there was even an implicit threat ‘you’re bound to get it in the snouts.’ The choice of the whale as a monstrous animal served as an allegory for the criminal act: ‘but I believe that you, who ate it / And forgot the Testament’; still, it is a monstrous case.

It should be noted that the use of animals, especially sea animals, by thinkers and poets as a way of creating allegorical moral lessons was recurrent, and the three poems commented on are examples of this. This tradition went back to Classical times, at least from Aesop, through Aelian. The existence of poems about whales and their boldness shows how these animals were not only of interest to scholars but had an impact on the common person. Their rarity generated popular curiosity, the circulation of pamphlets, of news, and was the motto for the creativity of poets, particularly in the creation of satires. Even if directed toward a different audience – the commoners, and, through the use of illustrations, also the illiterate – all these poems seem to have been inspired by the real events, as coeval printed news also testifies.

5 Mrs. Whale, ‘*Um Grande Peixe, Dona Baleia da Costa*’, in the News

Hand leaflets, letters, written news, and newspapers articles, at least from the middle 18th century onwards, included descriptions of stranded whales mainly in central Portugal shores. These events are worth printing, disseminating, and talking about; they reveal the interest of different audiences in the natural history of these mammals and shed light onto the general curiosity that involved the presence at the shore of a large marine animal.

Just before, during, or after the massive 1531 Lisbon earthquake, whales were stranded on the shores of the Tagus River. As much as the catastrophic event, whales made the news that was produced in Portugal and conveyed elsewhere in Europe. We are familiar with the German leaflet referring to it as well as the Book of Miracles,⁴⁰ but the source of the information must have been the ‘piece’ by Gaspar Correia.⁴¹ Here, the chronicler describes on 26 January 1531 a great earthquake felt in Portugal, Castile, Flanders, Rome, and France. With

40 Brito C., “The Voice of Skogula in ‘Beasts Royal’ and a Story of the Tagus Estuary (Lisbon, Portugal) as Seen through a Whale’s-Eye View”, *Humanities* 8 (1) 47 (2019) 1–16; Brito – Vieira, “Uma construção cultural de ser baleia”.

41 Correia Gaspar, *Crónicas de D. Manuel e de D. João III* (Lisbon: 1992) 300–301. Gaspar Correia (1495–1565) belonged to the Royal Chamber. In 1512, he left for India, where he served as clerk to Afonso de Albuquerque. He held several other posts until his death in 1565. Between 1532 and 1534, he wrote the *Chronicas dos Reis de Portugal*, containing

it, 30 or so dead whales washed up on the Portuguese coast. In Sesimbra there came to die a fish, which came through the air to land, which had 33 wings and whose appearance was unknown to all. For this reason, it was brought before D. João III (king of Portugal).

Another whale stranded in the Tagus River in Lisbon 1723 became famous. The poems I showed before were inspired directly by it and the observation of all involving such an extraordinary event, or eventually based on the news posted on coeval press. According to the *Gazeta de Lisboa Occidental* the large fish, a species of *balea* or *sombrero*, was massive and never seen⁴² opening space to more detailed and illustrated news a week later in the same journal [Fig. 13.7].⁴³ This news was so significant that crossed national borders⁴⁴ and was presented at the Royal Society of London: “Lisbon, 21 January 1723. The great fish, that came into this harbor last week nobody can say to have a certain knowledge of his species”.

Another bit of news refers to another ‘Memory of a large fish that died in the Tagus’.⁴⁵ On 11 January 1724, small boats in the service of the Ribeira das Naus brought to the said Ribeira a large fish that was 85 palms long and 14 palms high, and the mouth measured 19 palms. The English called this animal *Baleato*, and the Dutch cut it up to make oil. D. João VI (king of Portugal) ordered the corpse to be shown to the nuns at the Odivelas Convent. The choice of this convent was not random, since Mother Paula of Odivelas, the king’s mistress, lived here.

According to ‘News of the fish that arrived in the Beach of Moita Village’,⁴⁶ the naturalist Domingos Vandelli, in charge of the Ajuda Botanical Garden,⁴⁷ bought a large fish that was in Ribeira das Naus. With this acquisition Vandelli intended to enrich the garden’s collection of natural history, a subject that was part of the education of princes. The animal was skinned for about 13 coins.

summaries of the lives of kings Afonso Henrique to João III, as well as the main events of the Portuguese kingdom.

42 Mascarenhas, José Freire de Monterroio (ed.), *Gazeta de Lisboa Occidental*, 14 January 1723. Mascarenhas was the editor of the newspaper (that ran from 1670 to 1760) for that period.

43 Mascarenhas José Freire de Monterroio (ed.), *Gazeta de Lisboa Occidental*, 21 January 1723.

44 Vieira C.C., “Observing the Skies of Lisbon. Isaac de Sequeira Samuda, an *estrangeirado* in the Royal Society”, *Notes and Records of the Royal Society* 68.2 (2014) 135–149.

45 “*Memória de hum grande Peyxe que morreo em o Tejo*”, Biblioteca do Museu Nacional de Arqueologia, MS/Pp DIV, cx. 12, no. 767, fol. 62v.

46 “*Notícia do peixe que apareceu na Praya da villa da Moita*”, Biblioteca do Museu Nacional de Arqueologia, [manuscrito], MS/Pp, DIV, cx. 12, no. 767.

47 The Royal Botanical Garden of Ajuda (Lisbon) was founded in 1768. The garden was to maintain and study the largest number of plant species. In addition to botany, it was to instruct princes in the natural sciences.

23
 mesmo; e todos os Senhores, e Damas da Corte vestidos de luto apertado lhe beijarão a mão. A 16. fizeram o mesmo o Parlamento, Universidade, e Tribunaes. Tinha S. Mag. ordenado que se fizessem a esta Princeza todas as honras funebres que se devia à sua pessoa; porém como ella pediu exprellamente que se lhe não abrisse o seu corpo, ordenou El Rey que se comprisse a sua vontade; e assim foy logo conduzido a 10. do Palacio de Saint Cloud para a Igreja da Abbadia Real de S. Diniz, sem nenhuma demonstração de luto; indo diante, e junto ao coche, em que hia o seu corpo, os pagens da Cavalharia grande, e pequena del Rey, as guardas do corpo do Duque de Orleans, os 100. Esguizaros de Sua Alt. Real, os pagens, e homens de pé da mesma defunta, do Duque, e Duqueza de Orleans, todos com tochas acelas nas mãos, Madamoyfele de Charolois, Princeza de sangue nomeada por El Rey para a conduzir, hia acompanhada das Duquezas de Humieres, e Tallard, da Marquiza de Challeauthier, Dama da mesma Senhora defunta, da Marquiza de Hamarin, e da Viscondessa de Tavanéz, os principaes Officiaes de Madama defunta, e os do Duque, e Duqueza de Orleans se seguiu em outros coches, como tambem o Abbe de Saint Gery de Maignas, primeiro Elmoler, ou Capellão mór de Madama, o qual acompanhado dos mais Capellães, e do P. dte de Lignieres seu Confessor, appresentou o corpo da mesma Senhora ao Prior da Abbadia de S. Diniz, que com a sua Communidade o veyo receber à porta da Igreja, onde depois das preces ordinarias foy metida na sepultura dos Principes da Casa Real.

H E S P A N H A. *Madrid 7. de Janeiro.*

El Rey assistio a 30. do mez passado pela manhã na sua Real Capella, como Graõ Mestre da Ordem de Santiago, acompanhado de hũ grande numero de Cavalleiros della, à festa da Trasladação do glorioso Apolto'o seu Protector; a cujas Vesperas assistio tambem na tarde antecedente. No mesmo dia 30. de tarde deu Sua Mag. audiencia ao Embaxador de França, que lhe entregou cartas del Rey Chrittianissimo, nas quaes lhe dava parte da morte da Senhora Duqueza de Orleans viuva; e logo no mesmo dia se expedirão ordens para que as Casas Reaes se vestissem de luto por quatro mezes.

Ao Graõ Mestre de Malta que representou as razoes, que tinha para entender que os apreltos dos Turcos se desistia a fittar a ilha, em que a Religião faz a sua residencia; perdindo loccorro a esta Coroa contra os mesmos infieis, prometteo S. Mag. mandar hum refreco de 3 U. homens com fuzidos, e pagos à sua custa.

Aqui se diz que a Corte de Vienna não quer contentir 'que a Coroa de Hespanha tenha a Praça que pede em Italia, para segurança da successão de Toscana; attendendo à execução do artigo quinto do tratado da Quadruple aliança, e allega-te que o Marquez Corfini Plenipotenciario do Graõ Duque de Toscana deu Memotias a todos os Plenipotenciarios das Potencias, que entrãrão nella, nos quaes protesta em nome de seu amo contra tudo o que se estipular no futuro tratado sobre a successão dos seus Estados sem a sua participação.

P O R T U G A L. *Lisboa 11 de Janeiro.*

NA Igreja do Real Mosteiro de S. Vicente de fóra desta Cidade se celebrou Sabbado, Domingo, e segunda feira a festa do Delagravo do Santissimo Sacramento da Freguesia de Santa Engracia com a tolemnidade costumada; El Rey nosso Senhor, que Deos guar-te, assistio nella no primeiro, e no ultimo dia; nelle pegou em huma das varas do pallio com Suas Altezas, e com alguns Grandes da Corte. A Rainha nossa Senhora assistio à mesma festa no segundo dia.

Em 12. do corrente entrou neste porto huma nao de guerra da Grãa Bretanha, chamada *Lime*, capitaneada por Mylord Vere; e no dia seguinte partio para o Eitretto (donde esta veyo outra, que aqui se achava por nome *Dorsley-Gally*, mandada pelo Capitão George Lurvis.

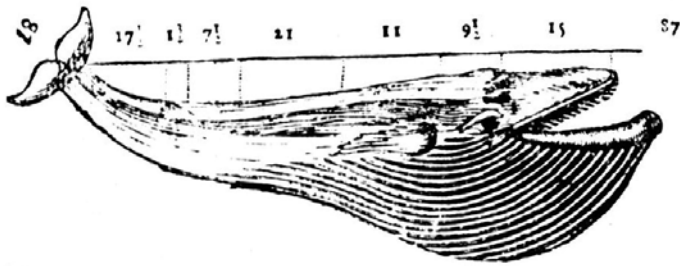
O grande Peixe, que entrou neste porto a semana passada; se não tem certo conhecimento da sua especie. Alguns entendem ter hama Butalina, a que os Francezes dão o nome de *Souffleur*, id est, Alloprador, outros que seja certa especie de Balea, a que os Hollandezes chamão *Kapeka*; mas como a sua figura he diferente da Balea, e de qualquer outro peixe conhecido, te expõem aqui em estampa aos curtos, com as medidas de todos os seus membros,

FIGURE 13.7 Stranded whale in Mascarenhas José Freire de Monterroio (ed.), *Gazeta de Lisboa Occidental* (21 January 1723) 23–24. Open access in Hemeroteca Nacional de Lisboa (<http://hemerotecadigital.cm-lisboa.pt>)

24

breve, e hum breve descripçõ da sua estrutura com mais certeza, que a semana passada.

Tinha este Peixe 87 palmos de comprimento, e na sua mayor grossura 43. de circumferencia, que por ser perfeitamente redondo, teria de alto 14. e hum terço. Na parte onde acaba a barbatana do ripunhaço tinha 14. de circumferencia. Desde alli hia diminuindo com figura chata ate grossura de 1. palmos e meyo lomenite, e na parte mais delgada começava o rabo, deitado, e não ao alto como os outros peixes com 4. palmos de comprimento, e 7. em circumferencia, acabando em duas pontas como os das Andorinhas com extensãõ de 18. palmos. A cabeça era de notavel grandeza. O rasgado da boca tinha 15. palmos, e toda a circumferencia della 60. Seis homens metidos em pé deatto na tua concavidade parecia occuparem huma pequena parte della, isto queixo de firma acabava como unha de ancora, e acabavaõ em dous e meyo junto ao canto da boca. As de dentro occupavaõ 5. palmos de cada lado, e eraõ brancas em numero de 294. As que occupavaõ os dez palmos ate à junta dos queixos, eraõ 350. e tiravaõ a cor de chumbo, como a do mesmo Peixe. A parte superior da concavidade da boca tinha hũa especie de jedas como de Javali, quasi brancas, com hum terço de palmo de comprimento, e no meyo huma fórma de quilha, que continhuava da ponta da boca até a guzla, branca, e liza, com meyo palmo de largo, e outro tanto de grosso, mas adelgacou tanto meyo acabava com dous palmos de largura. A parte de baixo era liza, e da cor do mesmo Peixe. No alto da cabeça tinha duas ventras, ou buracos por onde respirava de dous palmos e meyo de comprimento. Cada hum dos olhos tinha hum palmo de diametro, e contava-se 13. entre hum, e outro. Sobre o lombo tinha huma barbatana de palmo e meyo de alto, com dous e tres quartos de comprimento, e desta até o rabo havia 17. e meyo de distancia. Tinha nas ilhargas duas azas de 11. palmos de extensãõ cada huma, a quizes distavaõ 9. e meyo do canto da boca. Delde os queixos pela parte da barriga tinha 33. listras brancas, e entre ellas outras tantas meyas canas cor de chumbo, com que faziaõ 66. as quizes acabavaõ todas em fórma pyramidal no embigo, que se distinguia com huma concavidade de meyo palmo, e havia sete e meyo até a via da propagaçãõ, a qual mostrava fer tema, e tinha dous palmos e meyo de comprimento, e de cada parte huma maneira, a tres de palmo com seu bico no meyo. A via do excremento tinha hum palmo. A guela hum quarto de palmo de diametro, e desta para a boca lhe cahiaõ sobre o queixo de baixo humas pelles como redenhos de perto de dous palmos e meyo brancas, encarnadas, e vermelhas, ou tirantes a roxo. A pelle era delgada, e tão mimosa, que com pouca força, que se lhe applicava, a destaziaõ.



Dizem que havendo entrado no rio discorrera por elle até o sitio da Madre de Deus, de onde voltára para a vilinhauça de Castilhas, e que se hũa atinto a terra, que encaidando se entre huns grandes penedos, não pudera salir dellas, e vafundo a mare, se achara em seco, e toraõ tão grandes os urros, que dava de se ver fóra da agua, que atemorizou os moradores de d'el-reyno.

Na Officina de PASCOAL DA SYLVA, Impressor de Sua Magestade,
Com todas as licenças necessarias.

After the skin was cleaned of the fat, it was embalmed, and the skeleton was cleaned of all flesh. The animal was set up to be observed by D. José I (king of Portugal). The first skin could not be used, but the second was useful because it had a good hide. The animal's meat yielded four barrels of oil. The fish was 31 palms long and had 2 sets of teeth, the bottom ones smaller and the top ones larger, like those of horses. The animal was gray, with white spots, 'and had by its head two large wings the size of two cartwheels'.

King, nobles, scholars, the people – all wanted to see the whale. Definitively, Lisbon was amazed by the whale.

6 Building Knowledge about Whales in Early Modern Portugal

Across time and regions, whales have been hunted, used, venerated and worshipped, kept, hated, and remembered. Whales have been appropriated by societies and social groups in many ways, as they were food for the body but also food for the mind. Both in more recent science and in the realms of natural philosophy and secular natural history, these animals have been described as abundant, large, monstrous, valuable, impressive, unknown, amazing, beautiful. The presence of whales in a particular place or seascape – even if particularly muted in historical sources or in the archaeological and material records, as well as in the science of the last 200 years – can trace, shape, or alter human actions and choices.⁴⁸

The whale – real or conceptualized – has continually been an element of human fascination: an animal that still attracts crowds of people when it strands itself on nearby shores or when it is spotted on the horizon. The whale allows for a close connection of people with the strange, enormous, ambivalent, still largely unknown, ocean.⁴⁹ Whales have a power of attraction over humans, and such a fascination is apprehended in scientific and cultural productions that encompass whales and their presence. Surprise and awe have been feelings commonly associated with a sighting of whales in the open ocean, a whaling event, or even strandings and whaling practices. In the words of Father Manoel de Santa Maria and Doctor Domingos Franco Quaresma, as well as many other authors, we can find clear signs of the importance of the two strandings to Portuguese society. The stories of both whales echoed in the

48 Colby J., "Change in Black and White"; Colby J., *Orca: How We Came to Know and Love the Ocean's Greatest Predator* (New York: 2018).

49 Brito C. – Vieira N. – Freitas J.G., "The Wonder Whale: A Commodity, a Monster, a Show and an Icon", *Anthropozoologica* 54.3 (2019) 13–27.

national scientific production as in many different cultural milieus, reaching different levels of Portuguese (and European) society. The whales were brought before the eyes of the Portuguese kings, humanists, and naturalists seeking information, as people were curious about them. Those big and strange “fish” moved individuals, ideas, and mental views about nature and animals.

Up to the 18th century, cetaceans were categorized as fishes, as every ‘animal that is born and lives in the water, covered with skin, or scales, with gill, fins’.⁵⁰ In fact, it was only in the 10th edition of *Systema Naturae* of Carolus Linnaeus (1758–1759) that whales were taxonomically classified as mammals (Class Mammalia; Order Cetacea).⁵¹ But, for instance, following the *Gazeta de Lisboa Occidental* news, the whale is characterized as a different fish, one that breathes air and shows detailed features that differentiate it from other marine animals. In *Piscilegio lusitano* cetaceans are present as elements of the Portuguese marine fauna and in the case of the whales they also seem to be treated in a singular way, with the only depiction of the work being precisely that of a whale, which the author describes as a monstrous fish. Of extraordinary greatness, giving birth to live young and breathing air, the whale was never truly just a fish, but frequently consecrated as the crowning creature of that group.⁵² Whales, dolphins, and other marine mammals seem to be an important part of all the elements of natural history produced in Portugal.

But a consistent narrative about the Portuguese natural history that goes back to the beginning of the early modern age, and possibly medieval times, and that informs us about the production and dissemination of knowledge about natural life and biodiversity at that time, remains to be produced. Much of Portuguese science in the early modern period – mostly in the domains of nautical science and technology, medicine, and natural history – depended on the construction of the colonial empire⁵³ but is not limited to it. During the 15th and 16th centuries local practitioners might have been those more informed about coastal waters and the animals living in it, as were the mariners, explorers,

50 Bluteau Raphael, *Vocabulario portuguez e latino, aulico, anatomico, architectonico, bellico, botanico, brasílico, comico, critico, chimico, dogmatico, dialectico, dendrologico, ecclesiastico, etymologico, economico, florifero, forense, fructifero* [...] autorizado com exemplos dos melhores escritores portuguezes, e latinos [...] (Coimbra, [no Collegio das Artes da Companhia de Jesu]: 1712–1728) 373.

51 Laist D.W., *North Atlantic Right Whales: from Hunted Leviathan to Conservation Icon* (Baltimore: 2017).

52 Burnett D.G., *Trying Leviathan: The Nineteenth-Century New York Court Case that Put the Whale on Trial and Challenged the Order of Nature* (Princeton – Oxford: 2007).

53 Sánchez A. – Costa, P.F. da – Leitão H., “Introdução ao Volume”, in Sánchez A., Costa P.F. da – Leitão H. (eds.), *Ciência, tecnologia e Medicina na Construção de Portugal: Novos Horizontes, Sécs. XV–XVII* (Lisbon: 2021) 17–39.

missionaries, and settlers in the open ocean and the overseas. In fact, most Portuguese natural history is considered that produced in the wake of maritime voyages of expansion to the South Atlantic and Indian Ocean.⁵⁴ Renaissance humanists compiled observations about the natural world in order to explain it, but the ocean resisted the kind of systematic inquiry that had been applied to terrestrial environments, animals, and plants.⁵⁵ The Wet Globalization⁵⁶ that produced and circulated local, transoceanic, and imperial knowledge about the oceans and their animals was built on the backs of these nonhuman actors. The confrontation with unexpected winds, currents, and climates, with never-before-seen animals, plants, and humans, with the biogeography and eco-cultural diversity of the subtropical and tropical regions, demanded from Europeans attention to detail and an attempt at understanding. This exacerbated a systematic form of observation and compilation, categorization and naming, which also reflected what was being done on the Iberian Peninsula. And even if they are not as abundant as early modern records of strandings for the North Sea,⁵⁷ there are several records to attest to an effort to understand and document the natural history of whales in Portugal [Fig. 13.8].

Whales arouse curiosity, and if early modern scholars wanted to know what they were, they were equally interested in knowing all the other animals that inhabited the marine environment. If we look at this acquired and accumulated knowledge as significant, even if pre-disciplinary, it will be possible for us to establish a narrative about the value attributed to the animals, their habitats, add information about their uses and associated practices, and provide information about the relationship established between local (or Iberian) societies and the fauna that surrounded them. Here, I take a first step, trying to look at an older chronology of “scientific” events and productions, before the implementation, interpretation, or impact of Linnaeus’ *Sistema naturae* in Portugal.⁵⁸ The works presented here represent an important corpus of information to

54 Leitão H. – Sánchez A., “Too Much to Tell: Narrative Styles of the First Descriptions of the Natural World of the Indies”, *History of Science* 55.2 (2017) 167–186.

55 Pastore C.L., “Knowledges”, in Cohen M. (ed.), *A Cultural History of the Sea*. Vol. 3. *A Cultural History of the Sea in the Early Modern Age* (London – New York: 2021) 25–51.

56 Mentz S., *Ocean* (Bloomsbury: 2019); Mentz S., “Introduction”, in Cohen, *A Cultural History of the Sea in the Early Modern Age* 1–23.

57 Hoare P., *Albert and the Whale: Albrecht Dürer and How Art Imagines Our World* (New York: 2021).

58 The Linnaean programme for the classification of nature entered the Portuguese teaching system as a result of the reform of the University of Coimbra launched in 1772 by the marquis of Pombal (Costa P.F. da, “The Introduction of the Linnaean Classification of Nature in Portugal”, in Gunnarsson B. (ed.), *Languages of Science in the Eighteenth Century* (Berlin: 2011) 227–244).



FIGURE 13.8 Whale strandings in Fernando Álvares Seco's map of Portugal (1561). Open access at the Digital National Library of Portugal (permalink: <http://id.bnportugal.gov.pt/bib/rnod/28506>)

be analysed, and their authors should be included in the national panorama of oceanic natural history. The primary task of the natural historian (even if they are not aware that they are) is to name and produce order.⁵⁹ We find such concerns in the works of scholars who have produced an organized way of understanding the marine world, marine animals, and people's interactions with them. Whales, if not central, were of great relevance in their efforts. This review reflects exactly on the fact that there was an ongoing and perennial relationship of people with the whale-animal and the whale-symbol, and it was crystallized in multiple formats, including non-formal scientific ones, such as the poems or news reports of early modern Portugal.

Acknowledgements

The writing of this chapter greatly benefited from the multidisciplinary team working in Lisbon, at CHAM – Centre for the Humanities – NOVA FCSH (FCT Strategic project, UIDP/04666/2020), as members of the European research Council (ERC) Synergy Grant 4-OCEANS: Human History of Marine Life, under the European Union's Horizon 2020 research and innovation programme (grant agreement no. 951649).

I would like to acknowledge the incredibly hard work of Teresa Lacerda, who identified and transcribed several of the sources discussed here, while enthusiastically learning about the biology and environmental history of whales. I also sincerely thank Samuel Iglesias for allowing our team to access and work in *Piscilegio lusitano*, Pedro Pinto for his continuous source digging and sharing, and Nina Vieira, Catarina Garcia, and Ana Cristina Roque for their constant insights, comments, and support about the past of marine ecosystems and animals.

Bibliography

Amorim I., "A decadência das pescarias portuguesas e o constrangimento fiscal – entre a Ilustração e o Liberalismo", in Ribeiro da Silva F. – Cruz M.A. – Martins Ribeiro J. – Osswald H. (eds.), *Estudos em Homenagem a Luís António de Oliveira Ramos* (Porto: 2004) 153–164.

59 Knight D., *The Age of Science* (New York: 1986).

- Amorim I. – Pinto B., “Portugal in the European Network of Marine Science Heritage and Outreach (19th–20th Centuries)”, *Humanities* 8.1 (2019), <https://doi.org/10.3390/h8010014>.
- Anonymous, *Catalogo dos preciosos manuscritos da bibliotheca da casa dos marquezes de Castello Melhor. Documentos officiales, grande numero de autographos obras originaes e ineditas* (Lisbon: 1878).
- Baldaque da Silva A.A., *Estado actual das pescas em Portugal comprehendendo a pesca maritima, fluvial e lacustre em toda o continente do reino, referido ao anno de 1886* (Lisbon: 1891).
- Bluteau Raphael, *Vocabulario portuguez e latino, aulico, anatomico, architectonico, bellico, botanico, brasilico, comico, critico, chimico, dogmatico, dialectico, dendrologico, ecclesiastico, etymologico, economico, florifero, forense, fructifero [...] autorizado com exemplos dos melhores escritores portuguezes, e latinos [...]* (Coimbra, [no Collegio das Artes da Companhia de Jesu]: 1712–1728).
- Brigola J., *Domingos Vandelli e a circulação de conhecimentos na rede de naturalistas europeus* (Évora: 2016).
- Brito C., “Beauties and Beasts: Whales in Portugal, from Early-Modern Monsters to Today’s Flagship Species”, *Arcadia* 21 (Autumn 2018) doi.org/10.5282/rcc/8449.
- Brito C., “The Voice of Skogula in ‘Beasts Royal’ and a Story of the Tagus Estuary (Lisbon, Portugal) as Seen through a Whale’s-Eye View”, *Humanities* 8.1, 47 (2019) 1–16.
- Brito C. – Vieira N., “Uma construção cultural de ser baleia: A história ambiental de dois arrojamentos na Lisboa ribeirinha e das pessoas que os observaram e descreveram”. *SCAENA – Revista do Museu de Lisboa – Teatro Romano. O rio como horizonte: o outro palco do teatro romano*, no. 3. EGEAC, EM / Museu de Lisboa – Teatro Romano (Lisbon: 2022).
- Brito C. – Vieira N. – Freitas J.G., “The Wonder Whale: A Commodity, a Monster, a Show and an Icon”, *Anthropozoologica* 54.3 (2019) 13–27.
- Burnett D.G., *Trying Leviathan: The Nineteenth-Century New York Court Case That Put the Whale on Trial and Challenged the Order of Nature* (Princeton – Oxford: 2007).
- Ceriacio L., *O ‘Arquivo Histórico Museu Bocage’ e a história natural em Portugal. Professor Carlos Almaça (1934–2010) – Estado da Arte em Áreas Científicas do Seu Interesse* (Lisbon: 2014).
- Colby J., “Change in Black and White: Killer Whale Bodies and the New Pacific Northwest”, in Nance S. (ed.), *The Historical Animal* (New York: 2015) 19–37.
- Colby J., *Orca: How We Came to Know and Love the Ocean’s Greatest Predator* (New York: 2018).
- Correia Gaspar, *Crônicas de D. Manuel e de D. João III* (Lisbon: 1992).
- Costa P.F. da, “The Introduction of the Linnaean Classification of Nature in Portugal”, in Gunnarsson B. (ed.), *Languages of Science in the Eighteenth Century* (Berlin: 2011) 227–244.

- Cuvier Georges (ed.), *Historical Portrait of the Progress of Ichthyology, from Its Origins to Our Own Time*, ed. and transl. T.W. Pietsch (Baltimore: 1995).
- Egmond F., *Eye for Detail: Images of Plants and Animals in Art and Science 1500–1630* (London: 2017).
- Freitas J.G. – Brito C., “A Bixa Baleia. Ou a história de um manuscrito sobre o maravilhoso do mar”, in Clamote Carreto C.F. – Moreira Sousa L.M. (eds.), *Imaginários do mar: uma antologia crítica* (Lisbon: 2021) 203–209.
- Gamito-Marques D., “A Space of One’s Own: Barbosa du Bocage, the Foundation of the National Museum of Lisbon, and the Construction of a Career in Zoology (1851–1907)”, *Journal of the History of Biology* 5 (2017) 223–257.
- García Gil J.J. – Molinero Hernando P. (eds.), *Bestiario de D. Juan de Austria. S. XVI. Estudios y transcripción de la edición facsimilar* (Burgos: 2000).
- Giggs R., *Fathoms. The World inside the Whale* (New York: 2020).
- Granada Luís de, *Obras de Fray Luis de Granada* (Madrid, La Publicidad, Imprenta de M. Rivadeneyra: 1848).
- Gudger E., “The Five Great Naturalists of the Sixteenth Century: Belon, Rondelet, Salviani, Gesner and Aldrovandi: A Chapter in the History of Ichthyology”, *Isis* 22.1 (1934) 21–40.
- Herold B. – Horst T. – Leitão H., “A ‘História Natural de Portugal’ de Leonhard Thurneysser zum Thurn, ca. 1555–1556”, *Ágora. Estudos Clássicos em Debate* 19 (2017) 305–334.
- Herold B. – Horst T. – Leitão H. (eds.), *A História Natural de Portugal de Leonard Thurneysser zum Thurn, ca. 1555–1556* (Lisbon: Academia das Ciências de Lisboa, 2019).
- Hoare P., *Albert and the Whale: Albrecht Dürer and How Art Imagines Our World* (New York: 2021).
- Iglésias S.P. – Mollen F.H., “Cold Case: The Early Disappearance of the Bramble Shark (*Echinorhinus brucus*) in European and Adjacent Waters”, *Oceans Past News* 10 (2018) 1–2.
- Knight D., *The Age of Science* (New York: 1986).
- Kraemer F. – Zedelmaier H., “Instruments of Invention in Renaissance Europe: The Cases of Conrad Gesner and Ulisse Aldrovandi”, *Intellectual History Review* 24.3 (2014) 321–341.
- Lacerda T. – Vieira N. – Brito C., *Fontes documentais para uma história natural das baleias em Portugal*. Zenodo. <https://doi.org/10.5281/zenodo.6417799>. Online document (2022).
- Laist D.W., *North Atlantic Right Whales: From Hunted Leviathan to Conservation Icon* (Baltimore: 2017).
- Leitão H. – Sánchez A., “Too Much to Tell: Narrative Styles of the First Descriptions of the Natural World of the Indies”, *History of Science* 55.2 (2017) 167–186.

- Machado Barbosa Diogo, *Bibliotheca Lusitana, historica, critica, e chronológica, na qual se comprehende a noticia dos authores portuguezes, e das obras, que compozerao desde o tempo de promulgaçao da ley da graça até o tempo presente*. Vol. 4 (Lisbon, [Lisboa Occidental: Na officina de Antonio Isidoro da Fonseca]: 1759).
- Mentz S., "Introduction", in Cohen M. (ed.), *A Cultural History of the Sea*. Vol. 3. *A Cultural History of the Sea in the Early Modern Age* (London – New York: 2021) 1–23.
- Mentz S., *Ocean* (Bloomsbury: 2019).
- Montigore Antonino, *Della Sicilia ricercata nelle cose più memorabili*. 2 vol. (Palermo, Francesco Valenza: 1742–1743).
- Pastore C.L., "Knowledges", in Cohen M. (ed.), *A Cultural History of the Sea*. Vol. 3. *A Cultural History of the Sea in the Early Modern Age* (London – New York: 2021) 25–51.
- Pereira A., "The Opportunity of a Disaster: The Economic Impact of the 1755 Lisbon Earthquake", *The Journal of Economic History* 69.2 (2009) 466–499.
- Pinto B. – Amorim I., "A Biodiversidade Marinha nos Museus de Portugal continental: Uma introdução", *Museologia & Interdisciplinaridade* 7.14 (2019): 107–127.
- Rafinesque-Schmaltz C.S., *Précis des découvertes et travaux somiologiques de Mr C.S. Rafinesque-Schmaltz entre 1800 et 1814 ou Choix raisonné de ses principales découvertes en zoologie et en botanique* (Palermo: 1840).
- Ritcher V., "Where things meet in the world between sea and land: Human-Whale Encounters in Littoral Space", in Kluwick U. – Ritcher V. (eds.), *The Beach in Anglophone Literatures and Cultures: Reading the Littoral Space* (Farnham: 2015) 155–173.
- Roque A.C., "Towards a Scientific Approach of Natures: Looking at the Southern Africa Biodiversity throughout the 16th-Century Portuguese Records on Marine Fauna", in Polónia A. – Bracht F. – Conceição G.C. – Palma M. (eds). *Cross-cultural Exchange and the Circulation of Knowledge in the First Global Age* (Porto: 2018) 75–100.
- Sánchez A. – Costa P.F. da – Leitão H., "Introdução ao Volume", in Sánchez A. – Costa P.F. da – Leitão H. (eds.), *Ciência, tecnologia e Medicina na Construção de Portugal: Novos Horizontes, Sécs. XV–XVII* (Lisbon: 2021) 17–39.
- Santa Maria Fr. Manoel, *Este Livro he uso do P.M. Fr. Manoel de S^{ta} Maria Leytor de vespera [...]*, Cota Vermelho 569 [manuscrito]. Biblioteca da Academia das Ciências de Lisboa (1723).
- Silveira L., *Manuscritos de filologia latina da Biblioteca Pública e Arquivo Distrital de Évora* (Évora: 1941).
- Vieira C.C., "Observing the Skies of Lisbon. Isaac de Sequeira Samuda, an *estrangeirado* in the Royal Society", *Notes and Records of the Royal Society* 68.2 (2014) 135–149.
- Vieira N., *A taxonomia da baleação portuguesa entre os séculos XV e XVIII: Uma história atlântica do mar, das baleias e das pessoas*. Faculdade de Ciências Sociais e Humanas da Universidade NOVA de Lisboa. Tese de Doutoramento (2020).