A Story of Whales and People: the Portuguese Whaling Monopoly in Brazil (17th and 18th Centuries)

Nina Vieira ¹

ABSTRACT

In this work, the history of the whaling operation in Brazil during the 17th and 18th centuries is recovered. The activity was a monopoly of the Iberian (until 1640) and Portuguese crown, from 1614 to 1801, with economic, political, and ecological significance and impact both for the human and non-human protagonists.

The abundance of whales and the valorisation of their products worked as drivers - environmental and economic - for the implementation and development of whaling in Bahia, Rio de Janeiro, São Paulo and Santa Catarina. In its duration, this coastal operation followed the 'Basque-style' style with the establishment of fixed whaling stations on land and capturing animals very close to shore. For a short period, sperm whales were captured offshore, using techniques characteristic of the 'American-Style Shore'. The capture focused on coastal baleen whales, from which oil was produced and baleen plates extracted. Contrary to what was previously assumed, these two products were sent to Lisbon in very significant quantities and periodicity, which allows us a better understanding of their importance in the context of the Portuguese colonisation of the Americas and in a framework of 'wet globalisation'.

This marine extraction not only accompanied the processes of appropriation of the territory but was also a stimulus to promote them. It is argued here that whales played a role in providing a source of wealth for the Portuguese empire and in being an integral element in building relationships between people and the ocean.

Keywords: environmental history; blue humanities; marine extractions; South Atlantic; global south.

¹ Doutorada em História. Especialidade História dos Descobrimentos e da Expansão Portuguesa (Faculdade de Ciências Sociais e Humanas, Universidade NOVA de Lisboa). Investigadora da ERC Synergy Grant 4-OCEANS. ORCID: 0000-0002-6280-9951. E-mail: ninavieira@fcsh.unl.pt

The history of the people who hunted whales is also the history of the whales that were hunted. Whaling history is in fact a timeless story of entanglements between the hunter and the prey, both influencing each other lives. To humans, whales have always played several roles and meanings, within a variety of values and symbolisms attributed to the animal. And whaling - as the active hunting of cetaceans - has been one of the most impacting ways of this relationship². In the connection between humans and other animals, killing is the most extreme way of dominance and control, encapsulated in a set of cultural practices, attitudes, ideas, perceptions, and assumptions³. Whaling was (and still is), together with the fishery of some pelagic species, the most extensive way of exploitation of a wild living resource⁴. In fact, marine animals have been consumed, traded, and energetically transformed for food, clothing, energy, health, and adornment in very different ways. As animals per se and as resources, marine species and populations have been socially metabolised by different societies to become marine wealth and have played a significant role in human trajectories and culture⁵.

All these intricate features made of whaling history a paradigmatic case to understand the role of whales in the construction of narratives about the ocean, and the role of humans in modifying natural ecosystems, in a long-lasting relationship. Inhabiting maritime chronicles, observed, and described at sea and from land, whales are present in written, iconographic, and cartographic sources, in archaeological remains, in literature, in art^6 . Recognizing the role played by marine animals contributes to our understanding of events and to rethink traditional narratives of the ocean as a place of projection of imperial and commercial power as also a space of biological-economic flows⁷. Animals were at the core of the ecologic clash that

² Jakobina K. Arch, Bringing Whales Ashore: Oceans and the Environment in Early Modern Japan (Seattle: University of Washington Press, 2018); Ryan Tucker Jones and Angela Wanhalla, eds, New Histories of Pacific Whaling (RCC Perspectives. Transformations in Environment and Society,

³ The Animal Studies Group, ed., Killing Animals (Urbana/Chicago: University of Illinois Press, 2006), 4.

⁴ Randall R. Reeves and Tim D. Smith, "A taxonomy of world whaling: Operations and eras," in James A. Estees, Douglas P. Demaster, Daniel F. Doak, Terrie M. Williams and Robert L. Brownell, Jr., eds, Whales, whaling, and ocean ecosystems (London: University of California Press, 2006).

⁵ Poul Holm, James Barrett, Cristina Brito, and Francis Ludlow, "New challenges for the Human Oceans Past agenda," [version 1; peer review: awaiting peer review] Open Research Europe 2 (September 2022), 16.

⁶ Richard Ellis, Men and Whales (New York: Lyon Press, 1991); Cristina Brito, Nina Vieira, and Joana Gaspar Freitas, "The Wonder Whale: A commodity, a monster, a show and an icon," Anthropozoologica 54, no. 3 (2019), 13-27.

⁷ Ryan Tucker Jones, "Running into whales: The history of the North Pacific from below the waves," American Historical Review 118, no. 2 (April 2013), 350; Antonio Santos Ortega, "Extractivismo marino-colonial. Apropiación asimétrica de recursos marinos en el golfo de California (México) siglos XVI-XXI," Relaciones Internacionales no. 46 (February-May 2021), 115.

happened since the 16th century Americas and were among the environmental factors that complicated processes of conquest and ecological imperialism, based on the colonisation of nature. Processes that have been determined by the movement and contact of people, flora, fauna, and microorganisms, and by the ways in which institutions, cultural beliefs and knowledge patterns have regulated the use of resources and ecosystems⁸. Within the framework of the First Globalization, I will argue that whales – as an animal and a resource – are among the marine and maritime "forces and encounters that were largely beyond the control of individual humans" and that participated in the 'wet globalization' coined by Steve Mentz⁹.

Within an oceanic environmental history, the aim of this paper is to rescue the whaling operation that occurred in the 17th and 18th centuries in colonial Brazil, as a case study of appropriation and commodification where whales were agents and whaling was a stimulus for the Portuguese dominance of the territory, I will argue. This whaling operation has been a relevant research topic for a few South American scholars¹⁰, but until now it has not been included in Portuguese historiography and only rarely in global historiography, continuing to be considered a minor activity and the products of whaling still being consigned to the various miscellany boxes of history.

THE ABUNDANCE OF WHALES AND THE BEGINNING OF WHALING

While travelling the ocean or encountering the South Atlantic coastal waters, Portuguese and Spaniards already knew the whale, its uses and value. If one closely read some of the most studied and referred documental sources of the History of Portugal and of Brazil, whales as other marine animals will certainly be spotted. Some of these works were written by Jesuit priests, who not only were among the first

⁸ Bartolomé Yun-Casalilla, *Iberian World Empires and the Globalization of Europe 1415-1668* (Singapore: Palgrave Macmillan, 2019), 64-65. Robert B. Marks, "Exhausting the Earth": environmental and history in the early modern world," in The Cambridge World History, Volume VI, The Construction of a Global World, 1400-1800 CE, Part 1: Foundations, ed. Jerry H. Bentley, Sanjay Subrahmanyam, and Merry E. Wiesner-Hanks, (Cambridge: Cambridge University Press, 2015), 29-53.

⁹ Steve Mentz, Ocean (New York: Bloomsbury Academic, 2020), 34.

¹⁰ Besides the classic work of Myriam Ellis, A baleia no Brasil colonial: feitorias, baleeiros, técnicas, monopólio, comércio, iluminação (São Paulo: Edições Melhoramentos, 1969) that would be cited along this paper, at least three major publications have resulted from the network of whaling culture in the south seas, joining scholars from different countries of South America: Daniel Quiroz and Patrícia Toledo, eds, Balleneros del Sur. Antropología e historia de la industria ballenera en las costas sudamericanas (Colección Mocha Dick: Santiago de Chile, 2014); Wellington Castelucci Junior and Quiroz, orgs, Baleeiros do Sul II. Antropologia e história da indústria baleeira nas costas sul-americanas (Salvador: EDUNEB, 2018); Fabiana Comerlato and Daniel Quiroz, eds, Baleias e Baleeiros. Patrimônio Cultural e Conservação Ambiental (Pelotas: BasiBooks, 2019).

chroniclers of Brazilian nature as also their discourses influenced the occidental view towards nature, the ways of exploring and knowing the colonial word and thus much contributing to the narratives of imperial science¹¹. Some of these men lived in the Jesuit College in Salvador da Bahia, founded in 1549. From the windows of the building, with a privileged sight over the water of the bay, Joseph de Anchieta, Fernão Cardim, and many other priests observed and described the occurrence of whales in numbers we can hardly figure today. Anchieta wrote that whales were "so many and so big (...)" and that "we saw them jumping and along the coast there are many"¹². Cardim stated that "there are so many [whales] that sometimes one can see forty, and fifty together"¹³. In their descriptions, those men pointed the whales' presence between "May to September, when they give birth and raise their sons"¹⁴ or in the "four months of the year, that are those of Summer (...) when from our windows we had a continuous and joyful sight of many whales"¹⁵.

What was being noticed was the seasonal presence of migratory baleen whales (Superfamily Mysticeti) that travel annually between feeding areas, in polar and circum-polar waters, and breading areas in tropical and subtropical latitudes. In addition, a perception of abundance was being built up. In several documents one can find adjectives and attributes such as 'many', 'so many', 'large', 'so large'... At European eyes, whales were present in such unprecedented material abundance opening a wide range of new possibilities in the newly discovered Second Earth, as Donald Worster put it¹⁶. As many whales existed, many whales stranded. These events were also reported and provide rich information concerning the use of beached dead whales, as Fernão Cardim wrote "a lot wash ashore and from them a lot of oil is produced"¹⁷. Observations and contact with whales were not exclusively to Bahia, of course, and descriptions of Rio de Janeiro, for instances, also include those events. In his

¹¹ Palmira Fontes da Costa and Henrique Leitão, "Portuguese Imperial Science, 1450-1800: A Historiographical Review," in *Science in the Spanish and Portuguese Empires 1500-1800*, ed. Daniela Bleichmar, Paula De Vos, Kristin Huffine and Kevin Sheeha (Stanford: Stanford University Press, 2009). 43.

¹² José de Anchieta, "Informação da Província do Brasil para nosso padre," in *Cartas, Informações, Fragmentos Historicos e Sermões do Padre Joseph de Anchieta, S.J. (1554-1594)*, (Rio de Janeiro: Civilização Brasileira, 1933 (1558)), 429.

¹³ Fernão Cardim, Tratados da terra e gente do Brasil (Belo Horizonte: Ed. Itatiaia, Ed. da Universidade de São Paulo, 1980 (1540?-1625)), 47.

¹⁴ Cardim, Tratados, 47.

¹⁵ Padre Gaspar Afonso, "Relação da Viagem e Sucesso que teve a Nao S. Francisco Em que hia o Capitão Vasco da Fonseca, Na Armada que foy para a India no Anno de 1596," in *Historia Tragico-Maritima...*, ed. Bernardo Gomes de Brito, vol. 2 (Lisboa Occidental: Na Officina da Congregação do Oratorio, 1736), 328.

¹⁶ Donald Worster, Shrinking the Earth. The Rise & Decline of Natural Abundance (New York: Oxford University Press, 2019), 13.

¹⁷ Cardim, Tratados, 47.

description of Rio Guanabara Bay, the French missionary Jean de Léry (1578) reported the stranding of a live whale. The author described whales both as 'horrible' and 'amazing' and reported that both native people and Europeans removed meat from the animal, some for food and some "that we melted to use the oil produced to light us at night" 18.

Back to Bahia, one of the most emblematic chronicles about whales is the Notícia do Brasil or Tratado Descritivo do Brasil (1587) of Gabriel Soares de Sousa. This author and owner of sugar mills, dedicates the chapter CXXV of his extensive and comprehensive work to whales, describing in detail their seasonal occurrence and behaviour, their presence in the waters of the bay to give birth, the indigenous name pirapuã, also providing information about the anatomic features of two stranded animals (actually they were three because the female was pregnant). Very important in his report is the utilization of the animals to the production of such quantity of oil that supplied the land for two years¹⁹.

In addition, in the chapter CXC, Soares de Sousa wrote one of the best-known and symbolic sentences for the whaling history in Brazil: "if Biscayans or other man who know how to hunt whales went to Bahia, in any other part entered so many as in there, where they live for six months of the year and more, from which so many grease would be made that there would not be boats to bring it to Spain"²⁰. A similar annotation would be made years later by the English navy officer Sir William Monson in his Naval Tracts (1585-1601) who stated that "upon the Coast of Brazil, there are such abundance [of whales], that if the Portugueses [sic], who dwell there, would employ themselves in killing them, it would prove a commodious thing"²¹.

From both authors again the notion of American abundance - reflected in the number of whales observed (material resource) and in the amount of oil that could be produced (commercial product) - opening a horizon of expectancy and relating the

_

¹⁸ Following Léry's description, the animal tongue was sent to France as a delicacy. Jean de Léry, *Historia de uma viagem feita á terra do Brasil* (Rio de Janeiro: Livraria J. Leite, 1889 (1578)), 178-179.

¹⁹ Gabriel Soares de Sousa, Tratado Descriptivo do Brasil (Rio de Janeiro: Typographia de João Ignacio da Silva, 1879 (1587)), 254-255.

²⁰ Sousa, Tratados, 324.

²¹ William Monson, "Sir William Monson's Naval Tracts...The Sixth Book. Which Treats of a Fishery to be set up on the Coast of England, Scotland, and Ireland, with Benefit that will Accrue by it to all His Majesty's Three Kingdoms: With many other Things concerning Fish, Fishing, and Matters of that Nature", in *A collection of Voyages and Travels, Some now first Printed from Original Manuscripts..., vol.* III (London: H.C. for Awnsham and John Churchill, 1704 (1585-1602)), 535.

appropriation of nature with an almost automatic production of richness²². The stranding of whales provided a useful source of raw material, but it was an unpredictable and fortuitous event. What was missing was the creation of an organized activity for the extraction of the resource and this was Soares de Sousa's proposal when he referred to the centuries-old expertise of Basque whalers as the key to introducing commercial whaling to Brazil.

Although whaling has been practiced in continental Portugal since medieval times, neither the Portuguese seem to have had a 'whaling culture' passed down through generations, nor were the Portuguese settlers in America necessarily 'men of the sea'. To kill a whale requires expertise, courage, and means, and it seems that the Portuguese did not know how to do it. The treaty of Soares de Sousa's is a fundamental piece in the story of Brazilian whaling because the author identified the opportunity and the way of implementing it. Within a moment of Iberian Union (1580-1640), his work was translated into Castilian with the new title Memorias Historicosmograficas de la Bahia de todos los Santos..., and most probably reached, directly or indirectly, Felipe II of Portugal (1598-1621)²³. Aware of this information about a rich land and ocean in South America, in 1602 the monarch instructed the Governor of Brazil to "seek for some biscayans that in this fishery have more use because doing so and teaching others a great profit of oil will be achieved"24. That same year, the monarch granted two merchants from Bilbao, Pedro de Urrecha e Julien Michel, the concession to hunt whales for a period of ten years, thus inaugurating whaling in Brazil²⁵.

Beginning in 1603, experienced whalers travelled annually and seasonally in two or three ships from the Bay of Biscay (North Atlantic) to Bahia de Todos os Santos (South Atlantic). They possibly settled at the present Ponta da Cruz, formerly known

²² Pablo Sanchéz León, *Abundancia y Frustración: Por una historia conceptual de la economia en la modernidade latino-americana (I)* (Madrid: Postmetropolis Editorial, 2015), 18.

²³ Felipe Valdés Hansen, "Balleneros vascos en Brasil," *Itsas Memoria. Revista de Estudios Marítimos del País Vasco*, 8, Untzi Museoa-Museo Naval, Donostia-San Sebastián (2016): 730.

²⁴ Ellis, *A baleia*; Nina Vieira, "À Comparative Approach to Historical Whaling Techniques: Transfer of Knowledge in the 17th century from the Biscay to Brazil," in *Cross-cultural Exchange and the Circulation of Knowledge in the First Global Age*, ed. Amélia Polónia, Fabiano Bracht, Gisele C. Conceição and Monique Palma (Porto: CITCEM/Edições Afrontamento, 2018), 133-134.

²⁵ Ellis, A baleia, 33-34; See also detailed information about this whaling concession in Hansen, "Balleneros," 730.

as "Biscainho" or "Ponta de Biscaya", on Itaparica island, as expressed in the toponymy of the cartography of the time²⁶ (Figure 1).

The city of Salvador had, since the beginning of the European occupation, a cosmopolitan character. It was a place of circulation, influences and deep reconfigurations of its natural topography; the *reconcavo* offered favourable conditions to the development of a port city, scenario of maritime and commercial activities, while religious and political administrations were set uptown protected by the hill²⁷. With the beginning of Basque whaling in Bahia, the inhabitants had the opportunity to observe and learn the techniques of spotting whales at sea, persecuting, killing, and dismantling the animals, transforming blubber into oil and to extract baleen plates.

Figure 1. Map of Itaparica Island with the inscription "Biscainho" (Biscayan) in the north edge (left side of the image). Detail of "Mapa da Bahia de Todos os Santos de João Teixeira Albernaz I," in Diogo de Campos Moreno, Rezão do Estado do Brasil..., c. 1616.



Source: Available at Biblioteca Municipal do Porto, accessed September 17, 2019 http://arquivodigital.cm-porto.pt/Conteudos/Conteudos_BPMP/MS-126/MS-126.htm.

²⁶ In several maps of Bahia, the relation of places name and the whaling activity is visible. Examples are "Ponta de Biscaya" in "Mapa da Bahia de Todos os Santos de João Teixeira Albernaz I (c. 1626)", *Livro que dá razão do estado do Brasil* available in Hansen, "Balleneros," 732; "Ponta [?] onde [?] se faz a Armação das Baleas…" in Pedro Nunes Tinoco, *Mapas e Planos Feitos a Mão do Recife em Pernambuco, da Baía de Todos Os Santos*, *e da Costa da Bahia para Gãmam…*, 1631-1633, acessed March 23, 2017, (https://www.wdl.org/pt/item/786/.

²⁷ Ana Catarina Garcia, "Angra, Funchal e Baía. Contributo para uma análise comparativa da génese dos novos portos atlânticos do império Português", in *Entre Rios e Mares: um Património de Ambientes, História e Saberes, Tomo V da Rede BrasPor*, ed. Luís Cancela da Fonseca, Ana Catarina Garcia, Sílvia Dias Pereira and Maria Antonieta C. Rodrigues (Rio de Janeiro, 2016), 123; Evergton Sales Souza, Guida Marques and Hugo R. Silva, "Apresentação", in *Salvador da Bahia: retratos de uma cidade atlântica* (Salvador/ Lisboa: EDUFBA/ CHAM, 2016), 8.

There is no certainty about the last year of the Basque involvement in the whaling business in Bahia. By 1609, the foreign partners were involved in smuggling activities and in a dispute with local settlers who requested (and were granted with) permission to hunt whales²⁸. Their presence is reported in the following years, in the coeval works of François Pyrad de Laval, Viagem de Francisco Pyrard, ás Indias Orientaes...²⁹, of Ambrósio Fernandes, Diálogos das Grandezas do Brasil³⁰ and in the engraving of Alvardo de Popma, "Descripcion de la Baia de Todos los Santos y ciudad de Sansaluador en la costa del Brasil..."31. Nevertheless, their whaling legacy was set in Brazil for the centuries to come. The transfer of knowledge and techniques from the North Atlantic to the South Atlantic, and from foreigner hunters to Portuguese settlers is also reflected in the toponymy, especially after the Restoration of Independence in 1640. The name of the original whaling place lost the reference to the Biscayans and was renamed "Ponta das Baleas" (Figure 2). Despite pressure from Bahia citizens who wanted free access to the resource, whaling was established as a royal monopoly in 1614 and the permission to hunt whales began to be granted to those who could afford the contract and the investment in tools, boats and people. This monopoly lasted until 1801³³.

Both the place and the facilities associated with the whaling activity were designated by armação - armações in plural. Following Myriam Ellis, the term has its origin in the Portuguese expressions "armar pesca" and "armar às baleias"^{34.} If we follow the word in the written sources, a chronology of the settlement and development of the activity along the Brazilian shores can be found.

²⁸ Ellis, *A baleia*, 36; Hansen, "Balleneros," 728, 734-736.

²⁹ Francisco Pyrard, *Viagem de Francisco Pyrard, ás Indias Orientaes...* (1601 a 1611). Volume II (Nova Goa: Na Imprensa Nacional, 1862), 272-273, 276-277.

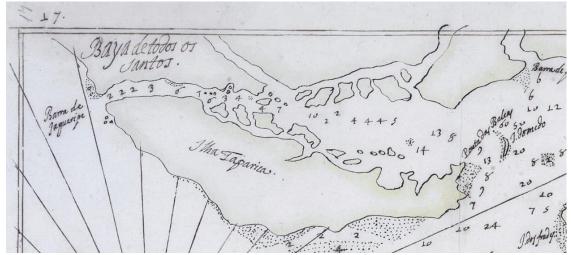
³⁰ Ambrósio Fernandes Brandão, Diálogos das Grandezas do Brasil (Rio de Janeiro: Edições Dois Mundos Editora, 1943), 72, 242.

³¹ Alvardo de Popma, "Descripcion de la Baia de Todos los Santos y ciudad de Sansaluador en la costa del Brasil...", 1625, John Carter Brown Library, accessed August 11, 2022, https://jcb.lunaimaging.com/luna/servlet. In the caption of the engraving, it can be read in the letter X: "sitio donde los viscainhos hacen el azeite de ballenas" (translation by the author: place where the Biscayans make the whale oil).

³² Hansen, "Balleneros," 731; Vieira, "A Comparative Approach," 134.

³³ Ellis, A Baleia; lan Hart and William Edmundson, A History of Whaling in Brazil: From royal fish to Japanese delicacy (Herefordshire: Pequena, 2017); Nina Vieira, "A taxonomia da baleação portuguesa entre os séculos XV e XVIII: Uma história atlântica do mar, das baleias e das pessoas," (PhD diss., Faculdade de Ciências Sociais e Humanas da Universidade NOVA de Lisboa, 2020).
34 Ellis, A Baleia, 59.

Figure 2. Map of Itaparica Island with indication of "Ponta das Baleas" (Edge of Whales, in english) (right side of the image). Map of Bahia de Todos os Santos, in *Atlas da costa do Brasil*, post. 1646, fl. 17.



Source: Biblioteca Nacional de Portugal, ca-107-r, accessed June 4, 2017, http://purl.pt/23778.

WHALING DEVELOPMENT ALONG THE BRAZILIAN COAST

Bahia

The first document identified in our research is dated from 1613 and includes the term "armação das Balleas" in Bahia³⁵. People involved in whaling activities, would move annually from the main city to the Itaparica island, and most specifically to the Ponta das Baleias, between July and October, transforming the village from 400 inhabitants to 2000³⁶. Along the 17th and 18th centuries whaling stations were multiplied in several points of the region, in front of the city of Salvador, at the entrance of the bay and at the north of Itaparica island³⁷ (Figure 3). This does not mean they have all operated simultaneously but demonstrates the hunting effort made during the two centuries of the monopoly.

³⁵ AHU_ACL_CU_017, Cx. 1, D. 53 (Acervo Bahia Luísa da Fonseca) (1613). A catalogue of all the primary sources present in this study and identified with the acronym AHU (Arquivo Histórico Ultramarino) is available at http://hdl.handle.net/10362/112540.

³⁶ AHU_ACL_CU_005, Cx. 15, D. 2686 (Acervo Bahia Eduardo de Castro Almeida (1757).

³⁷ Ellis, A Baleia, 40; Wellington Castellucci Junior, Caçadores de baleia: armações, arpoadores, atravessadores e outros sujeitos envolvidos nos negócios do cetáceo no Brasil, (São Paulo: Annablume, 2009), 36.

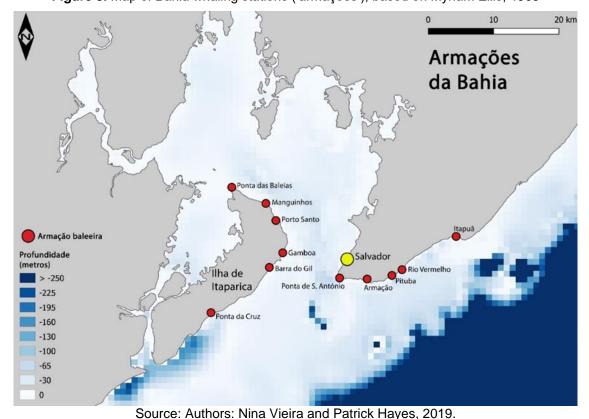


Figure 3. Map of Bahia whaling stations ('armações'), based on Myriam Ellis, 1969

Rio de Janeiro

Despite the uncertainties about the last years of Basque activity, in 1613 Pedro de Urrecha was living in the Island of Ipoya (nowadays island of Gipóia, Angra dos Reis), hunting whales with a city resident³⁸ and having a "house and engine for making whale grease"³⁹. In the 1612-edition of the Livro que dá razão do estado do Brasil, a reference to the "fishery of whales of Baya de todos os s^{tos}, or of Angra dos Reis"⁴⁰ can be found, pointing the practice in the two captaincies of Bahia and Rio de Janeiro.

³⁸ "Item carta d el Rey para o senhor Gaspar de Sousa sobre hús alvaras de fiança que o governador Dom Francisco de Sousa passou no Rio de Janeiro a hús culpados sem ter para isso regimento nem poder, 9 de novembro de 1613", in João Paulo Salvado and Susana Münch Miranda, eds., *Cartas para Álvaro de Sousa e Gaspar de Sousa (1540-1627)*. (Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 2001), 219.

³⁹ "Item carta d el Rey para o senhor Gaspar de Sousa sobre hũa villa que levantou hũ capitão per nome Manuel Antunes no Rio de Janeiro junto da Ilha Grande que dista daly doze legoas, 14 de agosto de 1613", in Salvado and Miranda, *Cartas*, 201.

⁴⁰ Diogo de Campos Moreno, Rezão do Estado do Brasil..., c. 1616. Biblioteca Municipal do Porto, accessed September 17, 2019, http://arquivodigital.cm-porto.pt/Conteudos/Conteudos_BPMP/MS-126/MS-126.htm.

Historical memoirs and correspondence also point to the establishment of the activity in Rio de Janeiro having occurred in the first half of the 17th century⁴¹.

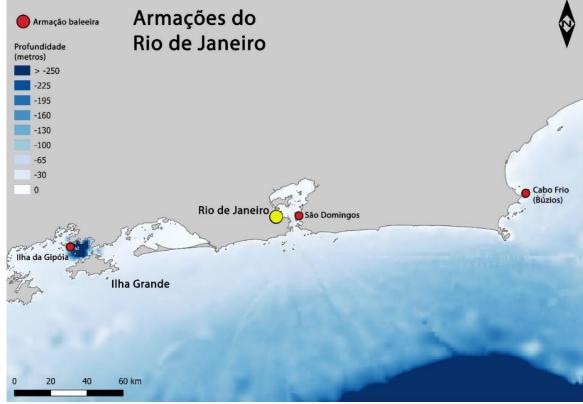


Figure 4. Map of Rio de Janeiro whaling stations ('armações'), based on Myriam Ellis, 1969.

Source: Authors: Nina Vieira and Patrick Hayes, 2019.

By 1710, whaling contractors requested the construction of a second station in a new location of the city "where whales were continuously infinites (...) in such abundance and such frequency"⁴². Once again, the abundance of animals motivating and justifying the activity. During the 18th century, three main whaling locations were set around Rio de Janeiro (Figure 4). This expansion of the activity around the city had several motivations. On the one hand, it increased the effort of capture and consequently the profit. On the other hand, these places were quieter and safer, ensuring greater protection of the facilities and products from possible looting⁴³. Moreover, at one point a remarkably decrease in the hunting of the city was justified "because the whales are being chased away from the many boats that enter that port

⁴¹ José de Souza Azevedo Pizarro e Araujo, *Memórias históricas do Rio de Janeiro*, Tomo II (Rio de Janeiro: Na Imprensa Nacional, 1822), 161; AHU_ACL_CU_017, Cx, 2, D. 120 (Rio de Janeiro Avulsos) (1644).

⁴² AHU_CU_017-01, Cx. 16, D. 3468 (Rio de Janeiro Eduardo de Castro e Almeida) (1716).

⁴³ For instances, in the French assault of Rio de Janeiro in 1711, according to Rodrigues, "Sob o signo", 238 the troops took gold and sugar, to which whale oil is now added according to AHU_ACL_CU_017, Cx. 11, D. 1173 (Rio de Janeiro Avulsos) (before 1720).

and from the many fishing boats there are there"44. In this situation the contractors were requesting permission to establish a factory anywhere in the coast outside from the city and this choice was being influenced by the behaviour of the animals.

Solidly implemented in Bahia and Rio de Janeiro at the dawn of the 1800s, whaling was an interesting and appealing activity for investors with capital. Whether due to the profits made by private individuals, who invested and developed the activity on their own initiative, or due to the usefulness and market value of the products, whale hunting attracted the interest of traders in more southern regions of the territory.

São Paulo

A first intention of establishing the business in Santos (current State of São Paulo) seems to have happened around 1710, supported by D. João V who acknowledged the "convenience [that could result] to my treasury, and usefulness to these residents because of the lack of meat they often experience: which could supply that of the whales"⁴⁵. At that time, Santos, a relevant port in the mining traffic, was under the jurisdiction of Rio de Janeiro, unrelated to the captaincy of São Paulo and Minas do Ouro. For that reason and because there was a well-established whaling activity in Rio, it was only after an administrative redefinition of São Paulo captaincy that whaling started there. The feeling of competition between contractors towards the sea and the animals was in permanent discussion, also involving Crown officials who were, particularly in that region, aware of the gold smuggling that can be also facilitated aboard the vessels of the whaling contract.

It was in 1734 that the first whaling station was erected with the support of the Crown and of the governors of Santos, São Paulo, and Rio de Janeiro. The contractor was excused from the payment of rights and subsidies related to the whaling products and had also facilities in the acquisition of land for the installation of the stations⁴⁶. In

⁴⁴ AHU_CU_017-01, Cx. 26, D. 5849-5851 (Rio de Janeiro Eduardo de Castro e Almeida) (1728).

^{45 &}quot;Carta de D. João V para o Governador da Praça de Santos, Miguel Carlos (12 de outubro de 1711)," in Documentos Interessantes para a Historia e Costumes de São Paulo, Vol. XVI, Avisos, Cartas Régias, Regulamentos e Ordens Diversas 1679-1761, (São Paulo: Typographia da Companhia Industrial de São Paulo, n.d.), 63.

⁴⁶ AHU_ACL_CU_017, Cx. 31, D. 3246 (Rio de Janeiro Avulsos) (1738).

about thirty-years the business was completely developed and growing in the coast of São Paulo captaincy (Figure 5).

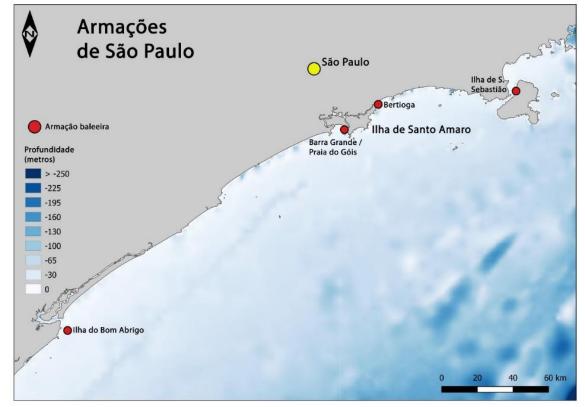


Figure 5. Map of São Paulo whaling stations ('armações'), based on Myriam Ellis, 1969.

Source: Authors: Nina Vieira and Patrick Hayes, 2019.

SANTA CATARINA

A similar pattern seems to have occurred in the coast of Santa Catarina captaincy, a region at the south of the tropic of Capricorn. The control over the living and mineral resources in the vicinity of River Plate was in constant negotiation between Portugal and Spain under the watchful eye of other European powers. The region has been practically unoccupied by European settlers during the 16th century and even during the first decades of the 18th century its sparse population feared pirates' attacks. In 1715, a peace treaty was signed between Portugal and Spain extending the Portuguese domination in the Americas to the New Colony of

Sacramento, which reinforced the settlement in the region⁴⁷. In 1717, D. João V ordered the examination of the advantages of the Island of Santa Catarina for the entrance of vessels, the condition of winds and currents, the abundance of fish and "if there can be fishery of Whales"⁴⁸. But it would only be in 1742/1743, after the foundation of the Captaincy of Santa Catarina (1738), that whaling would be effectively established in the region, still causing the displeasure of the contractors in Rio de Janeiro and São Paulo. From that year, several 'armações' were functioning along the coast (Figure 6).

The first whaling station was the Armação Grande or Nossa Senhora da Piedade, set on the continent facing the northern tip of Santa Catarina Island, and that was built simultaneously with the construction of the Santa Cruz fortresses on Anhatomirim Island, and in association with the works for the settlement and defence of the coast⁴⁹. This was the largest whaling station of Santa Catarina region and due to its dimensions would have taken three years to be finished, according to the French traveller Auguste de Saint-Hilaire. It was composed of a large house, a senzala, warehouses, and twenty iron boilers for melting whale blubber, a tank house with thirteen reservoirs, several storage and storeroom houses, a hospital, and an apothecary, among other structures⁵⁰.

The establishment of fixed 'armações' on the coast was basilar to the whaling style developed in Brazil. The stations in these four whaling regions did not all operate at the same time or have the same production capacity. However, they all followed the same operational logic. Stations were set at the entrance of bays or inlets, sheltered from the wind, with a good position for the quick departure of the vessels to the sea. They also had to be close to an area of woodland for the supply of the furnaces and were often set in the proximity of fortress⁵¹. As well as helping to defend the stations, the fortress could also act as lookout points from which signals were

⁴⁷ José Damião Rodrigues, "Sob o signo do ouro (c. 1696-1750)," in *História da Expansão e do Império Português*, coord. João Paulo Oliveira e Costa, eds. José Damião Rodrigues and Pedro Aires Oliveira (Lisbon: A Esfera do Livros, 2014), 239-240.

⁴⁸ "Carta Regia sobre as vantagens do porto de Santa Catharina, abundancia de peixes e outras comodidades," in *Publicação Official de Documentos Interessantes para a História e Costumes de S. Paulo.* Vol. XVIII. Avisos e Cartas Régias 1714-1729, (S. Paulo: Archivo do Estado de S. Paulo, 1896 (1717)), 9-10.

⁴⁹ Ellis, *A Balei*a, p. 57; Fernando Bitencourt, *Armações Baleeiras da Costa Basca a Garopaba* (Garopaba, 2005), p. 32; Fabiana Comerlato, "As armações baleeiras na configuração da costa catarinense em tempos coloniais," *Tempos Históricos* 15 (2011), 485.

⁵⁰ Comerlato, "As armações," 485.

⁵¹ Idem.

sent when a whale was observed at sea⁵². The landscape features, its orography and the surrounding environment were crucial to the establishment of the stations. Those sheltered waters were occupied by pregnant females or pairs mother-calf, preferential targets of the operation. The ocean was the space of capturing the whale and where the animals surpassed the conception of resource and were participant elements of the daily works at sea and land"53. All this combination of factors provided the ideal conditions to pursuit, capture, and towing of animals to land, and the coastal interface between land and sea was a shared place by people and whales and their space of encounter

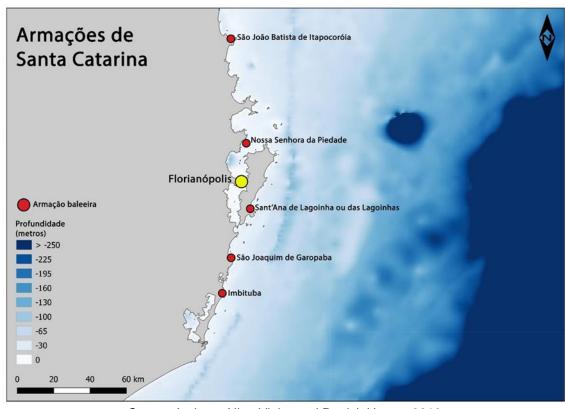


Figure 6. Map of Santa Catarina whaling stations ('armações'), based on Myriam Ellis, 1969.

Source Authors: Nina Vieira and Patrick Hayes, 2019.

Due to its origin and the use of the same techniques over time, this coastal and sedentary whaling operation can be clearly characterized as 'Basque-style'54. For a brief period of about four years (1773-1777), the hunting of sperm whales without sight

⁵² AHU_CU_017-01, Cx. 16, D. 3468 and attached documents (1711, 1716).

⁵³ Comerlato, "Análise especial," 5.

⁵⁴ Reeves and Smith, "A taxonomy," 89-90; Vieira, "A Comparative Approach".

of land was promoted. These captures in pelagic waters seems to have followed the 'American-Style Shore' although an in-depth study about this issue is still lacking.

WHALE'S PRODUCTS CONSUMPTION IN BRAZIL AND LISBON

In a colonization context, new patterns of natural resources consumption have been established, and their transformation into products with commercial value was promoted. The availability of whales in South American waters and the recognition of the value of its products were the drivers - natural and human - of its exploitation. Whales were caught because there was a demand for their products both in the Portuguese America and Lisbon. The main valued product was whale oil, also called fish oil, which resulted from the melting of the animal's blubbler. It was manufactured by enslaved Africans using rudimentary methods, which do not seem to have evolved significantly during the two centuries of monopoly of the activity⁵⁶. The investment and the work were justified because "from the immense quantity of oil that is extracted from this fish, all the houses, factories and workshops of Brazil are lit up"⁵⁷. Occasionally whale oil was used to light up noble salons as we can find it being used in the "lamps of the palace"⁵⁸. This product was the fuel that brought light to houses and later to the streets of the main cities or, a chronicler put it, "this is the ordinary oil that, used for other purposes, illuminates Brazil"⁵⁹.

When oil production was lower, its lack was felt by the inhabitants. One alternative was the use of vegetable oil that would be bought only by some people, while the poorest ones had no light at all, being in the dark⁶⁰. Other fuels could be used, such as castor oil (from a plant of the Euphorbiaceae family), more common in

⁵⁵ Reeves and Smith, "A taxonomy," 90; Nina Vieira, Patrick Hayes and Al Matthews, "Facing Changes, Changing Targets: Sperm Whale Hunting in Late Eighteenth-Century Brazil," Environment & Society Portal, *Arcadia* no. 44, (Autumn 2019).

⁵⁶ José Bonifácio de Andrada e Silva, "Memoria sobre a Pesca das Baleas, e Extracção do seu Azeite; com algumas reflexões a respeito das nossas Pescarias," *Memorias Economicas da Academia Real das Sciencias de Lisboa* II (1790); Vieira, "A Comparative Approach"; Vieira, "A taxonomia".

⁵⁷ Sebastião da Rocha Pitta, *Historia da America Portugueza desde* o anno de mil quinhentos do seu descobrimento até o de mil e setecentos e vinte e quatro (Lisbon: Francisco Arthur da Silva, 1880 [1730]), 23.

⁵⁸ José Antonio Caldas, *Noticia geral de toda esta Capitania da Bahia desde o seu descobrimento ate o presente ano de 1759* (Salvador: Typographia Beneditina, 1951 [1759]), 31.

⁵⁹ Francisco de Britto Freyre, *Relação da viagem que fez ao Estado do Brazil a Armada da Cõpanhia, anno 1655* (Lisboa: Na Officina de Henrique Valente de Oliveira, 1657), 118.

⁶⁰ AHU_CU_017-01, Cx. 16, D. 3468 (1716).

rural villages⁶¹, or oil of dogfish liver (an elasmobranch species), that provided "perfect light, but however rare and contrived, they are not so common as that of whales"⁶².

Due to its properties, whale oil was also used for naval repairs, both in Brazil and Lisbon. According to Ellis, the whaling stations also prepared pitch and tar which were used to caulk and waterproof ships⁶³. Whale oil was also used as a lubricant for the machines, being called the "medicine of the mills"⁶⁴. It is also supposed that whale oil was sent regularly to Ribeira das Naus in Lisbon from the 17th century onwards, to be used in ship repairs and construction⁶⁵.

It also seems very likely that since the beginning of the whaling monopoly, whale oil has been sent to several regions of South America, asserting its demand and consumption within the imperial dynamics. Since the decade of 1730' the product was transported as south as the Colony of Sacramento (nowadays a city of Uruguay, at the time a region under Portuguese domain) or northwards to Pernambuco (northeast coast)⁶⁶. For instances in 1761 and 1762, at least, provisions to the southern region included barrels of oil and possibly dried whale meat⁶⁷. In the case of Pernambuco, whale oil was shipped constantly, being the more systematized records related to the years between 1770 and 1798, in a total of 1.187 *pipas*, 285 cascos, 42 barrels (*barris*) and 2 *quartolas*, coming mostly from Rio de Janeiro but also from Bahia or Santa Catarina⁶⁸. At other times, when the Bahia whaling stations produced very little or even when they were closed, the region received oil produced in other captaincies⁶⁹.

These cases allow to understand how whale products thus entered the regional coastal trade that took place between various ports along the Brazilian coast, also fostering a set of coastal routes and an active *intercapitanias* trade, using the words of

⁶¹ Ellis, A Baleia, 140.

⁶² Pitta, Historia, 23.

⁶³ Ellis, A Baleia, 137-138.

⁶⁴ D. Luís de Sousa (Governor and Captain-general of Brazil), 1623, document no. 110 in João Paulo Salvado and Susana Münch Miranda, eds, *Livro 2º do Governo do Brasil (1615-1634)* (Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses - Museu Paulista / USP, 2001b), 167.

⁶⁵ AHU_CU_017-01, Cx. 11, D. 2122 (Rio de Janeiro Eduardo de Castro e Almeida) (1698).

⁶⁶ AHU_ACL_CU_017, Cx. 27, D. 2849 (Rio de Janeiro Avulsos) (1735).

⁶⁷ AHU_ACL_CU_012, Cx. 3, D. 306 (Colônia de Sacramento e Rio da Prata) (1735); AHU_ACL_CU_017, Cx. 65, D. 6126 (Rio de Janeiro Avulsos) (1762)

 ⁶⁸ AHU_ACL_CU_017, Cx. 103, D. 8770 (Rio de Janeiro Avulsos) (after 1777); AHU_ACL_CU_015, Cx. 212, D. 14440 (Pernambuco) (after 1779).
 ⁶⁹ AHU_ACL_CU_017, Cx. 103, D. 8770; Aditionally, a reference to 92 barrels of fish oil (whale oil) is found in AHU_ACL_CU_005, Cx. 72, D. 13860.

Stuart Schwartz, that allowed the creation of internal trade networks and promoted the colony's economic development⁷⁰.

The transport of whale oil, as it happened to other commodities with commercial value, was subject to smuggling and due to that it required some measures of control, mainly with the expansion of the activity to São Paulo in the decade of 1730 and a decade later in Santa Catarina. In 1735 the oil produced in Rio de Janeiro, could be shipped to Pernambuco, as seen above, to the islands "adjacentes ao reyno" and to Lisbon⁷¹. In 1736, the shipment was allowed at the expenses of the contractor to anywhere except Bahia in order to avoid internal competition and losses for Bahia's contractors. The product of the whaling stations of São Paulo should be shipped from Rio de Janeiro, where the contractor possessed a warehouse to store the oil, but it was forbidden to sold it in the city of Rio, again to minimize the conflicts between the contractors.

In 1748, there was a first union of the contracts, gathering the whaling lease of all the southern traps, that is, from Rio de Janeiro to Santa Catarina, excluding the whaling stations in Bahia. In that unified contract, the previous contractual conditions prevailed, namely the permission to send whale oil to the Islands and Lisbon, after being supplied with the necessary quantity of product for consumption and use in Brazil. Around 1759, a reservoir tank was built in Rio de Janeiro with a capacity of 4,000 barrels of oil, to receive the product from all those factories, and from there to transport it to other regions within or outside Brazil⁷². In 1760 the king of Portugal, D. José, authorised the navigation from Rio de Janeiro to Lisbon "in direction, and out of the Fleets, [of] a Ship of six hundred tons, or the vessels that complete the said number of tons; with so much that its cargo is reduced only to whale oil and baleens, and the other effects of the said contract" These ships were subject to an inspection before leaving Rio, which resulted in a list of the cargo for later verification in the port of Lisbon. These lists comprise a very relevant documental corpus, providing more systematised information on the products of the whale contract sent to Lisbon.

⁷⁰ Stuart Schwartz, "De ouro a algodão: A economia brasileira no século XVIII," in Francisco Bethencourt and Kirti Chaudhuri, dir, *História da Expansão Portuguesa*, Volume III. O Brasil na Balança do Império (1697-1808) (Navarra: Círculo de Leitores, 1998), 86; A. J. R. Russell-Wood, O *Império Português*, 1415-1808 - O mundo em movimento (Lisboa: Clube do Autor, 2016), 75.

⁷¹ AHU_ACL_CU_017, Cx. 31, D. 3246 (Rio de Janeiro Avulsos) (1738).

⁷²AHU_ACL_CU_17, Cx. 55, D. 5427 (Rio de Janeiro Avulsos) (before 1759); Ellis, A Baleia, 149-150.

⁷³ AHU_ACL_CU_017, Cx. 60, D. 5753 (Acervo Rio de Janeiro - Avulsos) (1760).

It is relevant to highlight that in 1765, with the inauguration of the Quintela whaling period⁷⁴ and its formalization with the creation of the *Companhia da Pescaria das Baleas*, the whaling activity was incorporated into one single contract, which now included all the four regions on the northern and southern coasts of Brazil. There was an effort to reorganise whaling, with increased investment in the repair of existing whaling stations and the construction of new ones, as well as a better control of the finances. This moment inaugurated the most profitable period of the whaling operation until its end, reorganising and innovating the business, uniting all the efforts in one company. The control of shipping was centralised in Rio de Janeiro, from where most of the shipments to Lisbon were made.

From the period between 1764 and 1785, we counted 59 documents related to shipment of whale oil and baleen from Rio de Janeiro to Lisbon, providing relevant information such as the name of the ship and its captain, the date of departure, the quantities of product in different type of measures. For the 12-years period between 1765 and 1776, a very important and detailed document was also analysed: MAPA da demonstração do que produziu a pesca dos cachalotes ou espermecetes desde 11 de Outubro de 1773 até 30 de Junho de 1777 e do que produziu a pesca das baleias de 1765 a 1776, citando os navios que transportaram tais gêneros do Rio de Janeiro para Lisboa⁷⁵. This latest document provides information on the number of animals captured, the amount of oil and baleen they produced, and the quantities of products sent to Lisbon.

Combining this information with the analysis of the cargo lists, it was possible to understand that at least 62 ships were involved in the transport of products from Brazil to Lisbon and that voyages were performed year-round, with several shipments per month. Our analysis also reveals something new about the amount of whale oil sent to Lisbon. In this 12-year period a total of 57.500 barrels (*pipas*) of oil were produced, from which an average annual production of 4.792 barrels is calculated (the lowest value being 2.975 units, in 1767, and the highest being 9.075 units, in 1773). From

_

⁷⁴ Inácio Pedro Quintela headed the whaling business in the period of 1765-1777, in addition to his participation in the trading companies of Pernambuco and Paraíba, Grão-Pará and Maranhão, among other administrative positions that promoted his social ascension and the wealth of his family.

⁷⁵ AHU_ACL_CU_017, Cx. 103, D. 8770.

the total of whale oil produced, around 48% was sent to Lisbon (27.501 barrels), 37% was sold in Rio de Janeiro (21.206 barrels), 11% was shipped to Bahia, and residual values were sent to Pernambuco and Portuguese islands (Figure 7).

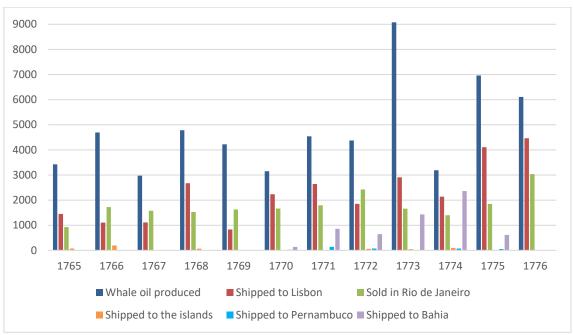


Figure 7. Quantity of whale oil in number of barrels (*pipas*) produced in Brazil, sold in Rio de Janeiro and shipped to Lisbon, islands, Pernambuco and Bahia, between 1765 and 1776.

Source: AHU_ACL_CU_017, Cx. 103, D. 8770.

Although oil shipments were mainly made from Rio de Janeiro to Lisbon, ships could also depart, even occasionally, from and to other cities: in 1788 and 1789, a total of 1.928 *almudes*⁷⁶ of "fish oil" from Rio de Janeiro (1.078) and Bahia (850) was shipped to Porto, the second largest city in mainland Portugal⁷⁷. Further research on these shipments will provide a more comprehensive and complete understanding of the importance and consumption of whale products in Portugal.

Moreover, and based on the same documentation, the production and shipment of baleen was also analysed also for the period of 1765-1776. Baleen plates were removed from whales' maxillae, cleaned, and packed in bales of 4 *quintais*⁷⁸. They could also be packed in half bales or small bales, and also transported in baskets or in

_

⁷⁶ Almude is an antique unit of measurement of volume used in Portugal, Brazil and other parts of the Portuguese Empire.

⁷⁷ Mapa Geral do Comércio e da Alfândega do Porto (1788). Reference code: PT/TT/JC/C/007/0001; Mapa Geral do Comércio e da Alfândega do Porto (1789). Reference code: PT/TT/JC/C/007/0002.

⁷⁸ Quintal is an antique unit of measure of weight equivalent to 58,75 kg.

bulk. From the total amount of 26.824 quintais of baleen produced in those years, 120 are reported to have been sold in Rio de Janeiro and 26.703 shipped to Lisbon, representing this 99,5% of the total production. This is in line with what Myriam Ellis stated about there not being a consumer market for this product in Brazil. By sending this product from Brazil to the metropolis, the Portuguese Crown most likely intended to export to European markets⁷⁹ as a valued raw material in the production of clothing such as corsets, and other objects.

Both whale oil and baleen can serve as examples of the triangular network established in the Atlantic, as commodities with origin in the Americas, extracted from South Atlantic whales by African slaves, transported through the Atlantic, and consumed in Europe. This is a case of a long-range impact activity, in which the origin of the raw material and the place where it is processed is very far (an ocean away) from one of its important consumption locations.

FINAL REMARKS: THE WEALTH THAT WHALES PROVIDED.

This study makes clear that whaling in colonial Brazil deserves a place in the historiography of the First Globalization, and particularly if one thinks in terms of wet globalization, phenomena that were absolutely dependant and shaped by animals and, in this case, marine animals. This whaling operation had its role in the trade networks of the global early modern world, fostering regional and transatlantic trade, using enslaved labour and contributing to the development of coastal settlements.

Whale hunting was one of several economic activities that depended on what natural ecosystems provided. To achieve that, thousands of southern right (Eubalaena australis) and humpback whales (Megaptera novaeangliae) were hunted during this period thousands of animals were hunted, to an extent that is very difficult to count accurately⁸⁰. It was based on an extractivist model supported by a monopolistic access to the resource, as happened with other marine resources in the Americas since the 16th century⁸¹. Like many other businesses of the Portuguese empire, it was

⁷⁹ Ellis, A Baleia, 134-135.

⁸⁰ Nina Vieira, "Whales lost and found. Rescuing a history of biodiversity loss in early modern Brazil." Exchanges: The Interdisciplinary Research Journal 10, no. 2 (2023): 106-130.

⁸¹ See for instances the work of Santos Ortega, "Extractivismo marino-colonial," 99-117.

based on economic privileges and on the monopolistic access to resources and information, with the essential aid of natural history and scientific knowledge⁸². Relying on a certain level of negotiation and autonomy by governors and contractors, resulted the production of local goods that allowed the maintenance and selfsufficiency of the Brazilian territory, as it has been proposed to other activities by Stuart Schwartz or Bartolomé Yun-Casalilla⁸³. The analysis of cargos allowed us to better access the frequency and dimension of the transport of whale products to Lisbon. This clarification on the supply of whale oil to Portugal allows us to question the importance of whaling, which until now has been recognized as an activity of little relevance, with only reduced and local impact and utility. We propose, with this new data, that the consumption of whales' products had a significant value in the big picture of the circulation of goods of which the Atlantic was the source, and that it the perspective of long-distance studied in marine teleconnections⁸⁴.

Moreover, whales and whaling were effectively an integral element and practice in the construction of the territory in its various forms and with different impacts, from the promotion of settlements in coastal areas, the evolution of social relations, the promotion of and the development of an extractive activity with economic value and strong environmental consequences. Whaling was a subject among monarchs, viceroys, ministers and governors of captaincies, naturalists and diplomats, and its exploitation in Brazilian coastal waters was not only included in the strategies of domination and colonization of the Brazilian territory in the 17th and 18th centuries, but also facilitated and promoted them.

This study sought to contribute to fill the absence of marine ecosystems and marine animals in environmental and animal historiographies of the global south and, more specifically, of Latin America⁸⁵. The whaling operation examined here serves

_

⁸² Among the several works of José Augusto Pádua, see "Annihlating Natural Productions': Nature's Economy Colonial Crisis and the Origins of Brazilian Political Environmentalism (1786-1810)," Environment and History 6, no. 3 (2000): 255-287 and "A Profecia dos Desertos da Líbia: Conservação da natureza e construção nacional no pensamento de José Bonifácio," Revista Brasileira de Ciências Sociais 15, no. 44 (2000): 119-142

⁸³ Stuart Schwartz, Sugar Plantations in the Formation of Brazilian Society. Bahia, 1550-1835 (Cambridge: Cambridge University Press, 1985), 239; Yun-Casalilla, Iberian World Empires, 73.

⁸⁴ Holm et al., "New challenges," 6.

⁸⁵ See for instances Regina Horta Duarte, "História dos animais no Brasil: tradições culturais, historiografia e transformação," *HALAC – Historia Ambiental, Latinoamericana y Caribeña* 9, no 2 (2019): 16-44; Germán Vergara, "Bestiario latinoamericano: los animales en la historiografía de

both Brazilian and Portuguese scholars to rethink and reformulate classic and traditional ways of discussing colonial dynamics and human-nonhuman interactions. As stated by Regina Horta Duarte and colleagues "studying animals over time includes focusing on the movements of these living beings worldwide and their role in different cultures" I hope to have shown that whales were not accessory to history but, rather, were agents in the construction of people's relationships with each other and with the terrestrial, coastal and marine environments, at the same time that they provided goods and wealth on both sides of the Atlantic. In both hemispheres, societies that were being built in the early modern period had an impact and were impacted by these whales.

FUNDING

This study has received funding from the European Research Council (ERC) Synergy Grant 4-Oceans (European Union's Horizon 2020 research and innovation programme under grant agreement N° 951649) and from project CONCHA (EU H2020-MSCA-RISE-2017 research and innovation programme under grant agreement N° 777998). This paper had the support of CHAM (NOVA FCSH / UAc), through the strategic project sponsored by FCT (UIDB/04666/2020). The study has also received support from the UNESCO Chair 'The Ocean's Cultural Heritage', the OPI-Oceans Past Initiative, and APCM-Associação Para as Ciências do Mar.

ACKNOWLEDGEMENTS

I will always be grateful to my supervisors and friends Cristina Brito and Alexandra Pelúcia, as well as to Prof João Paulo Oliveira e Costa. I thank my colleagues for all their support and comments throughout our oceanic journey. I would also like to thank Sandro Dutra for his efforts in publishing this paper.

América Latina," *História, Ciências, Saúde – Manguinhos* (December 2021): 201-202, or Cristina Brito, "Uma Agenda de Investigação nas Humanidades Azuis: Exploração dos Ambientes Aquáticos e os 4 Oceanos em Épocas Pré-Industrialização," *HALAC – Historia Ambiental, Latinoamericana y Caribeña* 12. no. 2 (2022): 459-474.

⁸⁶ Regina Horta Duarte, Sandra Swart and John Soluri, "Introduction: New Geographies in Animal History," Global Environment 16 (2023): 8.

REFERENCES

Afonso, Padre Gaspar, "Relação da Viagem e Sucesso que teve a Não S. Francisco Em que hia o Capitão Vasco da Fonseca, Na Armada que foy para a India no Anno de 1596." In Historia Tragico-Maritima..., Tomo Segundo, edited by Bernardo Gomes de Brito, 315-436. Lisboa Occidental: Na Officina da Congregação do Oratorio, 1736.

Anchieta, José de. "Informação da Província do Brasil para nosso padre." In *Cartas*, Informações, Fragmentos Historicos e Sermões do Padre Joseph de Anchieta, S.J. (1554-1594). Rio de Janeiro: Civilização Brasileira, 1933 (1558).

Araujo, José de Souza Azevedo Pizarro e. *Memórias históricas do Rio de Janeiro*, Tomo II. Rio de Janeiro: Na Imprensa Nacional, 1822.

Arch, Jakobina K. Bringing Whales Ashore: Oceans and the Environment in Early Modern Japan. Seattle: University of Washington Press, 2018.

Atlas da costa do Brasil, post. 1646, fl. 17. Biblioteca Nacional de Portugal, ca-107-r. Accessed June 4, 2017, http://purl.pt/23778.

Bitencourt, Fernando. Armações Baleeiras da Costa Basca a Garopaba. Garopaba, 2005.

Brandão, Ambrósio Fernandes. Diálogos das Grandezas do Brasil. Rio de Janeiro: Edições Dois Mundos Editora, 1943.

Brito, Cristina. "Uma Agenda de Investigação nas Humanidades Azuis: Exploração dos Ambientes Aquáticos e os 4 Oceanos em Épocas Pré-Industrialização." HALAC – Historia Ambiental, Latinoamericana y Caribeña 12, no. 2 (2022): 459-474.

https://doi.org/10.32991/2237-2717.2022v12i2.p459-474

Brito, Cristina, Vieira, Nina, and Freitas, Joana Gaspar. "The Wonder Whale: A commodity, a monster, a show and an icon." *Anthropozoologica* 54, no. 3 (2019): 13-27. https://doi.org/10.5252/anthropozoologica2019v54a3

Caldas, José Antonio. Noticia geral de toda esta Capitania da Bahia desde o seu descobrimento ate o presente ano de 1759. Salvador: Typographia Beneditina, 1951 (1759).

Cardim, Fernão. Tratados da terra e gente do Brasil. Belo Horizonte: Ed. Itatiaia, Ed. da Universidade de São Paulo, 1980 (1540?-1625).

Castellucci Junior, Wellington. Caçadores de baleia: armações, arpoadores, atravessadores e outros sujeitos envolvidos nos negócios do cetáceo no Brasil. São Paulo: Annablume, 2009.

Castelucci Junior, Wellington, and Quiroz, Daniel, orgs, Baleeiros do Sul II. Antropologia e história da indústria baleeira nas costas sul-americanas. Salvador: EDUNEB, 2018.

Comerlato, Fabiana. "As armações baleeiras na configuração da costa catarinense em tempos coloniais." Tempos Históricos 15, no. 2 (2011): 481-501.

https://doi.org/10.36449/rth.v15i2.7215

Comerlato, Fabiana, and Quiroz, Daniel, eds. Baleias e Baleeiros. Patrimônio Cultural e Conservação Ambiental. Pelotas: BasiBooks, 2019.

Costa, Palmira Fontes da, and Leitão, Henrique. "Portuguese Imperial Science, 1450-1800: A Historiographical Review." In *Science in the Spanish and Portuguese Empires* 1500-1800, edited by Daniela Bleichmar, Paula De Vos, Kristin Huffine and Kevin Sheeha, 35-53. Stanford: Stanford University Press, 2009.

Documentos Interessantes para a Historia e Costumes de São Paulo, Vol. XVI, Avisos, Cartas Régias, Regulamentos e Ordens Diversas 1679-1761. São Paulo: Typographia da Companhia Industrial de São Paulo, n.d.

Duarte, Regina Horta. "História dos animais no Brasil: tradições culturais, historiografia e transformação." HALAC – Historia Ambiental, Latinoamericana y Caribeña 9, no 2 (2019): 16-44. https://doi.org/10.32991/2237-2717.2019v9i2.p16-44

Duarte, Regina Horta, Swart, Sandra and Soluri, John. "Introduction: New Geographies in Animal History." *Global Environment* 16 (2023): 7-11. https://doi.org/10.3197/ge.2022.160101

Ellis, Myriam. A baleia no Brasil colonial: feitorias, baleeiros, técnicas, monopólio, comércio, iluminação. São Paulo: Edições Melhoramentos, 1969.

Ellis, Richard. Men & Whales. New York: The Lyons Press, 1991.

Freyre, Francisco de Britto. Relação da viagem que fez ao Estado do Brazil a Armada da Cõpanhia, anno 1655. Lisboa: Na Officina de Henrique Valente de Oliveira, 1657.

Garcia, Ana Catarina. "Angra, Funchal e Baía. Contributo para uma análise comparativa da génese dos novos portos atlânticos do império Português." In Entre Rios e Mares: um Património de Ambientes, História e Saberes, Tomo V da Rede BrasPor, edited by Luís Cancela da Fonseca, Ana Catarina Garcia, Sílvia Dias Pereira and Maria Antonieta C. Rodrigues, 109-127. Rio de Janeiro, 2016.

Hansen, Felipe Valdés. "Balleneros vascos en Brasil." Itsas Memoria. Revista de Estudios Marítimos del País Vasco 8, Untzi Museoa-Museo Naval, Donostia-San Sebastián (2016): 725-740.

Hart, Ian, and Edmundson, William. A History of Whaling in Brazil: From royal fish to Japanese delicacy. Herefordshire: Pequena, 2017.

Holm, Poul, and Brennan, Ruth. "Humanities for the Environment 2018 Report-Ways to Here, Ways Forward." *Humanities* 7 (January 2018), 3 p. https://doi.org/10.3390/h7010003

Holm, Poul, Marboe, Anne Husum, Poulsen, Bo, and Mackenzie, Brian R. "Marine Animal Populations: A new look back in time." In *Life in the World's Oceans: Diversity*, *Distribution, and Abundance*, edited by Alasdair D. McIntyre, 3-23. Blackwell Publishing, 2010.

Holm, Poul, Barrett, James, Brito, Cristina, and Ludlow, Francis. "New challenges for the Human Oceans Past agenda," [version 1; peer review: awaiting peer review] *Open Research*Europe

2 (September 2022). https://doi.org/10.12688/openreseurope.15095.1

Jones, Ryan Tucker, "Running into whales: The history of the North Pacific from below the waves," American Historical Review 118, no. 2 (April 2013): 349-377. https://www.jstor.org/stable/23425887

Jones, Ryan Tucker, and Wanhalla, Angela, eds. New Histories of Pacific Whaling. RCC Perspectives. Transformations in Environment and Society, 2019. https://www.environmentandsociety.org/perspectives/2019/5/new-histories-pacific-whaling-0

León, Pablo Sanchéz. Abundancia y Frustración: Por una historia conceptual de la economia en la modernidade latino-americana (I). Madrid: Postmetropolis Editorial, 2015. https://postmetropolis.com/pablo-sanchez-leon-abundancia-y-frustracion-por-una-historia-conceptual-de-la-economia-en-la-modernidad-latinoamericana-i/

Léry, Jean de. Historia de uma viagem feita á terra do Brasil. Rio de Janeiro: Livraria J. Leite, 1889 (1578).

Marks, Robert B. "Exhausting the Earth": environmental and history in the early modern world." In *The Cambridge World History*, Volume VI, *The Construction of a Global World*, 1400–1800 CE, *Part* 1: Foundations, edited by Jerry H. Bentley, Sanjay Subrahmanyam, and Merry E. Wiesner-Hanks, 29–53. Cambridge: Cambridge University Press, 2015.

Mentz, Steve. Ocean. New York: Bloomsbury Academic, 2020.

Monson, William. "Sir William Monson's Naval Tracts...The Sixth Book. Which Treats of a Fishery to be set up on the Coast of England, Scotland, and Ireland, with Benefit that will Accrue by it to all His Majesty's Three Kingdoms: With many other Things concerning Fish, Fishing, and Matters of that Nature." In A collection of Voyages and Travels, Some now first Printed from Original Manuscripts..., Vol. III, 154–560. London: H.C. for Awnsham and John Churchill, 1704 (1585–1602).

Moreno, Diogo de Campos. *Rezão do Estado do Brasil....* c. 1616. Biblioteca Municipal do Porto. Accessed September 17, 2019. http://arquivodigital.cm-porto.pt/Conteudos/Conteudos_BPMP/MS-126/MS-126.htm.

Santos Ortega, Antonio. "Extractivismo marino-colonial. Apropiación asimétrica de recursos marinos en el golfo de California (México) siglos XVI-XXI." Relaciones

Internacionales no. 46 (2021): 99-117. https://doi.org/10.15366/relacionesinternacionales2021.46.006

Pádua, José Augusto. "Annihlating Natural Productions': Nature's Economy Colonial Crisis and the Origins of Brazilian Political Environmentalism (1786-1810)," Environment and History 6, no. 3 (2000): 255-287. https://doi.org/10.3197/096734000129342307

Pádua, José Augusto. "A Profecia dos Desertos da Líbia: Conservação da natureza e construção nacional no pensamento de José Bonifácio," Revista Brasileira de Ciências Sociais 15, no. 44 (2000): 119-142. https://doi.org/10.1590/S0102-6909200000300007

Pitta, Sebastião da Rocha. Historia da America Portugueza desde o anno de mil quinhentos do seu descobrimento até o de mil e setecentos e vinte e quatro. Lisbon: Francisco Arthur da Silva, 1880 (1730).

Popma, Alvardo de. "Descripcion de la Baia de Todos los Santos y ciudad de Sansaluador en la costa del Brasil...", 1625, John Carter Brown Library. Accessed August 11, 2022. https://jcb.lunaimaging.com/luna/servlet.

Publicação Official de Documentos Interessantes para a História e Costumes de S. Paulo. Vol. XVIII. Avisos e Cartas Régias 1714-1729. São Paulo: Archivo do Estado de S. Paulo, 1896.

Pyrard, Francisco. Viagem de Francisco Pyrard, ás Indias Orientaes... (1601 a 1611). Volume II. Nova Goa: Na Imprensa Nacional, 1862.

Quiroz, Daniel, and Toledo, Patrícia, eds, Balleneros del Sur. Antropología e historia de la industria ballenera en las costas sudamericanas. Colección Mocha Dick: Santiago de Chile, 2014.

Reeves, Randall R., and Smith, Tim D. "A taxonomy of world whaling: Operations and eras." In *Whales, whaling, and ocean ecosystems*, edited by James A. Estees, Douglas P. Demaster, Daniel F. Doak, Terrie M. Williams, and Robert L. Brownell, Jr., 82-101. London: University of California Press, 2006.

Rodrigues, José Damião. "Sob o signo do ouro (c. 1696-1750)." In História da Expansão e do Império Português, coordinated by João Paulo Oliveira e Costa, edited by. José Damião Rodrigues, and Pedro Aires Oliveira, 235-263. Lisbon: A Esfera do Livros, 2014.

Russell-Wood, A. J. R. O Império Português, 1415-1808 - O mundo em movimento. Lisbon: Clube do Autor, 2016.

Salvado, João Paulo and Miranda, Susana Münch, eds., Cartas para Álvaro de Sousa e Gaspar de Sousa (1540-1627). Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 2001.

Salvado, João Paulo and Miranda, Susana Münch, eds. Livro 2º do Governo do Brasil (1615-1634). Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses - Museu Paulista / USP, 2001.

Schwartz, Stuart. Sugar Plantations in the Formation of Brazilian Society. Bahia, 1550-1835. Cambridge: Cambridge University Press, 1985.

Schwartz, Stuart. "De ouro a algodão: A economia brasileira no século XVIII." In História da Expansão Portuguesa, Volume III. O Brasil na Balança do Império (1697-1808), edited by Francisco Bethencourt and Kirti Chaudhuri, 86-103. Navarra: Círculo de Leitores, 1998.

Silva, José Bonifácio de Andrada e. "Memoria sobre a Pesca das Baleas, e Extracção do seu Azeite; com algumas reflexões a respeito das nossas Pescarias." Memorias Economicas da Academia Real das Sciencias de Lisboa II (1790): 388-412.

Sousa, Gabriel Soares de. Tratado Descriptivo do Brasil. Rio de Janeiro: Typographia de João Ignacio da Silva, 1879 (1587).

Souza, Evergton Sales, Marques, Guida and Silva, Hugo R. "Apresentação." In Salvador da Bahia: retratos de uma cidade atlântica, 7-14. Salvador/ Lisbon: EDUFBA/ CHAM, 2016. http://hdl.handle.net/10362/17105

Tinoco, Pedro Nunes, Mapas e Planos Feitos a Mão do Recife em Pernambuco, da Baía de Todos Os Santos, e da Costa da Bahia para Gãmam..., 1631-1633. Acessed March 23, 2017. https://www.wdl.org/pt/item/786/.

The Animal Studies Group, ed. Killing Animals. Urbana/Chicago: University of Illinois Press, 2006.

Vergara, Germán. "Bestiario latinoamericano: los animales en la historiografía de América Latina." História, Ciências, Saúde – Manguinhos (December 2021): 187-208. https://doi.org/10.1590/S0104-59702021000500010

Vieira, Nina. "A Comparative Approach to Historical Whaling Techniques: Transfer of Knowledge in the 17th century from the Biscay to Brazil." In Cross-cultural Exchange and the Circulation of Knowledge in the First Global Age, edited by Amélia Polónia, Fabiano Bracht, Gisele C. Conceição and Monique Palma, 133-156. Porto: CITCEM/Edições Afrontamento, 2018. https://ler.letras.up.pt/uploads/ficheiros/16581.pdf

Vieira, Nina. "A taxonomia da baleação portuguesa entre os séculos XV e XVIII: Uma história atlântica do mar, das baleias e das pessoas." PhD diss., Faculdade de Ciências Sociais e Humanas, Universidade NOVA de Lisboa, 2020. http://hdl.handle.net/10362/99551

Vieira, Nina. "Whales lost and found. Rescuing a history of biodiversity loss in early modern Brazil." Exchanges: The Interdisciplinary Research Journal 10, no. 2 (March 2023): 106-130. https://doi.org/10.31273/eirj.v10i2.976

Vieira, Nina, Hayes, Patrick, and Al Matthews, "Facing Changes, Changing Targets: Sperm Whale Hunting in Late Eighteenth-Century Brazil" Environment & Society Portal, Arcadia no. 44, (Autumn 2019). https://doi.org/10.5282/rcc/8798

Worster, Donald. Shrinking the Earth. The Rise & Decline of Natural Abundance. New York: Oxford University Press, 2019.

Yun-Casalilla, Bartolomé. *Iberian World Empires and the Globalization of Europe 1415-1668*. Singapore: Palgrave Macmillan, 2019. https://doi.org/10.1007/978-981-13-0833-8

Una Historia de Ballenas y Personas: el Monopolio Ballenero Portugués en Brasil (siglos XVII y XVIII)

RESUMEN

En este trabajo se recupera la historia de la operación ballenera en Brasil durante los siglos XVII y XVIII. La actividad fue un monopolio de la corona ibérica (hasta 1640) y portuguesa, desde 1614 hasta 1801, con significado e impacto económico, político y ecológico tanto para los protagonistas humanos como para los no humanos.

La abundancia de ballenas y la valorización de sus productos funcionaron como motores -ambientales y económicos- para la implantación y desarrollo de la caza de ballenas en Bahía, Río de Janeiro, São Paulo y Santa Catarina. En su duración, esta operación costera siguió el estilo "vasco" con el establecimiento de estaciones balleneras fijas en tierra y la captura de animales muy cerca de la costa. Durante un breve período, se capturaron cachalotes en alta mar, utilizando técnicas características del 'estilo costero americano'. La captura se centró en las ballenas barbadas costeras, de las que se producía aceite y se extraían las barbas. En contra de lo que se suponía hasta ahora, estos dos productos se enviaban a Lisboa en cantidades y periodicidad muy significativas, lo que nos permite comprender mejor su importancia en el contexto de la colonización portuguesa de América y en un marco de 'wet globalisation'.

Esta extracción marina no sólo acompañó los procesos de apropiación del territorio, sino que fue un estímulo para promoverlos. Se argumenta aquí que las ballenas desempeñaron un papel de fuente de riqueza para el imperio portugués y de elemento integrante en la construcción de relaciones entre las personas y el océano.

Palabras clave: historia ambiental; humanidades azules; extracciones marinas; Atlántico Sur; sur global.

Recibido: 03/11/2022 Aprovado: 24/08/2023