Facing Changes, Changing Targets: Sperm-Whale Hunting in Late Eighteenth-Century Brazil

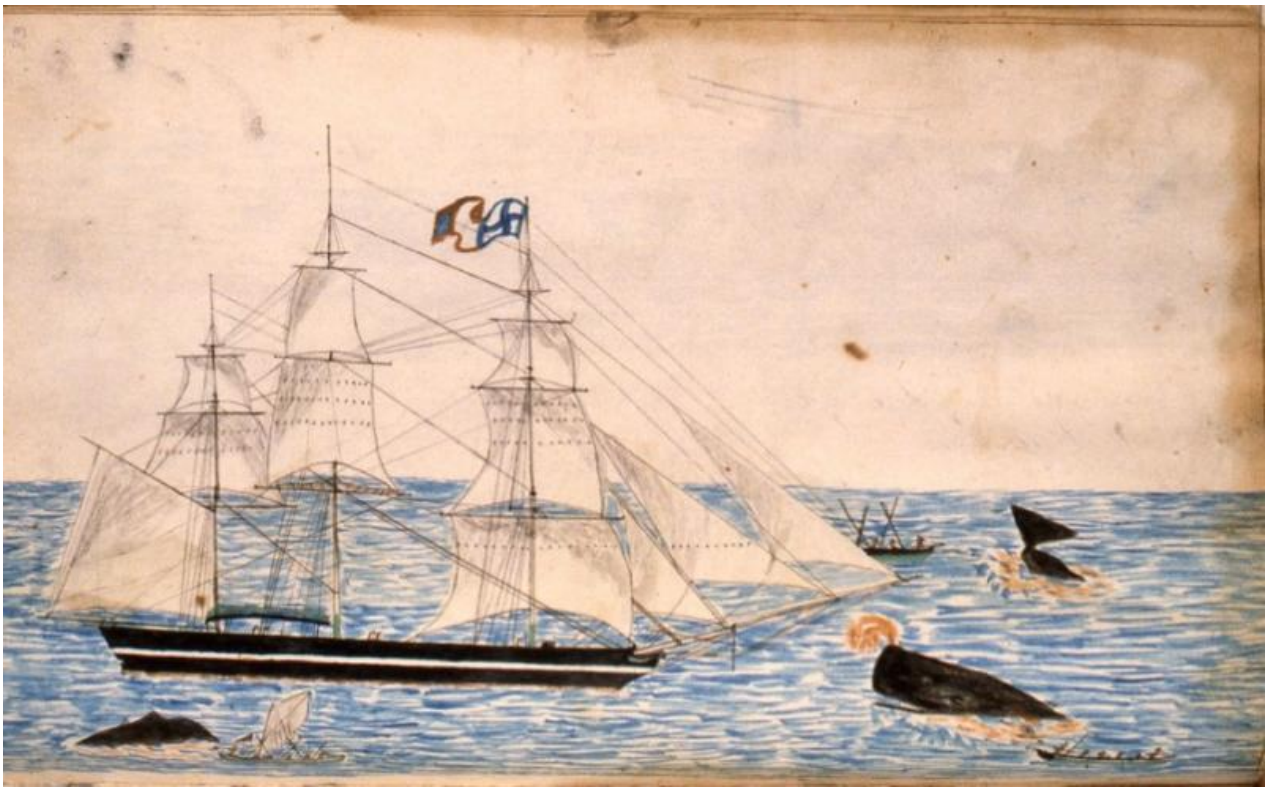
Nina Vieira, Patrick Hayes, and Al Matthews

Summary

In September 1773, the *Leviathan*, a whaling vessel from Newport, Rhode Island, entered the port of Rio de Janeiro in Brazil. This chance landing would give rise to a whole new whaling industry in Brazil, as the North American crew would teach their Portuguese counterparts how to hunt sperm whales. Sperm whales were one of the most valuable species pursued by whalers, due to the treasured spermaceti and ambergris that could be extracted from their bodies. The long-term commercial exploitation of sperm whales for these commodities has left their populations diminished and their future uncertain.

On 22 September 1773, the Leviathan, a whaling vessel from Newport, Rhode Island, entered the port of Rio de Janeiro in Brazil. The *Leviathan* was captained by Thomas Lothrop and had been chasing sperm whales (*Physeter macrocephalus*) in the Atlantic since January that year. By September the ship had lost one of its whaling boats and was short on provisions, so was forced to land in Rio to resupply. This accidental landing would give rise to a whole new whaling industry in Brazil.

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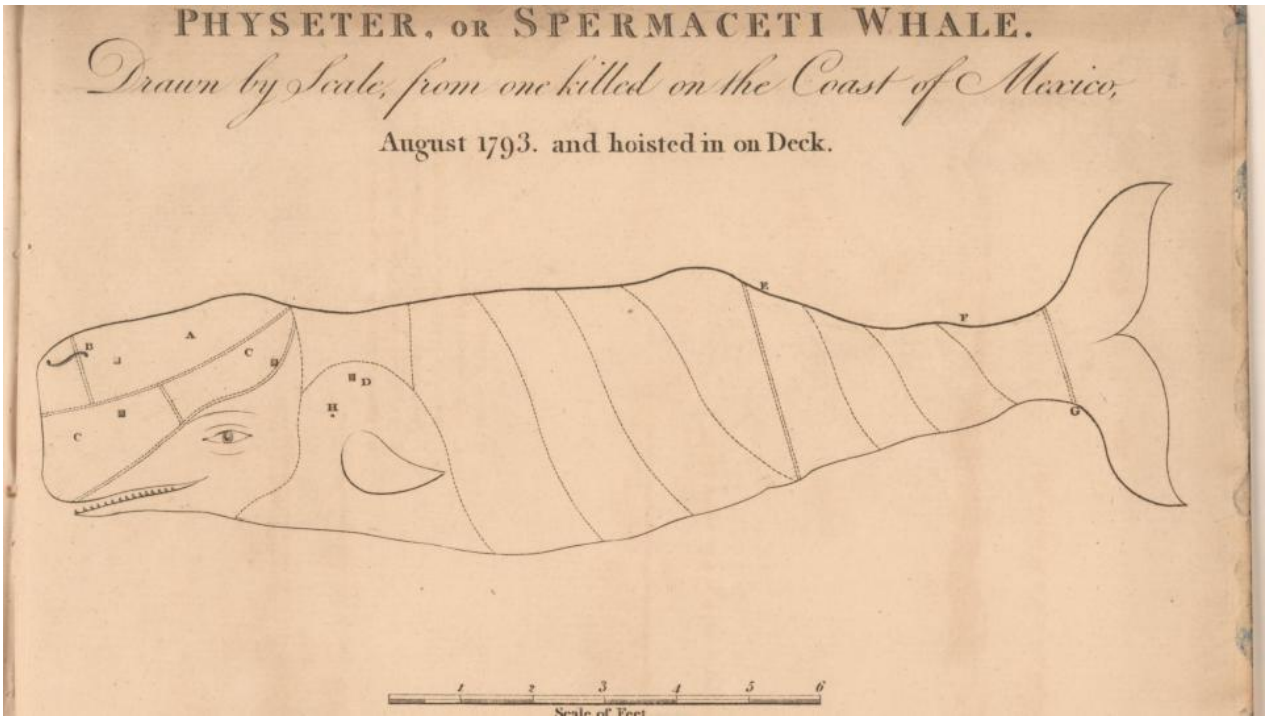
Artwork by the whaleman George A. Gould from the journal that he kept while sailing onboard the ship Columbia of Nantucket (1841–1845).

Brazil was a Portuguese colony where a coastal Basque whaling style had developed over two centuries as a crown monopoly (1614–1801). Whales were captured at sea under contract from Portuguese administrators, while most of the hard labor was performed by African slaves. The main targets were the southern right whale (*Eubalaena australis*) and the humpback whale (*Megaptera novaeangliae*). In the mid-eighteenth century there was much talk amongst the whalers of another species, one that provided two extremely valuable substances: spermaceti and ambergris.

Unknown to the Portuguese whalers, the source of these substances was the sperm whale, a species of cosmopolitan distribution inhabiting the open sea. It is the largest species of toothed whale (order Odontoceti) in the world, with males weighing up to 57 tonnes and females 24 tonnes. They can dive to a depth of up to three thousand meters while hunting squid and other deep-water prey. The spermaceti, found in their distinctively shaped head, is thought to aid buoyancy while deep diving and enhances the echolocation they use to hunt in the absolute darkness of the ocean depths. Ambergris is a hard substance produced in the stomach and is thought to ease irritation caused by the mandibles of the cephalopods they feed on. Spermaceti was mainly used in the

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production of candles and as lamp fuel. Ambergris was used to make fine perfumes and was a component of medicines prescribed to treat headaches and cardiac issues, among other ailments.



Depiction of a sperm whale caught on Mexico in 1792, showing the way it should be butchered. Items in the image are lettered for identification in text. Courtesy of the John Carter Brown Library.

Illustration by James Colnett, 1798.
Courtesy of the John Carter Brown Library.

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In 1765 Portuguese whaling contractors sent two French whaling experts to discover if spermaceti and ambergris could be sourced from Brazilian whales. They visited one whaling station after another over the course of three years, inspecting dead whales, but they did not find the fated substances. There is evidence that local whalers in Brazil were aware of the sperm whale, but this empirical knowledge was ignored by the administrators, who believed that "God is not served that in our seas of America appear more than three types of whales, without any being those that provide the drugs." ("Drugs" is a reference to the medical uses of spermaceti and ambergris.) After a great deal of time and expense, the Portuguese administrators were no closer to finding the species they were looking for. The accidental landing of the Leviathan in Rio changed that, as the locals quickly realized the ship was engaged in a new type of whaling, one that demanded novel methods and expertise, and had a different target species, the sperm whale.

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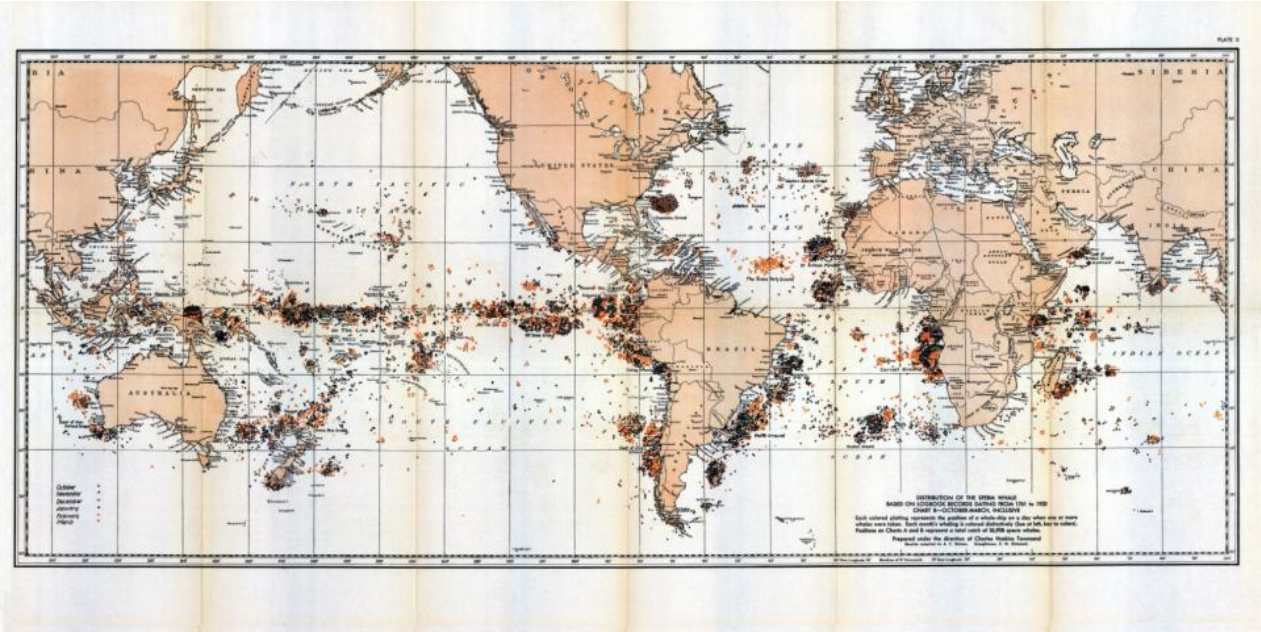


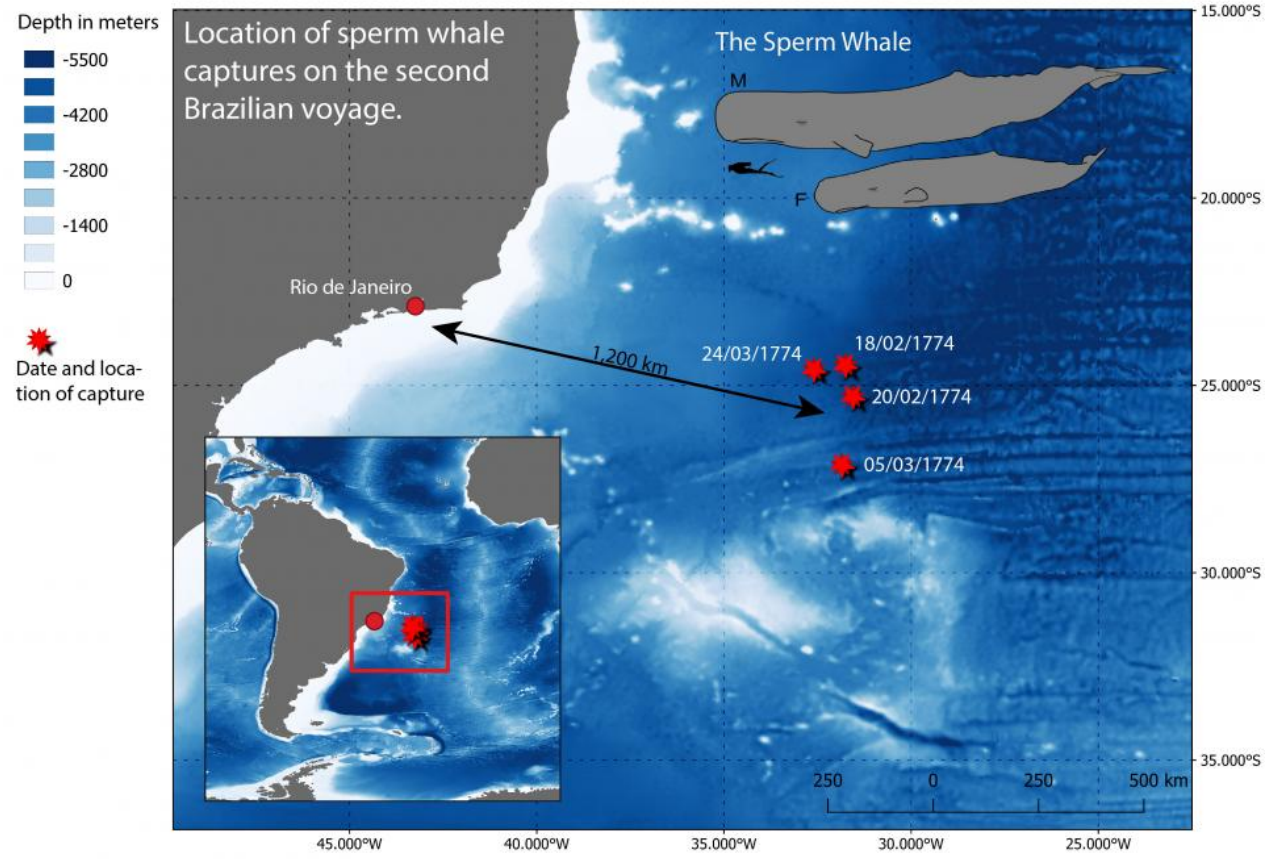
Chart B of The Townsend Whaling Charts. Sperm Whale, October to March, 1761–1920.

Courtesy of the Wildlife Conservation Society.
Chart originally published in:
Townsend, C. H. "The Distribution of Certain Whales as Shown by Logbook Records of American Whaleships ."
Zoologica 19, No. 1 (1935): 1–50.

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Soon the foreign crew joined the local whalers; a ship was ordered to be equipped identically to the *Leviathan*, with borrowed spears, harpoons, and hooks so the Portuguese could copy the North American whaling methods. The new ship departed in October 1773 and returned three months later, having caught six sperm whales. Due to the success of this voyage, Lothrop and his crew were employed to teach the Portuguese everything they knew about hunting and processing sperm whales; in exchange they were paid a share of the proceeds from each whale caught. During a second voyage that took place from February to March 1774, nine sperm whales were caught around 1,200 km off the coast of Rio. We know this because detailed records of the voyage were kept, including the number of animals caught, and the amount of oil and spermaceti harvested—another innovation borrowed from the Rhode Island whalers.

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Location of sperm whale captures from the second voyage (February 5 to April 1, 1774). Nine whales were caught at four different locations, at an average depth of 5,100 meters.

Map by Patrick Hayes, 2019.
Data from Arquivo Histórico Ultramarino (Lisbon), Document AHU_ACL_CU_17, Cx. 96, D. 8312.

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Facing economic and environmental changes, and by sheer chance, the Portuguese crown and whaling administrators changed target species and adopted a new whaling method. From October 1773 to June 1777, 30 whaling voyages were conducted and a total of 186 sperm whales were captured by the Portuguese off the coast of Brazil. At the same time, the presence of North American and British whalers in the South Atlantic increased, and whaling grounds were explored further offshore, along the entire Atlantic coast of South America and beyond. Portuguese involvement in sperm-whale hunting ended in 1777 because the whaling contractors amassed unsustainable debts and the industry was taken over by larger vessels from other nations.

The accidental arrival of the *Leviathan* in Rio de Janeiro in 1773 sparked a new industry in Brazil and contributed to the inexorable decline of the other leviathans in this story, the sperm whales. The exploitation of whales in Brazil was facilitated by the transfer of knowledge first from the Basque country, then from North America, and finally in the early twentieth century when Norwegian whaling methods were introduced. Sperm whales are now listed as "vulnerable" by the International Union for Conservation of Nature, due to centuries of commercial exploitation. Today, discussions are taking place about the creation of a South Atlantic whale

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sanctuary, and conversely there are calls to resume commercial whaling. The present story reminds us about the power of knowledge and the importance of spreading positive and helpful information about conservation and the impact people can have on other animals and ecosystems.

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- Starbuck, Alexander. *History of the American Whale Fishery, from Its Earliest Inception to the Year 1896*. Waltham, MA. Published by the author, 1878.
- Valdés Hansen, Felipe. "Balleneros vascos en Brasil." *Itsas Memoria. Revista de Estudios Marítimos del País Vasco* 8, Untzi Museoa-Museo Naval, Donostia-San Sebastián (2016): 725–40.
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Related links:

- Red List: Sperm Whale
  https://www.iucnredlist.org/species/41755/10554884
- CONCHA at FCSH
  http://www.cham.fcsh.unl.pt/ext/concha/
- The Oceans Past Initiative
  http://oceanspast.org/
- "New Histories of Pacific Whaling." *RCC Perspectives* 2019.

http://www.environmentandsociety.org/node/8954

- "Beauties and Beasts: Whales in Portugal, from Early-Modern Monsters to Today's Flagship Species." *Arcadia* 2018.
  http://www.environmentandsociety.org/node/8449
- "The Polluted Past of the Whaling Town Hachinohe." *Arcadia* 2020.
  http://www.environmentandsociety.org/node/9038

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- https://www.biodiversitylibrary.org/page/51225956#page/196/mode/1up

About the authors:

Nina Vieira
Nina Vieira has a background in Biology and Marine Ecology. She is presently undertaking her PhD at CHAM, University NOVA of Lisbon, and is focused on Portuguese whaling in the South Atlantic in the early modern period.
http://orcid.org/0000-0002-6280-9951

Patrick Hayes
Patrick Hayes has a background in English Literature and History. He is a PhD student at the Trinity Centre for Environmental Humanities and is studying the environmental history of Ireland's sea fisheries in the early modern period.
https://orcid.org/0000-0002-8894-2195

Al Matthews
Al Matthews has a background in Mathematics and is currently a PhD student supported by ERC Advanced Grant 669461. His research lies in both economic and environmental history, studying changes in fish markets from 1500 to 1700, following European expansion to the Americas.

https://orcid.org/0000-0002-1553-393X

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