CHAPTER 3

Whales' Teeth: A Niche Commodity of the Nineteenth-Century Pacific Sperm Whaling Industry

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NORTH ATLANTIC RIGHT WHALES were the primary target of the American whaling industry until around 1710 to 1720, when New Englanders began hunting sperm whales as well, transmuting certain parts of the whale into consumer commodities: oil tried out from body blubber, spermaceti wax found in sperm whales' heads, and ambergris (partially digested fecal matter that occasionally clogged up a sperm whale's innards or, if expurgated, could be discovered floating at sea or washed up on a beach).[1] Sperm oil and spermaceti, the former used in lamps and the latter in candles, fueled the eighteenth-century lighting revolution. By the mid-eighteenth century, a large whale fishery developed around the production of sperm oil and spermaceti, along with an industrial infrastructure of oil refineries, candleworks, and merchant middlemen.[2] Ambergris, due to its earthy odor resembling musk and civet and ability to fix scents in perfume, also became a staple product of the whaling industry. Its extraordinary rarity escalated its cost.[3] Nineteenth-century New Bedford whaleships lucky enough to come across ambergris could earn $10,000 to $20,000 for a one-hundred-pound lump.[4]

Teeth became a marketable by-product of sperm whales, too, but they were never a driving force behind the growth of the sperm whaling business. Their history followed a different trajectory from oil, spermaceti, and ambergris. Teeth mainly circulated as objects of exchange in niche markets that valued them as blank templates

for cultural inscription. With an eye toward unpacking the complex, quirky workings of global capitalism, this chapter surveys the varied niche markets that developed in sperm whale teeth. On the one hand, global capitalism adopted systems for standardizing some things into interchangeable commodities distinguished by weights and measures and characterized by expendability (oil, spermaceti wax, and ambergris). On the other, niche markets assigned value based on more intangible, durable, and culturally informed attributes related to beauty, history, and meaning. Oil, spermaceti wax, and ambergris realized their value when consumed. Whales' teeth realized theirs when displayed and preserved.

Scholars, mostly anthropologists, have ruminated at length on the value of sperm whale teeth in nineteenth-century Oceania as part of a larger query into the culture, economy, and politics of exchange. Marshall Sahlins succinctly captured one way of thinking popular among ethnohistorians. "The first commercial impulse of the local people is not to become just like us, but more like themselves," Sahlins asserted in a 1992 article. Hence European trade did not diminish Indigenous desire for "commodities of social and ritual value" but instead magnified the significance of such "prestige goods." In Fiji, for example, greater access to whales' teeth through foreign commercial shipping networks stimulated demand for them and resulted in ceremonial exchanges. Without confronting Sahlins outright, Nicholas Thomas critiqued the polarization that Sahlins avowed—the juxtaposition between Us and Them, Europeans and Natives, modern and premodern, commodities and gifts, economics and culture—as a longstanding yet errant anthropological tradition. Thomas argued that in every society the meanings of things depend on context; that whales' teeth in Fiji's history were "entangled objects" with complex, variable meanings as commodities and as gifts; and that European collection of Indigenous ritual objects could similarly be read as claims to power, authority, and status.[5]

As entangled objects within Oceania and outside it, whales' teeth cannot be reduced to a simple dichotomy that pits a passionless, cosmopolitan capitalism against an Indigenous, ritualized, fetishistic, cultural particularity. The history of sperm whale teeth in the global marketplace had a more convoluted history. Both natives of Oceania and industrial whalemen transformed them into things resonating with culturally significant meanings, things that made intangible emotions and beliefs tangible. Capitalist markets then developed to find

the advantage and put a price tag on these special objects that had sperm whale teeth as the base material.

Sperm whale teeth never became a commodity that industrial whaling marketed to European and American consumers. In his history of Nantucket, the Massachusetts island that dominated world whaling from the mid-eighteenth to the early nineteenth century, whaling merchant Obed Macy described Nantucketers' response to a sperm whale that landed on the beach in the early days of English settlement. It caused "considerable excitement" and heated arguments over who should possess "the prize." The townsmen boiled the blubber into oil at the tryworks set up for trying out right whales. They also collected the spermaceti for its reputed medicinal qualities, which suggests that they did not yet know how wonderfully this mysterious substance worked in candles. The teeth "were considered very valuable," Macy wrote without explanation. If so, why did the Nantucket whalemen who deliberately hunted sperm whales later in the century not systematically collect the teeth as they did sperm oil, spermaceti, and ambergris?[6]

Mentions of sperm whale teeth in eighteenth-century newspapers confirm that no one involved in the American whaling industry thought that whales' teeth had value beyond display in a curiosity cabinet.[7] A Boston newspaper, recounting a 1720 excursion from Nantucket that returned home with a sperm whale from sixty leagues offshore, reveals both the novelty of sperm whale hunting at the time and the expectation that teeth in the mouths of sperm whales might be as profitable as "whalebone" (baleen) in the mouths of right whales. The captured sperm whale "will make about a Dozen Barrels of Oyl, no Whalebone, and the Teeth seem to be like Ivory," the article reported, as though the ivory-like teeth might compensate for whalebone's absence.[8] No market in sperm whale ivory developed, however, as the Atlantic sperm whale industry took off in the eighteenth century. Retailers' advertisements listed sperm oil, whale oil, whalebone, and sperm candles alongside the "teeth" of elephants and sea cows but offered no whales' teeth for sale.[9] Ivory turners, the artisans who transformed these raw animal parts into something else, worked their craft in whalebone and elephant ivory but apparently had no use for sperm whale ivory.[10] It could be that artisans thought these teeth inferior. In his microscopic comparison of animal ivories, T. K. Penniman noted that sperm whale teeth did not produce the same sheen as elephant

ivory and that the outer layer of cement characteristic of whales' teeth made carving them more difficult.[11]

This was thus the state of the market for sperm whale products in the United States and Europe when the rush on Pacific sperm whales began in the 1790s. A Massachusetts family repatriated to London, the Enderbys, initiated the earliest whaling ventures into Pacific waters, with the 1789–1790 voyage of the *Emelia.* Half a dozen American vessels from Nantucket and New Bedford embarked for the Pacific the following year. The *Emelia*'s success prompted the Enderbys to send more vessels and in 1793 commission James Colnett on the *Rattler* to discover where in the Pacific Ocean and at what time of year sperm whales congregated.[12] A few years after the *Rattler*'s departure for the Pacific, Colnett published a narrative of the voyage and what may be the earliest, most accurate diagram of a sperm whale. He divided the whale into sections. The case held the spermaceti, the most valuable part. The diagonal lines across the whale's body demonstrated how whalemen cut the blubber into large "blanket pieces" to lift onto the deck of the vessel preparatory to boiling. Ambergris might be "discover'd by probing the intestines with a long Pole." The teeth clearly visible in the whale's lower jaw, however, are described in the text only as a physiological feature, not as a merchandisable product akin to blubber, spermaceti, and ambergris.[13]

Although fascinated by sperm whale teeth, the earliest generations of New Englanders involved in sperm whaling had no use for them. They may have collected a few as novelties, but no subsidiary industry emerged to support their exploitation, processing, and sale, and no buyers created demand for them in American and European markets.

As foreigners entered the Pacific in greater numbers in the early nineteenth century to explore, trade, and extract resources, they noticed the prominence of whales' teeth in the material culture of many Pacific peoples. Especially in Fiji but also in Hawai'i, the Marquesas, and elsewhere, the warm, gold-white glow of polished animal ivory combined with the teeth's rarity made them high-status objects exchanged and displayed as symbols of divinity, truth, integrity, trust, wealth, and power.[14] American commercial interests in the Pacific adapted to take advantage of this niche market. Just as Chinese dietary demand for birds' nests and bêche-de-mer (sea slugs) spawned American extraction of these items and the growth of a carrying trade

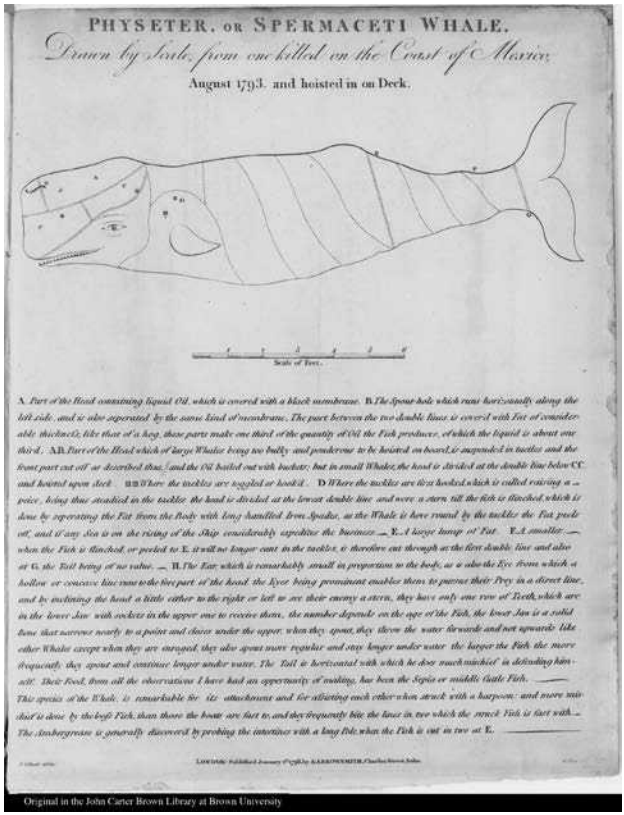

Figure 3.1. A. Arrowsmith published this version of Colnett's diagram in 1798. Courtesy of John Carter Brown Library. Accessed September 6, 2021. https://jcb.lunaimaging.com/luna/servlet/detail/JCB~1~1~5601~8220002:Physeter,-or-Spermaceti-Whale—Draw#.

between Pacific archipelagos and the China trade ports of Canton and Manila, sperm whale teeth now circulated in a market economy but with Pacific Islanders envisioned as the ultimate consumers.[15] Early global capitalism, therefore, did not cause consumption patterns across regions to standardize. Instead, it proliferated a variety of marketable commodities to meet what merchants in global trade saw as the peculiar tastes of exotic peoples.

Indeed, from the perspective of Oceania, the teeth were the best part of a whale. Oil, the whale part most sought after in the United States and Europe, had no value. Pacific Islanders' easy access to

coconut oil made oils rendered from animal fat less appealing since tropical heat would quickly turn such oils rancid. William Mariner, an Englishman stranded in Tonga from 1806 to 1810, recounted how "the unusual sight" of a rotting sperm whale that had washed up at Vava'u attracted a great deal of attention, "their object being the teeth," which Tongans cut into pieces one inch to four inches long, yet cut in such a way as to retain the shape of teeth. They strung these on necklaces worn by Tonga's elites. Tongans also used small pieces of whale ivory as inlay in clubs and wooden head rests. The meat had some use but only for "the lower orders," who "managed to make a meal of it."[16] The occasional beached whale provided Pacific peoples with their only access to whales' teeth. They did not hunt whales themselves, not until large numbers of Pacific Islanders joined foreign whaleships as crew members.[17]

Although many Pacific peoples shared in the high estimation of sperm whale teeth, how they incorporated these items in their material culture differed from archipelago to archipelago. Hawaiians created a variety of personal ornaments from them, the most distinctive and prized of which was the whale's tooth featured in *lei niho palaoa* (*lei* meaning necklace, *niho* meaning tooth, and *palaoa* meaning sperm whale). Carved into a shape that looks like a hybrid fishhook and tongue, the sperm whale tooth was worn around the neck on a cord made from braided strands of human hair. Similar objects have turned up at archaeological sites but are usually derived from more abundant shell, coral, or wood. No doubt occasional whale strandings brought some ivory to the islands, but the majority of the *lei niho palaoa* in museums today undoubtedly owe their existence to foreign shipping.[18]

Because Hawaiians carved most of the tooth away, they appear to have favored whale teeth more for the luxuriant look and feel of the ivory material than for its association with whales. Moreover, many *lei niho palaoa,* despite being classified as such, were not made from sperm whale ivory. The hundred *lei niho palaoa* in the Bishop Museum's online catalog include at least twelve made of walrus tusks and one made of elephant ivory.[19] An early European description attesting to the desirability of ivory appears in British explorer George Vancouver's account. In complaining about the theft of several knives while at the Hawaiian Islands in 1794, he said they were taken not "for their value as iron instruments, but for the sake of their ivory handles. These were intended to have been converted into certain neck ornaments that are considered as sacred and invaluable."[20]

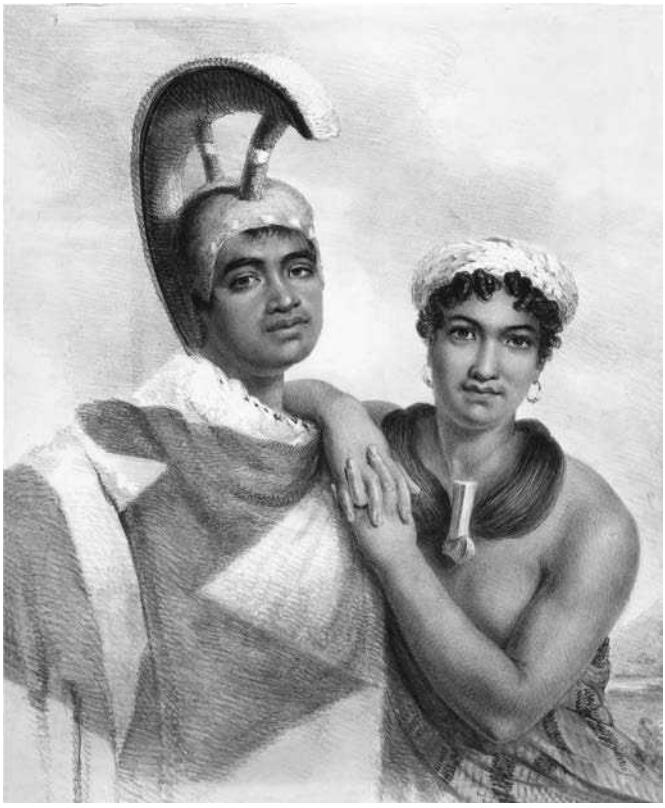

Figure 3.2. Lithograph of Boki and Liliha, based on artist John Hayter's painting of them in 1824 while in London with Liholiho (Kamehameha II), in the elite attire of the *ali'i* class. Liliha wears a *lei niho palaoa* around her neck. Source: Call number PP-96–2-002. Hawaii State Archives Digital Collections.

Like other foreigners in Hawai'i, Vancouver recognized the high value Hawaiians attributed to *lei niho palaoa* but did not delve deeply into the reason for their significance. The most obvious trait of *lei niho palaoa* was as treasured emblems of ruling authority for Hawaiian elites, the *ali'i.* This is the context in which whales' teeth usually appear in nineteenth-century documents of Hawaiian history. For instance, in the saga of Umi-a-Liloa and his rise to power on the Big Island of Hawai'i, published from materials collected by Abraham Fornander in the mid to late nineteenth century, the whale's tooth necklace that Umi wears throughout his travels, wars, and diplomatic

negotiations signifies the righteous, divine destiny guiding him in his eventual victory and rule over Hilo and Hamakua.[21]

With the arrival of China traders in the 1790s, sandalwood traders in the 1810s and 1820s, and whaleships beginning in 1819, teeth became an imported trade item along with cloth and muskets. Harvesting the teeth at sea, whalers used them as currency to pay for provisions.[22] Teeth flooded the islands without saturating demand. The nineteenth-century Hawaiian historian David Malo remarked indirectly on European shipping as the source of an influx when he observed that *niho palaoa* "were not common in ancient times, and it is only since the reign of Kamehameha I [d. 1819] that they have become somewhat more numerous."[23] By 1828, according to missionary Charles Stewart, these emblems of high status "formerly much worn by the high chiefs" were "now confined almost entirely to those of inferior standing."[24] The new surfeit of teeth did not eliminate demand for them but may have caused their deflation as marks of distinction, the largest and most luminous being reserved for the *ali'i.* Regard for whales' teeth did not dissipate over time. A *lei niho palaoa* featured as one of the royal symbols David Kalakaua wore at his 1883 coronation as king and, like *hula,* was a custom he revived during his reign.[25]

At the Marquesas, sperm whale teeth were even more conspicuous as objects of veneration. US naval officer David Porter observed that Marquesans preferred sperm whale ivory over other kinds of animal ivory and over all other trade goods. The lower classes would accept any ivory, but high-ranking individuals expected the real thing. When headman Keatonui toured the vessel, he was most excited at seeing the parcel of sperm whale teeth Porter showed him: "he would not be satisfied," Porter claimed, "until I had permitted him to handle, to measure and count them over and over." When later asked whether he wanted anything he had seen on the ship, Keatonui chose a small whale's tooth that he had especially admired.[26]

Marquesans refashioned the teeth into mainly two types of objects: ear ornaments called *hakakai* and strings of teeth worn around the neck. The large disk of the *hakakai* appeared at the front of the ear; a spur through the ear held the piece in place. Tiny, fully formed *tiki* on many *hakakai* were a common element. The necklaces were either a strand of multiple small whales' teeth (or larger teeth cut into smaller, toothlike shapes similar to what Mariner described at Tonga) called *taki ei hei,* or a single whale's tooth pendant, *taki ei.* Anthropologist

Ralph Linton, who conducted fieldwork in the Marquesas in 1920 and 1921, stated that only men wore *ei* (in contrast, women wore crowns of strung porpoise teeth). He further noted that *ei* had "religious significance" but did not elaborate on what meaning they held as sacred objects.[27] Given that whales' teeth necklaces were worn by men going into battle, they presumably signified martial potency. In the Marquesas in 1840, British naval officer Edmund Belcher ridiculed the assemblage worn by men heading off to a fight as a beaded headdress with a plume of feathers, a swath of tapa cloth around the waist, a musket in the right hand, a large woven fan in the other, and "a string of heavy whale teeth, with the points projecting forward." He wondered, "How they are to fight thus rigged is incomprehensible."[28] For Belcher, the necklace of whales' teeth seemed the epitome of military inefficiency, but for the Marquesan men who wore them as armament, the teeth likely afforded an invisible power that strengthened them for war.

Comparable to the Hawaiian case is how sperm whale teeth in the Marquesas sustained significance despite their greater availability once sandalwood traders and whalers began importing them as trade items. Archaeologist Robert Suggs' mid-1950s investigations of pre-European contact sites on Nuku Hiva turned up nearly two hundred whales' teeth: mainly from small pilot whales and occasional sperm whales (cut into smaller tooth forms). Suggs also found imitation whales' teeth whittled out of shells, which led him to conclude that, at some point in Marquesan history, the demand for teeth outstripped the supply. He speculated that foreign trade would have "cheapened" the teeth in Marquesans' estimation, but given Belcher's 1840 observations on Marquesan dress, rampant deflation in their value appears not to have happened or, if so, not for several decades.[29]

In Fiji, a sperm whale tooth, or *tabua* (pronounced tambua), was and is an object of even greater adoration, and the tooth shape fundamental to its desirability. Although resembling necklaces in how the tooth was pierced and strung on a coconut-fiber cord, *tabua* were not worn on the body but instead stored in a basket or box until some life-course transition or political situation required a presentation gift. With a whale's tooth in hand, Fijians could solicit allies to join in a war or assassinate a rival, beg forgiveness of a superior, or acquire a wife. As anthropologist Andrew Arno described their function, they were "cultural currency" that gained their affective meaning in the act of being exchanged.[30] Nineteenth-century visitors to Fiji recognized the emotive and social significance of a whale's tooth. A shipwrecked

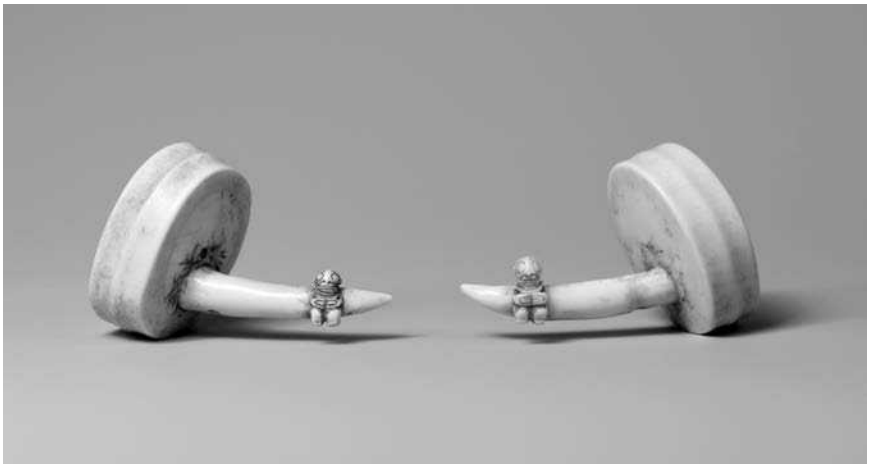

Figure 3.3. *Hakakai* (ear ornaments) made of sperm whale ivory. Metropolitan Museum of Art, 1979.206.1639a, b. Source: Art Resource, New York. © Metropolitan Museum of Art.

American sailor observed that "among the Polynesian savages it is as important a treaty article as wampum among our Indians," and a British naturalist called them "crown jewels" and likened them "to what diamonds are with us."[31]

Grasping the value of sperm whale teeth in Oceania, British and American sandalwood traders immediately exploited Indigenous demand. William Lockerby, a sandalwood trader in Fiji in 1808, explained their bargaining power to prospective investors in several pages of "Directions for the Fegee or Sandlewood Islands": Fijians who had whales' teeth laid "them up as graet riches as porshens for their Daughters & Making peace with their offended Supiriors." Elephant or other ivory, if cut into the shape of a tooth, was to the Fijian equally desirable, Lockerby added, and for one tooth a trader could expect two tons of sandalwood cut and delivered. More than any other trade good, whales' teeth were a necessity in Fiji.[32] When the sandalwood rush migrated to the Marquesas a few years later, sandalwood traders had fully adapted shipboard protocols to meet Indigenous demand. On its passage from Valparaiso, Chile to the Marquesas in 1816, the crew of the Salem ship *Indus* busied themselves "forming whale's teeth from ivory & preparing other articals of the ship's trade."[33] In the first two decades of the nineteenth century, as the Pacific sandalwood boom swept through Fiji, the

Figure 3.4. Nineteenth-century Fijian *tabua.* Catalog Number 1999.25. Courtesy of New Bedford Whaling Museum.

Marquesas, and Hawai'i, sandalwood traders imported real and faux whales' teeth into the islands in the thousands.

Once commercial shipping interests realized that Pacific Islanders wanted whales' teeth, a new market for them emerged in eastern seaports in the United States. In the 1810s, New York newspaper advertisements offered cash for whales' teeth and New York auction houses dealt in teeth along with sealskins, mother of pearl, and other newly arrived goods from the South Seas.[34] One seller pitched his offer explicitly to other merchants in promoting his two hundred pounds of whales' teeth as "well worthy the attention of North West Traders," in other words, ships involved in the China trade stopping for provisions at the Marquesas or Hawai'i.[35]

Despite this newfound awareness of a constituency eager to obtain whales' teeth, the American market remained small and marginal because it was confined to Pacific traders. Teeth never became a big commodity like whale oil or whalebone. Traders and whaleship captains did not bother recording transactions involving whales' teeth in the documents that measured voyage productivity, and whaleship owners reporting to customs officers on goods imported to the United

States at the end of a voyage continued to list only sperm oil, "head matter" (spermaceti), whale oil, and whalebone.[36] Thus, the Pacific whales' teeth trade had little impact on the industry's main objectives.

It was other Americans in the Pacific who needed teeth and depended on the whaling industry to supply them if they were to make any headway in bargaining with Pacific Islanders. Specific Pacific trades developed in which sperm whale teeth forefronted negotiations. Initially, it was the sandalwood trade that awakened the realization of a population eager to acquire sperm whale teeth, but the trade was short lived because the slow-growing tree was quickly depleted. The trade rose and fell in Fiji from 1804 to 1813, boomed and busted in the Marquesas in the 1810s, and lasted in the Hawaiian Islands into the 1820s.[37] Then, in the mid-1820s to mid-1850s, commercial interest in Fiji's bêche-de-mer revived the trade as dozens of American ships, nearly all from Salem, Massachusetts, frequented the islands.[38]

Salem's bêche-de-mer traders knew full well the necessity of having a large cargo of whales' teeth along with muskets, gunpowder, cloth, and axes.[39] The brig *Consul* left for Fiji in 1833 with one barrel of whales' teeth weighing 317 pounds at a cost of $0.18 per pound.[40] At two pounds per tooth, that adds up to almost 160 teeth at $0.36 each. The number of teeth in a sperm whale's lower jaw (the only place where it had teeth) varied by age, but forty-eight could be considered average, in which case this barrel held the teeth of more than three whales.[41] The *Consul* sold one cargo of bêche-de-mer in Manila in 1835 and picked up additional trade goods for another trip to the islands, including two barrels of whales' teeth costing $0.50 per tooth and weighing 465 pounds and a basket of cheaper whales' teeth, worth $0.30 each and weighing seventy-four pounds altogether. In short, sperm whale teeth had proven so effective in the *Consul's* trade negotiations that the brig picked up an even larger supply for the second leg of the voyage.[42]

Other Salem vessels carried considerably more whales' teeth from New England to Fiji. The *Gambia* in 1842 left Salem with 2,630 pounds of them.[43] Ship outfitters had to resort to different suppliers to acquire this many teeth given that they bought in small lots of fifty to a hundred pounds. Demand for teeth was high enough to inspire wholesalers who obtained them from whaleships returning to New Bedford and then sold them to Salem's bêche-de-mer traders, many of whom waited until arrival in the Pacific to stock up.[44] Salem ship owner Stephen C. Phillips instructed Captain Joseph C. Winn Jr. to purchase

teeth from any whaleships the *Eliza* encountered on its passage to Fiji in 1833.[45] Traveling to Fiji in 1844, the brig *Gambia* stopped at Bay of Islands, New Zealand, for its whales' teeth.[46]

For a brief period, then, sperm whale teeth became a commodity in US markets and subject to the same systems of quantification and measurement surrounding oil, whalebone, and ambergris. Merchants engaged in transactions involving "5000 gallons whale oil" and "50 boxes Spermaceti Candles" now advertised lots for sale of fifty whales' teeth, 100 pounds of whales' teeth, and three barrels of "large size whale teeth."[47] This vocabulary—dwelling on the number of teeth, their weight, and their size as an indicator of quality—signified their commodification.[48] In contrast to whales' teeth in Oceania, where aged teeth were appreciated for their rich color and polished feel, this brief surge of interest in US markets required that they be graded by quality and packaged by weight or container (in pounds or barrels), thereby translating their exchange value into a monetary equivalent.

At this point in the narrative of sperm whale teeth, it looks as though within the United States they became nothing more than commodities, interchangeable with each other and calculable by price. But the most famous manifestation of sperm whales' teeth was not the uses they were put to by Pacific Islanders but rather what nineteenth-century whalemen did to them. As a template for scrimshaw, defined as the handiwork of industrial whaling laborers while aboard ship, whales' teeth enabled cultural expression similar to that of Pacific Islanders yet different in form and meaning. Now cherished relics preserved in museums and among collectors, scrimshawed teeth endure as cultural artifacts evoking a romanticized nostalgia for an antiquated industry crucial to European and American overseas expansion.

Specialists in the study of scrimshaw date its emergence as an art aboard whaleships to at least 1817, based on an etched tooth with a whaling scene and text that reports it as the London whaleship *Adam* at the Galapagos Islands. If this is indeed when whaling laborers began scrimshawing in their plentiful leisure time as they awaited sightings of whales, then it occurred about ten years after the industry developed a market in teeth targeting Pacific Islanders as consumers. Despite the coincidence in timing, no causality is apparent between the ornamental uses of teeth by both Pacific Islanders and Yankee whalemen: neither one got the idea from the other. Scrimshaw expert Stuart Frank suggested that whalemen only picked up scrimshawing

after the sandalwood rush had ended and teeth lost value as a trade item in Oceania, but the teeth continued to be a valuable trade item with Pacific Islanders, at least through the first half of the nineteenth century.[49]

Surprisingly little commentary on scrimshaw appears in whaling records. One of the few American whalemen to identify as a "scrimshoner" was Mortimer Camp in his memoir of a Pacific sperm whaling voyage in the early 1840s. He described it as engraving on "bone, whale's teeth and corest [*sic*] boards, as we called them; they were for our sweet hearts at home."[50] As his comment reveals, scrimshaw was a sentimental pastime for whalemen lacking any profit-seeking intention. They whittled away at whales' teeth, baleen, and whales' bones to produce corset busks, swifts (yarn winders), pastry crimpers, inlaid boxes, and other knickknacks intended as voyage souvenirs and gifts for loved ones. Much scrimshaw had a feminized cast to it: the swifts, pie crimpers, and busks all evoked women's work or dress. When the tooth shape was preserved to serve as the canvas for a drawing, often referenced were domestic spaces, such as parlors, or genteel women in fashionable outfits as appeared in magazines from the period. Scrimshawing, then, was more than just a way to kill time aboard ship; it became a contemplative act in which men away from loved ones on three- to four-year voyages embodied their emotional attachments to home through gift production.

The few comments on scrimshaw in whaling accounts do not say how whalemen arbitrated who had rights to take possession of the teeth. Shipping contracts did not state outright whether the ship owners, captain, officers, and laborers in the forecastle each had a share in the teeth as they did in the more obvious products of the industry. Captains must have kept some of the teeth to use as barter with Pacific Islanders. In other cases, the crew probably divvied them up. In their rare mentions of scrimshaw, whalemen appear to have had easy access to teeth and the whale's skeleton. The latter would have been dumped into the deep as waste if not used for scrimshaw.

Even though whalemen did not make scrimshaw to sell, they sometimes did sell the products of their craft, and a haphazard market in scrimshaw developed in ports that whaleships stopped at. J. F. Beane, who went whaling on the *Java* in the 1860s, gave one of the fullest accounts of scrimshaw. Even though whalemen made these things "for sweetheart or wife," binges on shore in ports of call enticed them to sell their creations for a pittance. Beane held on to some of his

Figure 3.5. Display of scrimshawed sperm whale teeth. Courtesy of New Bedford Whaling Museum.

"handiwork as an etcher on ivory": two teeth from a whale caught off western Australia that made eighty-four barrels of oil and was "armed with fifty-two of the most perfect teeth I ever saw."[51] Frank Bullen also talked of scrimshawing by fellow crew members. He described the processing of the teeth. It first took some engineering to extract them from the whale's gums and clean them. The teeth then went into a barrel filled with brine before being subjected to the knife, chisel, and file. They were then polished with oil. He did not scrimshaw himself but dealt in it in a small way by exchanging "an elaborate pastry-cutter carved out of six whale's teeth" for a pound of tobacco with one crew member, later selling it to a shopkeeper in Dunedin, New Zealand.[52] Even this selling of teeth constituted a niche specialty market rather than a commodity market because it was the artwork on the teeth that made them worth buying.

Today the value of scrimshawed whales' teeth has skyrocketed. Classified as antiques and folk art, scrimshaw is now another commodity in the niche market. Indeed, the literature on the history of

scrimshaw seems directed entirely at museum curators and private collectors, the buyers and sellers of scrimshaw, and narrowly considers its history from within an art-world perspective. This literature identifies, or fails to identify, which "artists" produced which scrimshawed teeth and scrupulously tries to spot fakes. Scrimshaw traceable to particular "artists" can attain extraordinary returns when sold at auction.[53] A Frederick Myrick tooth dating to around 1830, valued at $150,000 to $200,000 on the PBS series *Antiques Roadshow,* garnered $123,000 at auction in 2014. Another tooth carved by Nantucket whaleman Edward Burdett, dating to the same period, sold at auction in 2017 for $465,000.[54] The reason for the high valuation is the ability to link classic sperm whale teeth depicting whaling scenes to specific craftsmen who have been elevated to the status of artist.

Although not nearly so precious, Fijian *tabua* sold at art auctions can also reach high values, selling for a thousand dollars or more, in these specialized markets of art collectors and museums.[55] Whether industrial whalemen or Pacific Islanders did the transforming, collectors coveting human-enhanced sperm whale teeth as cultural or artistic expressions are a new niche market that continues to treat them as desirable objects.

Sperm whale teeth as artifacts subjected to human transformation have been the subject of two discrete historiographies. Anthropologists of Oceania have seen them as important objects within Pacific cultures and fodder for ruminating on what things humans endow with value and for what reasons. In contrast, studies of scrimshaw have Yankee whalemen at the center and a readership of curators and collectors who want to be able to discriminate between the authentic and the fraudulent and who view an individual artist, not a collective culture, as the producer of the artifact.

Yet both Pacific peoples and industrial whalemen used the bone and ivory of whales as the basis for elaborate cultural expression. Even when they preserved the shape of the tooth, they did some altering of it by punching a hole in it for a cord or by polishing it. They kept, gave away, or sold these objects but did not destroy them. Using these kinds of symbolic and sentimental objects was a different kind of consumption from the commodified oil, spermaceti wax, and ambergris that was quickly expended to realize some other objective, such as lighting or scent creation.

The differential uses for and value of whale products—how oil, spermaceti, and ambergris became expendable commodities whereas teeth became treasured relics conveying a host of human emotions—continue to bear on the present day. Many countries prevent the sale of the industry's classic commercial products—whale oil, spermaceti, and ambergris—through such measures as the US Marine Mammal Protection Act, International Whaling Commission mandates, and agreements reached under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). These systems prevent whale parts from being treated as commodities. Cultural artifacts of nineteenth-century Pacific Islanders and whalemen, however, can be bought and sold as "Antique Parts" of sperm whales.[56]

Even though ambergris has also been regarded as precious and can be said to acquire its extraordinary value from its power to evoke human emotions by titillating our sense of smell, it realized its value—like the more mundane and lower-cost oil and spermaceti—through a transformation that resulted in its destruction. Sperm whale teeth have had the opposite trajectory. The blank canvas of the whale's tooth inspired people to transform it in ways that enhanced its value and called for its preservation. It was the meaning, not the transitory material benefits, of sperm whale teeth that made them objects of human desire of great worth in a variety of niche markets.

Notes

1. Nantucket folklore credits Christopher Hussey with bringing the first sperm whale back to the island for processing in 1712. See Macy, *History of Nantucket,* 36. Thomas Jefferson stated that American whalemen caught their first sperm whale in the Azores in 1715. See his "Report on the American Fisheries by the Secretary of State, 1 February 1791," Founders Online, https://founders.archives.gov/documents/Jefferson/01-19-02-0013-0014. See also Dolin, *Leviathan,* 71–73.
2. For sperm oil and spermaceti's qualities, market value, and subsidiary industries, see Macy, *History of Nantucket,* 69, 72, 128–137, 155; Thomas Jefferson, "Observations on the Whale-Fishery, 14 November 1788," Founders Online, https://founders.archives.gov/documents/Jefferson/01-14-02-0064-0005; Kugler, "Whale Oil Trade"; Davis, Gallman, and Gleiter, *Pursuit of Leviathan,* chap. 9; Zallen, *American Lucifers,* chap. 1; and Johnson, "Peculiarly Valuable Oil." For more on refineries and candleworks, mainly for the nineteenth century, see Pease, Hough, and Sayer, *New Bedford,* 173–190. For the physiology

and science of the spermaceti organ, where spermaceti wax is found, see Ellis, *Great Sperm Whale,* chap. 4; and Whitehead, *Sperm Whales,* 8–11.

3. Dugan, *Ephemeral History,* chap. 5; Dannenfeldt, "Ambergris"; Kemp, *Floating Gold*; and Stevenson, *Aquatic Products,* 247–252 (Stevenson usefully discusses other whale products as well).
4. Tripp, *"There Goes Flukes,"* 80–81.
5. Sahlins, "Economics of Develop-Man," 12, 17; Sahlins, "Tristes Tropes"; Thomas, *Entangled Objects*; and Thomas, "Exchange Systems." See also Melillo, "Making Sea Cucumbers." Melillo is a historian who comes closer to Sahlins than Thomas in ascribing to each culture a fixed meaning for things exchanged. Most of the theoretical literature referring to whales' teeth deals with Fiji because of the continuing importance of whales' teeth (*tabua*) in Fijian culture, as discussed in Hooper, "'Supreme Among Our Valuables'"; Serena Solomon, "In Fiji, Nothing Says 'I Love You' Like a Sperm Whale Tooth," *New York Times*, April 11, 2017; van der Grijp, "*Tabua* Business"; Arno, "*Cobo* and *Tabua*"; and Tomlinson, "Passports to Eternity."
6. Macy, *History of Nantucket,* 32.
7. For a sperm whale tooth in a curiosity cabinet, see "Mr. Dickman, Sir," *Greenfield Gazette* (Massachusetts), February 28, 1798.
8. "We are informed from Nantucket," *Boston News-Letter*, May 23–30, 1720.
9. "Extract of a Letter from Lisbon," *Pennsylvania Journal* (Philadelphia), April 17, 1745 ("Elephants teeth"); "Imported in the last Vessels from Boston," *Dunlap's American Daily Advertiser* (Philadelphia), February 10, 1792 ("Sea Cow Teeth"); "Imported and for sale by Conrad Wecke[r]ly," *Dunlap's American Daily Advertiser,* December 2, 1794 ("Sea Cow and Elephant Teeth"); "Imported and for sale by Conrad Weckerly," *Philadelphia Gazette*, March 29, 1796 ("Sea cow and elephant teeth"); and "For Sale, by E. Sigorney, & Sons," *Columbian Centinel* (Boston), January 16, 1799 ("Elephant's Teeth").
10. "Last Notice," *Claypoole's American Daily Advertiser* (Philadelphia), August 17, 1799.
11. For example, see Barthelmess, "Scrimshaw Precursors," 94; and Penniman, *Pictures of Ivory,* 27–28.
12. Jackson, *British Whaling Trade,* 106–109; Stackpole, *Sea-Hunters*; Colnett, *Voyage to the South Atlantic.* For one account of the first American whaleships to round Cape Horn, see Elijah Durfey, Journal, Ship *Rebecca* of New Bedford, 1791–1793, Log 50, G. W. Blunt White Library, Mystic Seaport Museum.
13. Colnett, *Voyage to the South Atlantic,* 80–81.
14. This chapter focuses on Hawai'i, the Marquesas, and Fiji; for sperm whale teeth as objects in other Pacific cultures see Sperlich, "Embodied Inter-Cultural Dialogues"; and Clunie, "*Tapua,*" 161–210, 211–224.
15. For China trade niche commodities, see Fanning, *Voyages,* 455–464; and Delano, *Narrative of Voyages,* 100, 173.

16. Martin, *Account of the Natives,* 1:194, 196; see also Clunie, "*Tapua.*"
17. Lebo, "Native Hawaiian Seamen's Accounts"; Lebo, "Native Hawaiian Whalers"; Lebo, "Two Hawaiian Documents"; Lebo, "Local Perspective"; Rosenthal, *Beyond Hawai'i,* chaps. 2–3; and Diamond, "Queequeg's Crewmates."
18. For an overview, see Kjellgren, *Oceania,* 318–319. The Bishop Museum, Honolulu, Hawai'i, lists one hundred *lei niho palaoa* in its ethnology database. See http://data.bishopmuseum.org/ethnologydb/type2.php?type=palaoa&s=51 (accessed September 6, 2021). Twelve are in Oldman, "Collection of Polynesian Artifacts," 72, plate 124. A March 2019 search in Google Images on "lei niho palaoa" turned up dozens of them in museums in the United States, New Zealand, Australia, the United Kingdom, and Israel and for sale by auction houses. For archaeology, see Kirch, *Feathered Gods,* 197.
19. Most of the *lei niho palaoa* in the Bishop Museum's ethnology database do not specify the type of ivory. For walrus *lei niho palaoa,* see also Cammann, "Notes on Ivory."
20. Vancouver, *Voyage of Discovery,* 3:16.
21. Fornander, *Fornander Collection,* 74, 180–184, 212, 220–224. See also Kamakau, *Ruling Chiefs,* 5–6, 15–17.
22. Mathison, *Narrative of a Visit,* 465; Kuykendall, *Hawaiian Kingdom,* 87–88; and Frank, *Ingenious Contrivances,* 11. For the first whaleships in Hawai'i, see Bullard, *Captain Edmund Gardner,* 34–36. For the sandalwood trade, see Bradley, *American Frontier,* chaps. 1–2.
23. Malo, *Hawaiian Antiquities,* 77.
24. Stewart, *Journal of a Residence,* 248.
25. Kamehiro, *Arts of Kingship,* 39–41.
26. Porter, *Journal of a Cruise,* 2:10, 25–28, 65, 126, quoted 2:28. Porter spelled Keatonui "Gattanewa."
27. Kjellgren and Ivory, *Adorning the World,* 12, 71, 74–75; Linton, *Material Culture,* 340, 368, 427, 435; and Kjellgren, *Oceania,* 308. Linton says *ei;* fellow fieldworker E. S. Craighill Handy says *taki ei hei* and *taki ei.* See Craighill Handy, *Native Culture,* 290.
28. Belcher, *Narrative of a Voyage,* 2:318.
29. Suggs, *Archeology of Nuku Hiva,* 135–138 ("cheapened," 136). See also Suggs, *Hidden Worlds,* 199–203.
30. Arno, "*Cobo* and *Tabua,*" 54–55. For the extensive historiography on Fijian *tabua,* see note 5 of this chapter.
31. Thompson, *Last of the "Logan,"* 39; and Seemann, "Remarks," 51–62, quoted 61–62.
32. Lockerby, "Directions for the Fegee or Sandlewood Islands," Phillips Library, Peabody Essex Museum, also on Pacific Manuscripts Bureau microfilm reel 225. Readers should avoid the error-filled transcription in Dodge, "William Lockerby Manuscript." See also Lewis Francoeur to John Dorr, August 6,

1809 (typescript), Dorr Family Papers, MSS. MH-21, Box 1, Folder 4, Peabody Essex Museum. For the Fiji sandalwood trade, see Im Thurn and Wharton, *Journal of William Lockerby*; and Shoemaker, *Pursuing Respect,* chap. 1.

33. Charles Forbes, Journal, April 5, 1816, Ship *Indus,* 1815–1817, Log 111, Peabody Essex Museum.
34. "Whales' Teeth," *Public Advertiser* (New York), June 21, 1810; *New York Journal,* June 23, 1810; and "Auctions," *National Advocate* (New York), April 26, 1817.
35. "Whale Oil and Spermaceti Candles," *Boston Commercial Gazette*, April 22, 1819.
36. See Inward Foreign Manifests, New Bedford Collection District, Records of the US Customs Service, RG 36, National Archives at Boston. During the peak periods of the bêche-de-mer trade at Fiji, 1809–1814 and 1829–1833, the recorded imports were sperm oil, head matter, whale oil, and whalebone.
37. Im Thurn and Wharton, *Journal of William Lockerby*; Ward, "An Intelligence Report," 178–180; Dening, *Islands and* Beaches, 115–22; Hammatt, *Ships, Furs*; and Shineberg, *They Came.*
38. Ward, "Pacific *Bêche-de-Mer*"; Shoemaker, *Pursuing Respect*; Clunie, "Manila Brig"; Dodge, "Fiji Trader"; Fabian, *Skull Collectors,* chap. 4; and Melillo, "Sea Cucumbers."
39. See the list of ideal trade goods itemized by one Salem merchant in John B. Williams to Henry L. Williams, August 7, 1846, and October 23, 1848, Williams Papers, MH-238, Box 3, Folder 4, Peabody Essex Museum.
40. "Invoice of Merchandize shipped by P. J. Farnham & Co. on board the Brig Consul," Isaac Needham Chapman Papers, Mss. 184, Box 2, Folder 1, Peabody Essex Museum.
41. For whale jaw physiology, see Beale, *Natural History,* 79–80, 92–96; forty teeth in one whale, fifty-six in another, in Bullen, *Cruise of the Cachalot,* 53, 82.
42. "Sundries Shipped by Peele Hubbell" (1835), Chapman Papers, Box 2, Folder 1, Peabody Essex Museum.
43. "Invoice of Merchandise shipped by S. Chamberlain & Son, Benj. Cox, George West, George West, Jr. ¼ each on board the Brig Gambia. Benj. Wallis. Master. for Pacific Ocean for a/c & risk of the shippers & consigned to said Master," July 21, 1842, Benjamin Cox Papers, Mss. 168, Box 1, Folder 4, Peabody Essex Museum.
44. John Kehew (a New Bedford marine store outfitter) to Henry L. Williams, January 29, 1845, Williams Papers, Box 2, Folder 5, Peabody Essex Museum, regarding "a small lot of Whales Teeth which shall probably get." According to a receipt dated June 22, 1844, Benjamin Cox bought ninety teeth from Charles W. Mead. Wood and Brownell of New Bedford appear at the bottom of the receipt, Cox Papers, Box 1, Folder 4, Peabody Essex Museum. See also receipts from Melendy & Davis, J. Lilly, and G. Wheelwright attached to

"George West in a/c with S. Chamberlain & Son," January 30, 1841 (for brig *Gambia,* 1840–1842), Benjamin, George, and John West Papers, MH-235, Box 6, Peabody Essex Museum; receipt from Charles Hoffman, "Barque Zotoff," July 14, 1844, Cox Papers, Box 1, Folder 7; numerous small lots from different sellers in "Account of Disbursements," Ship *Leonidas* (1839–1840), Phillips Family Papers, MH-4, Box 4, Folder 2, Peabody Essex Museum.

45. S.C. Phillips to Joseph Winn Jr., May 23, 1833, Winn Papers, MH-329, Peabody Essex Museum.
46. Entry dated June 25, 1844, Eustis Bacon Diary, Baker Library, Harvard Business School.
47. "Trunks, Ivory & Whetstones," *Mercantile Advertiser* (New York), August 17, 1820; "Whale Oil & Bone," *American* (New York), January 3, 1825; and "Whale Teeth," *North American* (Philadelphia), April 16, 1840.
48. For the evolution of raw materials into abstract, standardized commodities, see Cronon, *Nature's Metropolis,* chap. 3.
49. Frank, *Ingenious Contrivances,* 12–13; West and Credland, *Scrimshaw,* 46.
50. Camp, *Life and Adventures,* 109.
51. Beane, *Forecastle to Cabin,* 116–117, 172.
52. Bullen, *Cruise of the Cachalot,* 83–84, quoted 84.
53. Frank, *Ingenious Contrivances*; West and Credland, *Scrimshaw*; and Frank, *Dictionary*.
54. Alan Katz, "Fred Myrick Scrimshaw Tooth, ca. 1830," *Antiques Roadshow,* June 7, 2014, https://www.pbs.org/wgbh/roadshow/season/19/santa-clara-ca/appraisals/fred-myrick-scrimshaw-tooth-ca-1830--201402A50 (accessed September 7, 2021); and Madeleine List, "$465K Sale Price for Scrimshaw Art Breaks Record," *Cape Cod Times,* July 24, 2017, https://www.capecodtimes.com/news/20170724/465k-sale-price-for-scrimshaw-art-breaks-record (accessed September 7, 2021).
55. At a Skinner Auctioneers and Appraisers event in May 2018, a "Fijian Whale Tooth, Tabua" sold for $1,476. See https://www.skinnerinc.com/auctions/3099B/lots/41 (accessed September 7, 2021).
56. National Oceanic and Atmospheric Administration, "Protected Species Parts," August 6, 2018, https://www.fisheries.noaa.gov/national/protected-species-parts (accessed September 7, 2021).