

## From Davis Strait to Bering Strait: The Arrival of the Commercial Whaling Fleet in North America's Western Arctic

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In the summer of 1848 Captain Thomas Roys, commanding a whaling vessel from Sag Harbor, Long Island, sailed into Bering Strait and discovered the vast herds of bowhead whales (*Balaena mysticetus*) that lived in those waters. He discovered the most important new whaling ground of the nineteenth century, and its richness supported the American whaling industry for more than 50 years. It may seem inappropriate to begin an essay thus — in a symposium on Arctic history which concludes with the eighteenth century — but in fact the discovery of the Bering Strait whaling ground was the conclusion of a whaling movement that had begun several centuries earlier, and that, for North America, commenced with the arrival of the first whaleships in Bering Strait's eastern counterpart, Davis Strait.

One may well ask why the connection should be drawn between these two whaling grounds: one was principally a British fishery of the eighteenth century; the other, principally an American fishery of the nineteenth. It is true, nevertheless, that the European whaling industries until the mid-nineteenth century and the American industry until its demise in the early years of the twentieth century differed very little from one another in strategy, tactics, or technology. They remained essentially as they had originally developed, and, curiously enough, they did not begin to change substantially until the latter part of the nineteenth century, when Sven Foyn and his Norwegian associates thoroughly altered the character of the industry by introducing an advanced technology.

This paper, then, focuses primarily on the whaling industry as a whole and not centrally upon the arctic regions — because the impetus for the arrival of the whaling fleets at the gates of the American Arctic came directly from the economic centers of Europe and America, and only as the result of a concatenation of political and economic events were the fleets drawn to the north. My discussion will not deal specifically with the history of either the Davis Strait or the Bering Strait whale fishery. It will, rather, analyze the series of events between their two discoveries that led the whaleships to Bering Strait: for although whale fisheries in most parts of the world have been capably studied, far less attention has been paid to the causes which led the fleets to abandon one fishery and begin the exploitation of another.

Many writers have been drawn to the romantic and adventuresome aspects of the whaling industry at the expense of considering the whaler's sole objective: making money. The whalers' consuming purpose was to catch as many whales as possible, as quickly as possible, and to bring the oil and baleen to market at the best price. For the most part they

operated on one whaling ground until its yield had deteriorated to the point where their profits became unacceptably low, then they moved on to another. There were few radical departures from this pattern of a slow outward expansion as the whaling grounds closer to home became fished out. Whalers made very few daring voyages of discovery as they moved outward in search of new whale stocks. The farther they had to go, the more costly the voyages; consequently if competitors were catching whales nearer home, it made little sense to search farther away. Only the existence of price supports, political controls, or war contradicted these fundamental imperatives.

Strangely enough, it was the discovery of the sperm whale, or cachalot (*Physeter catodon*), as a lucrative quarry that drew the whaling fleets to the bowhead whales of Bering Strait. In the first half of the eighteenth century the demand for lubricating and illuminating oils by the growing societies on both sides of the Atlantic was met for the most part by the whaling industry in the waters east and west of Greenland and off the coast of Labrador. Increasingly during this period the whalers of Nantucket, a small island off the southeastern coast of Massachusetts, became an important force in the fishery. The 5000 inhabitants — most of them Quakers — had few natural resources to rely on and therefore turned to the sea, first taking whales near home but soon expanding to the waters near Labrador, West Greenland, and as far south as the coast of Brazil. They sold their whale products both to the New England colonies and to England itself, where oil and baleen became one of the colonies' most important sources of credit, reaching to more than 50% of all sterling earnings in the northern colonies shortly before the outbreak of the American War of Independence.

This dramatic growth of the American whaling industry was the result of two basic innovations. The first was the development of the practice of carrying try works aboard their whaleships. Try works — the large iron cauldrons built over fire pits that allowed the men to render whale blubber into oil at sea — had not been systematically employed before 1750. The reasons for this are clear. Where whale stocks were available near shore, the carcasses could simply be towed to a shore base for flensing and rendering. For fisheries farther north the blubber could be packed into casks and kept without its turning rancid until the ship reached a shore base or its home port, a procedure followed by the British fleet in their northern fishery. Before about 1750 the American whalers did not need try works afloat because their voyages often lasted only a month or so and they could return with blubber from a few whales before it had spoiled. By 1750, however, with nearby

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whale stocks depleted, the Nantucketers were forced to range farther north and south. It seems likely that it was because of their expansion southward that they began to employ try works aboard ship, an action that at once freed the whalers of their fetters to shore, changed their vessels into crude factory ships, and allowed them to become truly pelagic hunters.

The other major innovation — which, like the effect of shipboard try works, drew the Americans into distant waters — was the development of a method of separating the thick fluid found in a sperm whale's head into oil and a waxy substance called spermaceti. The inventor of this process was possibly Jacob Rodriguez Rivera, a Sephardic Jew who arrived in Newport, Rhode Island in 1748. About 1751 Rivera began to purchase "head matter" — this mixture of oil and spermaceti — to make candles. He used the separated spermaceti in the candles themselves, but the oil was a by-product. It was soon discovered, however, that this oil, when burned in a lamp, gave off a superior light compared to that from the oil of a baleen whale. Because henceforth "sperm oil" would have a higher value than "whale oil", it brought the focus of the American industry onto the sperm whale. With their shipboard try works, the Americans quickly spread south in search of those whales, to the Azores, the Brazil Banks and, by 1775, to the Falkland Islands. By that year the Quakers of Nantucket and New Bedford had a fleet of 300 vessels and were essentially alone in the sperm-whale fishery.

But for the Americans these achievements were short-lived. The outbreak of the War of Independence in 1775 marked the beginning of four decades of misfortune for the American whaling industry. The hostilities both cut the Americans off from their European markets and put the Royal Navy and British privateers on the lookout for American vessels, causing the industry to wither. Nantucket went so far as to send a declaration to the Massachusetts Assembly proclaiming neutrality, an act which neither gained them favor among the colonists, nor spared their ships from the British.

With the American whaling industry nonexistent in the years following 1776, the British industry was able to prosper, both by filling the vacuum left by the Americans and by continuing to receive bounties from the government on the tonnage of their vessels engaged in the northern whale fishery. And, in 1783 with the end of hostilities, as the Americans struggled to regain their former markets, Britain placed a duty on imported whale oil that was roughly equal to its market value and thus effectively embargoed it.

Because of the bounty and the tariff the British fleet expanded rapidly in the waters east of Greenland, largely replacing the Dutch fleet, which at the time was on the decline. Those whaling grounds had, however, already been over-hunted, and the increase in British ships led to a decline in the average catch per vessel, reducing profits substantially. In fact, the decline was so sharp that by 1787 some whaleships had trouble securing the minimum catches to qualify for the bounty. By 1790 the size of the British northern fleet had shrunk dramatically, a contraction that was hastened by the war with France and the consequent loss of that export market. The government witnessed the decline in the size of the catch-

es, and, increasingly reluctant to grant large subsidies to a dying fishery, it reduced the bounty on vessels operating in the north. These misfortunes, combined with the depredations of press gangs in manning fighting ships, forced many vessels from the northern fishery. Those that did remain were forced to seek other whaling grounds, and the nearest relatively lightly hunted area was the Davis Strait region, west of Greenland. Many of the northern vessels soon began to hunt there, a shift of focus that was to sustain the British northern fishery for another century.

In the meantime the Nantucketers, who were reeling from the effects of the British tariff of 1783 and who lacked another means of livelihood on their small island, began seeking to circumvent the closure of the British market by transferring their base of operations within Britain's tariff boundaries. One group was offered subsidies by the government in Nova Scotia and settled there at Dartmouth to begin activities from that port, while another group, under the leadership of William Rotch, Sr., sought to move to England.

Rotch and his group were "Quakers with a vengeance," Richard Kugler has written, "men who endorsed the pacifist principle of their faith yet lived by the violence of the whale fishery. The paradox was analyzed by (Herman) Melville, who asked how Captain Peleg, 'in the contemplative evening of his days, reconciled these things in reminiscence? Very probably he had long since come to the sage and sensible conclusion that a man's religion is one thing and his practical world quite another. This world pays dividends.'"

Rotch petitioned the British government to allow his group to enter England with 20 ships and to reimburse them for the expenses that they would incur both in moving and in re-establishing their shore support facilities. The government wished to sponsor the development of a vigorous whaling industry and was willing to agree to Rotch's request but refused to allow the Americans the bounty that the British ships received.

Rotch, however, had hedged his bets and in the meantime had petitioned the French government with a similar request, an idea that caught Louis XVI's interest because of the possibility of competing with Britain in the whaling industry. The French government consequently offered the Americans a bounty on their tonnage, and a dozen or more Nantucket families moved to Dunkirk.

In 1786 the British government, now witnessing the rise of whaling ports in Nova Scotia and France, began to review the status of its own industry. Its interest was the continuation of its oil supplies, and it faced two basic questions: whether on the one hand it should continue to support the declining northern fishery and whether on the other it should begin to give strong support to the southern fishery, which appeared to have great potential in the central and southern Atlantic. Furthermore, regarding the southern fishery, which had become almost wholly the province of Nantucketers who either hunted there on their own or were employed on British ships, how could Britain gain more of their expertise in the face of challenges from Nova Scotia and France?

The Greenland whaling merchants were, naturally, loath to

see their bounty reduced. The government concluded, nevertheless, that although the northern fishery provided much of Britain's oil, the bounty was expensive. The potential of the southern fishery — and especially the potential of the stocks of sperm whales that were known to exist beyond Cape Horn and the Cape of Good Hope — appeared to be a better bet than the northern waters, which were closer to home but already heavily hunted.

In fact, several merchants of London had already petitioned the government for support of the southern fishery; principal among them were Samuel Enderby and his son. In 1775 the government began offering premiums to the British ships returning with the largest cargoes from the South Atlantic, and in 1776 the Enderbys sent 12 ships south. In 1786 they asked the government for a bounty on their tonnage to be able to induce more Americans, who already made up most of their crews, to join the British fishery; for although there was, initially at least, less danger attendant on the southern fishery than the northern, the voyages were much longer, often two years, and the cargoes were smaller per unit of time than in the northern fishery.

The British government recognized the political and economic advantages of sponsoring its own commercial activities in the South Atlantic, Pacific and Indian oceans and offered, rather than a bounty on tonnage as in the northern fishery, a premium on catches — an inducement which, it seems, would not have affected the whalers' decisions on when to return home, as a bounty might. The East India Company vigorously protested this government sponsorship of other commercial activities within its area of monopoly, but the government prevailed against these and other protests and in 1786 enacted a comprehensive law to encourage the southern fishery.

One year later one of the Enderby vessels, the *Emilia* of London, under a Nantucket captain, became the first whale-ship to round Cape Horn and to take a whale in the Pacific, capturing a sperm whale off the west coast of South America. Returning with a full cargo several years later, her success lured other ships there, and in 1791 the first American whale-ship, the *Beaver* of Nantucket, entered the Pacific. In 1804 the *Hannah and Eliza* of New Bedford became the first American whaleship to enter the Pacific via the Indian Ocean, following a route that British whalers had sailed since the founding of Port Jackson in 1788. These whaling vessels, like the merchantmen and sealers that accompanied them, spilled into the Pacific on the wave of expanding geographical knowledge. They comprised the beginning of the great nineteenth-century commercial and political expansion into that vast ocean.

For the Americans — who would ultimately come to dominate the whale fisheries in the nineteenth century — their star would not be ascendant until the 1820s. In the years following the War of Independence they were unable to compete in European markets. "The English," wrote Thomas Jefferson, "had now begun to deluge the markets of France with their whale oils; and they were enabled by the great premiums given by their government, to undersell the French fisherman, aided by feebler premiums and the American, aided by his poverty

alone." Furthermore, the Spaniards, who bitterly resented the arrival of British ships off their shores in South America, considered the American vessels similarly unwelcome, and the "quasi-war" with France in the last years of the eighteenth century allowed French privateers to take their toll on American ships as well. These misfortunes induced several Nantucketers to move from their island, as well as from Dunkirk and Nova Scotia, to Milford Haven in Wales to continue their operations in the southern fishery; in fact from 1788 to the outbreak of the War of 1812 two-thirds of the British vessels in that fishery were commanded by Americans. It was only after the end of the War of 1812 that many of the Americans returned home to rejoin the industry that, for the first time in 40 years, had few impediments before it.

Just when the American whaling industry began to expand rapidly, the British industry — by then America's only serious competitor — began to founder. In 1824 the British government refused to renew the bounty on the northern fishery, and whale-oil prices began to decline steeply under the assaults of both rapeseed oil, which undercut the use of whale oil in textile manufacturing, and the developing coal-oil and coal-gas industry, which put the price of whale oil below the cost of its acquisition. In 1843 the tariff on American whale oil and sperm oil was cut severely, apparently in recognition of the fact that the British industry could no longer supply the nation's needs.

Meanwhile the American industry was riding the flood tide of a growing nation that allowed the industry the dual luxuries of cheap manpower and raw materials while at the same time providing a ready market for oils. A lag in the industrialization of the nation retarded the effects of the coal and petroleum industries on the whale-oil market until after the end of the American Civil War in 1865.

In 1815, with the end of the War of 1812, the American whaling industry began a period of steady growth that would reach its zenith three decades later with the discovery of the whaling grounds in Bering Strait, the Sea of Okhotsk, and the lagoons of Baja California — a time when the American whaling fleet comprised more than 600 vessels.

In 1815 — the first time in four years that the Royal Navy was not hunting for American ships — the American whaling industry surged ahead, acquiring investment capital and developing new centers of commerce. Whaling vessels from New Bedford, New London, and many other ports in southeastern Massachusetts, Rhode Island, Connecticut, and Long Island began cruising on all the old whaling grounds of the North and South Atlantic, with the exception of the waters east of Greenland. They were part of a general American maritime commercial expansion, and they were accompanied or preceded by merchantmen and sealers as they pushed south into the Atlantic, then east and west into the Pacific and Indian oceans.

The merchantmen began to travel routes between the Northwest Coast of America, where they bought furs, the Hawaiian and other Pacific islands, where they bought sandalwood, mother of pearl, and bêche de mer, and the ports of China, where they sold their cargoes, returning with tea, silk and

porcelain. The sealers fanned out into the waters of the Antarctic, to the South Shetlands, South Orkneys, and to the Antarctic Peninsula itself, then to the Crozets, Desolation (Kerguelen), and Heard islands.

At the same time the whaling fleet exploded into the Pacific. In 1818, four years after the end of the war, there were 120 American whaling vessels in the Pacific, cruising for the most part on the familiar "on shore" grounds near the coasts of Chile and Peru and around the Galapagos Islands. In that year the *Globe* of Nantucket sailed west and discovered the "off shore" grounds, an area rich in sperm whales, south of the Equator between 105° and 125° W. In 1820 the *Maro* of Nantucket and the *Syren* of London, commanded by a Nantucketer, discovered the Japan ground — equally rich waters stretching far east of that country, between the Bonin Islands and Midway. At the same time American ships began cruising "on the line," the 5000-mile corridor that spanned the Pacific at the Equator.

During the 1820s and 1830s the whaling fleets cruised throughout the Pacific from 50° S to 40° N, chasing the nomadic sperm whales throughout the year on one ground or another. They reached first the sperm whales near the Fiji and Samoan islands and the coast of Japan; later they opened the "coast of New Holland ground," off Western Australia, as well as the Sulu Sea, the Celebes Sea, the Molucca Passage, the "middle ground" between Australia and New Zealand, the Vasquez and "French Rock" grounds north of New Zealand, and the Tuamotu, Solomon, and Bonin islands, among others. As time wore on the length of these voyages gradually increased from about 20 months to about 40 months as the numbers of sperm whales gradually declined under the pressure of the world's whaling fleets that, like the Americans, were drawn to these profitable waters. Because of the length of their voyages the ships would touch at ports two or three times a year to take on fresh supplies of food and water, to "recruit ship" (to sign on new men to make up for deaths or desertions), and to communicate with their owners. In 1819 the first whaleships reached Hawaii, and quickly Hilo, Lahaina, and Honolulu — as well as Tahiti, Nukahiva, and a number of other places in South America, Asia, Australia, and New Zealand — took on a new importance, not only for refitting between cruises, but also as points from which to send home by cargo ship the accumulated catch of oil and whalebone. This practice, which helped to cushion the financial distress should the whaleship be lost, also served to lessen the whaleship's function as a freighter to carry the ship's oil. If a ship were carrying the oil from an entire voyage, the captain might well have had to modify his tactics as the cargo accumulated, balancing the desire to preserve a valuable cargo with the need to take risks in search of whales. The practice of transshipping his cargo two or three times a year therefore allowed the master to maintain a more aggressive search for whales in waters that were often poorly charted or known to be dangerous.

By 1840, however, the sperm whales in the Pacific were on the decline. Paradoxically, the price of sperm oil also began to decline somewhat. Faced with the assumption that they had

thoroughly surveyed the waters south of the fortieth parallel in the North Pacific, the fleets understandably moved north. By 1840 the entire North Pacific, with the exception of the Bering Sea, had been criss-crossed by traders and sealers, and it is likely that the whale resources of those waters were well known. It is also likely that the trading vessels, particularly those of the Russian-American Company — which regularly travelled between the Okhotsk Sea and the Gulf of Alaska and Hawaii — would have passed this information directly or indirectly to the whalers, who understood that there were stocks of right whales (*Eubalaena glacialis*) to be found at several places in the North Pacific.

At the same time another factor entered that helped to draw ships north: in 1840 the price of whalebone began a rise that more than doubled its value by 1844. Whalebone — baleen — had been a saleable by-product of baleen whales for more than four centuries. Because it could be cut into long thin strips, or indeed any shape that the baleen plate would allow, without sacrificing its strength or springy flexibility, and also could be moulded by steam to hold a new shape, it was used in a number of items where resilience was required, among them umbrella spokes, buggy whips, hat-brim stiffeners, brush bristles, and corset stays. The length of the baleen plates from a right whale, often more than eight feet for the best pieces, made it especially desirable to the fashion market for dress hoops because it was the lightest and least fragile material used for keeping skirts fully ballooned. And in 1840 the Parisian and English couturiers began a 20-year trend calling for fully flaring skirts. Baleen's increasing use in Victorian fashions and its limited supplies caused the price to rise, and soon the whaling merchants realized that the value of a sperm whale, which had hitherto been more actively sought because of its fine oil, was decreasing relative to the right whale because of its combined yield of oil and whalebone.

By 1843 knowledge of the decline in the stocks of Pacific sperm whales had reached the pages of the *Whalers' Shipping List and Merchants' Transcript*, a recently-established weekly that, until its demise in 1914, would be the American whaling industry's trade journal.

We have given some attention to the future prospects of the demand and supply of sperm oil. Our accounts from the fleet in the Pacific, by recent arrivals, shows a great falling off in the quantity of sperm oil taken during the last season, as compared with previous years. From the unsuccessful cruises of sperm oil ships; from the fact that many ships have been, and the probability that more will be, withdrawn from that business; and the additional fact that the diminished tariff of duties in England will take effect on the 5th of July, we infer that holders and importers of sperm oil have seen their darkest day, and that they may soon hope to realize remunerating prices for that staple. We, however, do not think that the prospects are such as to encourage reflecting and judicious men to join with the host of those who have seemed disposed, for some years past to cover the ocean with whale ships.

Because the Atlantic and Indian oceans and most of the Pacific had already been thoroughly searched for stocks of whales, the whaling merchants, short of withdrawing their capital from the industry, were left with only the North Pacific

in which to hunt for right whales. It is probably impossible — and at any rate it is unnecessary — to establish the identity of the first ships to hunt along the Kurile Islands, on Kamchatka, or in the Gulf of Alaska, but it is certain that from 1843 to 1845 a large number of whaleships from several nations began to cruise on the rim of the North Pacific. The *Whalemen's Shipping List*, describing the activities of the summer of 1844 listed ships as cruising "on Kamchatka"; — the use of the phrase suggests that those grounds had become commonplace, probably a year before. And we know, for instance, that Captain Mercator Cooper took the ship *Manhattan* briefly into the Okhotsk Sea in 1845 and that she, as well as Thomas Roys' *Josephine*, and one Danish, four French, and four American ships touched at Petropavlovsk that summer.

There is no doubt that Thomas Roys' voyage to Bering Strait was a bold and innovative departure from the usual cruising patterns, sailing as he did 1000 miles beyond the nearest whaleship; but his was also an intelligent gamble. We have evidence from as early as 1845 that several ships were taking bowhead whales in the waters between Petropavlovsk and the Commander Islands. In that year Roys was forced to spend two months in Petropavlovsk, recuperating from three broken ribs inflicted by the flukes of a fighting whale. There he learned from a Russian officer that the same "polar whales" were to be found in Bering Strait. On returning to Sag Harbor, Long Island, at the end of his voyage, he consulted Cook's and Beechey's narratives and noted their reports of whales. When he returned to the Pacific in 1848, aboard the *Superior*, he was prepared for the risk he would take.

Roys reached Hawaii with a full ship in October 1848 and immediately announced the news of his success. Whalers — unlike sealers, who kept the knowledge of newly-discovered rookeries to themselves — usually shared their discoveries, realizing that there was safety in numbers in remote waters of the world. The *Superior's* voyage set off a flurry of excitement, and the news that was not spread by word of mouth was quickly broadcast by the Honolulu missionary newspaper *The Friend*. By early 1849 most of the marine journals of the world had carried the story.

Roys not only made the most important whaling discovery of the nineteenth century but also brought about one of the most important events in the history of the Pacific. Over the next seven decades the richness of the western Arctic whale stocks would lure the vessels of the United States, France, Germany, Hawaii, and Australia through the shallow and treacherous waters of Bering Strait. More than 2700 whaling cruises would be carried out there at a cost of more than 150 lost whaleships and the near-extinction of the bowhead whale. The vast American presence there would add impetus to the sale and purchase of Alaska. The support facilities that the whaling industry generated in Hawaii, for refitting before and after their northern cruises, would contribute to the American presence in those islands that ultimately led to their annexation. The natives on both sides of Bering Strait, as well as in northern Alaska and western arctic Canada, would be supplied with western manufactured goods and their lifeways would be changed — for better and worse. As World War I approached,

the Arctic whaling industry would spawn in its death throes the maritime fur trade in the western Arctic, an activity which would employ most of the Eskimos, and a few remaining whalers, until the beginning of the Second World War. And finally, one of the whalers would ultimately cause the western Arctic's second oil rush — by reporting the oil seeps in the Sagavanirktok River delta that led to the Prudhoe Bay oil strike.

