"That Extensive Enterprise": HMS *Herald*'s North Pacific Survey, 1845–1851¹

JANE SAMSON²

ABSTRACT: Despite its enormous scope, the survey of HMS Herald, like most British scientific voyages after the time of Captain Cook, is little known. This article's discussion of naturalist Berthold Seemann's accounts of the voyage challenges the impression, still common in some naval history circles, that there is a difference between scientific expeditions and other naval activities (that is, between science and politics). The article considers evidence of imperial aesthetics in Seemann's responses to landscape and notes connections between the collection of scientific data and the interests of British commercial and political expansion. Examination of Seemann's racial views shows that, just as he viewed landscape and natural resources with an imperial eye, so he judged other peoples by his own standards of achievement and "improvability."

THE PACIFIC SURVEY voyages of the Herald, like most British voyages after the time of Captain Cook, are little known. A recent study by Andrew David has examined the hydrographic significance of the Herald's South Pacific expedition in the 1850s and 1860s (David 1995), but there is no overview of the northern survey in print; it is that expedition that I discuss in this paper. Two ships were involved—the 26-gun frigate HMS Herald under Captain Henry Kellett, and the six-gun barque HMS Pandora, commanded by Lieutenant Commander James Wood. The survey had an enormous scope: the Hydrographer of the Navy, Francis Beaufort, invited Kellett "to complete the West Coast of America from Guayaquil up to the Arctic Ocean. Are you in the mind to accept of that extensive enterprise?" (Hydrographic Office Archives, Taunton, U.K., Letter Book Series 12, Beaufort to Kellett, 4 November 1844). The expedition left Britain in 1845 to survey the Falkland Islands and then proceeded along the west coast of South America and north to the coast of what is now British Columbia, making three detours

north to assist the search for Sir John Franklin's missing expedition in the Arctic. *Pandora* returned to Britain in 1849, but the *Herald* was out for 6 years, finally returning in 1851.

Although this article focuses on the survey's natural history, the Herald expedition had a wider significance that should be noted first. Even by the 1840s, a half-century after Cook and Vancouver, much of the Pacific region remained uncharted. The North Pacific whale fishery and the sea otter fur trade between the northwest coast and China had drawn attention to the area's economic importance since the 1790s (Steven 1983, Mackay 1985). The North West Company's operations had been moving westward from the Canadas, taking advantage of the Anglo-American war to found a base at Ft. Vancouver on the Columbia River in 1813. Wars of independence in South and Central America had drawn the Royal Navy into closer involvement throughout the region, and British support for the revolutionaries had secured the use of a number of important harbors. The focus moved steadily toward the Pacific, as reflected in the shift from the old "Brazils" or "South America" station, based at Rio or Buenos Aires, to the new Pacific Station, founded in 1837, with its headquarters at Valparaiso on the Chilean

¹ Manuscript accepted 15 January 1998.

² Senior Research Fellow, Institute of Commonwealth Studies, London, United Kingdom.

coast (Graham and Humphreys 1962, Gough 1971).

The Royal Navy's Hydrographic Office knew the importance of the Pacific region and had dispatched a number of survey vessels there in the early nineteenth century, notably HMS Blossom, under the command of Captain F. W. Beechey, in 1825-1828. Beechey was commissioned to lead another Pacific survey in 1836 with HMS Sulphur and Starling. Illness forced him to return to Britain, and in his absence Lieutenant Henry Kellett took command of Starling. Overall command of the expedition passed to Captain Edward Belcher in 1837. Farther north, there had been Russian surveys of the Bering Strait area under the Estonian captain Otto von Kotzebue in 1816. But probably the most famous surveyor in the eastern Pacific, and the one whose writings had the most influence on the *Herald*'s officers, was Captain Robert Fitzrov. HMS Beagle's work in South America and the Galápagos Islands during 1835 was then legendary, and naturalist Charles Darwin's role had not yet eclipsed that of his captain.

Herald's naturalist, at least its final one, was the Hanoverian botanist Berthold Seemann, and he was assured prominence when the task of writing up the voyage narrative fell to him after the Herald's return to Britain in 1851. Seemann, who was still relatively unknown at that time, had not been the first choice for the naturalist's post; that had fallen to the young botanist Thomas Edmondston from the Shetland Islands, a protégé of Sir William Hooker, director of the Royal Botanic Gardens at Kew. Just before sailing in the Herald, Edmondston had been appointed professor of botany at Anderson College, Glasgow. "Hurrah! for Natural History," he wrote to a friend. "Who says it is a bad profession!" (Edmondston 1868:235). Edmondston was obviously a young man of great promise, but he was killed in a tragic accident in 1846 during the Herald's survey of the Ecuador coast; a loaded rifle left by accident in the bottom of one of the ship's boats went off, killing him instantly. He was only nineteen.

Berthold Seemann joined the expedition

late in 1847, also through Hooker's patronage. Thus, although Seemann wrote both the *Botany* and the *Narrative* of the voyage, he was not actually present at many of the events he described. This explains some of the oddities of his account, which was prepared from various journals and correspondence loaned to him by some of *Herald*'s officers, as well as his own diaries. This article explores some of those different voices, especially with regard to the ethnography of the expedition.

Only brief comments are needed about the zoology of the voyage. The Zoology of the Voyage of H.M.S. "Herald" was edited by British zoologist Edward Forbes, but was written by Sir John Richardson, the famous Arctic explorer and scientist, and it is not what it claims to be. Rather than a zoology of the whole survey, it is exclusively a study of the "fossils" (as they were known then) taken from the Eschscholtz ice cliffs of Kotzebue Sound near Bering Strait in the Arctic. These were mostly the remains of prehistoric mammoth, ox, and deer. The volume was written solely as a contribution to the emerging science of paleontology; the Kotzebue Sound ice cliffs were a phenomenon unrelated to the usual stratigraphy that allowed scientists to gauge the age of fossils on Charles Lyell's scale. Richardson suggested that the absence of human bones or artifacts meant "that the drift era must have been antecedent to the appearance of man upon earth" or at least to human colonization of the Arctic (Forbes 1854:2). He also argued for an indigenous origin of the remains (rather than drift), which meant that these were American versions of the prehistoric animals already found frozen in northern Europe. He chose to gloss over the issue of extinction, which was a controversial issue at the time-difficult to reconcile with the Bible.

In addition to describing the natural history of *Herald*'s survey in this paper, I challenge the impression, still common in some naval history circles, that there is a clear difference between scientific expeditions and other naval activities (that is, between science and politics). Barry Gough, who dominates

the study of the ninteenth-century Royal Navy in the North Pacific, sees a distinction between eighteenth-century voyages of discovery, which he regards as mainly scientific, and the politically motivated Victorian naval operations (Gough 1971:xiv). Gough is interested in the story of maritime empire; thus any voyage that seems to be merely scientific holds little interest for him. My work, on the other hand, emphasizes the difference between modern concepts of scientific objectivity and neutrality, and nineteenth-century perceptions of "truthfulness" and "fact" in voyage narratives. Men like Seemann felt duty-bound to present their observations in a way that would serve Britain's imperial interests. In this was their truthfulness and honor as chroniclers, allowing Seemann to declare that "Fact is the object I have aimed at throughout the following pages, on the strict adherence to which will rest their sole recommendation" (Seemann 1853: vol. 1, xi). For him there was no conflict between scientific observation and an imperial gaze.

In recent studies of the history of science, distinctions between science and politics are usually regarded with suspicion. Instead, we are invited to consider the tangled motives and multilayered perceptions of Western science. A veritable publishing industry now surrounds the pioneering British explorations of Captain Cook and his circle. I only add that the neglected nineteenth-century record deserves the same attention. Let me begin by considering imperial aesthetics in Berthold Seemann's responses to landscape during the *Herald* survey.

While observing the New Granadian jungle along the river Iscuande in February 1846, Seemann welcomed the sight of small shoreline villages because "An uninhabited place, however beautiful, has always a forlorn and desolate aspect" (Seemann 1853: vol. 1, xi, 76). He was never comfortable with the vast, apparently uninhabited coasts that Herald frequented, taking little apparent interest in marine biology or botany and disturbed—even threatened—by jungles and forests. North of the Iscuande he mused that "In England the confines of a wood remind one of a park; trees excite ideas of refine-

ment, elegance, luxuriance, and retirement: there are so many feelings connected with trees, that it cannot but influence one in beholding for so many leagues the vast forests with which the Pacific Ocean is skirted" (Seemann 1853: vol. 1, xi, 78-79). Seemann was well aware that he was imposing European associations on a foreign landscape and clear about wishing that he could remake what he saw to imitate Europe. He made particularly ominous observations about the rain forests of the Isthmus and northern South America. He hoped that the Californian and Australian gold rushes would bring colonization and intensive agriculture in their wake, and that land clearance would "improve" the climate of these areas. He noted that the seasons at Rio de Janeiro used to be similar to those of Panama "but since the axe was laid on the dense forests surrounding the city, the climate has become dry" and he speculated that "the same effect will probably be produced in the Isthmus. When the immense forests ... shall have been reduced, and a free circulation of air from sea to sea has been established, the rainy season will be considerably shorter, and the climate become cooler and more healthy" (Seemann 1852-1857:73). Only the absent industry of Europeans was required to mold the political and economic landscape, and the ecosystem itself.

Seemann made similar observations on the northwest coast of North America, at Neah Bay in Juan de Fuca Strait, observing that "The country around our anchorage was rather pretty. But an uninhabited, uncultivated country is always wanting in one grand attribute of the picturesque—the industry of man.... Houses, cleared land, and symptoms of attention and labour, wonderfully improve a landscape" (Seemann 1853: vol. 1, 97). He was comforted by the sight of the Hudson Bay Company settlement at Victoria with its enclosed pastures and fields of wheat and vegetables. "Civilization had encroached upon the beautiful domain," he noted with approval, "and the savage could no longer exist in the filth and indolence of mere animal life.... The prospect is cheering, the change gladdening ..." (Seemann 1853: vol. 1, 102).

Seemann's reaction against unimproved landscapes was most striking in the Arctic where he found "a death-like silence" as winter approached. "His own breath, the solitary beating of his own heart, is all the ear perceives," he wrote, and it was "in the dreary steppes of the Polar region" that Seemann recognized longings for "those circles where his exertion may be beneficial to his neighbours, and his wants be supplied by the aid of his fellow-creatures" (Seemann 1852–1857:16). Once again, we see the *Herald*'s naturalist turning away from direct observation to describe the landscapes of his own memory and aspirations.

Seemann also linked the collection of scientific data with the interests of commerce. It is clear that both he and Edmondston had been instructed to observe some parts of the world more closely than others. At the Falkland Islands, where the British Governor was struggling to improve agricultural and grazing yields, the Colonial Office asked Edmondston to collect samples of grasses for Kew Gardens. The connection between Kew and the Falklands was already so strong that Governor Moody had recently named a peninsula near Stanley Harbour "Hooker Point." Edmondston also reported directly to the Colonial Office on the resources of the Galápagos Islands and their prospects for more intensive colonization. As the use of steam power by the navy and British merchant shipping grew, the need for coaling stations was imperative. Although rumors of Galápagos coal proved false, deposits on Vancouver Island were very real and prompted Captain Courtenay of HMS Constance to declare a makeshift British jurisdiction over part of the island in the wake of Herald's survey.

Commercially marketable plants were of even greater interest to the expedition than the discovery of new species. Seemann found little to praise in the Arctic flora. "In a commercial point of view," he found "no productions which would play a prominent part in the traffic of civilized nations," adding that "should the country ever be inhabited by a civilized people, they will have to ... ex-

change walrus-tusks, eider-down, furs, and train oil, for the spices of India, the manufactures of Europe, and the medicinal drugs of tropical America" (Seemann 1852-1857: 21). The Arctic was of value, not in itself, but as part of a global system of trade. In South America, on the other hand, there were cinchona plants and their quinine derivatives. Admiring the "high mountains, extensive meadows, and valuable Quina-forests" of Ecuador, along with its temperate climate, mineral resources, and fertile soil, Seeman also noted its position "in the centre of the inhabited globe, between one of the largest rivers in the world, the Amazon, and the great Pacific Ocean." A discussion of Ecuador's botany was quickly turned into something else, as Seemann went on to say that "Ecuador presents a vast field for enterprise.... It is now ... inhabited by so limited a number of whites, that about twelve thousand immigrants would effect surprising changes" (Seemann 1853: vol. 1, 202).

Seemann's racial views emerge regularly in both the Narrative and the Botany of the Herald's voyage and, just as he viewed landscape and natural resources with an imperial eye, so he judged other peoples by his own standards of achievement and "improvability." At first Seemann praised what was, to him, the surprising practicality and expertise of indigenous peoples in the Americas. But he paid double-edged compliments. For example, along the river Iscuande, he noted the ingenious use of mangrove posts, bamboo, and palm-leaf roofs in the construction of houses. These buildings had open sides "so that every breath of air could enter, which in such a climate, to an idle, lounging, lolling race, is a comfort. We were surprised to see so much neatness in the construction" (Seemann 1853: vol. 1, 75). Seemann added that bamboo was "in architecture what the Banana is in food, the most bountiful and beautiful production in nature, and, by the very facility with which it is procured and applied, an incentive to indolent ease, an encourager of the too prevalent idleness of the tropics" (Seemann 1853: vol. 1, 76). Behind such statements lay the current debate about

environmental influences on human societies and the assumption that warmer climates discouraged exertion and innovation.

Seemann's most extensive ethnographic comments were made about creole and mixed-race communities. He made particularly detailed observations of Panama's population after crossing the isthmus from the Atlantic side to meet the Herald on the Pacific coast. Although Seemann recognized the diversity of the Isthmus' population, he felt able to trace the effect of different European genetic and cultural influences. "Spanish priestcraft and tyranny," for example, had destroyed the intellectual and entrepreneurial capabilities of the creoles, "But when the Anglo-saxon appeared the country began to revive and prosper" (Seemann 1853: vol. 1, 76). When it came to the black population, however, Seemann saw no hope. Environment was not everything; he also believed in essential racial differences and we can glimpse the man who would speak to "anti-negro" demonstrations in the wake of the Jamaica rebellion of 1860: "The negroes are treacherous, thievish, and extremely indolent ... for this reason they will always fill subordinate situations, although the law places them on a level with the rest of their countrymen" (Seemann 1853: vol. 1, 301).

Even worse, as usual, were the "halfcastes," which in this case meant the offspring of black-Spanish or Indian-Spanish parents. These people had inherited "all the vices and none of the virtues of their parents," were physically weak, and their children died young. Although forced to admit that people from different races could reproduce—this had been much debated in earlier vears-Seemann concluded that the childhood death rates in mixed-race families showed that "there must really be a specific distinction between the races, and their intermixture be considered as an infringement of the law of nature." He made a similar point later with reference to the populations of Ecuador and Peru, where he believed that the Indians were the only part of the population that was growing: a reflection of the strength Seemann believed lay in maintaining racial purity (Seemann 1853: vol. 1, 200, 302).

Like his attitude toward Central and South American Indians, Seemann's attitude about northwest coast peoples was ambivalent. In Juan de Fuca Strait, he was impressed at first by the Indians, who managed their canoes with "great skill, seeming goodhumoured and friendly, holding up fish, skins, etc., to trade with." After his paeon to agriculture at Victoria, however, he declared that "after making every allowance for the crimes of civilization, still man in a savage state exists in all his grossness.... While nature has imparted to most animals a desire of cleanliness, uncivilized man, with all the intelligence, ingenuity, cunning, and skill of his class, seems in general to be uncleanly, to revel in filth" (Seemann 1853: vol. 1, 102). Seemann recognized that the Indians had to build solid, enclosed dwellings to keep out the cold, but added that "Several families occupy the same house—one large shed, little better than an open cow-house or stable in an indifferent inn, [with] the compartments or walls hardly excluding the sight of one family from another. There are chests and boxes rudely made, in which blankets, furs, and smaller fishing gear are kept ..." (Seemann 1853: vol. 1, 105-106). It is interesting to note how much aesthetics have changed: these "rudely made" cedar chests, carved with the distinctive abstract designs of the northwest coast, are now reproduced for sale as part of a multimillion dollar industry in Indian art. So are the "grotesquely carved" figures and masks Seemann described: modern versions of these objects now grace the homes and offices of upwardly mobile British Columbians at a cost of several thousand dollars apiece.

As usual, Seemann was particularly critical of the mixed-race population. Victoria, like most fur trade posts, included British-Indian or French-Indian (Métis) men and women on its staff. These, Seemann decided, "appear to inherit the vices of both races; they are active and shrewd, but violent and coarse." What disgusted him even more was evidence of the usurpation of racial privi-

leges, as when mixed-race men identified themselves with Europeans. "We felt quite disgusted," he wrote, "in seeing one of these half-castes, bearing as good a name as any in Scotland, beating and kicking a score of Indians out of the fort, with as little compunction as if they had been dogs, scorning them as natives, though his mother had been taken from one of their tribe and had been no more educated than they were" (Seemann 1853: vol. 1, 104-105). In light of Seemann's own remarks about the animal nature of Indians, this outburst seems bizarre. The point, however, was that only Europeans were entitled to look down on "natives"; the despised "half-castes" could not be permitted to view indigenous people from a European perspective.

We can sometimes recover other voices than Seemann's from the Herald's records. Seemann's discussions of the expedition's Arctic cruises were based mainly on the journals of Midshipman Bedford Pim, who wintered in Bering Strait in 1849-1850 and spent a great deal of time living with the local Maliemut people. Pim found the interiors of their underground wood-roofed houses surprisingly comfortable. Oil lamps diffused light and heat throughout the tidy interiors. "and when the traveller has put off his wet clothes, and reclines on the soft deerskins regardless of the boisterous and snowy weather without, the pity he felt for the condition of the poor Eskimos rapidly evaporates, and he finds that, remote as they are from civilization, their condition is by no means so deplorable as is generally considered" (Seemann 1853: vol. 2, 58). Then the familiar voice of Seemann intrudes—perhaps in intentional counterpoint—to warn readers against seeing "the savage as a model of excellence" or "his actions as honourable."

Seemann made the same point with regard to Peruvian Indians, dismissing criticisms about the introduction of alcoholism and venereal disease as "mere cant" perpetrated by naive humanitarians (Seemann 1853: vol. 1, 198–199). Such statements were an important part of Seemann's view of natural history: the natural world was incomplete without the introduction of European eco-

nomic and social organization. To observe anything of real value in an indigenous culture interfered with this worldview and introduced unwelcome moral uncertainties to a process that, for Seemann, was simply the triumph of civilization over savagery.

Nothing illustrates this better than a comparison of Midshipman Pim's response to the warmth of Maliemut hospitality and Seemann's impression of their village. The naturalist visited the area at the end of the summer, when the inhabitants were still hunting inland, and his account of their settlement was designed to emphasize their lack of civilization: "Villages exist, yet all that our minds associate with them is wanting. On approaching we expect to meet with roads and bridges and smiling fields, to behold peaceful dwellings peeping through green boughs, and the steeple of the church towering heavenwards: in an Eskimo village these pleasing features are looked for in vain.... The underground dwellings look cheerless and are filled with water ... the paths are overgrown with herbage—the whole presenting a picture of misery and desolation. The Eskimos have not yet learned that migratory habits and progress in civilization are opposed to each other ..." (Seemann 1853: vol. 1, 19). But Pim had more insight into that migratory life. As the freeze-up of winter approached, he wrote, "They appeared almost different beings. Their light and filthy summer dresses had been exchanged for others which fitted more closely and were better made. They were no longer the apparently overawed people who, in their small skin baidars, paddled near the sides of our huge ships, but seemed conscious that they were moving in an element for which nature had admirably adapted them. Their step was firm, their movements graceful, their dread of the white man had vanished, and they appeared to communicate with us on the footing of perfect equality" (Seemann 1853: vol. 1, 133–134). Where some naturalists might have been excited by viewing a pristine northern ecosystem, Seemann lamented that "The mineral wealth rests undisturbed in the bowels of the earth; the vegetable kingdom still exercises an absolute sovereignty; and

the animal creation swarms over the boundless steppes, rarely disturbed by the sight of the hunter, and uncontrolled by the voice of the herdsman" (Seemann 1853: vol. 1, 20). Amid the terrible beauties of the Arctic, this anxious imperialist found "death-like silence" broken only by "his own breath, the solitary beating of his own heart" (Seemann 1852–1857:16). Perhaps it is no wonder that he could hear only his own voice, never giving the landscape or its inhabitants a chance to challenge or beguile him.

For Seemann, and for so many other explorers and naturalists in the nineteenth century, the essence of civilization was its control and exploitation of nature. Naval survey expeditions did far more than chart coastlines: they also mapped Europe's conquest of the non-European world, cataloging the future of empire. Accounts of the Herald expedition's natural history reveal how deeply entwined were the issues of scientific investigation and imperial expansion. Natural resources of commercial value to Britain were given top priority, and the indigenous populations living near them were described as unfit custodians of their value in a global market. Hydrography, natural history, and ethnography must be considered together when studying these survey voyages, or we will miss the themes that connect them. Even then, after marshaling all available sources of information, one thing usually eludes us: indigenous views of these scientific incursions. At best we can get only brief glimpses of what other peoples thought of exploring expeditions. Telling stories to while away the long Arctic winter, one of Midshipman Pim's Maliemut hosts explained that the origins of the British were obscure to him, but he supposed that they were "trees grown in the same soil as the drift-wood, only living, while the wood left on our shores is dead" (Seemann 1852–1857:68). There is much to ponder in this elegant metaphor. There is irony, too: this living driftwood moved with a deliberate yet ambivalent purpose, both desiring and despising the alien shores it touched.

LITERATURE CITED

DAVID, ANDREW. 1995. The Voyage of H.M.S. "Herald" to Australia and the South-west Pacific, 1852–1861 under the command of Captain Henry Mangles Denham. Miegunyah Press, Melbourne.

EDMONDSTON, ELIZA. 1868. The Young Shetlander, or, Shadow over the Sunshine: Being the life and letters of Thomas Edmondston, naturalist on board H.M.S. "Herald." William P. Nimmo, Edinburgh.

FORBES, EDWARD, ED. 1854. The zoology of the voyage of H.M.S. "Herald." Lovell Reeve, London.

Gough, Barry M. 1971. The Royal Navy and the northwest coast of North America, 1810–1914: A study of British maritime ascendancy. University of British Columbia Press, Vancouver.

Graham, Gerald S., and R. A. Humphreys, EDS. 1962. The Navy and South America, 1807–1823. Navy Records Society, London.

MACKAY, DAVID. 1985. In the wake of Cook: Exploration, science and empire, 1780–1801. Croom Helm, London.

SEEMANN, BERTHOLD. 1852–1857. The botany of the voyage of H.M.S. "Herald." Lovell Reeve, London.

——. 1853. Narrative of the voyage of H.M.S. "Herald," 2 vols. Reeve and Company, London.

Steven, Margaret. 1983. Trade, tactics and territory: Britain in the Pacific, 1783–1823. Melbourne University Press, Melbourne.