both chronologically and in terms of their location in the text. Less happily, a number of Wrens are introduced further on in the book, but the author still goes right back to the beginning for that individual. So, for example, we will read yet another account of training at Greenwich whose location in the text is many chapters away from the others. Understandably, chronology starts to become difficult. Even hemispheres are displaced in this manner: on the second page of Chapter 18, "Last Acts in the East," dealing with the Pacific theatre, we are introduced to a Wren who acquired her particular specialty analyzing U-boat transmissions. The reader is thus forced back to the Atlantic for a few paragraphs, for no compelling reason, before returning to the Pacific.

Rather than a lack of organization, I think the problem lies with the author's reluctance to leave anything out of the anecdotal accounts recorded for posterity by the Wrens in question. While a praiseworthy sentiment, it has the unfortunate result here, of more than a little bit of repetition – work with oscilloscopes, for example, is described on at least three separate occasions. I think it is fair that the editorial staff share some of the blame.

Hore's goal of integrating the recollections of women who worked in wartime signals intelligence with the broader picture is worthwhile, but I think others have done it better. For example, I would recommend Tessa Dunlop's *The Bletchley Girls* (London: Hodder & Stoughton, 2015) and Michael Smith's *The Debs of Bletchley Park* (London: Aurum Press, 2015). For those more interested in the role of women in the specifically naval side of wireless intelligence, there is really no alternative at present to *Bletchley Park's Secret Source*, but the prospective reader must be prepared to accept writing and editing that are less than first-rate.

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Christoph Irmscher and Richard J. King (eds.). Audubon at Sea. The Coastal and Transatlantic Adventures of John James Audubon. Chicago, IL: University of Chicago Press, www.uchicago.edu, 2022. xix+334 pp., illustrations, maps, notes, bibliography, indices. US \$30.00, UK £24.00, cloth; ISBN 978-0-226-75667-7.

This is a book about seabirds seen through the lens of the writings of the great observer of the avian world, John James Audubon. Everyone has a notion about the word "Audubon" as icon of the modern-day environmental movement – this work introduces the person who was John James Audubon through his writings. It consists of selections about seabirds and the seafaring life from his journals and published books between 1826 and 1833. Audubon's prose

is the basic focus, although the book is profusely illustrated with sketches, anatomical drawings and a few of the striking paintings of birds for which he is known for above all, as rendered for publication in the form of engravings by his collaborator, Robert Havell.

In the foreword, Subhankar Banerjee separates Audubon the person from Audubon the icon and puts him into the context of present-day events in the world of birds; the environmental movement; and the current understanding of the nature of racism and violence in its most brutal form: the slave trade. He draws parallels between the violence shown toward living things with recent environmental events. The introduction begins with an account of the extinction of what was believed to be the last great auk in 1844, which suffered a violent end at the hands of three, named Icelandic fishermen. It includes a biography that draws out the major themes of violence and racism in his background. They trace Audubon's French ancestry and the life of his family as small-time slaveholders in Haiti through a mysterious birth, a flight to France, and finally, his emigration to the United States - another slave-holding nation. Audubon's background as a child of a seafaring family from Nantes during the American War of Independence and into the Napoleonic wars gave him a grounding in violence; nor was he initially self-conscious about his use of violence, the gun being an essential tool for a self-professed ornithologist in his age. Throughout the book there are descriptions of horrific massacres of birds and all types of animals using guns and every weapon to hand which drives home the brutal nature of the people committing it.

The book also presents accounts of his life at sea on lengthy voyages made over extended periods, both to collect specimens and also to spend time in England, producing and promoting his two great works: the *Ornithological Biography* and *Birds of America*, where he made his name and fortune. On long voyages collecting individual specimens, an often-bored Audubon made detailed, intimate observations in sketches and prose, of life in a sailing vessel of 100 tons with a crew of twelve or so.

The editors also describe the evolution of Audubon's language in terms of structure, describing the process of deciphering the handwriting of early journals written in a vital, spare mixture of French and English, yet covering a wide sweep of topics from the minutiae of life on the vessel to fish and other creatures. This is contrasted with the later, polished language of his published work. The style of later journals is more direct and less digressive, being focused on the birds and other animals. His vision is shown to be darker and more reflective.

Irmscher and King contribute notes on the texts and, in the case of his journals, reconstruct them from handwriting made on board small sailing craft bouncing across the waves. In the last section of the journal, Audubon records a voyage to Labrador and Newfoundland in 1833. He describes the slaughter of birds for their eggs for sale in a Halifax market, the slaughter of seals, and in the case of the birds, massacres where they attempt to defend their nests from the "eggers." There is a detailed description of fishing and the processing of the fish in what was the nineteenth-century version of a factory ship producing salt fish. His final journal entries show a growing awareness of the basic violence underlining humankind's treatment of living things, especially on the part of the fishers, "turtlers," and "eggers" whom he had accompanied on his collecting expeditions, who were inured to violence. He describes the Fur Company as being a root cause being based on cupidity and details their fishing operation. He points out where industrial plunder leaves indigenous people in Labrador: "disappearing here from insufficiency of food and physical comforts and the loss of all hope, as he loses sight of all that was abundant before the white man came.... Nature is perishing" (290-291).

In the "Coda," the editors bring Audubon into the context of today. This is an important book that everyone with a romantic notion of who Audubon was or is today needs to read. Despite being considered by Webster as "an American naturalist and painter," the editors conclude that Audubon was a deeply ambiguous figure, who emerges as a violence-prone racist, a product of his time, as well as a human being, of his own nature. They invite us to consider our part of the legacies of violence and ultimately of slavery. A line is drawn from death of birds by primal violence to their modern-day death by pollution by plastic waste and oil-spills. Although none of the editors has a background in science or the academic credential of "ornithologist," they have created an excellent work at a time when it is urgently needed. Given the current issues in the avian world such as "bird flu" and mass die-offs, it is time to consider the relationship between ourselves and our environment. This book is about Audubon and seabirds, but it is also about ourselves. It throws a bright light on racism and violence as characteristics of mankind. The question is asked, does he ever evolve into modern-day environmentalist?

Bibliography is alive and well. The physical book is a living tutorial on book production. For devotees of the *Chicago Manual of Style*, it is like coming home. What you see is what you get, but the sum is greater than the parts: the team at the press have produced a masterpiece of communication. As a physical work it is, as expected, being from the University of Chicago Press, a wonderful piece of work that both communicates and is a pleasure to read. Often "Acknowledgements" are rote, but these seem, though tucked away modestly at the back, to be heartfelt and evidence of the wide array of talents employed to create a fine work. Two indices, ornithological and general, make navigation simple.

The major published works described are also a bibliographic feast: a

"double elephant" folio presumably for the earlier *Ornithological Biography* and more the "egalitarian" Royal Octavo of *Birds of America*.

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## Ryan Tucker Jones. *Red Leviathan The Secret History of Soviet Whaling*. Chicago and London: University of Chicago Press, www.press.uchicago. edu, 2022. 304 pp., illustrations, map, notes, bibliography, index. US \$30.00; cloth; ISBN 978-0-226-62885-1. (E-book available.)

In the twentieth century, whaling was conducted on an industrial scale by factory ships from several nations, in pursuit of animal fats used in producing margarine and other products. Most of the activity was in remote waters. Fleets of catcher boats would locate and kill whales and bring them to their parent factory ship for processing. This system owed its effectiveness to innovations by Norwegian whalers earlier in the century: deck-mounted harpoon guns armed with an explosive grenade, and a factory ship with a stern slipway that enabled the whale carcass to be winched inboard for processing instead of the former method of flensing it alongside.

The Soviet Union was a latecomer to the industry, creating its first whaling flotilla in the 1930s. After the 1950s, it was a major player, and "the world's most prolific whaler" (210). Between 1932 and 1987, Russian whalers killed 550,000 whales, roughly one in six of all those taken in the twentieth century. This stark story of the Russian decimation of whale populations was largely unknown in the west. It was publicized in the 1990s after the collapse of the USSR by Russian scientists and Yulia Ivaschenko, a Russian-American scientist. In *Red Leviathan*, Ryan Tucker Jones, an environmental historian at the University of Oregon, has now published a highly readable and thorough examination of all aspects of Soviet whaling. He covers why the industry was developed, how it was organized, and how it reflected the ideology of the USSR. He describes how it was supported by massive research, entered popular culture, created a group of privileged workers and finally, ended in the 1980s.

The book is based on years of study, interviews with former whalers and scientists in Russia and Ukraine, and Jones' reflection. An earlier work, *Empire of Extinction: Russians and the North Pacific's Strange Beasts of the Sea, 1741-1867* (2014) was about the dire environmental consequences of Russia's imperial expansion into the North Pacific. It also covered how Russia subsequently introduced progressive conservationist policies. Jones' even-handed perspective is a particular strength in *Red Leviathan*. While