INDIAN FISHING: EARLY METHODS ON THE NORTHWEST COAST

Hilary Stewart, 2018 [1977]. University of Washington Press, Seattle; 192 pages, black and white photos, drawings, bibliography, index. ISBN 978-0295743899 (paper); \$34.95.

Reviewed by Jane L. Smith

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For years, no, decades, I have thumbed through Hilary Stewarts' *Indian Fishing* (1977) looking at the photographs and superb yet simple drawings. The art itself told me what I thought I needed to know as an archaeologist new to the Pacific Northwest. As a reference document, the book's organization makes it easy to find what you are looking for with many succinctly labeled chapters and subsections. Even the landscape orientation lends itself to quick review. But much more than reference material, *Indian Fishing* combines historical citations, interviews and techniques to show us the incredible resourcefulness of the native peoples whose world has been tied to sea and river for thousands of years. First published in 1977, a fortieth anniversary edition was released in 2018 and is a testament to the significant and enduring nature of this work.

Hilary Stewart was born in St. Lucia, West Indies, in 1924, educated in England and moved to Canada in 1951 where she lived for many years on Quadra Island, British Columbia. We are fortunate her love of Pacific Northwest Coast culture, writing ability, and talented graphic artistry culminated in a body of work that lines bookshelves up and down the coast. Evident is the research and practical experimentation that preceded this work. So too is its appeal to a broad audience—novice or scholar, anyone with an interest in Northwest Coast cultures, fishing, art, or craftsmanship will appreciate this book.

Ms. Stewart begins with an introduction to early coastal life, and within minutes I am tearing scraps of paper to mark pages with interesting details—things like steaming a branch in a hollow kelp stem so one can bend

it into a halibut hook or noting a codfish design that resembles a nearby pictograph. She then begins in earnest to detail items perfected over thousands of years, nearly everything you can think of: hooks, lines, sinkers, lures, floats, clubs, spears, harpoons, gaffs, rakes, and nets. Pages are dedicated to each implement with just enough description, but not too much, to convey purpose, diversity, and method. Sprinkled in are historical, ethnographic, and personal accounts.

I particularly like the drawings and range of examples depicted. Detailed pen and ink sketches show tools from northern Washington State, British Columbia, and southeast Alaska. Each meticulous illustration shows how the implement would have looked in a finished state with all components and hafting devices included. She notes the size of the tool and associated tribe if known. Stewart learned to reproduce many of the tools, and it is with this knowledge she provides details like shaping, knot making, and wrapping: enough detail that I might try my hand at making a hook or spear.

Equally important as the gear are the methods by which these tools were deployed. Sketches accompany each tool type, such as how a lure is pulled through the water, the position of a canoe over a modified kelp bed, or the process for anchoring a net to the river bottom. Blockletter hand-written descriptions make for ease in reading and historical photographs show us true accounts.

Following the comprehensive gear chapters, Stewart tackles fishing structures, including traps, weirs, and baskets. This section presents wood stake weirs crossing rivers

and streams, dam and fence traps, basket traps, and intertidal stone traps. An introduction describes how they work with current or tidal ebb and flood and touches on ownership and use rights. Construction and function are shown mostly through illustrations depicting both structure and setting. Missing are the lower intertidal wood stake structures common to the bays and estuaries of the northern Northwest Coast. I suspect few were recorded or known to exist where she lived or frequently traveled. The chapter ends with herring spawn harvest, showing us how kelp and branches manipulated spawn for easy collection.

Just as important as the catch is the preparation and preservation of the harvest. Fish were boiled, steamed, or roasted and Stewart experimented with the latter two while beach camping. A detailed diagram of box cooking would guide any novice through the process and I found her steam pit drawings to closely resemble those I've seen at the Kake culture camp in southeast Alaska.

Smoking and drying fish demanded great care and technique to prevent spoilage and assure stores through the long winter. Many methods are presented and Stewart recounts her visits to fish camps, touching on old style melding with new, while watching practiced hands deftly butcher fish in the traditional way. I wonder about butchering methods specific to preservation, and that too is covered along with numerous drawings of how different species are hung from racks or threaded onto sticks. Eulachon, a small fish, was literally caught by the boat

load and rendered for its oil, a relished commodity and important trade item.

Throughout the entire book are examples of art and how it played into nearly every aspect of fishing, catching, processing, and serving. Hooks, lures, floats, clubs, drivers, spoons, ladles, and bowls: anything that could be decorated often was, or at least minimally those treasured objects that stood the test of time depict gracefully carved creatures, clan crests, and designs.

The thought and energy imparted to the objects segue into Stewart's final chapter on the spiritual realms of the Northwest Coast. Indian fishing is more than thousands of years of craftsmanship and learned ways. It speaks to the cultural reverence for living things that sacrificed themselves for the benefit of others. Art, prayer, ritual and song kept the balance and provided for the thriving and complex culture that still flourishes today. A Tsimshian example:

I will sing the song of the sky.
This is the song of the tired—
the salmon panting as they swim up the swift
current.
I walk around where the water runs into
whirlpools.
They talk quickly, as if they are in a hurry.
The sky is turning over. They call me (p. 177).

If you have it, read it. If you don't, get it—an easy read packed to the gills and that's my final word.

DOGS IN THE NORTH: STORIES OF COOPERATION AND CO-DOMESTICATION

Edited by Robert J. Losey, Robert P. Wishart, and Jan Peter Laurens Loovers, 2018. Routledge, London; 298 pages, 28 black & white illustrations, index. ISBN 978-1-13821-840-6 (hard cover); \$150.00. ISBN 978-1-31543-773-6 (ebook); \$56.95.

Reviewed by Angela Perri

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This edited volume seeks to contribute to a growing body of literature focused on multispecies approaches to ethnography, anthropology, and archaeology, aptly summed up by the volume's subtitle: Stories of Cooperation and Co-Domestication. It combines anthropological, archaeological, ethnographic, and ethnohistoric research to present an interdisciplinary perspective on the role of dogs in "the North," spanning North America and Eurasia. The volume is part of a series, Arctic Worlds: Communities, Political Ecology, and Ways of Knowing, which, according to the Routledge website, "aims to integrate research from across the circumpolar Arctic from across the humanities, social sciences, and history of science." To that aim, the editors of this contribution intend to "illuminate diversity and similarities in canine-human relationships across this vast region" (p. i). It is aimed at a wide audience, from scholars to general interest, who should all find it a worthwhile read. While the breadth and depth of the topics covered in the volume can, at times, seem disparate (from ancient dog domestication in Siberia to police dogs in the Western Canadian Subarctic), overall the editors have managed to curate a collection of interdisciplinary authors and research foci that tell the mottled story of human-dog relationships across the North.

The book has fifteen chapters. The first (Wishart) is a useful introduction to the concepts and perspectives discussed throughout the volume and also gives a brief overview of each subsequent chapter. Chapter 2 (Losey, Nomokonova, Fleming, Latham, and Harrington) takes a more social, mutualistic approach to the archaeology of dog domestication than is typically seen, seemingly the purpose of the chapter, by focusing on domestication as "an enduring project" and not a unilateral event. Chapters 6 (Hill) and 12 (Viranta and Mannermaa) also take archaeological approaches to human-dog relationships in the past, in Northwest Alaska and Fennoscandia, respectively. Chapter 3 (Oehler) offers a keen perspective on multispecies ethnography by documenting the collaboration between Oka-Soiot herder-hunters in South Central Siberia and their hunting dogs, contributing to an important record of documenting human-dog hunting regimes in the North. Chapters 4 (Davydov and Klokov), 5 (Strecker), 10 (Loovers), 11 (Hastrup), 13 (Mazzullo), and 14 (Anderson) also offer multispecies approaches to the ethnography (and sometimes ethnohistory) of humandog interactions, cooperation, collaboration, and interactions with other animals (wild and domestic) across the North. These contributions present unique insight into native/indigenous perceptions of relationships with their dogs and the dog's place among cultures in the North. Chapters 7 (McCormack), 8 (Wishart), and 9 (Levesque) each present a distinct ethnohistoric/anthropological view of the role of dogs in the Canadian Subarctic. Chapter 7 (McCormack) in particular offers a detailed, meticulously researched history of dogs in the Mackenzie basin that incorporates numerous sources.

The final chapter, a conclusion by the editors, compares and contrasts the ways in which the volume contributions document human-dog relations across the North. They focus particularly on the themes of (1) domestication; (2) cohabitation and coexistence; (3) intimacy, ambiguity, introgression; and (4) shared bodies and emotions. They end with a stark commentary on the interplay between humans, dogs, commodities, and colonialism in the North that frames many of the perspectives throughout the volume.

The editors have managed to bring together an excellent group of interdisciplinary authors to tackle not only a broad set of topics, but a vast region of the world. Some, including this archaeologist, may wince at the biting tone of long-held exasperation expressed by some of the authors when discussing the need for inclusion of a more nuanced, multispecies approach that focuses on agency, dog autonomy, human-dog cooperation, and "perspective sharing," and less on scientific methods, the "first and earliest," and human-driven narratives. Yet the authors are right to argue for a more socially driven, "data beyond utility" (Chapter 2, Wishart) methodology, with the ultimate goal being an approach to human-dog relationships that pulls from multiple research perspectives.

"The North" is a big place and this volume attempts to tackle research locations as geographically disparate as northwest Alaska, Fennoscandia, and eastern Siberia, sometimes leaving the reader jumping locations with each subsequent chapter. The editors have done their best to dampen this issue by placing the essays in some order of

geographic proximity. Yet this geographic order means that each successive chapter potentially changes foci (between archaeological, anthropological, ethnographic and ethnohistoric). The volume may have been best subdivided between these foci, permitting the reader to compare, for example, research on the archaeology of various regions more easily in one section. Equally, the subtitle is a bit misleading, if not limiting, as the book feels as if it encompasses so much more than these topics.

This volume represents a significant contribution to multispecies perspectives in human-dog interactions in the North. Whether you agree with the perspectives of the various authors or not, their essays are often thought-provoking and represent important additions to the unique narrative of life in this part of the world through time. Each essay could function as a stand-alone piece of work, but their incorporation results in an exceptional window into a complex, multifaceted relationship between dogs and people. The book makes an excellent case for the deep entanglement of interspecies histories in the North, across time and space, while highlighting both the differences and similarities across such an immense region. It is well-conceived and well-executed and represents an essential read within the *Arctic Worlds* series.

CARVING LIFE: WALRUS IVORY CARVINGS FROM THE BERING SEA

Eleanor M. Imperato; 2017. Queensborough Community College Art Gallery Press, City University of New York, Bayside, NY; 296 pages, map, color photos, bibliography. ISBN 978-1-93-665-8374 (paper); \$45.00.

Reviewed by Emily E. Auger

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Carving Life is the catalog for an exhibition at the Queensborough Community College Art Gallery, City University of New York. It is a beautiful volume with a classic glossy cover, short well-written and illustrated essays about the author's experiences in the North and encounters with artists, and numerous photographs of the carvings she has purchased. The foreword is by Dr. Faustino Quintanilla, the gallery's executive director, and the introduction is by Anne Milbrooke, who has worked as a teacher in Alaska and evidently guided Imperato in her trip planning and visits with artists. Eleanor M. Imperato is a freelance writer and photographer, whose professional credits include books of poetry and a co-authored biography of Martin and Osa Johnson, which is to say that her interest in the Arctic is that of an enthusiast and collector, not a scholar. She is wise enough to specifically disclaim any such credit herself; nevertheless, the exhibition and catalog were sponsored by a university gallery and the point needs to be made: the catalog's flaws as a historical source do not begin with the limited bibliography nor do they end with the brief representation of Canadian Inuit sculpture (a cynic might think it was only included to validate the wisdom of the author's decision to invest in Alaska carvings).

So why bother reviewing such a book in a scholarly journal? Because while the catalog itself, from the moment of conception through the well-deliberated stages of its production, was never intended as a source for current historians, it is itself an artifact for (if not already "of") history. It belongs to a lineage of books and exhibition

catalogs by or dedicated to travelers to the Arctic who, like Imperato, have found themselves in the thrall of a land they do not belong to and know little about. James Houston is notable among these individuals, particularly because of his role as a kind of instigator of the production of modern Canadian Inuit art in the late 1940s; the Alaskans were late comers to this particular party. George Swinton is another (see various exhibitions sponsored by the Winnipeg Art Gallery in Manitoba, Canada), who was a much more serious and dedicated collector than Imperato and is notable in the complete absence of any mention of him in Carving Life. The contemporary and future relevance of Imperato's account is that it shows us just how modern the Arctic is, from her references to the special round-about "taxi" service to her hotel, meant to excite first-time guests at Gambell (p. 82), to the timing of the visit with annual craft fairs and her participation in an annual amateur dog-racing event. This world is not the one Houston and Swinton encountered in the twentieth century; nor is it one of the worlds documented by the Johnsons nearly a century ago. This is the twenty-firstcentury Arctic, specifically the Alaska Arctic, where tourism is well recognized by the locals as an important source of revenue and visitors like Imperato are shown the best of service for the future benefit the effort is likely to bring. That service is not only about advertising carvings to potential buyers.

A certain stark exoticism in the illustrated works may unlock the beauty of the land and aspects of the worldview of its occupants to outsiders, but, more importantly, by leading outsiders to the art and from the art to the artists and from the artists to the people and their communities, Alaskan Inuit carvings may direct us all toward our common problems and the importance of finding solutions to them. Inuit art is not only a means of preserving valued aspects of the past and present. For the urban southerner it is a sign of adventure, of travel, of other places, even of the Other beyond one's own self and community, and most important, it can be a touchstone for understanding just how far-ranging and deeply affecting some of today's problems are: alcoholism, drugs, and, perhaps most devastating of all, climate change. Such subjects are not typically illustrated in Bering Sea carvings; they are sometimes mentioned by those who write about art from the Arctic. Climate change is addressed most directly in the section "On Gambell's Beach" by way of discussion about the unusually early break up of the ice and its effect on whales and walrus and local subsistence. Imperato met biologist Brad Benter and grad student Jenell Larsen, both of whom are studying the walrus population, and were waiting for a call to join the first hunting expedition of the season. Jenell had hoped to collect enough female walrus ovaries for a specific part of her study, but the hunt has been so poor in recent years that she has had to focus on other aspects of her project.

Imperato takes the increasingly dire effects of climate change seriously, but her tone throughout is one of enthusiasm:

I had read about hunters becoming much more involved with many governmental organizations and scientific research institutions, but seeing it in practice made me realize how much we can share and learn from one another. The lodge seemed to be the nerve center for all social, scientific, and artistic interactions, and I was in the middle of it! (p. 85).

This is the voice of the well-to-do tourist seeking both modest adventures and a place in the larger conversation about art, current issues, and life outside the urban mainstream: Imperato has achieved both goals. Perhaps—and only perhaps—her authorial connection with Martin and Osa Johnson even adds a little glitter to that accomplishment. Whether that is enough to place this catalog on the required reading lists of anthropology or art history classes is less certain.

MEXICANS IN ALASKA: AN ETHNOGRAPHY OF MOBILITY, PLACE, AND TRANSNATIONAL LIFE

Sara Y. Komarnisky, 2018. University of Nebraska Press, Lincoln; 300 pages, photographs, maps, tables, index. ISBN 978-1-4962-0364-9 (hardcover, \$60.00); ISBN 978-1-4962-0563-6 (paper, \$30.00); ISBN 978-1-4962-0648-0 (ebook, \$30.00).

Reviewed by Ana E. Rosas

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Sara Y. Komarnisky's Mexicans in Alaska: An Ethnography of Mobility, Place, and Transnational Life is a meticulous mapping of the generative transnational imaginaries framing the mobility and place making of three generations of Mexican people laboring and raising families in Anchorage, Alaska and Acuitzio del Canje, Michoacan, Mexico. Beginning in the late twentieth century, Komarnisky's multi-sited ethnographic fieldwork elucidates the emotive value of forging transnational family relationships and lives that made it accessible for Mexican immigrant family members to thrive as enterprising seasonal laborers in the construction, fishing, packing, and service sectors of Anchorage in anticipation of retiring as transnationally knowledgeable and mobile grandparents and business and home owners in both Anchorage and Acuitzio del Canje. By researching the "paths, threads, conjunctions, and juxtapositions of locations" informing the transnational investments, circular and circuitous migration, family and community relationships, and desires of Mexican, Mexican immigrant, and Mexican American children, women, and men in Alaska, Komarnisky compellingly argues that as generations of Mexican immigrants grew in their knowledge of Alaska as a promising destination and experience, they did not abandon, but rather committed themselves to excelling as members of adventurous, mobile, and inclusive transnational families and communities (p. 42). Each of the six chapters comprising this ethnography makes evident that these families confronted the hardships of physical absence and distance, climate change, employment conditions, and the gendered

transitions of belonging and caring for each other across the U.S.-Mexico border as part of daring transnational Mexican immigrant families and a larger community of Mexican immigrant people that prioritized experiencing and benefiting as fully as possible from their hard-earned knowledge and networks, ethnic heritage, family ties, and experiences in Alaska.

In chapters one and two of Mexicans in Alaska, Komarnisky unpackages in vivid detail the preparation, aspirations, and agreements that incentivize Mexican immigrant women and men to invest themselves in what she describes as la vuelta (circular and circuitous migration to and from Alaska from Acuitzio del Canje (p. 47). Her focusing on fleshing out these women and men's pursuit of strategically timing their migration, as well as entering into transnational extended family agreements that would make it easier for them and their children to migrate to and from Alaska illuminates the diversity of interactions and people that are needed as they prepare to transition into laboring, completing an education, and/ or growing in their involvement in a transnational family and community life that celebrates their goals and ethnic heritage. Having traveled alongside and shared numerous conversations with Mexican immigrant women and men, Komarnisky reveals that unearthing and tracing the unique mobility of Mexican immigrant families within and beyond Alaska entails understanding that these families' mobility is informed by a range of emotions. She persuasively illustrates that these families' desire to achieve a pacing that is fair to extended family entrusted to care for their relatives, belongings, livestock, and homes during their absence, as well as satisfy their yearning for their *ranchos* (ranches) in Acuitzio del Canje inspired Mexican immigrant women, men, and their children to move, drive, and travel with the utmost urgency, care, and energy.

Komarnisky's robust contributions to the fields of Immigration and Ethnic History and Studies and Latinx Studies are concisely showcased in chapters three, four, and five of Mexicans in Alaska. Each of these chapters clearly magnifies the historical significance of the majority of the Mexican immigrant families at the center of her ethnography achieving a seasoned, mobile, and placecentered existence as members of transnational families and communities, because of their having been granted amnesty in 1986 in the United States. Securing the legal right to cross the U.S.-Mexico border without the constant fear of deportation weighing heavily on their minds and hearts, made it possible for these families to invest themselves in place-making in both Anchorage and Acuitizio del Canje. These families' children in turn, began to move and migrate without it interfering with their completion of a high school education as a priority, and older family relatives labored tirelessly to sustain what Komarnisky describes as traction across pathways and networks that made it possible for their families to eventually own and operate businesses in Anchorage. Such dedicated pursuit of transitioning as a mobile and goal-oriented transnational family in the United States would make owning and enjoying homes seasonally in Anchorage and Acuitzio del Canje accessible. Purchasing and gifting food items across the U.S.-Mexico border, as well as participating in compadrazgo (the sponsorship of fellow Mexican immigrant women and men's children through the religious rituals of baptism, first communion, and/or marriage) further paved the way for Mexican immigrant families to establish and benefit from community knowledge and networks that nurtured their drive to make places for their families in Acuitzio del Canje and Anchorage steeped in goals, ethnic food culture, religious rituals, and community belonging that spanned

three generations. Hence, Komarnisky demystifies how not being in close geographic proximity to the U.S. and Mexican governments' militarization of the U.S.-Mexico border coupled with amnesty in the United States made it possible for Mexican immigrant families in Alaska to pursue a family life in which transnational mobility was embraced as a demanding yet highly coveted asset.

Finally, in chapter six of her multi-generational ethnography, Komarnisky argues that transnational Mexican immigrant families in Anchorage don't shy away from celebrating their ethnic difference and heritage in public. She argues that their public celebration of Xochiquetzal-Tiqun, a Mexican immigrant dance group that honors the traditions and culture of Acuitzio del Canje, further emboldened Mexican immigrant families to act in support of each other as community members. Publicly recognizing and coming together to celebrate and convey this dance culture to a younger generation made it less arduous for these families to lead lives stretched across borders. Partaking in Xochiquetzal-Tiqun provided the first and second generation with a restorative and intergenerational break from the pressures of working tirelessly to advance their family and community goals. Experiencing their ethnic heritage and traditions as restorative activity and a source of ethnic pride elevated the significance of this dance culture to these families' place-making in Anchorage and across generations. Nonetheless, and throughout this ethnography, a more thorough and nuanced account of the desires, anxieties, and interests of the third generation of Mexican American children raised in these transnational families and community would have enriched our understanding of the diversity of incentives and feelings orienting this transnational family and community experience. Overall, Mexicans in Alaska is a comprehensive and humane consideration of the desirable qualities and underestimated ingenuity and rigors informing the mobility and place-making of Mexican people in Alaska and Acuitzio del Canje, pointing to the undervalued diversity from within shaping Mexican immigrant and Mexican American family investments and life throughout the United States and its history.

REVIEW ESSAY

THE OXFORD HANDBOOK OF THE PREHISTORIC ARCTIC

Edited by T. Max Friesen and Owen K. Mason, 2016. Oxford; 988 pages, 100+ photos, maps and line drawings, index. ISBN 978-0199766956 (hardcover, ebook) \$175.00; also available via Oxford Handbooks Online.

OUT OF THE COLD: ARCHAEOLOGY ON THE ARCTIC RIM OF NORTH AMERICA

Owen K. Mason and T. Max Friesen, 2017. Society for American Archaeology (SAA) Press, Washington, DC; vi + 294 pages, photos, maps, and line drawings, index. ISBN 978-093283955-8 (paper) \$33.95 (regular price); \$27.95 (SAA member price); ISBN 978-093283956-5 (Kindle ebook) \$9.99.

Reviewed by Erica Hill

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The recent trend in publishing handbooks and cultural or regional overviews is finally benefitting arctic archaeologists. Two new surveys co-authored and co-edited by Owen K. Mason and T. Max Friesen are a boon to undergraduates, graduate students, scholars, and cultural resource managers, finally offering an alternative to Don Dumond's classic overview *The Eskimos and Aleuts* (1977, revised 1987). The two volumes reviewed here complement each other: intended as an undergraduate text, *Out of the Cold* provides a succinct overview of North American Arctic culture history. *The Oxford Handbook of the Prehistoric Arctic*, on the other hand, serves as a comprehensive reference on Arctic cultural traditions from initial colonization through the post-contact period.

Running to nearly one thousand pages, the *Oxford Handbook* features an international roster of contributors that includes academics, museum professionals, and contract and agency personnel. The *Handbook* is organized in three sections: thematic introductory essays, followed by two regional sections on the Western (Chukotka, Aleutian Islands, Alaska and Northwest Canada) and Eastern Arctic (Central Canada to Labrador and Greenland). An introductory chapter by editors Friesen and Mason sets the stage for the volume by identifying key issues in arctic prehistory: use of ethnographic analogy, chronologies,

environmental change, and migration. A general outline of Arctic cultural traditions follows, accompanied by two excellent maps and a chart providing parallel time lines for seven arctic regions, from the western Gulf of Alaska to high-Arctic Greenland.

Each chapter in the thematic section deals with an issue or line of archaeological evidence relevant to the entire North American Arctic. The first contribution (Rubicz and Crawford) addresses how studies of Y-chromosome markers and mtDNA haplogroups contribute to understanding how and when the initial colonization of the Americas occurred. A discussion of alternatives to Greenberg's three-migration model condenses a complex literature into key points for nonspecialists and describes current thinking on the geographic distribution of and genetic distance among northern populations.

Tackney et al. cover some of the same ground, but deal additionally with autosomal markers and stable isotope analysis. This chapter addresses later, Holocene migrations and relations among Dorset, Thule, and modern Arctic populations, linking specific aDNA samples to their associated dates and archaeological contexts. A short discussion of carbon and nitrogen isotopic analysis illustrates dietary differences among individuals from the Eastern Arctic, Aleutian Islands, and Alaska Peninsula. Tackney

et al. note that variation in δ^{13} C values at the highest trophic levels "is heavily structured by temporal and/or geographic variation in the carbon isotope chemistry of the marine ecosystem" (p. 56)—a point with particular relevance for dietary studies of Arctic foragers.

Key Arctic resources are addressed in most of the remaining chapters of this thematic section, including fauna (Betts); wood (Alix); jade, obsidian, and soapstone (Rasic) lithics (Desrosiers and Sørensen); and copper and iron (Cooper). Each contribution deals with geographic differences in access to resources, and several address regional trade and exchange. In the chapter on zooarchaeology, Betts covers birds, fish, and shellfish, in addition to sea mammals and caribou. His contribution focuses on evidence for "procurement, butchery, storage, and consumption" (p. 81), though Betts acknowledges that social and ideational factors also influenced human—animal interactions (p. 97).

Alix deals with driftwood availability in both the Eastern and Western Arctic, demonstrating how wood and charcoal analysis can inform understanding of fuel preferences, carpentry, and building practices. Access to wood resources influenced the design and use of hearths and lamps as well as food preparation, cooking practices, and ceramic production (p. 117). Wood analysis and dating also have the potential to answer questions about the nature of contact between the Late Dorset and Norse migrants. However, Alix cautions against assuming the Norse were "better equipped" woodworkers, since woodworking is an ancient indigenous tradition in the Arctic (p. 121).

Rasic contributes a chapter on raw material sourcing, describing how trade and exchange of jade, obsidian, chert, and soapstone were embedded in social relations. The distribution of such resources also demonstrates extensive geographic knowledge. Rasic sees exchange of lithic materials as "a critical means to cope with seasonal and spatial variations in subsistence resources" (p. 134), enabling inland Alaska Iñupiat to access marine products and linking interior Athapaskans to Inuit in multiethnic regional networks. A useful map of selected raw material sources (p. 133) graphically illustrates the major differences between Eastern and Western Arctic access to high-quality cherts, obsidian, and soapstone.

In the following chapter, Desrosiers and Sørensen focus on Paleoeskimo lithic technologies across the Arctic, taking a diachronic perspective and emphasizing, like Rasic, the capacity to exchange both knowledge and materials across vast distances. Arctic metallurgy is the subject of Cooper's contribution; he provides an overview of copper, meteoritic, and telluric iron use and outlines the challenges of detecting and identifying metal at archaeological sites. Linking the study of metal to key anthropological issues, such as social complexity, trade, and innovation, Cooper advocates for continued replication experiments and survey of regional literatures for occurrences of metal at archaeological sites (p. 189).

In the concluding chapter of this section, Lyons traces the development of community-based archaeology, linking shifts in disciplinary practice and relations with indigenous communities to broader social and political changes in the United States and Canada. She points to the potentials inherent in digital deliverables, highlighting innovative efforts to collaborate, educate, and repatriate using electronic media. Each overview in this thematic section of the *Handbook* summarizes a massive literature while remaining accessible to nonspecialists. Together with *Out of the Cold*, this section could provide a firm foundation for an undergraduate course on Arctic prehistory.

The remainder of the *Handbook* deals with the culture history of the Western and Eastern Arctic, respectively. In the West, this coverage extends temporally from the Late Pleistocene (Goebel and Potter) to nineteenth-century Iñupiat life in northern Alaska (A. Jensen and Sheehan). Coverage of the archaeology of Alaska and Canada constitutes the bulk of the volume, but extends westward to include one chapter each on the prehistory of Chukotka (Bronshtein et al.) and the Northwest Pacific, dealing with maritime adaptations in the western Bering Sea, Sea of Okhotsk, and the Kuril Islands (B. Fitzhugh). General chapters on the Aleutians (Davis et al.; Maschner) and the Central Gulf of Alaska (Steffian et al.) discuss chronologies and key sites. The chapter by Steffian et al. is accompanied by detailed site plans from Kodiak, while Maschner's contribution includes photos of extraordinary stone, ivory, and whalebone figurines and personal ornaments from the eastern Aleutians. The inclusion of maps would have enhanced several of these chapters, as would artifact drawings, rather than photos, which often lack detail.

Chapters by Tremayne and Rasic and by Darwent and Darwent describe the current state of research on the Denbigh Flint Complex, and on Choris and Old Whaling, respectively. Questions surrounding these constructs have persisted since Giddings' work in the 1960s. These two essays review recent research, largely conducted by the authors, that refines our understanding of subsistence,

settlement and technological change in northern Alaska between about 4500 and 400 BCE. The Darwents' work on the "Old Whaling" locality at Cape Krusenstern has reframed early inferences about both seasonality and subsistence. Their contribution summarizes the argument for successive winter occupations at the site, which yielded a faunal assemblage comprised of 98% small seal, likely taken via breathing-hole hunting. These two chapters are accompanied by detailed line drawings of artifacts and several useful tables presenting faunal and radiocarbon data; an excellent map by Tremayne illustrates the distribution of the Denbigh Flint Complex.

Dumond deals with Norton culture in the following chapter; his 50 years of work have been critical to defining Norton chronology, describing its characteristic assemblages, and exploring its possible origins in the eastern Aleutians. Norton provides an entrée to an encyclopedic chapter on Ipiutak by Mason, who takes the opportunity to explore possible links to the forested interior. He also makes an argument for the qargi as a theatrical space in which shamans—whose presence is indicated by burial goods and iconography—purportedly made use of inscribed stones and pictographs. Mason also authored chapters on Old Bering Sea and on Birnirk and Punuk relations to Thule. Bronshtein et al. deal with contemporaneous developments across Bering Strait in Chukotka, illustrated with fine drawings of objects from Ekven and Paipelghak. These two sites also form the basis for a comparative discussion of architecture, making some of the material previously published in Russian available to English-language readers.

Anne Jensen surveys Late Western Thule in a contribution on technology, architecture, and burial patterns. These themes are picked up again in a later chapter dealing with the Iñupiaq descendants of Thule living in northern Alaska. Here, Jensen and Sheehan discuss contact between Iñupiat and Western explorers, whalers, and traders and deal briefly with warfare and the relationship between gender and architecture.

Two chapters explore the Western Subarctic: Potter's contribution on the Alaska interior ranges broadly in terms of both geography and chronology and includes a series of instructive maps that are regrettably reproduced too small for clarity. Potter also deals with Athapaskan prehistory, emphasizing long-term trends. MacKay and Andrews explore the last 2000 years of subarctic prehistory in Yukon, the Northwest Territories, and western Nunavut through the lens of land use and hunting strate-

gies. Their chapter cleverly conveys the entanglement of humans and caribou by arranging each section by caribou ecotype, implicitly crediting caribou with agency in the joint construction of landscape in Northwest Canada. The western Arctic section of the *Handbook* is rounded out with two chapters on the late prehistoric and contact periods among the Mackenzie Inuit (Arnold) and a survey of some 4000 years of prehistory of the Aleutian Islands (Corbett and Yarborough).

Part III of the volume is devoted to the Eastern Arctic. It begins with Finkelstein's chapter on paleoenvironments and concludes with Gulløv's discussion of Inuit contact with Europeans in Greenland through the eighteenth century. Friesen's chapter on migration provides an apt introduction to the archaeology. He begins with a discussion of terminology, distinguishing among the terms Pre-Dorset, Independence, and Saqqaq, each of which refers to early Paleo-Inuit (pp. 674–675). Friesen also addresses the Thule migration, outlining the causal factors that figure in most explanations for the phenomenon.

Milne and Park return to the question of terminology in a chapter on Pre-Dorset, concluding that lithics remain the definitive artifact type for the culture (p. 707) given the lack of organic preservation. Two contributions on Greenland cover the time period from initial colonization around 4500 years ago (Grønnow) though Dorset (J. F. Jensen). In contrast to Pre-Dorset, permafrost preservation at Saqqaq sites in West Greenland allows for a more nuanced reconstruction of subsistence practices. Wooden bird spears, bows and arrows, and baleen snares complement the faunal evidence for a broad-spectrum strategy that included the great auk as well as an extensive menu of terrestrial and marine species. Fragments of paddles suggest use of watercraft while probable wooden drum frames hint at shamanic performance (p. 723) as well as proficiency with driftwood resources.

Ryan revisits the "Dorset Problem" in a transitional chapter examining competing models of the Pre-Dorset to Dorset transition, or discontinuity, depending on the region under study. Late Dorset is the focus of Appelt et al., whose coverage spans the vast region from Victoria Island to Northwest Greenland. This chapter features one of the most considered discussions of social organization (pp. 792–793) and cosmology (pp. 794–796) in the entire Eastern Arctic part of the volume. The authors explore links between material culture and gender- and age-based cohorts as well as human relations with polar bears, materialized in figurines, animal bones, and architecture.

Park's chapter on the Dorset–Thule transition evaluates the evidence for contact, discussing models of interaction and avoidance. Park concludes that the absence of evidence for intermarriage, acculturation, or avoidance combined with current dates indicate that arriving Thule people encountered an unpopulated landscape in the Eastern Arctic (p. 821). Whitridge tackles the Classic Thule, in a seamless integration of social organization and worldview with settlement and economy. The requisite line-up of Thule harpoon heads is accompanied by an excellent illustration of house types in both plan and profile views.

Four of the last five chapters of the Handbook discuss Inuit populations in specific regions of Canada and Greenland. Contributions by Kaplan and Woollett on Labrador, by W. Fitzhugh on the Southern Inuit, and by Lemoine and Darwent on the Polar Inuit (Inughuit) of Northwest Greenland describe distinctive adaptations to Eastern Arctic environments. Each chapter covers the transition from Late Thule to contact, highlighting Inuit cultural plasticity without minimizing the profound negative effects of epidemic disease, violence, and missionization. Dawson takes an alternative approach, exploring whether Late Thule people experienced a "rigidity trap" that limited their adaptive options to the new conditions they encountered in the central Arctic. Referencing work by Friesen on the Caribou Inuit, Dawson suggests that adherence to traditional social structures developed within an Alaska context may have constrained responses to climate change and culture contact. He interprets cultural conservatism as a source of conflict as some entrepreneurial Inuit adapted to new opportunities while others attempted—unsuccessfully—to maintain the status quo (pp. 928–929).

Gulløv's chapter on Greenlandic–European contact addresses similar themes; he explores interaction among early Thule migrants, Late Dorset, and Norse settlers. Supplementing archaeological evidence with the limited historical sources, Gulløv (p. 904) suggests that Norse relations with indigenous Greenlanders involved "a generalized [and] balanced reciprocity." Metal objects, such as rivets and brass, were likely exchanged for walrus ivory; other trade items, such as spoons, may have had both functional and novelty value. Later Inuit–European contact began sporadically in the late 1500s. Accounts from this time period provide invaluable insights on Inuit lifeways, although the nature of interaction became primarily extractive, with Europeans interested primarily in fox skins and marine mammal resources.

For any archaeologist working in the North American Arctic, the *Handbook* will be an invaluable resource. Each contribution offers a concise outline of the culture history of a select region and time period, identifying key issues, finds and sources. While I have used the volume as a reference several times already, reviewing it as a whole for *AJA* highlighted the diverse cultural trajectories of the North American Arctic past, ranging from whalers, sealers, and fisherfolk to caribou hunters and Norse pastoralists. For graduate students, as well as professional archaeologists, each chapter provides a navigable orientation to a vast regional literature. The general focus on major sites and diagnostic material culture, however, means that some topics receive little attention.

For example, missing from the book is any extended discussion of pottery, scrapers, and bone technologies, with a few notable exceptions (e.g., Darwent and Darwent, p. 390; Dumond, pp. 396, 405–406). Lithic projectiles, harpoon heads, and microblades, on the other hand, are well-illustrated. Gender is discussed only once in the western Arctic section (Jensen and Sheehan), though the topic receives more attention in chapters on Late Dorset (Appelt et al.), Classic Thule (Whitridge), and Saqqaq (Grønnow). These same chapters mention children, suggesting that many eastern Arctic archaeologists have a greater awareness of decades-old disciplinary trends than their Western colleagues.

Several authors do deal explicitly with art, ritual, and personal ornaments, including Mason's chapter on Ipiutak and, notably, Goebel and Potter's discussion of Late Pleistocene settlement. Shamanism is addressed in contributions on Old Bering Sea (Mason), Saqqaq (Grønnow), and Late Dorset (Appelt et al.), though ritual and worldview are ignored in most chapters.

Themes that run throughout the volume include the persistent problems with terms for archaeological "cultures"; authors in the culture history sections of the book (parts II and III) consistently make a point of defining terms, while acknowledging the challenges of balancing site specifics with regional patterns. Throughout, authors never lose sight of the fact that archaeologists use cultural constructs to describe and organize the past. This awareness reflects the editors' choice of contributors, all of whom are knowledgeable, highly engaged, and thoughtful scholars. Transition is another theme that unifies this volume. Rather than serving as introductory or conclusory brackets in chapters focused on specific archaeological cultures, transitional periods (e.g., Pre-Dorset–Dorset,

Dorset—Thule, Thule—historic period) receive thorough discussion. The explicit consideration of interaction—or avoidance—evidences a positive trend in a field where humans have sometimes taken positions peripheral to artifact types.

Taken as a whole, the *Oxford Handbook* is a monumental work of impressive breadth and depth. Production quality and editing are generally excellent. The index is competently constructed and, happily, each chapter is accompanied by its own list of works cited. The only major shortcomings of the volume are the lack of maps and poor quality of some illustrations. While two first-rate maps of the eastern and western Arctic are provided in the introduction, their scale limits their use to general orientation. Some chapters featured fine maps, artifact drawings, and site plans; others included dark, indistinct photos and illustrations that were simply too small to decipher. Despite these problems, the *Handbook* will be an indispensable reference for many archaeologists.

Out of the Cold fulfills a completely different purpose and will be welcomed by anyone teaching a course on the archaeology of the North American Arctic. Reasonably priced and accessible to students, the volume is an excellent introduction to the complex archaeological record of this massive region. Following a brief introduction, the two main chapters deal with the western (Mason) and eastern (Friesen) Arctic, respectively, divided at the Mackenzie River delta. These two chapters present chronological prehistories, with Mason's chapter including an overview of coastal geography and the oceanographic factors that make the Bering Sea such a productive habitat.

The authors wrap up the volume with a concluding chapter identifying key themes in Arctic prehistory, observing that while multiple migrations have shaped the cultural landscape, change has often been balanced by linguistic and genetic continuity. Climate change and tectonic activity are identified as major drivers in the region, yet the authors manage to avoid ecological determinism.

Unfortunately, the book's space constraints are reflected in the small size of many maps and artifact illustrations. The problem of legibility is compounded by digital (as opposed to offset) printing, which tends to blur halftones. As a result, complex and potentially useful maps are reduced to a couple of inches and artifact drawings that deserve an entire page become indistinct. In particular, Mason's complex illustrations, which provide snapshots of the geographic distribution, artifact types, and architectural styles of several cultural traditions, would have immeasurably benefitted students were they readable. These criticisms are arguably balanced, however, by the reasonable price of the book. Nevertheless, future editions should remedy this shortcoming. (The ebook version, which was not reviewed, may not suffer from the same problem.)

The Oxford Handbook and Out of the Cold occupy very different scholarly niches—the former an authoritative state-of-the-discipline volume and the latter a text for advanced undergraduate and graduate students. The Handbook deserves to become an essential reference for twenty-first-century archaeologists; it belongs in the personal library of any serious scholar of the North American Arctic past and in the libraries of most universities. Educational institutions in the North, or those with programs in archaeology or the Arctic, should also acquire the volume. Currently available in hardcover and ebook format, the Handbook may also be accessed via subscription to Oxford Handbooks Online. Unfortunately, individual chapters are not currently available for purchase without a subscription. Out of the Cold will likely become a key text for courses on North American Arctic archaeology; its reasonable price, in both softcover and ebook format, makes it an obvious choice for instructors. The book should also make it onto reading lists for field schools in Alaska and Canada; its compact size should ensure a place in the backpacks and dry bags of students for many years to come.