stage; I do not see this as evidence of corruption. Nevertheless, this book's shortcomings demonstrate the need to exercise great care and independence when working in this arcane and complex arena. Researchers can make a significant contribution to the study of petroleum development by utilizing Alaska's celebrated (but relative) transparency to identify information process and data deficiencies, as well as the subtle but pervasive powers of oil industry seduction.

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Biocultural Diversity and Indigenous Ways of Knowing: Human Ecology in the Arctic. By Karim Aly-Kassam. Calgary: University of Calgary Press, 2009. 288 pp. Bibliography, index, maps.

Written in an accessible style, this volume presents the reader with seven chapters that lead the way through the author's re-conceptualization of human ecology into a narrower iteration specific to an Arctic inhabited and shaped by Indigenous communities. Two case studies are presented, based on archival research and interviews with inhabitants of Ulukhaktok, Northwest Territories and Wainwright, Alaska. The interviews were followed up with community verification events. Accompanying the volume is a map indicating subsistence resource and land use by Inuvialuit residents of the western Arctic community of Holman.

The strength of the book lies in its contribution to the discussion of the nature of Indigenous knowledge. This intervention is timely. In Chapter Three, the author provides a sensitive and insightful consideration of Indigenous knowledge's attributes, which are identified as: content specificity, complex connectivity, empirical tendency, cumulative nature, and plurality. The discussion of these elements is used as a framework for the author's reconceptualization project and allows for an understanding of human ecology structured by Indigenous ways of knowing based on constant and collective interaction with the lived environment. This re-thinking acknowledges that Indigenous knowledge itself is consistent with human ecology's purpose of understanding "the complex and varied systems of interaction between man and his living and non-living environment" (25). Moreover, it provides a way of conceptualizing arctic human ecology that both brings to bear, and requires of researchers, a deeper understanding of human ecologies of hunter-gatherer communities at a crossroads of change wrought by the intersecting realities of cultural resurgence, capitalist resource extraction, and climate change. This theoretical framework will assist in moving analysis of Indigenous knowledge, its veracity, and its usefulness beyond the barriers placed before it by those who cling to notions of Eurocentric Western science as a superior—if not the only "true"—way of knowing.

The book's description of theory leads into its two case studies, which are used to illustrate the deep importance and relatedness of Indigenous knowledge's elements and to present aspects of the human ecologies of Holman and Wainwright. The study of Holman examines subsistence land and resource use. The study of Wainwright investigates how understandings of sea ice (ice phenology) indicate characteristics and implications of climate change for human ecology. Woven throughout both case studies is an emphasis on the implications of biocultural diversity for the human ecology of the places and peoples in question, and on the power relations inherent in how ways of knowing are shared and documented. These studies, however, are likely to leave the reader wanting more—more ethnographic description, more detail about the research process and its participatory and transformative aspects, more information about the *dramatis personae* who speak through frequent quotations, and more about the social and cultural lives and characteristics of the communities themselves.

The penultimate chapter provides an in-depth discussion of the implications and relevance of human-ecology mapping as a depiction of the results of phronesis, the two step process of knowing how to knowing that, which, taken up from the work of Aristotle, constitutes the philosophical underpinning for the author's re-framing of Arctic human ecology. In a particularly important passage, Aly-Kassam asserts, "While it is true that maps express the language of power, human-ecological mapping demonstrates that there are alternative expressions of the cartographic venture which are popularly supported by Indigenous peoples and take map-making outside the domain of the cartographer-conqueror" (191). Throughout the chapter, it is argued that ecological map-making moves away from representing the Arctic as an imperial frontier awaiting discovery and development, and aims instead to depict lived Indigenous human ecology. This process, in turn, strengthens individual and intergenerational knowledge transmission, and thereby validates spiritual, cultural, and legal relationships between Indigenous peoples and their Arctic homelands.

Unfortunately, while the author emphasizes the importance of participatory research methodology, the theoretical approaches developed in recent years by Indigenous scholars working in this area are not referenced in the book (for example, see Linda Tuhiwai-Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 1999, and Denzin et al., *Handbook of Critical* 

and Indigenous Methodologies, 2008). Admittedly, much of this wider literature is not Arctic-specific, but it points to the need for the continuing development of research methods that respect, empower, and benefit Indigenous peoples in accordance with community needs and priorities. While adding to the literature on Inuvialuit and Inupiaqland and resource use and social relations, Biocultural Diversity and Indigenous Ways of Knowing contributes to this larger effort by providing a comprehensive undergraduate-level introduction to Arctic human ecology and offers an essential philosophical and practical synthesis of concepts that promote the understanding necessary for working effectively in the Arctic.

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Alutiiq Villages Under Russian and U.S. Rule. By Sonja Luehrmann. Fairbanks: University of Alaska Press, 2008. xx + 204 pp. Bibliography, index, illustrations, maps.

The coastal region of south-central Alaska, including the Alaska Peninsula, Kodiak Island, and Prince William Sound, is the ancestral home of the Alutiiq people. Many individuals living in this area today celebrate their hybrid Alutiiq, Russian, and Scandinavian heritage. *Alutiiq Villages Under Russian and U.S. Rule* by Sonja Luehrmann offers a fascinating comparative history of this part of Alaska while exploring the effects of colonization, the politics of written history, and the importance of place for Alutiiq peoples. Throughout the book, Luehrmann carefully examines shifting settlement patterns across the Alutiiq homeland and highlights their significance for the changing Alutiiq experience, especially between 1805 and 1920.

The book is divided into five chapters, all of which examine written and other records from a different perspective. The first chapter, "Masks and Matrioshkas: Memorabilia from Alutiiq Historiography," offers a reading of the changing image of Alaska's two colonial powers in scholarship through an exploration of such political developments as the debate over the Alaska Native Land Claims Settlement Act and the end of the Soviet era. Chapter 2, "Village Locations and Colonial History: Map Essays" takes a critical look at historical maps of Kodiak Island and examines how villages disappeared and reappeared, changed names, and underwent population changes during colonial times. Readers learn how smallpox epidemics, the establishment of Russian "Creole" villages, American canneries, and volcanic eruptions affected Alutiiq settlement patterns, as well as who the Russian newcomers were and how they were integrated into local populations.