Michael R. Dove. 2024. *Hearsay is not excluded: A history of natural history.* Yale University Press. ISBN 9780300270105. US$35.00

Reviewed by Hatib A. Kadir. Email: kadir "at" kitlv.nl

1. Introduction

In *Hearsay is not excluded*, Michael Dove (2024) critiques the detachment of scientific disciplines from folk knowledge. This disconnection, which began over a century ago, has created a growing separation between science and the broader public. Dove challenges the idea that scientific inquiry operates purely rationally, objectively, and divorced from everyday life. He calls for a more inclusive approach that recognizes the legitimacy of various forms of knowledge, including hearsay and folk traditions.

Dove's critique is grounded in the historical context of how natural history and other sciences engaged with local knowledge before modern Western practices emerged. The book discusses four naturalists: Georgius Everhardus Rumphius (17th century), Carl Linnaeus (18th century), Alfred Russel Wallace (19th century), and Harold Conklin (20th century), and highlights their integration of Indigenous "folk knowledge" into scientific work. This review is organized by regions and topics rather than chapter sequence. Rumphius and Wallace conducted research in the Eastern Dutch East Indies, while Linnaeus and Conklin focused on swidden cultivation.

2. Science and folk knowledge: The blend of nature and culture

Chapter one profiles Rumphius, a 17th century naturalist based for much of his life in Ambon, Indonesia. He recorded the region's flora and fauna, and he also documented local customs, medicine, and folklore. His detailed work on the *Ambonese herbal* (Rumphius 2011, assembled and published posthumously in 1741) combined observation with poetic reflection, which exemplified an approach that transcended divisions between science, religion, and mythology. Moreover, Rumphius condemned colonial exploitation, particularly the Dutch destruction of spice trees, calling it "waging war on trees." He valued the ecological and cultural importance of native resources, such as the sago palm, as divine gifts.

Among the four figures, Wallace is presented as the most problematic, and Dove devotes more space to him and highlights the tensions in his views. Growing up near the "Highland Line," which divided fertile Scottish southern lands from the rugged northern regions inhabited by Celts, he understood how geography shaped socioeconomic conditions and ethnic identities. This perspective likely informed his identification of a similar boundary in the Malay Archipelago, later called "Wallace's Line." In *The Malay Archipelago* (1869), he distinguished swidden cultivation in "Indo-Malayan" regions from sago cultivation in "Austro-Malayana." While he favored terrace farming, irrigated wetlands, and swidden cultivation for attracting insects crucial to his research, he criticized sago cultivation because it required minimal labor and, to him, fostered societal stagnation. Reliance on sago palms led, in his view, to economic simplicity, idyllic society, and a lack of industriousness.

Wallace prioritized modernization and scientific utility, while Rumphius championed preservation and local autonomy. Wallace used sago groves to argue for a paternalistic mode of governing "savage" races, likening it to disciplining a child. He justified despotism as necessary for colonized peoples' advancement and praised the Dutch *cultuurstelsel* (1830–1870), which required villages to dedicate 20 percent of land to export crops for taxes. Although he acknowledged its

despotic nature, he viewed it as a means to integrate native economies into global trade. Yet his admiration for industriousness contrasts with his observations in Dobo, Southeast Maluku, where he encountered a harmonious trading community thriving without heavy governance. He contrasted their social equality with industrial England's inequalities, in which workers endured competition and poverty. Wallace highlighted the paradox of indigenous societies buying affordable goods while English laborers producing them suffered. This reflected his conflicting views on progress and the nature–culture balance.

2. Linnaeus and Conklin: Redefining swidden agriculture sustainability

Chapter two discusses Linnaeus's contributions, particularly his system of biological classification, which, although substantially refined, forms the foundation of systems still used today. Linnaeus aimed to illuminate shared traits across cultures rather than emphasizing differences. His method of grouping organisms into hierarchical "families," based initially on morphological similarities and later paralleled by phylogenetic approaches, helps clarify how his classificatory logic extended to cultural comparison. His study of Sámi swidden practices in northern Sweden demonstrated cultural empathy because he wore their clothing to help understand their beliefs. For Linnaeus, practices like reindeer herding and burn-beating symbolized human interconnectedness with the natural world. When he refers to "bucolic culturescape" or idyllic rural life (p. 100), he envisions a landscape where natural beauty and human activity coexist harmoniously, and livelihoods are not eliminated for the sake of conservation, as later discussed by Cronon (1995).

Chapter four highlights anthropologist Harold Conklin, who is distinct from Rumphius, Linnaeus, and Wallace. Because he is the only trained anthropologist among the four, Conklin's respect for local cultures arises directly from the discipline of anthropology rather than merely aligning with it, and Dove positions him as a continuation of earlier naturalists' respect for slash-and-burn and shifting cultivation, because it demonstrates a more comprehensive anthropological perspective that emerged by the 1950s. Conklin challenged misconceptions about swidden agriculture, which was often dismissed as primitive (p. 169-170). He refuted claims that it depends on virgin forests and causes uncontrolled fires, because he showed swidden's systematic patterns, firebreaks, regional variations, crop diversity, and its long-term sustainability. He argued that efficiency should be evaluated by labor productivity rather than land use, because it emphasizes environmental sustainability and cultural adaptability.

3. The limits of modern science

Since the early scholars and naturalists discussed above negotiated the relationship between local practice and scientific knowledge in different ways, this book is essential because mainstream science has become increasingly detached from folk knowledge. In the epilogue, Dove observes that excluding everyday practices and local understandings from modern science has fueled public cynicism, as seen during the COVID-19 pandemic. Communities already possess long-standing, embodied knowledge. For instance, Porter's (2019) ethnography shows that Vietnamese poultry farmers have practiced complex, multispecies care for years in managing zoonotic diseases. The science-based One Health framework applied during the H5N1 pandemic, which was based on global livestock standardization, reduced disease management to a single, market-oriented approach.

Dove's discussion of fire and cultivation practices further illustrates this scientific detachment from local knowledge. Global fires now occur across the world, from Kalimantan in Indonesia to Australia and to California in the United States. Although Dove does not devote a full chapter to this topic, he explains that since the 1950s, modern science has prohibited practices like burn beating and

swidden cultivation. Burn beating uses controlled low-intensity fires to reduce underbrush, and swidden cultivation is a rotational form of slash-and-burn agriculture. Both methods also promote plant diversity. When local cultivators stop small-scale burns, invasive species proliferate, such as the blue gum eucalyptus in Australia and California, which is highly flammable and sheds bark and leaves, increasing fire hazards. These examples underscore Dove's broader point that traditional techniques maintain ecological balance and create healthier and more resilient ecosystems.

4. Decolonizing natural history

In his concluding discussion, Dove recognizes that natural history often served as a covert tool of empire, because it blended science with commerce for political and economic gains. Behind European fascination with expeditions and local traditions and lay hidden commercial motives. Dove argues for decolonizing natural history in the Anthropocene. Decolonization critiques Eurocentric traditions while transforming natural history into a pluralistic practice, because it challenges colonial legacies and modernist knowledge systems, also recognizing folk knowledge and non-human agency. Contemporary historians, anthropologists, and ethnobotanists show that nonhuman entities—such as insects and grasses (Kimmerer, 2015), fungi (Tsing, 2015), jaguars (Kohn, 2013), elephants (Saha, 2021), and rats (Vann, 2018)—played active roles in history, and reveal aspects of colonial power. Decolonial natural history emphasizes interconnected material histories and integrates folk knowledge with nonhuman actors. It broadens empirical methods and incorporates insights from non-Western traditions and nonhuman agencies that are often overlooked by modern science. In this sense, modern science represents a shift away from the relational and place-based approaches practiced by early scholars, making decolonial approaches an essential corrective.

References

Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground: Rethinking the human place in nature* (pp. 69–90). W.W. Norton & Company.

Dove, M. (2024). *Hearsay is not excluded: A history of natural history*. Yale University Press.

Kimmerer, R. W. (2015). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teachings of plants.* Milkweed Editions.

Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human.* University of California Press.

Saha, J. (2021). *Colonizing animals: Interspecies empire in Myanmar.* Cambridge University Press.

Porter, N. (2019). *Viral economies: Bird flu experiments in Vietnam.* University of Chicago Press.

Rumphius, G. E. (2011[1741]). *The Ambonese Herbal*. Yale University Press.

Tsing, A. L. (2015). *The mushroom at the end of the world: On the possibility of life in capitalist ruins.* Princeton University Press.

Vann, M. G. (2018). *The great Hanoi rat hunt: Empire, disease, and modernity in French colonial Vietnam.* Oxford University Press.

Wallace, A. R. (1869). *The Malay Archipelago.* Macmillan.

***

Hatib A. Kadir is an environmental humanities researcher specializing in ecological crises in peripheral regions. Over the past seven years, he has conducted research across coastal areas of the Eastern Indonesian archipelago, from Maluku to West Papua. His work explores the intersections of the Anthropocene, human–nonhuman interactions, and ecological disruptions resulting from resource exploitation, infrastructure projects, political policies, human activity, settler colonialism, and invasive species. He is currently a researcher at KITLV (Royal Netherlands Institute of Southeast Asian and Caribbean Studies).