

Translating Nature: Cross-Cultural Histories of Early Modern Science

Edited by Marroquín Arredondo, Jaime and Bauer, Ralph

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Translating Nature: Cross-Cultural Histories of Early Modern Science is a fascinating volume composed of eleven chapters/essays examining the ways in which indigenous and Iberian colonial epistemologies travelled from the Americas to Europe in the sixteenth century to the eighteenth century. Each essay does so through the close examination of a particular text or topic and its linguistic and hermeneutic movements.

The main text is divided into four sections of thematically linked chapters: Part I. 'Amerindian Knowledge and Spain's New World,' Part II. 'Amerindian Knowledge in the Atlantic World', Part III. 'American Nature and the Politics of Translation', and Part IV. 'Translation in the Transoceanic Enlightenment'. The first two parts focus on the translation and appropriation of indigenous American epistemologies by European

audiences, while the latter two broaden the volume's scope beyond Iberian perspectives and the Atlantic.

While essays make up the core of the text, they are bookended by an editor's introduction which deftly defines the historical, philosophical, and socio-political context of the volume, as well as its major players, and a reflective afterword by William Eamon discussing the performative, often illusory nature of translation. Some readers may be tempted to skip these peritexts, but they are worthwhile, especially for those who come to this collection without an orientation to the Iberian conquest of the Americas and the subsequent intercultural exchanges, as familiarity with these topics is assumed in the essays. It is also helpful, particularly in the latter two parts, to come to this volume with some knowledge of the history of science from the classical Greek philosophical

traditions descended from Pliny, Aristotle, and Epicurus, to Enlightenment thinkers including Francis Bacon, Renee Descartes, and Immanuel Kant.

Notably, in the introduction, Ralph Bauer and Jaime Marroquín Arredondo provide thoughtful acknowledgement that terms such as ‘discovery’ and ‘New World’, often used in historical accounts, are inaccurate—the lands and peoples of the Americas existed and flourished prior to the arrival of Europeans. Additionally, the editors emphasize that information in the early modern history of science was often not the result of novel discoveries but linguistic and cross-cultural translations of localised knowledge.

Both introduction and afterword note that the data-collection, translation, and transculturation practices of the indigenous interlocutors and Iberian investigators in the Americas pre-date the ‘new science’ methodologies of knowledge production espoused by the extolled ‘father of empiricism’, British philosopher, Francis Bacon. These notations exemplify one of the major arguments that is maintained throughout this collection—that while the development of modern scientific practices is often attributed to seventeenth-century Northern European Enlightenment thinkers, similar and earlier efforts of Iberian intellectuals are often overlooked. This new/old science binary is further explicated in Ralph Bauer’s own chapter, satirically titled ‘The Crucible of the Tropics: Alchemy, Translation, and the English Discovery of America’.

A related argument that pervades this collection’s essays attempts to disprove, or at

least discount, the ‘Spanish Black Legend’, the unfavourable view of the Spanish empire, its people and culture as cruel and intolerant, and Spanish science as ‘medieval’ and ‘backward.’ This criticism was perpetuated by non-Spanish, particularly Protestant, historians, and is often associated with the sixteenth-century anti-Protestant policies of King Philip II. This perception was particularly strong in the Americas, peaking during the Spanish-American war in 1898.

The book’s first chapter, ‘Sighting and Haunting of the South Sea’ by Juan Pimentel, is as entertaining as it is critical and informative. The essay simultaneously relates and dismantles the fantastic account of Vasco de Balboa’s ‘discovery’ and proclamation of ownership of the Pacific Ocean, and all the known and unknown lands within it, as chronicled by Gonzalo Fernández de Oviedo y Valdés. It also considers a nautical map that, despite its impressive precision in the depiction of certain physical geographic bodies, inaccurately and ambiguously displays indigenous settlements. Pimentel astutely uses the flaws of both records to pose questions about the reliability and intentionality of historical sources in an illustration that should be remembered throughout the rest of the text, and can extend to any human-created document or archive.

In another key essay, chapter four, ‘Pictorial Knowledge on the Move’, Daniela Bleichmar observes the dual meanings of ‘translation’ in the early modern period, referencing the first Spanish-language dictionary, Sebastián de Covarrubias’ *Tesoro de la lengua castellana o española*, which defined *traduzir* [sic]

as ‘to take one thing from one place to another’ and ‘to turn a statement from one language into another’ (100). She discusses a third definition of translation, that of interpretation, by recounting the convoluted biography of the *Codex Mendoza*, a carefully and collaboratively authored and illustrated manuscript detailing the history, economy, and culture of the Nahua people. As different translators emphasised different kinds of information (i.e. image vs text) the codex was transformed through ‘mutation and multiplication [...] across languages, cultural categories, space, media, time, and interpretive horizons’ (117) in an international/intercultural game of epistemological telephone.

The final chapter, ‘Native Engravings on the Global Enlightenment: Pedro Murillo Velarde’s Sea Map and Historical Geography of the Spanish Philippines’ by Ruth Hill, turns focus away from the Americas to Spanish-colonial Asia, examining Jesuit geographer Murillo Velarde’s use of ethnographic methodologies. This includes interactions and collaborations with indigenous inhabitants, international merchants and missionaries occupying Manila in the eighteenth century, and the exchange of ideas via different languages, including multiple Spanish pidgins. While her discussion of Murillo Velarde’s experience is interesting, the most thought provoking part of Hill’s chapter is the final paragraph, where she notes, ‘[W]e must strive to refine our tools of analysis and expand our critical vocabularies for confronting cultural synergy and symbiosis,’ and asks, ‘[h]ow [...] might we develop a critical language that eschews presentism and at the same time engages both historians of the present and

historians of the past?’ (264).

This question of presentism, of attempting the presentation of an objective history without the distortion of a modern lens or the denial of contemporary cultural understandings and perspectives, leads me to this—a criticism I feel must be raised is the adherence to colonial language and narratives, whether intentional or accidental, that sometimes appears in the book’s essays. For example, in chapter five, ‘The Quetzal Takes Flight’, Marcy Norton refers to the way in which the ‘Christianization of Mesoamerica allowed and even facilitated the continued valuation of’ (127) sacred symbols from pre-existing indigenous spiritual practices—a shockingly demure description of cultural erasure—without acknowledging the violence inherent in compulsory religious conversion. Ironically, later in her chapter, Norton accuses English naturalist John Ray of making a ‘doctrinal barb’ (146) when negatively comparing Catholic saints to pagan deities. She does acknowledge that the prejudicial attitudes of Northern European Protestants towards Spanish Catholics ‘paralleled to a degree the one that Spanish authorities took towards indigenous informants’ (143), but this language minimises the violence of colonialism. Similarly, Ralph Bauer diminishes Dominican Friar Bartolomé de Las Casas’ criticisms of Oviedo’s ‘unflattering at times’ depiction of indigenous Americans by likening the historian’s portrayal of Amerindians as being subject to ‘demonic revelations’ (176), to his criticism of Spanish colonists in Hispaniola being too ‘fond of adventure’ (177) to settle in one place.

Committing a far less egregious but

conspicuous faux pas, in ‘Local Linguistics and Indigenous Cosmologies’, Sarah Rivett presents a historical critique of European views of indigenous American languages as ‘barbarous,’ while simultaneously and repeatedly using the European-derived moniker ‘Iroquois’ to refer to the self-named *Haudenosaunee* tribal confederacy. Considering Rivett’s research background, this apparent irony can likely be dismissed by assuming she has chosen to use a title more familiar to the book’s intended audience rather than the confederation’s autonym for the sake of expediency. In numerous similar cases throughout this book, the use of out-of-date terminology can likewise be excused because of the historical context of the material.

It must be recognised that while interactions between indigenous peoples and European colonisers led to scientific and technological advancements for both groups, these efforts were accompanied by the oppression of indigenous peoples and their cultures, including their languages. While this volume is not intended to be a critique of colonialism, this history of violence cannot be extricated from narratives of early modern European exploration and conquest, and it is disingenuous to equivocate or gloss over this reality. At times, some of this collection’s authors seem so intent on making a positive case for Catholic Iberian naturalists and their efforts that they commit this error.

These issues aside, *Translating Nature* illuminates both well-known and overlooked histories illustrating the importance of translation, in its many forms, in the global exchange and development of scientific

knowledge. It is a volume worth reading for those interested in the historiography of early modern science, though readers should be advised to retain a conscientious scepticism of the perspectives of the collection’s contributors in their presentation of these histories.

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