



NEW WORLD NATURE DIVERSITY & LOSS IN THE EARLY MODERN ATLANTIC WORLD

Assistant Professor of History Mackenzie Cooley



SUPPORTING RESEARCH & DESIGN

Abstract

With a resounding crash of nature-cultures, modernity began. Contact forced early modern Europeans steeped in Renaissance ideals to reckon with alternative visions of the natural world. Nature was not, as it happened, all the same as what they had found in Europe. Not only did Caribbean, Canary Island, and Mesoamerican communities rely on animals, plants, and minerals hitherto unknown to Europeans, but they developed distinct practical knowledge traditions around their environments.

In Summer 2019, New World Nature student researchers at Hamilton College examined the relationships between natural things and their environments to reconstruct how early moderns learned from the nature in which they lived at the dawn of the biological disciplines. Student researchers **Thomas Anderson**, **Antton De Arbeloa**, **Elizabeth Atherton**, **Kate Biedermann**, and **Kayla Self** conducted original research in the history of science in Canada, the Dominican Republic, France, Puerto Rico, Spain, and the United States. Their findings will be published in forthcoming book appendices, edited volumes, monographs, co-authored articles, and digital venues throughout the next several years.



Mackenzie Cooley
New World Nature Principal Investigator and Assistant Professor at Hamilton College



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Methods

Through these wide-ranging projects, students cultivated a variety of skills integral to research in the humanities. From the logistics of travel, to digital humanities visualizations, to how to record information about a site, archive, or document, they ventured into the depths of history. Their adventures into the many facts, things, and ideas left over from the past led to the collection of exciting new documents and narratives yet to be incorporated into our published knowledge of history. Students also gained useful skills about how to make meaning out of the opaque and distant. This, in the most fundamental sense, is the research of a historian: to make meaning out of the world around us and sew together stories that give purpose to our lives, selecting out the memories worth recording from the vast troves of past times.

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Skills included:

- Archival research in the Canary Islands, France, Spain, and the United States
- Database development
- Digital visualization in programs including ArcGIS, Gephi, and Vikus Viewer
- Document transcription in Spanish, French, Latin, Portuguese, German, Dutch, English, and Nahuatl (the language of the Aztecs)
- Early modern paleography, or the study of old types of handwriting in Spanish, French, Latin, English, and Nahuatl (the language of the Aztecs)
- Historical writing and analysis, including how to frame historical documents through narrative
- Pioneering a new method of “history of science with science” by drawing out connections between history and science, supplementing historical analysis with genomic data, biochemical research, and archaeological analysis
- Networking for research at conferences, archives, archeological sites, and other professional academic settings
- Travel for work outside of the United States, including to Spain, France, Canada, and the Dominican Republic

Overall Findings

- A disappearance of medical knowledge, flora, fauna, and diverse cultures and people characterized European conquest in the Americas, shown by a new database of colonial documents.
- Hamilton Special Collections document reveals illicit medical trial using manchineel venom, the world's most poisonous tree, on slaves in the 19th-century Caribbean.
- A new translation of an important 16th-century Meso-american history sheds light on La Malinche, an indigenous woman who translated for Hernan Cortés and has come to symbolize cultural and biological mixing in the Americas.
- Through a large database of European languages, the term “race” is shown to have animal origins in the Renaissance before coming to characterize human difference.
- The oldest European-style pharmacy in the Americas is in present-day Santo Domingo in the Dominican Republic. Its drawers illuminate medical practice at the confluence of the New World and the Old.

Major Research Outputs

NWN: New World Nature Website, hosted by Hamilton College, <https://nwn.dhinitiative.org/>

HT: A Mestizo in Madrid: The History of Tlaxcala, 1581-1584. [Critical Edition and Translation of Diego Muñoz Camargo's Corpus, To be Submitted to University of Texas Press by September 2020]

M1: The Perfection of Nature: Animals, Humans, and the Renaissance Invention of Race [Monograph #1, Under Advance Contract, Chicago University Press]

RG: “New World, New Nature: Animals and Natural History in the Relaciones Geográficas” [Article for Colonial Latin American Historical Review, In Preparation]

NT: Natural Things: Ecologies of Knowledge in the Early Modern World Co-Editor with Anna Toledano and Duygu Yildirim [Edited Volume with Introduction and Two Chapters, To Be Submitted to Chicago University Press]

M2: Reproducing an Empire: Sex, Medicine & Power in the Spanish Empire [Monograph #2, In Progress]

KE: Knowing an Empire: Imperial Science in the Chinese and Spanish Empires, 1500-1800, Co-Editor with Huiyi Wu [Edited Volume with Introduction and Chapter, In Preparation]

AO: “Animal Origins of Race in the Early Modern World” [Article, To Be Submitted to the American Historical Review by Autumn 2019]

PARTICIPANTS/RESEARCHERS BIOGRAPHIES



Mackenzie Cooley, New World Nature Principal Investigator, is an assistant professor at Hamilton College, where she teaches the history of science and ideas in the early modern world.



Antton De Arbeloa '21 majors in history with a double minor in government and art. He has pursued his study of colonial Latin American history through research in Spanish archives in addition to work on a structured database of the 16th-century *Relaciones Geográficas*.



Thomas Anderson '20 is a double major in history and francophone studies. His work focuses on island-based medicines and herbals, with a particular emphasis on poisons and their antidotes. Thomas recently completed a transcription and translation of Jean-Baptiste Ricord's extensive *Mémoire sur le Mancenillier vénéneux* and conducted archival research in the Canary Islands and France. His chapter on these documents, "Manchineel: Power, Pain, and Knowledge in the Lesser Antilles" will appear in *Natural Things: Ecologies of Knowledge in the Early Modern World*.



Elizabeth Atherton '22 intends to major in history with a minor in French. She has carried out research into indigenous languages sources, primarily the Matricula de Huexotzinco, as part of her study of colonial Latin America. She has written an appendix on “Malintzin and the Tlaxcalan Alliance” for the critical edition of the *Historia de Tlaxcala* by Diego Muñoz Camargo.



Kate Biedermann '22 plans to double major in history and French. As a CLASS Fellow in the Digital Humanities, she attended courses at the Digital Humanities Summer Institute in order to continue her research on the intersections of race and animality with Professor Cooley. She has developed a multilingual database of race in European discourse from 1350 to 1800. In Winter 2020, she will pursue field research in Pisa and Genoa on the Mediterranean slave trade, while also co-authoring an article on guinea pigs, genetics, and human migration in the medieval early modern Caribbean.



Kayla Self '21 is concentrating in world politics in Latin America and the Caribbean. She has contributed to the *Relaciones Geográficas* database and has conducted on-site research in Puerto Rico and the Dominican Republic to understand how the Spanish Caribbean served as a precedent for mainland Iberian empire.

STUDENT RESEARCH CONTRIBUTIONS

STUDENT	STUDENT PROJECT	RESEARCH TYPE	BROADER PROJECT	OUTCOMES
Thomas Anderson '20 <i>Levitt Fellow</i>	Toxicology of Empire: Medicine, Poisons, and Colonial Power, 1650-1850	Archival Research; Co-Authored Chapter; Editing	NWN; NT; M2	Featured chapter in Natural Things volume; field research in the Canaries and France
Antton De Arbeloa '21 <i>Levitt Fellow</i>	Diversity Lost in the Relaciones Geográficas	Archival Research in Madrid and Seville; Database Creation; Maps in ArcGIS	RG; NWN; KE	Relaciones Section of Website; Relaciones Database
Elizabeth Atherton '22 <i>Levitt Fellow</i>	Indigenous Difference: Race and Colonialism in the Lesser Antilles 1600-1800	Archival Research in Hamilton Collections; Digital Humanities Tool Development; Critical Translation Appendix	HT; NWN; M1; M2	Appendix in Critical Edition; Vikus Viewer Comparative Platform
Kate Biedermann '22 <i>DHi CLASS Fellow</i>	The Crossroads of Animality and Humanity: The Evolution of Race in European Discourse, 1400-1700	Database Creation; Digital Humanities Tool Development	M1; NWN; AO	Race Section of NWN Website; Credited visualizations in published Natural Things and Perfection of Nature; managing NWN site
Kayla Self '21 <i>Levitt Fellow</i>	Precedents of Island Imperialism: Nature, Sex, and Race in the Spanish Caribbean	Site-based Research in Dominican Republic and Puerto Rico; Database Creation	KE; NWN; RG; M2	Relaciones Database; field research in the Dominican Republic and Puerto Rico

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Hamilton College, through its strategic initiatives, fosters innovative approaches to digital research and experiential learning. The New World project, supported by a partnership between the Levitt Center and Library Information Technology Services (LITS), is one example of how the College provides faculty and students with exciting opportunities to pursue cutting-edge research and engaged scholarship. We welcome inquiries and proposals from students and faculty members from all divisions of the College.

Contact us at

The Levitt Center levitt@hamilton.edu and LITS askus@hamilton.edu

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