

DUMBARTON OAKS

ART • NATURE • SCHOLARSHIP

Friday, October 21, 2022

- 8:30AM - 9:00AM Registration and Coffee
(Oak Room, 4th Floor of the Fellowship House)
- 9:00AM - 9:45AM Welcome from the Director and Directors of Studies
Thomas B. F. Cummins, Dumbarton Oaks
Thaïsa Way, Garden and Landscape Studies
Frauke Sachse, Pre-Columbian Studies
Anna Stavrakopoulou & Nikos D. Kontogiannis, Byzantine Studies
- Opening Remarks: **Kyle Whyte**, University of Michigan

Session 1

Moderator: Nikos D. Kontogiannis, Director of Byzantine Studies

- 9:45AM - 10:30AM **Harriet Mercer**, University of Cambridge
Expanding Empire and Knowing Climate in the Southern Hemisphere
- 10:30AM - 10:45AM Break
- 10:45AM - 12:00PM **Matthew J. Jacobson**, University of Glasgow
The Science of Climate Change in the Roman and Byzantine Eastern Mediterranean
- Jordan Pickett**, University of Georgia
Archaeologies of Climate Change in the Roman and Byzantine Eastern Mediterranean
- 12:00 - 2:00-PM Lunch
(Orangery Terrace)

Session 2

Moderator: Frauke Sachse, Director of Pre-Columbian Studies

- 2:00PM - 2:45 PM **Timothy Beach**, University of Texas at Austin
The Trowel and the Laser: Climate and Humanity in the Maya World from the Pleistocene to the Anthropocene
- 2:45M - 3:30 PM **José Iriarte**, University of Exeter
Understanding Cultural Responses to Climate Change in late Pre-Columbian Amazonia
- 3:30PM - 3:45PM Break
- 3:45 PM - 4:45PM Discussion with Speakers moderated by Dagomar DeGroot,
Georgetown University
- 4:45PM Adjourn

DUMBARTON OAKS

ART • NATURE • SCHOLARSHIP

Saturday, October 22, 2022

9:00AM - 10:00AM Keynote: **Valerie Trouet**, University of Arizona (virtual)
Tree Story: What We Can Learn About Climate History from the Rings in Trees

Session 3

Moderator: Anna Stavrakopoulou, former Director of Byzantine Studies

10:00AM - 10:45AM **Lee Mordechai**, Hebrew University of Jerusalem
Environment and Society in the Sixth Century Eastern Mediterranean

10:45AM - 11:00AM Break

11:00AM - 11:45AM **Bradley Skopyk**, Binghamton University
Climate and New World Virgin Soil Epidemics: A Spatio-Temporal Approach to Understanding the Intersection of Mass Mortality, Spanish Imperialism, and the Little Ice Age in Early-Colonial Mexico

11:45AM - 12:30PM **Matthew Liebmann**, Harvard University
Stalked by the "Refuse Winds": Colonialism, Disease, and Ecological Change in the Pueblo Southwest, 1540-1700

12:30 PM - 2:00PM Lunch
(Orangery Terrace)

Session 4

Moderator: Thaisa Way, Director of Garden and Landscape Studies

2:00PM - 2:45PM **Paul Stephenson**, Pennsylvania State University
Late Antique Metallurgy and Environmental Violence

2:45PM - 3:30PM **Joyce E. Chaplin**, Harvard University
The Franklin Stove and Colonial Resource Conservation

3:30PM - 3:45PM Break

3:45PM - 4:30PM Discussant
Dagomar DeGroot, Georgetown University

5:00PM - 7:00PM Reception
(Orangery Terrace)

Changing Climates - Changing Histories: Perspectives from the Humanities

Joint Symposium, organized by the Director's Office and Programs of Byzantine Studies, Garden and Landscape, and Pre-Columbian Studies at Dumbarton Oaks

Contributors

Kyle Whyte, University of Michigan

Opening Remarks

Kyle Whyte is George Willis Pack Professor at the School for Environment and Sustainability, teaching in the SEAS [environmental justice specialization](#). He is founding Faculty Director of the [Tishman Center for Social Justice and the Environment](#), Principal Investigator of the [Energy Equity Project](#), and Affiliate Professor of Native American Studies and Philosophy. His research addresses environmental justice, focusing on moral and political issues concerning climate policy and Indigenous peoples, the ethics of cooperative relationships between Indigenous peoples and science organizations, and problems of Indigenous justice in public and academic discussions of food sovereignty, environmental justice, and the anthropocene. He is an enrolled member of the Citizen Potawatomi Nation.

Kyle currently serves on the White House Environmental Justice Advisory Council and the National Academies' Resilient America Roundtable. He is President of the Board of Directors of the Michigan Environmental Justice Coalition and the Pesticide Action Network North America. He has served as an author for the U.S. Global Change Research Program, including on the National Climate Assessment, and for the Intergovernmental Panel on Climate Change Working Group II. He is a former member of the Advisory Committee on Climate Change and Natural Resource Science in the U.S. Department of Interior and of two environmental justice work groups convened by past state governors of Michigan.

Dagomar Degroot, Georgetown University

Discussant

Dagomar Degroot is an associate professor of environmental history at Georgetown University. His first book, *The Frigid Golden Age*, was published by Cambridge University Press in 2018 and named by the *Financial Times* as one of the ten best history books of that year. His next book, *Ripples in the Cosmic Ocean*, is under contract with Harvard University Press and Viking. He publishes equally in historical and scientific journals, including *Nature* and the *American Historical Review*, and writes for a popular audience in, for example, the *Washington Post*, *Aeon Magazine*, and *The Conversation*. He maintains popular online resources on the history of climate change, including the podcast *Climate History*. He has shared the unique perspectives of the past with policymakers, corporate leaders, and journalists in many countries, from Wuhan to Washington, DC.

Abstracts and Biographies

Harriet Mercer, University of Cambridge

Expanding Empire and Knowing Climate in the Southern Hemisphere

In 1770, in the warm waters off the northeast coast of Australia, a massive *porites* coral was expanding its skeleton. In the same year, the wooden hull of a British collier cut through the waters near the growing coral. The ship was carrying the first Europeans to see Australia's east coast and among those on board was the English naturalist, Joseph Banks. The ship's journey and Banks' time in Australia are part one of the most well-known episodes in Australian history. Yet the massive *porites* coral and others like it can offer a new perspective on this otherwise familiar story. In this paper, I read the documentary record left by Joseph Banks in conversation with the underwater record registered by the coral as well as other paleoclimatic sources. What, I ask, was the weather like when this first shipload of Europeans sailed along Australia's east coast? And how did it impact the interpretation of what Banks saw and reported to metropolitan audiences?

Harriet Mercer is currently a research associate on the Leverhulme-funded Making Climate History project at the University of Cambridge. She works across the fields of the history of science, environment, and settler colonialism. She completed her PhD thesis at the University of Oxford, where she investigated the relationship between the experience of climatic variability and the efforts to understand that variability. A recent publication from her thesis in *Environment and History* offers a methodology for addressing gaps and silences in the archives of climate knowledge.

Matthew J. Jacobson, University of Glasgow

The Science of Climate Change in the Roman and Byzantine Eastern Mediterranean

Historical fluctuations in climatic conditions and their associated environmental impacts are increasingly considered as driving forces in social, cultural, and economic shifts. Previously, simplistic environmental determinism hindered our understanding of human-environment interactions. The last decade has seen a shift towards more thorough analysis that considers causality and the importance of human agency. This has revealed complicated and highly-variable interactions between people and the natural world. Understanding and assessing these relationships requires diverse high-quality evidence and interdisciplinary collaboration.

In this paper, the scientific evidence used to characterize past climate changes and their environmental impacts in the Roman and Byzantine Eastern Mediterranean is explored. The first part of the paper introduces the palaeoclimate proxy records from this region which, for this period, are primarily lake sediment cores and cave stalagmites. Large discrepancies exist between these records, emphasising heterogeneity of both climatic conditions and the proxies themselves, which have different sensitivities and levels of chronological precision. The second part of the paper examines the scientific evidence for climate change impacts on the environment and agriculture. In the final section, challenges associated with connecting these types of evidence are explored, asking questions such as: If we have strong evidence for synchronous climatic and environmental change, how do we assess whether they are linked? Can anything be done to counteract uncertainties? And, to take this one step further, what kind of “evidential tree” is required to advance arguments of climate-driven societal change?

Matthew J. Jacobson is a lecturer and research associate in environmental archaeology at the University of Glasgow. He obtained a PhD in Archaeology from the University of Reading, England, with his thesis on climate change and socio-economic transformations in Late Antique southwest Asia. Previously, he has primarily worked on speleothem-based palaeoclimate reconstructions and human-environment interactions in Iraq, Turkey, and the Arabian Peninsula. Currently, Matthew is researching evidence for community resilience in the Department of Archaeology, University of Glasgow, Scotland, and as a post-doctoral fellow at the German Archaeological Institute (DAI). His previous work continues, however, with further palaeoclimate records and syntheses in Turkey and Greece, as well as an article examining climate impacts in the Sasanian Empire.

Jordan Pickett, The University of Georgia
**Archaeologies of Climate Change
in the Roman and Byzantine Eastern Mediterranean**

How has climate change and its societal response been identified in the archaeological record of the Byzantine and Eastern Mediterranean? The first part of this paper offers a survey of recent literature on this question. Highlighted here are methods and conclusions from the last thirty years' key archaeological studies of climate change in the Eastern Mediterranean. However, it will be observed that climate change histories of the Roman and Byzantine Mediterranean have, to date, used archaeology only anecdotally, with relatively few targeted archaeological studies available. The second part of this paper explains this gap. Textual sources - often with presumably annual or decadal resolutions - have been much favored by Mediterranean climate histories, while archaeology tends to be used only sparingly, because of its very different evidentiary foundations with landscapes, phased histories of buildings, and relative dating via coins and ceramics or inscriptions, which typically offer multi-decadal or centurial chronological resolutions. Absolute or scientific dating is infrequent in the archaeology of the Roman and Byzantine Mediterranean, with ceramic, numismatic, and epigraphic chronologies much preferred. Summed probability distributions (or SPD's) of radiocarbon are briefly introduced to illustrate this problem. The conditions under which surveys and excavations are given permits, or by which data is collected and archived, in countries that were formerly parts of the Roman and Byzantine Mediterranean, are one explanation for this gap; scholarly traditions within Mediterranean archaeology are another. The third part of this paper offers alternative and optimistic solutions, by highlighting the potential in exemplary methodologies from other regions and periods in global history: studies of the Pre-Columbian Americas stand out, especially, for their longstanding and innovative interest on questions of climate change.

Jordan Pickett is an assistant professor of Classics at the University of Georgia. He earned his PhD from the University of Pennsylvania in 2015. Jordan's research is concerned with the architecture and environments of Roman and Late Antique cities, with resultant publications in the *Dumbarton Oaks Papers*, the *Journal of Late Antiquity*, *PLOS One*, the *Journal of Archaeological Science*, *Quaternary Science Reviews*, and *Human Ecology*. He has worked with survey and excavation projects across the Mediterranean, and currently serves as a co-principal investigator for survey of Byzantine fortifications at Sardinia.

Timothy Beach, University of Texas at Austin

**The Trowel and the Laser:
Climate and Humanity in the Maya World from the Pleistocene to the Anthropocene**

This paper considers the range of climate change and human interactions in the Maya World. First, it frames the deep past with the present threats from global warming and weirding to consider what we can know about human interactions with elements of climate change. Second, the paper considers the Maya Climate record and what parts of climate are relevant as ultimate or proximate influences on humans. Key aspects of Maya climate include too much and too little water and temperatures that potentially could have limited foodways and societies in the past and are again today. The region has a wide range of annual rainfall and interannual variability. Many areas also have thin soils that store limited water, which high groundwater tables mitigate in some places, albeit often with poor quality water. Third, the paper considers the possible evidence for Maya response to climate in water management features. Lidar imagery has greatly expanded estimates of Maya water management such as many ancient reservoirs, sprawling terrace complexes, and vast wetland field complexes, which may provide evidence of human response to climate. But in all cases field studies that could supply chronologies and evidence for use lag far behind the lidar mapping, though this paper will provide field verification from the 2021 season in Guatemala. The conclusion is an assessment and desideratum for climate meaning in Maya landscapes through multiple lines of evidence to search for Maya responses to past climate changes, changes that are accelerating for the Maya world today.

Timothy Beach is a Guggenheim, Dumbarton Oaks, and AAAS Fellow. He holds a Centennial Chair in US Mexican Relations and is a Professor and Directs the Soils and Geoarchaeology Labs at UT Austin. His research ranges from soil profiles to watersheds and from the Pleistocene to the present, especially in the Maya and Mediterranean worlds. He has authored hundreds of publications and given invited lectures around the world from the Vatican to Shanghai. He has taught climatology and geoarchaeology for decades alone and with historians, engineers, and archaeologists. One current project considers human impacts on global climate through the Anthropocenes.

José Iriarte, University of Exeter

**Understanding Cultural Responses to Climate Change
in late Pre-Columbian Amazonia**

Understanding the response of ancient societies to climate change has been a significant topic of archaeological enquiry. However, until recently, the lack of integrative studies using archaeological, palaeoecological and palaeoclimatological data hampered an evaluation of the relationship between climate change, distinct subsistence strategies and cultural transformations in Amazonia. This chapter reviews the most relevant cultural changes seen in the archaeological record of six different regions within Greater Amazonia during late pre-Columbian times (last three thousand year before present). It explores how resilient or vulnerable societies with large investments in landesque capital (water management systems, anthropic soils) were to transient climate change. Comparing the chronology of those cultural transitions with the available high-resolution regional palaeoclimate proxies shows that, while some societies underwent major reorganisation during periods of climate change, others were largely unaffected and even thrived. The chapter finalizes with a general discussion on climate change, cultural resilience, and Amazonia.

José Iriarte is a professor of archaeology at the University of Exeter. He is an archaeologist and archaeobotanist whose research focuses on human-environmental interactions, the development of agricultural economies and the emergence of early complex societies in lowland South and Central America. He got his BA from the State University of Uruguay and his PhD in Anthropology from the University of Kentucky. Iriarte has extensive experience in directing and participating in a wide range of international projects across Latin America on these themes integrating archaeology, palaeoecology, soil science, remote sensing and modern ecology. These multidisciplinary projects have allowed him to explore human-environmental interactions in-depth and have provided clearer evidence on the timing and nature of the human impact on tropical and subtropical ecosystems. He directs the University of Exeter Archaeobotany and Paleocology Laboratory and is a specialist in phytolith analysis (microscopic plant remains). He is the Principal Investigator of the European Research Council 'LASTJOURNEY' (<https://lastjourney.exeter.ac.uk/>), PAST (amazoniapast.exeter.ac.uk/) the AHRC-FAPESP Je Landscapes of Southern Brazil (jelandscapes.exeter.ac.uk/). The results of his projects have been published in more than 70 international peer-reviewed journals articles including, *Nature*, *Proceedings of the National Academy of Sciences*, *Nature Ecology and Evolution*, *Journal of Archaeological Science* and *Antiquity*, among others.

Valerie Trouet, University of Arizona

Tree Story: What We Can Learn About Climate History from the Rings in Trees

Dendrochronology - from the Greek words dendron (tree) and chronos (time) - allows us to study climate over the past ca. 2,000 years and to put current anthropogenic climate change in a long-term context. We can use tree rings to study past mean climate, but also climate extremes - such as drought, hurricanes, and wildfires - and climate dynamical patterns, such as the jet stream. In addition to this, dendrochronology sits at the nexus of climatology, ecology, and archeology and helps us to link climate history to forest history and human history. In my talk, I will present world-wide examples of how our century-long tree-ring records have improved our understanding of the interactions between the climate system, human systems, and ecosystems.

Valerie Trouet is a professor in the Laboratory of Tree-Ring Research at the University of Arizona. She received her PhD in Bioscience Engineering at the KULeuven in Belgium in 2004 and has worked at PennState University and at the Swiss Federal Research Institute WSL before moving to Tucson in 2011. She is a dendrochronologist whose research focuses on past climate variability and how it has influenced human systems and ecosystems. She has published more than 90 scientific papers and is the author of *Tree Story*, a broad audience book about dendrochronology published by Johns Hopkins University Press in 2020 that is translated in 7 languages and won the 2020 Jan Wolkers Prize. She is a University of Arizona Distinguished Scholar, the laureate of the 2019 Willi Dansgaard award of the American Geophysical Union, and a Kavli Fellow of the National Academy of Sciences.

Lee Mordechai, Hebrew University of Jerusalem

Environment and Society in the Sixth Century Eastern Mediterranean

The sixth century is increasingly portrayed as ‘a time of troubles.’ The list of environmental stressors that caused these troubles has grown over the past few years and now includes climatic events (the ‘536 Dust Veil Event’ and the much longer Late Antique Little Ice Age (LALIA) that followed); infectious diseases events (the Justinianic Plague and the even longer first plague pandemic that followed); and a high seismicity phase (the Early Byzantine Tectonic Paroxysm). Evidence for these factors increasingly comes from the sciences in the form of, e.g. tree rings or ancient DNA. As a result of both these research trends, the explanatory power of the items on the list has increased and they are discussed as significant causes of major effects such as the so-called fall of the Roman Empire.

My contribution discusses the Eastern Mediterranean in this context. It focuses on a few urban and rural locations that have drawn scholarly and public attention as illustrative case studies. In these, the paper eschews the grand environmental narratives and instead examines the sixth century primary sources - whether historical text, archaeological excavation, sediment core or speleothem - to understand the local and regional impacts of the large-scale climatic changes and disasters. The synthesis of these diverse sources reveals nuanced results and differential effects. While some of the environmental stressors caused suffering and misery in certain cases, in others local societies turned out to be highly resilient and even used the opportunity to innovate traditional practices. In a third group of cases the large-scale environmental stressors appear to have had no effect whatsoever on local and regional scales. The paper will conclude with a reflection upon the opportunities and challenges in future cross-disciplinary research and collaborations.

Lee Mordechai is a Senior Lecturer at the Hebrew University of Jerusalem and the Associate Director of Princeton's Climate Change and History Research Initiative. Lee has worked and published on several environmental history topics, focusing on disasters - ranging from the Justinianic Plague to earthquakes - and societal resilience to short- and long-term environmental stresses. To answer these interdisciplinary questions, Lee's work regularly draws upon studies from the paleosciences and archaeology, while using e.g. digital tools, quantitative methods and resilience frameworks. Lee's work has been published in journals such as *Past & Present*, *American Historical Review* and *Proceedings of the National Academy of Sciences*.

Bradley Skopyk, Binghamton University

Climate and New World Virgin Soil Epidemics:

A Spatio-Temporal Approach to Understanding the Intersection of Mass Mortality, Spanish Imperialism, and the Little Ice Age in Early-Colonial Mexico

This paper examines the interplay between climate and indigenous depopulation in early-colonial Mexico. Current explanations of New World depopulation prioritize biotic (Columbian Exchange) and socio-political (Spanish Imperialism) factors. The Little Ice Age (ca. 1550 - 1725)—one of the most important climatic events in the last few thousand years—has not featured prominently in this debate, even though the temporal coincidence with mass mortality is quite apparent. Not only is this paper one of the first substantial contributions to explore climate's role in mass mortality in any part of the Spanish Americas, but it does so by means of a unique methodology. The paper combines and correlates paleoclimatological (tree-ring) and historical (archival) datasets within a historical GIS database. The historical database—soon to be expanded through a crowdsourcing initiative—is comprised of more than 7,000 unique events that evince social-ecological stress in particular settlements across Mexico, dated between 1520 and 1821. Using geostatistical toolsets, this research explores the spatial and temporal dynamics of mortality, climate anomalies, and social stress in Mexico. Preliminary results show a strong statistical relationship between these factors, one that remained strong throughout the colonial era. Based upon these results, I argue that climate, depopulation, and imperialism formed a single, global historical-ecological process that cannot be fully disentangled. This entanglement was further complicated by the probable effect of depopulation on climate, not just the latter on the former. Given our knowledge of how indigenous depopulation cooled the atmosphere by initiating forest regrowth and, consequently, carbon sequestration (the so-called Ruddiman thesis), the results of this paper strongly support a nonlinear, mutually-causative relationship between climate and depopulation.

Bradley Skopyk is an associate professor of history at Binghamton University. He studies the experience of New World indigenous communities during the climatic and biological revolutions of the early modern era, especially in colonial Mexico. In *Colonial Cataclysms: Climate, Landscape, and Memory in Mexico's Little Ice Age* (2020), he linked agrarian innovation with unprecedented erosion and flooding during the worst of the Little Ice Age. His new project (*Topographies of Death: The Culture, Ecology, and Climate of Epidemic Disease in Colonial Mexico*) reinterprets indigenous depopulation by combining big datasets with rich and detailed historical contexts. He advocates for the Digital Humanities and welcome collaboration with the sciences.

Matthew Liebmann, Harvard University

**Stalked by the “Refuse Winds”:
Colonialism, Disease, and Ecological Change in the Pueblo Southwest, 1540-1700**

Debates regarding the magnitude, tempo, and ecological effects of Native American population decline between 1492-1900 constitute some of the most contentious issues in the study of Indigenous American history. Was depopulation rapid and catastrophic, with effects extensive enough to change even the earth’s atmosphere? Or was this decline more moderate, with numbers of Native Americans waning slowly after European colonization? In recent years climatological studies have suggested that the depopulation of Native American peoples in the wake of the European colonization resulted in significant changes to the 17th century global climate (Lewis and Maslin 2018; Koch et al. 2019). These studies were based on hypothetical hemispheric population estimates, however, and lack fine-grained archaeological and ecological data to evaluate this hypothesis. The results of the Jemez FHiRE (Fire and Humans in Resilient Ecosystems) project provide a detailed strong-case study of this period from the Southwest US. Based on six years of collaborative research among archaeologists, dendrochronologists, and tribal members from the Pueblo of Jemez in northern New Mexico, the FHiRE Project returned unanticipated results, with consequences extending beyond the borders of the American Southwest to debates about the relationship between colonialism and climate change worldwide.

Matthew Liebmann is the Peabody Professor of American Archaeology and Ethnology, Department of Anthropology, Harvard University. His research interests include the archaeology of the Southwest U.S., North American colonialism, postcolonial theory, semiotics, and the anthropology of revitalization. He is the author of *Revolt: An Archaeological History of Pueblo Resistance and Revitalization in 17th Century New Mexico* (University of Arizona Press 2012) and co-editor of *Archaeology and the Postcolonial Critique* (Altamira Press, 2008) and *Enduring Conquests: Rethinking the Archaeology of Resistance to Spanish Colonialism in the Americas* (SAR Press, 2011). Liebmann previously served as the Tribal Archaeologist and NAGPRA Program Director for the Pueblo of Jemez, and currently serves as the Chair of the Peabody Museum Faculty Executive Committee at Harvard.

Paul Stephenson, Independent Scholar Late Antique Metallurgy and Environmental Violence

This paper addresses the natural and environmental consequences of metallurgy, including the mining and smelting of ores, and artisanal production using metals. This paper employs macro, meso and micro level approaches to explore in turn: metallurgy and lead contamination in the late Roman world; coin minting and metal working in early Byzantium; and some metal objects in the collection of Dumbarton Oaks. I shall attempt to connect these parts in a brief conclusion.

Paul Stephenson is author or editor of ten books, most recently *New Rome*, forthcoming with Harvard UP. He has held teaching and research posts at universities, museums, and institutes in seven countries, including four professorial chairs (Wisconsin, Durham, Nijmegen, Lincoln). Paul is founder and board director of theec.net (The Education Consultancy), a non-profit collaborative enterprise that offers independent research, academic services, and educational consultancy for students with learning differences and disabilities

Joyce E. Chaplin, Harvard University

The Franklin Stove and Colonial Resource Conservation

When Benjamin Franklin invented his "stove," the first of several attempts at an improved heating system, he was initiating an Enlightenment project to save the trees of Pennsylvania. A project extends forward in time—it is an experiment that runs into the future. Franklin was trying to solve two temporally related problems: a pattern of historically-atypical cold weather and the concomitant threat of future deforestation, as the colonial population increased and demanded ever more firewood, possibly changing the climate for the worse as they did so. His project showed confidence that human technology could adjust for climatic change, but also fear that it might worsen material conditions. The politics of Franklin's project reveal a specific and troubling American vision. The stove was part of settler colonialism, the project of Indian removal and of white resettlement of American land. Franklin and other colonists quoted (as facts) Indian observations that the climate in North America was colder than it used to be. But he thought of his stove, primarily, as a way to defend the material interests of the settler population spreading over North America. Then as now, resource management was a matter of ethics, defining whose good life was worth defending, but whose not, with inherent biases that ran into Franklin's future, meaning our present.

Joyce E. Chaplin is the James Duncan Phillips Professor of Early American History at Harvard University. A former Fulbright Scholar, she's taught at six universities on two continents, an island, and a peninsula, and in a maritime studies program on the Atlantic Ocean. Her books include *The First Scientific American: Benjamin Franklin and the Pursuit of Genius* (2006), finalist for an LA Times Book Prize and winner of the Annibel Jenkins Prize of the American Society for Eighteenth-Century Studies. She is a Fellow of the American Academy of Arts and Sciences, a Member of the American Philosophical Society, and a former Guggenheim Fellow.

DUMBARTON OAKS

ART • NATURE • SCHOLARSHIP

Notes