View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by ScholarWorks@UMass Amherst

University of Massachusetts Amherst

ScholarWorks@UMass Amherst

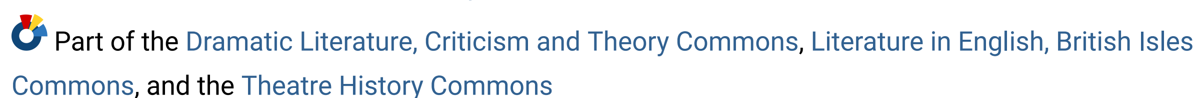
Doctoral Dissertations | Dissertations and Theses

March 2019

Globalizing Nature on the Shakespearean Stage

William Steffen

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_2



Part of the Dramatic Literature, Criticism and Theory Commons, Literature in English, British Isles Commons, and the Theatre History Commons

Recommended Citation

Steffen, William, "Globalizing Nature on the Shakespearean Stage" (2019). *Doctoral Dissertations*. 1532.
https://scholarworks.umass.edu/dissertations_2/1532

This Open Access Dissertation is brought to you for free and open access by the Dissertations and Theses at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

Globalizing Nature on the Shakespearean Stage

A Dissertation Presented by

WILLIAM H. STEFFEN

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

February 2019

English

© Copyright by William H. Steffen 2019
All Rights Reserved

Globalizing Nature on the Shakespearean Stage

A Dissertation Presented by

WILLIAM H. STEFFEN

Approved as to style and content by:

____

Jane Degenhardt, Chair

____

Malcolm Sen, Member

____

Brian Ogilvie, Member

____

Adam Zucker, Member

____

Randall Knoper, Department Head

English Department

DEDICATION

To Anna-Claire, Oscar, and Calliope,
my muses, who never let me down.

ACKNOWLEDGMENTS

I would like to thank my advisor, Jane Degenhardt, for her years of dedicated and unwavering support. Jane's generous feedback, helpful guidance, professional advice, and commitment to my project has been invaluable to me, and I am grateful to have had such an admirable mentor and model instructor steering my dissertation. I would also like to thank my committee members, including Malcolm Sen, without whom this project would not have been possible. Thank you as well to Adam Zucker and Brian Ogilvie for their recommendations and guidance over the past few years. I also need to thank Daniel Sack for his expertise in performance theory, and for his helpful feedback.

There are several friends and colleagues to thanks as well, who provided generous feedback either in class and in dissertation group meetings: Neelofer Quadir, Ashley Nadeau, Lauren Silber, Michelle Brooks, David Katz, Sean Gordon, Annaliese Hoehling, Benjamin Zender, Jenny Krichevsky, and Catherine Elliot.

I also wish to thank Miles P. Grier, Lisa Barksdale-Shaw, Matthieu Chapman, and other participants on the 2017 SAA panel on "Race and the Materiality of Early Modern Performance," for their help with providing feedback and encouragement. Thanks as well to Robin Bates, Andrew Bretz, and Charisse Willis for their organization and feedback during the 2018 SAA panel on "Sites of Resistance." I am also indebted to the anonymous referees for *The Journal of Early Modern Cultural Studies* and *Renaissance Drama,* who helped to shape parts of this project into something worthy of publication.

Thank you as well to the Special Collections librarians at the University of Adelaide, Marie Larsen and Cheryl Hoskin, for digitizing Allan Wilkie's autobiography. Thanks too to Ellen Jane Hollis at the Bermuda National Library for helping me find information on a spectacular performance of *The Tempest*.

I am grateful as well to all of my friends and family who helped me marinate, digest, and regurgitate these ideas. I would not have been able to write a word of this dissertation without the love and support of my loving wife, Anna-Claire, whose own work never ceases to inspire me. Thank you too to my parents, my brothers, to Bob Gruber, Pete and Luke Smith, Cody Tannen-Barrup, Kristin Gengler, and Jamie Moody for the bike rides, small beers, little Joes, and long friendship that have made this a sustainable and worthwhile project for all these years.

ABSTRACT

GLOBALIZING NATURE ON THE SHAKESPEAREAN STAGE

FEBRUARY 2019

WILLIAM H. STEFFEN, B.A., HAMPSHIRE COLLEGE

M.A., UNIVERSITY OF MASSACHUSETTS AMHERST

Ph.D. UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Jane Degenhardt

As the far-reaching consequences of human-generated climate change continue to threaten the earth, an evaluation of the historical narrative of the Anthropocene has never been more important. *Globalizing Nature* revises the anthropocentric narrative of early globalization from the perspective of the non-human world on the early modern stage, which showcases Nature's agency in determining ecological, economic, and colonial outcomes. Overturning the popular narrative that European technology and military might determined the outcome of settler colonialism in ancient Britain and colonial Virginia, John Fletcher's *Bonduca* suggests that the floral and microbial grafts attending colonial exchange could make or break an invader's attempt to plant themselves on foreign soil. I show how the English stage modeled strategies for confronting ecological crises during the supposed final "Age of Man"—strategies which can be useful to modern audiences confronting a changing global environment today. *King Lear*, for example, demonstrates how a human alliance with Nature's capacity for balance provides a more equitable model for wealth distribution in a kingdom fraught by economic disparity. The

history of Shakespearean performance in the British colonies—where weather events and other unpredictable ecological agents often played a role in a given performance—offers a similar strategy for provincializing the narrative of the Anthropocene. The agency humans now exert on the global climate, this performance history suggests, is not shared equally across the globe. Furthermore, by focusing on the materials of the stage, *Globalizing Nature* traces the distributive agency of natural commodities from their use in performance to their role in building an empire, or in changing the climate. I show how natural commodities used on stage derived from and facilitated British colonial expansion. Corkwood and galls, for example, which were used as cosmetic ingredients in representing African Moors in plays like *Titus Andronicus* and *Lust's Dominion*, connect an emergent racial discourse to the environmental violence of early English colonialism. During a moment when the effects of human behaviors are blurring the distinction between human and nature, *Globalizing Nature* seeks to recover an early modern ethos of alliance between humans and nature from an otherwise violent human narrative of ecological imperialism and the Anthropocene.

TABLE OF CONTENTS

Page
ACKNOWLEDGEMENTS v

ABSTRACT vii

CHAPTER

INTRODUCTION: EARLY MODERN DRAMA AND THE ANTHROPOCENE 1

1. GRAFTING AND ECOLOGICAL IMPERIALISM IN JOHN FLETCHER'S *BONDUCA* 35
    Grafting and Colonial Incorporation 42
    Horticultural Grafting and English Colonialism 48
    Staging Ecological Consequences 55

2. HEWERS OF WOOD, DRAWERS OF GALL: THE WOODEN ECONOMIES OF RACE IN TITUS ANDRONICUS AND LUST'S DOMINION 77
    Cork and Moors on the Early Modern Stage 85
    "The Best Galls": Moors, Inkface, and the Manipulation of Print 92
    Aaron and Eleazar: Embodying the "Indistinct Human" on the Early Modern Stage 110

3. MONKEYS, FLOODS, AND THE "IMMORTAL WILLIAM": ENDURING NATURE AND PLAYING SHAKESPEARE IN THE BRITISH EMPIRE 121

4. STOLEN THUNDER: PERFORMING SHAKESPEAREAN WEATHER EVENTS IN THE ANTHROPOCENE 159
    How To Do Things With Storms: A Theater of the Anthropocene 165
    Assisting the Storm: Provincializing the Species Narrative of the Anthropocene 181
    Stolen Thunder: Performing Weather Events on the Colonial Stage 189

5. SHAKING THE SUPERFLUX: SIN AND REDEMPTION ALONG GEOLOGICAL FAULTS IN KING LEAR 208
    "Bond of Childhood": Lear and Gloucester's Unbalanced Family Accounts 214
    "O most small fault!": Economic Imbalances and Geological Redemptions 217
    Gloucester's Cliff and Lear's Flood: Nature's Redemptive Dark Matter 228
    "That things might change or cease": Imagined Futures and Deep Time 240

6. CODA: THE EMPTY DRAINPIPE 245

7. BIBLIOGRAPHY 249

INTRODUCTION

EARLY MODERN DRAMA AND THE ANTHROPOCENE

Last –cene of all: Global Endings, Global Beginnings

In 1613, when the Globe Theater caught fire and burned to the ground, the end of the world seemed overdue. Despite England's nascent efforts to colonize what was still seen as a "new world" across the Atlantic, English culture was steeped in the idea that doomsday was immanent. God had already destroyed the earth with water once; he might easily do it again. The time allotted for the human species on earth was thought to be as finite as life itself, and rapidly approaching its quietus. Each of the popular temporal schemes for imagining the breadth of human history on earth—which were broken into three, four, six, seven, and even twelve distinct "ages"[1]--placed the early modern present in the final age. In *As You Like It* (1599), Shakespeare's somber clown Jaques articulates one such seven-age scheme. Each "age of man" corresponded macrocosmically to a different stage in an individual's life, to a different planet in the Ptolemaic solar system, and to a day of God's creation of the earth.[2] Reflecting on his own age, Jacques anticipates an impending oblivion for himself, if not his species:

> Last scene of all,
>
> That ends this strange eventful history,
>
> Is second childishness and mere oblivion,

[1] John Anthony Burrow, *The Ages of Man: A Study in Medieval Writing and Thought* (Oxford: Clarendon Press, 1988), 2.
[2] Ibid., 52, 72.

Sans teeth, sans eyes, sans taste, sans everything. (2.7.170-173)[3]

By comparing the seven "ages of man" to seven acts or scenes of a play, Jacques turns the duration and form of the play he inhabits into yet another microcosm for collective and individual human existence. Our play, he reminds us, is almost over. But he also situates the early modern stage within its own apocalyptic parameters. Early modern theater and performance history, as Ellen MacKay reminds us, is fraught with anecdotes of disaster, accident, and death.[4] Theaters themselves became the loci of cataclysm on several occasions. On April 6, 1580, for example, long before the building was disassembled, carried across the Thames, rebuilt, and renamed the Globe, the Theater was rocked by an earthquake during an afternoon performance, which prompted several frightened spectators to leap from the balcony.[5] Though it would endure earthquake and plague, Shakespeare's wooden O would not survive fire. The Globe burned. But the world did not end.

The idea that humans are inhabiting their final stage on earth has not faded with the last four hundred years of theater history. The medieval temporal schemes used to describe the "age of man" in terms of Biblical history or astronomical correspondence have translated into the less human-oriented narratives offered by geology and natural history. Human life on earth, we now know, has been relatively brief compared to the

---

[3] William Shakespeare, *As You Like It,* eds. Barbara A. Mowat and Paul Werstine, (New York: Washington Square Press, 1997).

[4] See Ellen MacKay, *Persecution, Plague, and Fire: Fugitive Histories of the Stage in Early Modern England* (Chicago: University of Chicago Press, 2010).

[5] 5 Thomas Churchyard, *A warning for the wise, a feare to the fond, a bridle to the lewde, and a glasse to the good,* London: 1580, B2r.

four and half billion years the earth has existed, (though it has also far exceeded the six-thousand-year timeframe promoted by early modern antiquarians and scholars). Geologists today will discuss earth's history in periods, eras, and epochs, rather than "ages." But as the term "Anthropocene" ("human era" or "age of man") continues to gain traction among scientists and scholars for describing our current geologic era in which humans have gained geologic agency and influence over the earth's climate and environment without necessarily meaning to, our own present seems remarkably compatible with an early modern understanding of humanity's borrowed time on earth. Just as early modern English writers were preoccupied with identifying how their own behaviors (sins) indirectly caused storms, floods, earthquakes, and other seemingly "natural" manifestations of God's wrath, scientists today are continuing to uncover how human behaviors are to blame for a host of similar and seemingly "natural" events. Anthropogenic climate change may be responsible for the intensification of weather events, like the particularly devastating hurricane season during the fall of 2017. Anthropogenic climate change is also the primary culprit in global sea-level rise, and is contributing to the increasing acidification of the earth's oceans. Floods are becoming more frequent and more intense, in part due to the increased amount of moisture in the air. Wastewater injections from oil and gas drilling operations have been shown to induce earthquakes in parts of the central United States. Global commerce and the unwitting introduction of invasive species to foreign environments are driving the earth's sixth mass-extinction event. Today, the greatest threat to the continuation of life (human or not) on earth is not Almighty God. Nor is it a six-mile wide asteroid barreling toward the

Yucatan Peninsula—though our threat is likely just as dangerous. It is just us. Human behavior by itself is innocuous enough; our species has existed for millennia without altering the earth's climate. But human behavior within a system of global commerce—our behavior since Columbus inaugurated the globalization of the earth's biota—has proven to be an irrevocable geologic force of ecological devastation. Early modern European colonialism was not the first world system of capital exchange.[6] But its beginning may have marked the dawn of the Anthropocene,[7] our last "-cene" of all.

As our planet faces a future of ecological uncertainty, *Globalizing Nature* turns to the early modern English stage for a re-evaluation of a period that was once regarded as the final "Age of Man." I argue that the English stage—where the modern distinction between human and nature was still emerging, and where commercial properties on stage accentuated the agency of the natural world in facilitating colonial expansion—provides a material counter-narrative to the history of the first phase of biological globalization, one that can help modern audiences come to terms with our own uncertain future shaped by climate change. Overturning the popular narrative that European technology and military might determined the outcome of settler colonialism in ancient Britain and colonial Virginia, John Fletcher's *Bonduca* suggests that the floral and microbial grafts attending colonial exchange could make or break an invader's attempt to plant themselves on foreign soil. Similarly, working against the notion that racial categories emerged during

---

[6] See Janet L. Abu-Lughod, *Before European Hegemony: The World-System A.D. 1250-1350* (Oxford: Oxford University Press, 1989).
[7] Simon L. Lewis and Mark A. Maslin, "Defining the Anthropocene," *Nature* 519, no. 171-80, (2015).

the period to justify colonization efforts, the wooden ingredients in the cosmetics used to represent African Moors in plays like *Titus Andronicus* and *Lust's Dominion* suggest instead that early racial categories emerged from the ongoing colonial exploitation of natural resources, and were inextricably linked to an overconsumption of wood in England. Globalizing Nature also turns to a history of Shakespearean performance in the British colonies (where weather events frequently coalesced with human actors) as a resource for understanding how the agency that humans now exert on the global climate (and even the weather) is not shared equally across the species or across the globe. Finally, I show how *King Lear* stages an emergent understanding of natural equilibrium that upholds Nature as a more equitable model for the distribution of wealth in a kingdom fraught with economic disparity. Natural commodities had more agency and played a more significant role than once thought in determining the disparate economic relations between the global North and South. I show that Nature's agency, which becomes more visible and accessible in performance, might also be a strong ally in facing an uncertain future shaped by a changing climate.

Nature's Empire

> "Cotton all by itself exists in perfection, with malice toward none; in the sharp, swift, even brutal dismissive words of the botanist Oakes Ames, it is reduced to an economic annual, but the tormented, malevolent role it has played in my ancestral history is not forgotten by me."
>
> --Jamaica Kincaid[8]

[8] Jamaica Kincaid, *My Garden*, (New York: Farrar, Straus, Giroux), 1999, 150.

Nature is not innocent. When Jamaica Kincaid mistakes a cotton flower for a hollyhock during a stroll through Kew Gardens, she names the plant's "tormented, malevolent" staying-power, and its ability to "play a part" in shaping her identity as a black woman, "long after its role in the bondage of some of [her] ancestors had been eliminated."[9] Kincaid thus identifies cotton's agency, its culpability in slavery, empire, and modernity. Furthermore, she demonstrates that knowing what a plant *is* is just as important as knowing what it *does*, and what it has done. In the age of late global capitalism, the entire cotton species shares in this "temporality of conjunction," where the past and present can hold congress in a single object or natural commodity.[10] Before cotton, there was sugar, and before sugar, gold. My own project takes up the sixteenth-century commercial and networks surrounding galls and corkwood. I suggest that understanding the history and agency of the natural commodities on which European empires were built has become increasingly important, especially as the effects of climate change continue to be disproportionately felt in the global South, and as climate scientists overwhelmingly identify human agency (rather than passive Nature) as a culprit. By placing non-human nature at the center of this dissertation, I build on the work begun by

[9] Ibid.
[10] Jonathan Gil Harris, *Untimely Matter in the Time of Shakespeare*, (Philadelphia: University of Pennsylvania Press, 2009), 16. Though Harris is more focused on human-made objects and texts, I think his temporal frameworks are useful for thinking about a history of natural commodities as well.

environmental historians like Alfred Crosby, Henry Hobhouse, and Richard Grove.[11] We —scholars of English literature, scientists of climate, and anyone living in 2018 concerned about a sustainable future—need to understand how the natural world made European empire a possibility, for two reasons. First, grasping nature's agency allows us to consider how non-human objects, species, and environments contributed to both the early construction of *and* later dissolution of Enlightenment hierarchies—human over nature, man over woman, white over black—which are foundational to colonial and postcolonial discourse.[12] This is not to say that nature played a more primary role than humans in establishing these hierarchies. Rather, I aim to read nature's agency as distributive—that is, as participating in a network of interdependent relationships between human and non-human actors, which together produce the material conditions of European empire. Kincaid's cotton flower does *not* exist all by itself in perfection, and its perceived "malice" is a symptom of its agency, which is complexly intertwined with human appetites and aspirations. Secondly, we need to understand nature's active role in the production of European empire because we need to continue to think of nature not as

---

[11] Alfred W. Crosby Jr., *The Columbian Exchange: Biological and Cultural Consequences of 1492*, 30th Anniversary Edition, (London: Praeger, 2003); Henry Hobhouse, *Seeds of Change: Six Plants that Transformed Mankind*, (Washington DC, Shoemaker & Hoard, 2005); Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860*, (Cambridge: Cambridge University Press, 1995).

[12] Elizabeth DeLoughrey and George B. Handley, *Introduction to Postcolonial Ecologies: Literatures of the Environment*, eds. Elizabeth DeLoughrey and George B. Handley (Oxford: Oxford University Press, 2011), 24-25. DeLoughrey and Handley foreground how the "Enlightenment dualisms of culture/nature, white/black, and male/female were constituted through the colonial process" and subsequently show how both postcolonialists and ecofeminists seek to disentangle "the hierarchies that derive from these interpellations of non-European nature."

a resource to exploit further, but as one to rely on as an ally in diminishing global, ecological, and climate-related crises.[13]

In *Globalizing Nature*, I turn to the early modern English stage as a site where nature's agency speaks with most miraculous organ, and where the repercussions of that agency resound offstage. By representing the oscillating potential of imperial power, the English stage ultimately limits for its audience the number of causal agents—human and non-human actants—that can participate in the production of an empire. I begin with the premise that the early modern stage constitutes a unique site for showcasing how the agency of non-human things motivates and determines the outcomes and consequences of economic and colonial expansion. At the same time, I am also interested in recovering the ecological narrative—and the non-human dramatis personae, which are the protagonists—of this first phase of globalization.[14] By tracing a series of object histories, I hope to frame the early globalization of the earth's biota in context with its postcolonial and ecological legacy in the Anthropocene. This introduction attempts to recover a narrative voice for two ecologies of the early modern stage, or two examples of how human

---

[13] For example, Meera Subramanian looks to the Staten Island Bluebelt for a model of how ecological infrastructure can help manage sea-level rise: "The extensive system of engineered ponds, creeks, and wetlands naturally provides flood control by absorbing storm surges across ten thousand acres and sixteen watersheds that span the southern end of the borough, Oakwood Beach among them." She also advocates for repopulating New York City's lost oyster reefs "which could naturally help shield the city from future storm surges" in the event of another hurricane. See Meera Subramanian, "The City and the Sea," Orion Magazine, 2015. Online. https://orionmagazine.org/article/the-city-and-the-sea/

[14] In this sense, I share Steve Mentz's concern with exploding and exploring the competing potential narratives of early globalization. See Steve Mentz, *Shipwreck Modernity: Ecologies of Globalization, 1550-1719*, (Minneapolis: University of Minnesota Press, 2015).

performance practices not only coalesce with the non-human or "natural" world, but also impact economic exchange and expansion. This dissertation, by extension, attempts to reframe a few key objects or phenomena of the stage within the narrative of the Anthropocene. In the same way that Kincaid acknowledges cotton's role within the brutal economic network of the slave trade, I hope to investigate the natural commodities upon which the early modern stage depended, and to shed them of their seemingly passive innocence. The natural commodities that made early modern theater possible became the imperial materials that built the British Empire.

The First Ecology: Wandering Galls

A little after dawn on a cold December morning in 1605, a cynipid gall wasp pokes her head out from a small spherical casket—one of several dangling vampire-like beneath a single oak leaf—and sees the sun for the first time. She—there can be no question of her sex, since all of her generation will be female—slowly escapes her husk, beats her wings once, and then takes off. She is somewhere between Iskunderun and Aleppo, and the oak leaf which had been her dormant home for the last several months casts its long shadow towards the western bank of the Afrin river. She flies north. She will not live long, and she will never meet another wasp. She does not need a mate; the wasps of her generation reproduce asexually. Before she dies, she will lay her eggs, immaculately conceived, on the budding leaf of a tree that will remind her of the one she flew away from that first morning. Then she will fly off to die. As the leaf grows, so will her progeny; a small brown gall will swell on the underside of the leaf, where a wasp larva will live for a few weeks, leaching food and nutrients from the host plant, before it

too emerges. Unlike his mother, this wasp will be male, and will need to find a mate. And unlike his mother, this wasp will not live to see the light of day. A man's hand plucks the gall from the leaf a few days after it has formed. The man tosses it into a basket full of galls just like it. The basket is fastened to a donkey, which will carry the man and the galls to Iskunderun, where the man will sell his galls to a merchant. Money changes hands. The gall mixes with hundreds more in a wooden barrel, which in a few days' time is sold to a group of men, who load it onto a ship. Money changes hands. The gall travels below deck in the swaying darkness across the Mediterranean, through the strait of Gibraltar. It will touch the Azores, and narrowly escape annexation by pirates. Blood is spilt. It lies dormant below deck as the ship moves up the Thames, and finally lands at London, where it is unloaded and sold to an apothecary. Money changes hands. The wasp larva has long since died when it is sold again to a playwright, freshly released from debtor's prison. He may also purchase gum Arabic and vitriol from the apothecary, and if he has any money left, paper. Money changes hands. Once home, or perhaps back in prison, he will use these ingredients to make an ink, which he will use to write a play. He invents names and characters. His fingers turn black as he clumsily dips his pen, and paints his words on paper. His play features a Moor who advances himself through forging letters. After hours, days, weeks of work, he might sell his play to a company. Money changes hands. A man from the company that bought the play purchases ten galls from the same apothecary shop where the playwright bought his ink ingredients. On the afternoon of the play's performance, the actor uses the galls to concoct a face paint,

which he applies to his face and hands to play the Moor. The play opens. Money changes hands.

Without meaning to be, Aleppo galls are suddenly implicated in the human affairs of representation, writing, and performance. *Globalizing Nature* demonstrates how natural properties of the stage create meaning during a period of global expansion. Working against the view that Britain's superior naval or military power is responsible for its imperial dominance—and in order to trouble Shakespeare's status as the icon of British cultural and intellectual superiority—I contend that natural materials and unintentional accidents played a significant role in facilitating early English global expansion. I analyze how objects of the early modern stage contribute to emergent ideologies of power in early English colonial efforts. Focusing on plays by Shakespeare and his contemporaries, *Globalizing Nature* seeks to reconcile a shifting early modern discourse about human and natural ontological categories with more contemporary concerns about human geologic agency, sustainability in the Anthropocene, and a changing global environment.

While the chapters of this dissertation concentrate on different natural objects, phenomena, and plays, there are a five main throughlines I would like to identify at the outset. First and foremost: each of the six plays and performances I am most concerned with either represent or demonstrate the distributive agency of "Nature." Although I use the word "Nature" to distinguish the category of the non-human from the modern category of the human, my aim is to destabilize this modern binary, and to historicize an ontological lack of distinction between human and Nature in the early modern period.

Through privileging accident in (or as) the history of the English stage, British colonialism, and the global climate, my intention is to expose the porousness of modern boundaries between subject and object, between human and "Nature," between intention and outcome. The ontological muddiness that failed to distinguish early modern humans from the non-human "natural" world or environment has been explored by other ecologically-minded scholars of the stage.[15] But more than simply reiterating the primacy of "Nature" in an early modern understanding of the "human," I am interested in analyzing how three types of events—performing a play, colonizing an environment and its human inhabitants, and changing the climate—do not occur by virtue of human intention alone; they occur within a network where non-human "Nature" has some role in determining the play's tragic ending, the colony's rise or decline, and the rate at which carbon dioxide emits into the atmosphere. In *Bonduca* (ca. 1614), for example, the Roman army makes a decisive victory over the British rebels, but not without being cursed by a host of metaphorical pathogens. At the same time the play was being performed in England, those same pathogens were significantly aiding European military campaigns in the Americas, all while quietly yielding credit to European discourses of might, right, and whiteness. I turn to "Nature" neither to apologize for nor deflect the very real human violence that British colonialism engendered. Instead, I seek to highlight the ways in which human Empire exploits—and perhaps even mimics—Nature's ecology. The benefit of reading Empire as an ecological endeavor where "Nature" is neither

---

[15] See Jean Feerick and Vin Nardizzi, eds. *The Indistinct Human in Renaissance Literature,* (New York: Palgrave Macmillan, 2012).

entirely passive nor wholly responsible is that it retains the potential to be an active ally in catalyzing a more sustainable future for humans today. Both on and off stage, non-human "Nature" is always tied up with human affairs. Under a rubric of "accident"—as opposed to a more historicized early modern narrative of predestination or divine explanation—I hope reorient the anthropocentric histories of British colonialism, the Shakespearean stage, and the Anthropocene around a more distributive and ecological "Nature."

Second, I show that the materials of the stage are inextricably tied to the material expansion of the British Empire. The non-human objects, phenomena, and stage properties used in sixteenth-century (but also in nineteenth- and twentieth-century) performances were the same materials that drove British commercial and colonial expansion. Nine theaters were constructed out of wood in spite of the devastating shortage of timber in England, which was motivating colonial extraction of timber resources, particularly from Ireland and the Americas. Yew trees—like the one central to Vittoria's dream in Webster's *The White Devil* (1612), and the one to which Tamora is allegedly threatened to be bound in *Titus Andronicus* (2.3.106-7)—provided superior bowstaves for the English army after the thirteenth century.[16] Yew bowstaves, which began to be imported to England from Ireland and Spain during the early fourteenth century, provided decisive victories for the English at Agincourt in 1415 as well as

---

[16] Botanists have shown that yew trees actually do live their lives according to a cycle made up of seven distinct ages, a cycle which can repeat when new trees use the existing root system of a dead tree to begin life anew. See Fred Hageneder, *Botanical: Yew*, (London: Reaktion, 2013), 69-70.

several other important battles over the next two centuries, which may have "helped to forge the Empire."[17] From an ecological perspective, the English stage was a biological conglomeration, a vantage from which spectators could discern the material scope of an emerging global marketplace. Actors wore face paint that used ingredients like cork from Portugal, or gum Arabic from Northern Africa. Galls were also likely used to make a black face-paint, and brought to the stage the product of a parasitic insect ecology from the Ottoman Empire. Some of the scarlet clothing and rouge cheeks worn by men playing women on stage likely used cochineal, the product of a Mexican prickly-pear and insect ecology, brought to England through Spanish colonization and English piracy. The expansion of the English Navy would not have been possible without hemp for rope-making, which the Muscovy Company began manufacturing in Russia in the mid-sixteenth century.[18] Plays like *A Christian Turn'd Turk* (1610) and *Two Gentlemen of Verona* (1589) rely on ladders of rope as stage properties. Shakespearean performance itself eventually became a commodity of its own in the Victorian era of the British Empire, the value of which would increase with the unwitting aid of ecological elements.

The Second Ecology: Birds, Birds, Birds

While Shakespeare's cultural capital might be dependent upon the non-human, accidental, and unforeseeable ecological factors influencing performance, his works have also legibly impacted environmental change. The most famous example of Shakespeare's complicity in altering an environment is Eugene Schieffelin's acclimatization of the

---

[17] Ibid.,105.
[18] See Martha Morris, "Naval Cordage Procurement in Early Modern England," *International Journal of Maritime History* 11, no. 1 (1999): 81-99.

starling to Central Park in 1890. A member of the American Acclimatization Society, Schieffelin was motivated to introduce the starling to New York "in part because he allegedly wished to introduce all the birds mentioned in the works of Shakespeare to Central Park."[19] Of the hundred pairs of starlings that Schieffelin released, only one pair made it through the harsh New York winter, successfully nesting under the eaves of the Natural History Museum. And as is usually the case with successfully acclimatized species, starlings were able to thrive in North America because of a lack of natural predators, and because of their ability to displace other populations. Kim Todd reminds us that Shakespeare's one reference to the starling from *Henry IV, Part One*, which presumably inspired Schieffelin's project—is in fact "a curse."[20] The line is Hotspur's, and it issues a diatribe against the King, who has commanded Hotspur never to speak of the captive Mortimer or plea for his release again. Hotspur replies, "I'll have a starling shall be taught to speak/ Nothing but 'Mortimer,' and give it him/ To keep his anger still in motion" (1.3.230-2). Hotspur's characterization of the starling registers the bird's ability to "mimic" noises, and seems appropriate considering its legacy as a nuisance to native bird populations and North American farmers: "They decimate fruit crops and outcompete other birds that nest in holes, including eastern blue-birds, northern flickers, great crested flycatchers, and red-bellied woodpeckers. A single flock of starlings, called a murmuration, can grow up to a million or more birds, blanketing the sky with darkness

---

[19] See Edward Tenner, *Why Things Bite Back: Technology and the Revenge of Unintended Consequences* (New York: Vintage, 1997), 153.
[20] See Kim Todd, *Tinkering With Eden: A Natural History of Exotics in America* (New York: W.W. Norton & Co., 2001), 140.

and the ground with excrement."[21] Of course, Shakespeare is only complicit if we look backward, and take Schieffelin's apocryphal motive for truth. But I think Shakespeare's role in the acclimatization of the starling points to the concrete, material impact that literature can have on the world. The starling may have brought only trouble to the American farmer or to the other species of birds that it managed to outcompete. However, its dominance in North America today depends on a network of factors (whose agency may be distributive)—ecological, biological, cultural, historical, climatological, and literary. That Shakespeare might have played a role at all is astounding because it means that literature and ecology are not as distinct as we might assume. If a study of early modern drama is to be of any significance to the predicament faced by humans living in the Anthropocene, we would do well to find more ways in which literature exists in ecological relationships with life, trash, and climate.

The third throughline threading the chapters of *Globalizing Nature* together concerns my method, which invites readers to return to early modern drama through the lens of the Anthropocene. If the analysis I offer seems anachronistic, it is because anachronism has been normalized by our geologic agency. Climate change is rapidly acidifying the oceans and raising them to heights not seen in thousands of years, for example. Starlings—along with the multitude of invasive species thriving in the Americas as an accidental or intentional consequence of European colonialism, Columbian exchange, and globalization—have turned the globe into a land- and waterscape teeming with anachronism. To live in the Anthropocene means inhabiting anachronism. I attend to

---

[21] Ibid. 142.

how Shakespeare and his contemporaries represent the process by which human agency and behaviors create imbalances in nature. But far from offering a simple comparison between the ecological crises faced by twenty-first and sixteenth- century audiences, I aim to take a hopeful and pragmatic lesson from early modern dramatists, who, not unlike us, were facing a bleak ecological future. It is a lesson shared by some restoration ecologists today: trust nature as an ally in seeking to correct imbalances in nature caused by human behaviors. As I show in my fifth chapter on *King Lear*, the natural imbalance of water that Lear endures during the storm is linked to the economic imbalance he perceives in his kingdom. Lear's desire to "shake the superflux" as a strategy to "show the heavens more just" (3.4.40-1) bears an important postcolonial relevance in the Anthropocene, since natural and economic imbalances between the global North and South are the legacy of European colonialism. But rather than offer a clear-cut *human* solution to the problem of economic inequality, the play insists that, given enough time, Nature can correct its own imbalances, and even provide secular economic retribution.

The attention I am lending to non-human objects and events in this dissertation will build on recent materialist scholarship, though I also want to clarify that I seek to privilege the non-human as an early modern, rather than as a post-humanist, move. The recent post-humanist turn in material approaches to literature has perhaps reached its limit with object-oriented ontology and alien phenomenology, philosophies which would hold Kincaid's cotton ransom "all by itself," in a vacuum of "perfection, with malice

towards none.”[22] I prefer to ground my project in materialist political ecology. In attending to the agency of non-human nature, I seek to flatten the ontological hierarchies reinforced by Western historical narratives of European empire in an attempt to wrest a voice from a silenced, subaltern Nature. My project thus follows in the tradition of Bruno Latour’s actor-network theory, Jane Bennett’s vital materialism, and Karen Barad’s agential realism, each of which uphold the distributive agency of non-human actants.[23] But rather than shift the materialist discussion away from the human and towards the object as these scholars have done, my focus on the object is intended to historicize the confluence between human and nature during this period, and to trace that ecology to our present moment. Early modern culture did not privilege human categories above non-human ones, and consumers were far more willing than we are to accept the agency of non-human objects and nature in determining events. Astrology, witch trials, and the curious law of the deodand uphold stars, “familiars,” and quotidian objects as determining and agential factors in risky pursuits of fortune, domestic mishaps, or even

---

[22] See Ian Bogost, *Alien Phenomenology or What It’s Like to Be a Thing*, (Minneapolis: University of Minnesota Press), 2012; Graham Harman. “The Well-Wrought Broken Hammer: Object-Oriented Literary Criticism.” *New Literary History*, 43, no. 2 (2012): 183–203.

[23] See Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory*, Oxford: Oxford University Press, 2005; Jane Bennett, *Vibrant Matter: A Political Ecology of Things.* Durham, Duke University Press, 2010; Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society*, 28.3 (2003): 801-31.

accidental death.[24] Regarding nature on the early modern stage, then, requires that we contextualize humans as a part of nature.

Furthermore, through attempting to reconstruct the history of globalization, or the Anthropocene, from the perspective of the "natural" world, I aim to remind us that what we think of today as "nature" is not only far from natural, it is also irrevocably tied to an imperial history. The concept of "Nature" cannot be divorced from human behaviors and accidents, especially not in the era of anthropogenic climate change. The "Nature" that Thoreau was so eager for "us" to hurry back to may not even have been entirely "natural" in 1854 when Walden was first published, and it is certainly less so today. Thoreau's Concord has been forever altered by the biological side-effects of globalization; according to one study, 27% of the floral species noted by Thoreau in Concord are now missing from the area, and another 36% are on the brink of extinction.[25] The Norway Maple standing in my own backyard in Turners Falls, Massachusetts, offers another example of a human footprint disguising itself as "nature." After the invasive Dutch Elm blight began wreaking havoc on the native American Elm, the non-native, long-living, fast-growing, allelopathic Norway Maple became a popular substitute in the 1950s—though John Bartram first imported the Norway Maple to Philadelphia from London in

---

[24] For more on the deodand law, see William Pietz, "Death of the Deodand: Accursed Objects and the Money Value of Human Life." *Anthropology and Aesthetics*. No. 31. (Spring, 1997), 97-108; for more on astrology, see Keith Thomas, *Religion and the Decline of Magic*, (New York: Charles Scribner's Sons), 1971.

[25] Richard B. Primack, Abrahama Miller-Rushing, and Kiruba Dharaneesaran, "Changes in the Flora of Thoreau's Concord" *Biological Conservation*, 142 no. 3, (2009): 502.

1756.[26] The Norway Maple has been officially banned from the state of Massachusetts, but its initial invasion is not so distinct from the general ecological imperialism of early British settlers. I want to remind readers that the forest and the river have a human history, and that a walk through the woods can be a passive experience of peace and solitude, a clumsy stumbling upon the Anthropocene, or even an unexpected confrontation with a violent history of colonialism. When I see a Norway Maple growing in Turners Falls, I am confronted with two histories, one biological, and one colonial. Not only is the Norway Maple in my backyard well-equipped to outcompete and to prevent native species from flourishing because it is not from here, but it also stands across the river from where Captain William Turner led a massacre on a camp of Native Americans in 1676 during King Philip's War. Jamaica Kincaid cannot regard a cotton flower without considering the history of the trans-Atlantic slave trade; I cannot look at a European Starling on a New England street corner without thinking of Eugene Schieffelin or Shakespeare. It is my hope that this project will encourage audiences to perform a similar double-take the next time they see Shakespeare in performance.

Through emphasizing a material history of non-human-centric agency, I also seek to make an intervention into recent ecocritical investigations of the early modern stage. I

---

[26] Suzan Bellincampi, "Norway Maples Grow Fast, Live Long," *The Vineyard Gazette*, April 30, 2018, https://vineyardgazette.com/news/2015/05/06/norway-maples-grow-fast-live-long

do not mean to suggest that Shakespeare was an environmentalist[27] or that a genealogy of environmentalism in the West can be traced back to early modern literature. In fact, part of my investment in focusing on the early modern period is to understand how the ethics of modern Western conservationist and environmentalist movements are complicated by a genealogy that begins with European colonial exploitation. Long before "conservation" connoted the protection of land from corporate deforestation or oil drilling, it was a principle of European colonial management and capitalist production[28] (though maximizing "yield potential while conserving our natural resources" is still a principle of modern capitalist production in the case of Monsanto.)[29] Scholars have foregrounded how various environmental crises impacted literary and dramatic production in the early modern period,[30] though few have privileged the object as a primary text. Vin Nardizzi's

---

[27] Some ecocritics skirt around this suggestion, like Steve Mentz, Daniel Brayton, and Gabriel Egan. As Boehrer convincingly shows through the playwright's habits as a landowner, Shakespeare was probably just another early capitalist. See: Daniel Brayton, *Shakespeare's Ocean: An Ecocritical Exploration*, (Charlottesville: University of Virginia Press), 2012; Gabriel Egan, *Green Shakespeare: From Ecopolitics to Ecocriticism*, (London: Routledge), 2006; Steve Mentz, *At the Bottom of Shakespeare's Ocean*, (London: Continuum), 2009; Bruce Boehrer, *Environmental Degradation in Jacobean Drama*, (Cambridge: Cambridge University Press), 2013.

[28] Richard Grove shows how the English developed a conservationist ethic through a history of trial and error on their early island colonies in the Atlantic. See Grove, *Green Imperialism*.

[29] See Monsanto's Commitment to Sustainable Yield, July 1, 2018 http://www.aganytime.com/Documents/DemonstrationReportsPDFs/2013%20Demonstration%20Summaries/MON_GLC_MonsantosCommitmenttoSustainableYield.pdf

[30] For example, Bruce Boehrer demonstrates how the environmental side-effects of London's urbanization influenced Jacobean dramatic production, while others, like Ken Hiltner, focus on environmental issues impacted the pastoral genre. Daniel Brayton also shows how human activity affected marine life in the early modern period, and influenced Shakespeare's plays. See Ken Hiltner, *What Else is Pastoral?: Renaissance Literature and the Environment,* (Ithaca: Cornell University Press), 2011.

Wooden O's (2013) provides a unique exception through demonstrating how the "constitutive woodenness" of London theaters themselves offered audiences, who were feeling the effects of a crippling wood shortage, "the pleasures and the frights of being inside virtual woods."[31] By virtue of being a part of a performance space, Nardizzi shows, the wood from which the theater is made conjures in its audience a "rich array of eco-fantasies and nightmares about the shortage of wood" in England.[32] Nardizzi offers a useful model for how to imagine a material (and unprecedented) performance history of the early modern theater. However, *Globalizing Nature* investigates how environmental degradation and exploitation influenced English stage performances on a more global scale. I will explore how plays foreground the provenance of the materials they stage, and how wood imported from Portugal or Ireland might conjure a different "eco-fantasy" or "nightmare" than wood from England's own backyard. Furthermore, through foregrounding English ecophobia as a driving force behind economic and colonial expansionary efforts—and through reading the stage's depiction of Moors as a construction of degraded European and colonial environments—my project takes a step towards theorizing ecocriticism: I recognize, as Simon Estok does, "that ecophobia,

---

[31] Vin Nardizzi, Wooden Os: Shakespeare's Theatres and England's Trees, (Toronto: University of Toronto Press, 2013), 20.
[32] Ibid., 24.

racism, misogyny, homophobia, and speciesism are thoroughly interwoven with each other and must eventually be looked at together."[33]

As a fourth throughline, this dissertation might be thought of as a meditation on the economy of tragedy. All of the plays I focus on in this project—with the exception of *The Tempest*—are tragedies. A number of scholars—including Bradley Ryner, Linda Woodbridge, Valerie Forman, and Jonathan Gil Harris—have considered how a shift in economic thought amidst a flood of economic treatises from two camps of English mercantilists influenced the generic conventions of early modern plays.[34] Although Edward Misselden and Thomas Mun would not diagnose the upset "balance of trade" in England as a cause for the loss of English bullion until the 1620s, the notion of balance had been dictating the conventions of tragedy for decades, if not centuries. In *English Revenge Drama* (2010), Linda Woodbridge notes the obsessive logic of debits and credits in revenge plays of the period, and the ubiquitous imagery of double-entry bookkeeping:

---

[33] See Simon C. Estok, "Reading Ecophobia: A Manifesto." *Ecozon@*, 1. 1. (2010): 75. In his manifesto for "Reading Ecophobia," Simon Estok pushes ecocriticism towards theory by arguing that, in the same way that "Feminism shows up misogyny and sexism—as queer theory shows up heterosexism and homophobia," so should ecocriticism be "performing the same kind of disclosures about how ecophobia is embedded in our cultural artifacts" (75). He also suggests that the heart of this work requires a concentration on things: "Reading ecophobia means challenging the *modus operandi* of a profit-based system that requires the maintenance of ethically inconsiderable objects always available for exploitation" (77).

[34] Bradley Ryner, *Performing Economic Thought: English Drama and Mercantile Writing 1600-1642*, (Edinburgh: Edinburgh University Press, 2014); Linda Woodbridge, *English Revenge Drama: Money, Resistance, Equality* (Cambridge: Cambridge University Press, 2010); Valerie Forman, *Tragicomic Redemptions: Global Economics and the Early Modern English Stage*, (Philadelphia: University of Pennsylvania Press, 2008); Jonathan Gil Harris, *Sick Economies: Drama, Mercantilism, and Disease in Shakespeare's England,* (Philadelphia: University of Pennsylvania Press, 2004).

"An operating company's books are never closed with a 'final balance': at any given moment, debts will be outstanding. And a vendetta is never complete while some are alive on both sides."[35] Though some of the plays I look at in this project are revenge tragedies, I am more interested in how the tragic form engages with the idea of an emergent balance of nature as a precursor to the scientific study of ecology. *King Lear* provides the strongest illustration of how Nature's ability to balance itself, or water's ability to find its level, can amend the play's economic imbalances, which have been generated by human faults and errors. John Fletcher's *Bonduca* represents foreign pathogens as balancing agents when the metaphorical diseases infecting the invading Romans turn their military triumph over the British into a Pyrrhic victory. The revenge tragedies *Titus Andronicus* and *Lust's Dominion* display the tragic economy that Woodbridge describes above, where blood repays blood. But in their original performance, the two hero-villain Moors who made these plays commercially successful also depended on the right balance of ingredients to make a white actor appear like a Moor, a theatrical type commonly associated with an internal humoral imbalance. Furthermore, due to the combined inadequacy of English galls and the absence of cork oak in England, theater companies had to import galls and corkwood to bring these characters to life on stage. Blood will have blood, these plays suggest, but only if England can correct its dearth of blackface materials. Finally, I show how the tragedy that Romeo catalyzes through purchasing poison from an apothecary not only characterizes an

[35] Woodbridge, 62.

unfair exchange of money for death, but takes on a pressing ecological urgency when the play is performed in a rainy Cape Town during an 1890s gold rush.

Globalizing Nature investigates the agency of natural and non-human players on the English stage at a moment when the ecological consequences of human agency in the Anthropocene are being reckoned with. A final throughline to this dissertation is that each chapter attempts to characterize a theory of performance for what I call a "Theater of the Anthropocene." Such a theater acknowledges that agency in performance is shared not only between a human performer and a human audience, but also includes non-human actants, which may be physical properties on stage, or components unique to the performance space. The capacity for human and non-human agents to influence the meaning of a performance reflects the burden of the human species in the Anthropocene, which, though collectively responsible for anthropogenic climate change, does not bear that burden equally across the globe. Such a Theater aims to provincialize, rather than "pluralize," the Anthropocene.[36] Instead of seeking to privilege one specific thing by which geologists in the future might characterize our present "-cene"—which has been variably dubbed the Neologismcene, the Capitalocene, the Chthulucene, and the Naufragocene[37]—I am more concerned with how the stage can illuminate the

---

[36] In response to Steve Mentz's proclamation that we "pluralize the Anthropocene!," I hope to shift the focus of these various "-cene" narratives from the collective human species back onto the individual humans who contribute to and bear the burden of climate change in different ways. See Steve Mentz, "The Neologismcene," *Arcade: Literature, the Humanities, & the World*, July 1, 2018, https://arcade.stanford.edu/blogs/neologismcene. See also, Steve Mentz, *Shipwreck Modernity: Ecologies of Globalization, 1550-1719*, (Minneapolis: University of Minnesota Press, 2015).

[37] Mentz, "The Neologismcene"

inequalities, the "carbon surpluses" and "carbon debts," that the Anthropocene narrative presents. Thus, a Theater of the Anthropocene subscribes to the "Orbis spike" hypothesis, which views 1610 as the potential start date for the Anthropocene, because it holds European colonialism and the Columbian exchange as the primum mobile for our current ecological crisis.[38] The history of the Shakespearean stage is also the history of the British Empire, and the history of anthropogenic climate change; a Theater of the Anthropocene aims to hold these narratives together, and to see them as one. But at the same time that it accounts for inequalities in wealth and carbon generated by human behaviors, Anthropocene Theater also values accident in performance. By training audiences to look more charitably on unplanned weather events, for example, or to regard unfavorable performance conditions as productive, Anthropocene Theater recognizes that rehearsal and human intention hold a tenuous grasp over what a performance ultimately will mean to a human audience. Audiences who are aware of how human behaviors have, for the past four centuries, unwittingly shaped our current global environment should appreciate accident as a global force offstage as well as on. Human intention may have driven European colonialism and the proliferation of the Shakespearean stage, but accident is what brought us into the Anthropocene.

Chapter Breakdown

My first chapter, "Grafting and Ecological Imperialism in John Fletcher's Bonduca" reevaluates how the early modern English understood their agency in determining colonial conquest. For contemporary horticultural writers, the practice of

---

[38] Lewis and Maslin, 175.

grafting was closely associated with colonial acclimatization, and offered a means of either enhancement or debasement for graft and grafter alike. Drawing upon this horticultural discourse, this chapter investigates John Fletcher's *Bonduca* and its pervasive treatment of grafting as a meditation on the horticultural practices that were considered essential to early modern English colonialism. Through metaphorical imagery as well as physical gestures of grafting, *Bonduca* attends to the ecological repercussions of Britain's colonial history and explores the potential risks of colonial expansion. In addition, the play represents the Roman exposure to several metaphorical diseases, which registers an early understanding of disease transmission as pathogenic, and which imagines a reversal of the effect of Old World diseases on indigenous human populations in the New World. Rather than promoting a pro- or anti-imperialist agenda, these dramatized grafts sanction a more complex representation of empire formation, where non-human actants play a more prominent role in determining the outcome of a political, military, and colonial struggle than human agents. But rather than exonerate colonial conquerors, *Bonduca's* focus on the non-human reveals an early modern understanding of colonial conquest as determined not by the inherent superiority of one group of humans over another, but by the will of the graft.

Shifting from stage metaphors and gestures of colonial domination in my first chapter, my second chapter, "Hewers of Wood, Drawers of Gall: The Wooden Economies of Race in *Titus Andronicus* and *Lust's Dominion*," emphasizes how the natural characteristics of the stage's physical materials create meaning, and position race as a construction of degraded European environments. Both plays I analyze in this chapter

were written at the peak of the Elizabethan timber crisis, and each relies on a different pun to link the material technology for representing racial difference on stage to an expanding economy of wood. "How every fool can play upon the word!" (3.5.38) laments Lorenzo, cringing at Launcelot's play on "Moor" in *The Merchant of Venice*; Shakespeare and Dekker were clearly not above racial wordplay, though these puns may have only made sense in their original performance context. In *Titus Andronicus*, Aaron's black "hue" both begets and justifies the physical, bodily "hews" he orchestrates against the Andronicii, which are figuratively aligned with the excessive consumption of timber. In *Lust's Dominion*, Eleazar's furious "gall" informs his audience how they should read his "Inky" face (1.2.191). Galls, as early modern playwrights would have known, were common wooden ingredients in ink and blackface cosmetic recipes of the period. As forgers, Eleazar and Aaron are two of several Moors on the early modern stage who manipulate ink for their own revenge or advancement. I investigate these material wooden puns—which conflate the hued skin of a Moor with a tree's hewn limbs, humoral gall with imported galls, and black characters of the stage with black characters of the page—in the context of England's timber crisis and economic expansion at the turn of the seventeenth century. By focusing on the wooden ingredients that constituted an embodied form of difference on stage, I investigate what happens when we view the emergence of hierarchical or proto-racial thinking in association with ecological materials moving through economic networks. Through re-orienting our understanding of Aaron and Eleazar around the wooden commodities that may have constituted their black skin

onstage—namely cork and galls—I hope to show how the performance of “race” onstage was mediated by the natural world and the human commodification of it.

If *Globalizing Nature* is in part an attempt to study the materials of the stage that drove British imperialism, then the material dissemination of Shakespeare’s works throughout the Empire deserve our attention. But the narrative produced by this imperial cultural production—that Shakespeare was a genius, the national poet of England, or perhaps even the inventor of the human—is a problematic one, for several reasons. For one, it often overlooks Shakespeare’s own biographical context. Shakespeare was no great celebrity in his time, but just another playwright who likely benefitted from collaboration. When actors or even English departments today promote Shakespeare’s “genius,” they often overlook the imperialist overtones embedded within that pedagogical history of that claim. Shakespeare’s “genius” and cultural iconicity are the products of British imperialism, though Shakespeare’s stature as a literary figure has not faded with the Empire. He became a global commodity who had purchase all over the world in part because of the actors and actresses who carried their performances beyond the British Isles. Despite my own affinity for Shakespeare’s works, my goal here is to interrogate the processes by which Shakespeare became a global commodity, and to qualify his imperial ascendancy as an accident in which Nature played no small part. The Shakespearean industry, I hope to show, owes itself in part to natural and even atmospheric elements that were beyond the control of human intentions as his plays were paraded through the colonies.

My third chapter, "Monkeys, Floods, and the 'Immortal William': Enduring Nature and Playing Shakespeare in the British Empire," introduces readers to the performance conditions that a number of touring actors and actresses encountered when they performed Shakespeare plays throughout the British colonies, from the eighteenth through the twentieth centuries. I argue that the status and iconicity that Shakespeare enjoys today owes itself in part to the ecological and environmental hazards that actors and actresses were willing to endure in order to wave the flag of Shakespeare in every corner of the globe. I offer a survey of the various heat waves, floods, dust storms, thunder storms, droughts, earthquakes, illnesses, bugs, animals, and other nuisances of nature that allowed touring performers like Daniel Bandmann, Allan Wilkie, Geoffrey Kendal, George Crichton Miln, Genevieve Ward, Matheson Lang, Frank Benson, and W.E. Holloway to perform Shakespeare in the British colonies, and thus to fulfill the civilizing mission of British cultural imperialism. I suggest that the performance conditions encountered by these actors and actresses allowed them to see themselves as martyrs for Shakespeare. But when compiled together, this theater history also places Shakespeare at the center of a Theater of the Anthropocene, where accidents abound, and where human intentions are often productively undermined by unforeseen natural players.

My fourth chapter, "Stolen Thunder: Performing Shakespearean Weather Events in the Anthropocene," focuses on atmospheric agency in Shakespearean performance as a way of theorizing a "Theater of the Anthropocene." Through analyzing specific instances of Shakespearean theater history where weather events have coincided with dramatic

performances, I argue that the stage can provide a helpful tool for determining the implications of human agency in the age of anthropogenic climate change. For one, weather on stage exposes how any given performance is constantly fluctuating between human intention and unplanned accident. A real weather event on stage can undermine the built-in artifice of theater, which Shakespeare so often exploits in his representations of the weather. At the same time, a real weather event that occurs during a modern Shakespearean performance can also reinforce the ecological unpredictability of live theater, which early modern audiences likely took for granted. To spectators conscious of how human behaviors are impacting the climate (and by extension exacerbating certain weather events), an authentic storm on stage positions the audience as both knowing participants in a performance event, as well as passive recipients of a weather event. This dual positioning is similar to the species narrative offered by the Anthropocene, which argues that all humans are culpable for changing the climate, even if the reality is that some are more culpable than others. A theatrical space where the weather performs thus models how we might provincialize this Anthropocene narrative by attending to how human actors and audience members possess different degrees of agency in choosing how to engage with a given weather event on stage. I provide two examples of site-specific Shakespearean weather events in order to demonstrate how an ecological analysis of Shakespearean performance can attend to a more provincial geologic agency. One occurred during a production of *The Tempest* in the segregated colonial setting of Hamilton, Bermuda in 1950; Prospero's failure to control the *actual* weather, I speculate,

demystifies him before his audience, and demotes him from seeming sovereign ruler of his isle to little more than a soggy actor, impotently imploring the weather to behave. Shakespeare's colonial authority is also undermined by the errant storm. Another Shakespearean weather event from an 1892 production of *Romeo and Juliet* in Cape Town, South Africa—which coincided with a gold rush in the Witwatersrand basin—similarly failed, in a spectacular way, to demonstrate Shakespeare's linguistic and cultural superiority to a Dutch-speaking population. Romeo's purchase of poison from the apothecary takes on a new significance in the rain, especially during a gold-rush, where rainwater and the toxic method of extracting gold particles from the soil carried unforeseen hazards of ecological devastation and slow violence which endure today.

In the introduction to their book, *Postcolonial Ecologies* (2011), Elizabeth Deloughrey and George Handley note several areas of overlap between postcolonial studies and the environmental humanities. Among them, they notice that both disciplines recognize that "human political and social inequalities cannot be successfully and sustainably resolved without some engagement with the more-than-human world and with deep time."[39] While scholarship of the early modern stage has thus far avoided this transdisciplinary principle, I hope to show how a careful study of the English stage can excavate the history of social inequalities created by the mutually reinforcing powers of colonialism and climate change. At the same time, I also want to think about how we can situate early modern drama in a greater historical timeframe, one that can help explain the

[39] Deloughrey and Handley, 25.

inequalities of our present and future in geologic time-scales, without ignoring the history of European colonialism.

My fifth chapter, "Shaking the Superflux: Sin and Redemption Along Geological Faults in *King Lear*," views Shakespeare's tragedy as a text that engages with deep time in order to seek out a sustainable resolution to social inequality. I suggest that the play overturns a religious model of redemption offered by the medieval flood plays—where human sin is punished with divine retribution and global deluge—in favor of a more secular model of redemption, where self-correcting imbalances in nature provide solutions to economic imbalances between kingly pomp and houseless poverty. Gloucester and Lear each seek redemption in this play. Lear, who hopes Goneril and Regan will pay him "subscription" for giving them "kingdom" and for calling them "children," seeks (like blind Gloucester) to atone for the "fault" (1.4.277) of doubting the credit of his faithful child. But whereas "faults" are recognizable as human sins in the flood plays, they are also in *Lear* the geological fault lines by which nature achieves balance. Although Lear and Gloucester seek atonement through different avenues—Lear through a stormy flood, and Gloucester on the edge of a cliff—they also each imagine a future in which the debtor/debtee paradigm of Christian redemption, the zero-sum scheme in which one's "pomp" (3.4.37) is necessarily another's "houseless poverty" (3.4.30), is replaced with a more distributive justice. As Lear realizes that he "may'st shake the superflux" and "show the heavens more just" (3.4.40-1), Gloucester hopes that "distribution should undo excess,/ And each man have enough" (4.1.80-1). Through (not) representing the cliffs of Dover as the site of Gloucester's theatrical

redemption, the play registers a contemporary antiquarian interest in an emergent form of "natural history," which developed in part when scholars began to supplement historical texts and documents with artifacts and evidence from the physical world. One antiquarian, Richard Verstegan, imagined that the white cliffs of Dover had formed as the result of a superflux finding its balance in nature, a theory which informs the white cliffs as the site of Gloucester's economic redistribution. Both storm and cliffs are central to the action of the play because they suggest that the play's economic imbalances might be restored not with God, but with the help of the earth's restoration of natural imbalances. In the age of anthropogenic climate change, where science has proven the damaging global reach of human behaviors, Lear's lesson has never been more important: we need to learn to see
economic imbalance as resolvable not through God's divine grace, but through the distributive justice made possible by an alliance between human and natural agency. We need to take responsibility for the economic imbalances created by a long history of human (and geologic) "faults."

CHAPTER 1

GRAFTING AND ECOLOGICAL IMPERIALISM IN JOHN FLETCHER'S *BONDUCA*

Accidents happen. Living in the Anthropocene means coming to terms with accidents, and inhabiting the consequences of unintentionally acquiring an influence over the global climate. When the Globe caught fire and burned to the ground in 1613, it was an accident. And while accidents were likely frequent during performances of early modern plays, playwrights were also invested in deliberately representing accidents for comedic and tragic effect. John Fletcher's *Bonduca* (ca. 1612) provides a meditation on accident that is noteworthy for its scale and proximity. Not only does the play undercut the strength of the military in establishing a "successful" colony; it also suggests that the attempt to establish a colonial foothold in the Americas was subject to forces that were outside of human control. Through staging the British resistance to the Roman occupation, Fletcher turns his audience's attention to the past in order to comment on the present colonial narrative unfolding across the Atlantic. And while other plays may offer a similarly implicit commentary on a burgeoning English colonial project, Fletcher's portrayal of the Roman occupation places a unique emphasis on the ecological players that could make or break the enterprise. *Bonduca* stages the globalization of natural resources as a deliberate consequence of Roman imperialism, but it is Nature which determines colonial victory.

In the opening scene of *Bonduca*, a play that dramatizes the fall of ancient Britain to the Roman Empire, the British general Caratach underscores a similarity between his

men and their Roman opponents by using a metaphor that compares humans and plants. After reprimanding the British Queen Bonduca for boasting of her recent victory over the Roman enemy, Caratach cautions her neither to love nor to hate the Romans. But he also issues a warning to his enemy of what they can expect from him:

> That hardy Romane
> That hopes to graft himself into my stock,
> Must first begin his kindred under-ground
> And be alli'd in ashes. (1.1.171-4)

Caratach's horticultural metaphor, which describes the Roman imperial project as a "graft," reveals his understanding that the Roman invasion of Britain is more than a military takeover. The menace of the imperial Roman graft in Britain threatens to contaminate Caratach's familial bloodlines and to debase the British "stock." But Rome's weaponized graft poses an even larger threat to the British ecosystem. The imagery of grafting that proliferates throughout the play engenders grafting as the literal and physical means by which Rome colonizes Britain. I read grafting as a central metaphor for imperial incorporation in Fletcher's play, but a metaphor which illuminates a diversity of literal gestures—of joining, swallowing, interring, planting, and transplanting—that the play stages. However, at the same time that grafting encompasses for Caratach the nefarious intentions of the hardy Romans, the horticultural practice also serves as his own weapon of choice for resisting unwanted colonial incorporation. Caratach demonstrates that grafting and planting are fundamental and complementary practices of both colonial domination and colonial resistance. His proposal for resisting the Roman graft is to

"begin"—a verb whose archaic transitive form connotes entrapment[40]—the Roman "kindred" as ashes underground; he aims to bury all the Romans together, as if to keep them from mixing with the ashes of British soldiers. Ironically, his self-defeating effort at genocidal containment promises to accomplish the very incorporation of Roman and Briton as the proposed graft; whereas the Romans want to "graft" onto his British "stock" and penetrate British bloodlines, Caratach imagines that planting Roman bodies in the British earth is the best way to keep Rome and Britain separate. Thus, even when the British are resisting colonization, they are moving toward an inevitable and tragic incorporation with Rome. The play incessantly anticipates the fall of Britain, which early modern English audiences would have expected from a familiar historical tragedy. But Fletcher's play distinguishes itself from other early modern dramatizations of British colonial history by foregrounding the graft as a tool through which to mediate colonial conflict. Though Roman "hopes" clash with British ones in *Bonduca*, colonial victory is ultimately determined by which graft flourishes and which fails.

While it may be tempting to imagine early modern English audiences identifying with either their British and Roman ancestors in the play's colonial conflict, *Bonduca* ultimately discourages identification with both sides by framing colonialism as an ecological issue. Although the play seems to provoke contemporary theatergoers to perceive themselves as the ancient Britons resisting foreign invasion and defending a burgeoning nationalist sentiment, while simultaneously soliciting its audience to imagine

---

[40] "† begin, v.2." *OED Online*. Oxford University Press, June 2015. Web. 19 August 2015.

the Roman expeditionary force as a model for the English to idolize, (especially in light of England's recent economic and colonial expansion), the incorporation between the two powers at the play's end troubles an easy alignment with one side or the other. At the turn of the seventeenth century, the Roman invasion of ancient Britain was "cited as a key precedent for English imperialism," and was thereby upheld as "an unequivocally good thing."[41] However, because audiences would have been familiar with the history of Queen Boadicea—if only as an emblem "of that period's belief in savage excess as the inevitable consequence of female rule"[42]—they would have been primed for the inevitable incorporation of Britain into Rome at the tragedy's conclusion. Instead of offering a pro-British or a pro-Roman message—and instead of promoting a pro- or anti-imperialist agenda—*Bonduca* emphasizes that the Roman conquest of Britain (and by extension the eventual success of contemporary colonial ventures) had more to do with the consequences of the grafting, and less with the intentions of the grafters. The tragedy of *Bonduca* ensures that almost all of the human intentions are undercut by unforeseen consequences, so that even the victors are victims of circumstance. But rather than apologizing for the unforeseen consequences of a colonial invasion, the play reminds audiences that the victors of colonial conquest are sometimes only accidentally so.

Though I follow scholars who have acknowledged the ways in which *Bonduca* links ancient Rome's colonization of Britain with Britain's contemporary colonization of

---

[41] Gordon McMullan, "The Colonization of Early Britain on the Jacobean Stage," in *Reading the Medieval in Early Modern England,* eds. Gordon McMullan and David Matthews, (Cambridge: Cambridge University Press, 2007), 119.
[42] Jodi Mikalachki, *The Legacy of Boadicea: Gender and Nation in early modern England,* (London: Routledge, 1998), 12.

Virginia, I seek to define the relationship between Britain's ancient and contemporary colonial history in ecological, rather than allegorical, terms.[43] Caratach's metaphor effectively grafts a horticultural discourse onto a colonial discourse in order to explore the ecological consequences of colonial expansion. In doing so, it reveals how the practice of grafting was closely affiliated with planting in the early modern imaginary. But late sixteenth- and early seventeenth-century horticultural discourse also associated grafting with the practice of transplantation or acclimatization—the introduction of a foreign species into a new ecology. Acclimatization was a common practice during the age of trans-Atlantic commercial development, though seemingly innocent transplantations resulted in devastating unforeseen consequences. The introduction of domesticated animals to the Americas, and the globalization of New World foods resulted in "a swift, ongoing, radical reorganization of life on Earth without geological precedent."[44] While American foods brought new diets to other parts of the world, the diseases that Europeans introduced to the New World may have reduced the native human population by as much as 90% in the first sixty years of contact.[45] Simon Lewis and Mark Maslin have even proposed that this "Columbian Exchange" and the

---

[43] laire Jowitt, *Voyage Drama and Gender Politics, 1589-1642: Real and Imagined Worlds,* (Manchester: Manchester University Press, 2003), 108; McMullan, 137. Jowitt reads Fletcher's play as an allegory for the respective foreign policies of Elizabeth, James, and Prince Henry regarding Virginia. McMullan has noted the tendency in Fletcher's plays in particular to celebrate both the colonial origins of Britain and England's contemporary colonial achievements without even staging English characters, though he does not discuss *Bonduca* in this regard.
[44] Simon L. Lewis and Mark A. Maslin, "Defining the Anthropocene," *Nature* 519, no. 171-80, (2015), 174.
[45] Ibid., 175.

"geologically unprecedented homogenization of Earth's biota" may mark the beginning of the geologic epoch known as the Anthropocene—the period in which human activity significantly influences the global environment.[46] Their argument about the geologic agency that humans have unknowingly acquired through early modern commercial, colonial, and horticultural practices is useful for thinking about how the stage mediates transcontinental grafts as practical measures with unforeseen consequences. It is also useful for thinking about how those consequences are still being felt centuries later. Fletcher's play stages this colonial form of grafting in two major ways. First, through representing the Roman importation of foreign commercial goods and flora as a means of sustaining the expeditionary force, the play demonstrates how Roman colonization irreversibly altered Britain's ecological history when it introduced (through grafting) foreign species to British ecosystems. Second, *Bonduca* refers to a number of devastating diseases (which happen to be of European origin) that were carried by contemporary English and European settlers to the Americas, where they wreaked havoc on native human populations. The metaphorical transmission of these diseases in the play registers

---

[46] Ibid. Lewis and Maslin propose what they term the "Orbis hypothesis," which marks 1610 as a possible start date for the Anthropocene Epoch (175). Their criteria for defining a new geological epoch includes locating a Global Stratotype Section and Point, or GSSP, or "the location of a global marker of an event in stratigraphic material" (173). Their GSSP for the 1610 date derives from the trans-Atlantic movement of species, but also from the sharp decline in atmospheric carbon dioxide, which they suggest is a result of the devastating human depopulation in the Americas, which resulted in "the near-cessation of farming and reduction in fire use" as well as "the regeneration of over 50 million hectares of forest" (175). This carbon dioxide dip between 1570 and 1620, observed from "two high-resolution Antarctic ice core records" is "the most prominent feature, in terms of both rate of change and magnitude, in pre-industrial atmospheric CO_2 records over the past 2,000 years" (175).

the coterminous trans-Atlantic movement of the diseases themselves and situates them within a discourse of colonial grafting. The play's literal and metaphorical grafts or gestures of colonial acclimatization reinforce, as I will show, the attitudes expressed in contemporary horticultural manuals. Early modern horticultural writers promoted the practice of grafting and the movement of a plant from one soil to another as a gesture of potential enhancement, especially in the colonial setting of Virginia. In fact, more than the other European colonial powers in the Americas, the English cited their use of the land, their engagement "in agricultural or pastoral activities," and their improvement of it —which could refer to both "grazing (domestic animals) and planting"—as the primary means by which they claimed possession of their colonies.[47] And although Fletcher's play participates in the colonial discourse of grafting, its representation of grafting as a means toward colonial conquest services the enhancement of neither the Roman "graft" nor the British "stock." Instead, the play's tragic conventions highlight the ways in which colonial grafts produce unforeseen consequences for both "graft" and "stock" that confound the intentions of the grafters. By considering *Bonduca* as a meditation on actual grafting practices, we are made privy to an early modern understanding of empire that precedes the racist imperialist discourse of "white makes right," and reveals an early modern awareness of the role played by non-human agents in determining the "success" of colonial conquest. In *Bonduca*, the intent to conquer yields to the outcome of the graft; Fletcher's characters capitalize on the consequences of transplantation, which drives the

[47] Patricia Seed, *Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640,* (Cambridge: University of Cambridge Press, 1995), 25.

action of the play. As a result, the play foregrounds colonization as a tragic undertaking through staging the involved risks and outcomes. By privileging ecology as a primary determinant in the unfolding of both ancient and contemporary British colonial history, the play neither condemns nor endorses the military campaigns of either the Romans or the British. Instead, it stages the history of the Roman Empire in Britain as a catastrophe of incorporation, which British colonizers seemed bound to repeat in the New World.

Grafting and Colonial Incorporation

Fletcher's *Bonduca*, which was first performed by the King's Men between 1611 and 1614 and was first published in 1647, stages a tragedy that unfolds through a series of efforts to incorporate early "British" soil and citizens into the Roman body politic. These Roman initiatives can be read as metaphorical grafts that reinforce the literal grafting represented in the play. Caratach's eventual embrace of his colonial oppressor at the end of the play, where he identifies himself as "The man that makes her [Rome's] spring of glory grow" (5.3.196), marks the culmination of a long series of scenes staging Rome's absorption into Britain, and Britain's into Rome. Scholars have shown how the early modern stage rehearsed the colonial origins of Britain, which constituted an emergent national identity, and which "was understood to be the product of a series of invasions from overseas"—from the Normans, the Saxons, the Danes, and the Romans.[48] *Bonduca* endorses a narrative of British colonial history where the Romans can still

---

[48] McMullan, 122. McMullan follows Richard Helgerson in comparing the frontispieces from John Speed's *Theatre of the Empire of Great Britain,* and Michael Drayton's *Poly-Olbion.* See De Grazia's third chapter for a discussion of how Shakespeare's career reflects an understanding of Britain as a composite of colonial invasions. See: Margreta De Grazia, *Hamlet Without Hamlet*, (Cambridge: Cambridge University Press, 2007).

constitute seventeenth-century British identity, but without penetrating Britishbloodlines. The play overwhelmingly disavows incorporation between Roman and British humans in order to sanction incorporating gestures that unite humans with earth. The "stock" that the Romans infiltrate through their occupation of Britain is thus botanic rather than related to a human or national genealogy.

Throughout the play, sex repeatedly threatens to unite Roman and Briton, first through Junius' infatuation with Bonvica, and then through Petillius' necrophilic infatuation with her. But the play repeatedly disallows sexual congress across enemy lines. Junius realizes the error of his ways once Bonvica captures and nearly executes him. And Petillius, who spends so much time mocking Junius for being in love at the beginning of the play, falls in love with the same woman. But he only realizes he loves Bonvica as he witnesses her noble suicide, committed alongside her sister's and her mother's. In *Bonduca*, love between humans procures only an unconsummated union. And though the rapes of Bonduca's daughters are part of what motivated the historical queen's rebellion in the play's source material,[49] the play seems to privilege their chastity in its representation of their suicides. Alison Calder is right to point out that "an awareness of the rape threat faced by Bonduca and her daughters is central to an understanding of *Bonduca*."[50] Bonduca's daughters do seek "vengeance for our rapes" (3.5.70). But Calder also reads Bonduca's "eldest daughter as a Lucretia figure,"

---

[49] Mikalachki, 12.
[50] Alison Calder, "'I am unacquainted with that language, Roman': Male and Female Experiences of War in Fletcher's *Bonduca*," *Medieval and Renaissance Drama in England*. 8, no. 1, (1996): 214.

since “her suicide occurs to avert rape, rather than as its consequence.”[51] So although sex as a means of conquest is not altogether absent from the play, its disavowal underscores the role of the non-human in the play’s presentation of colonial incorporation.

The examples of colonial incorporation that proliferate throughout the play actually depend on the rejection of love and sex between humans. The inevitable union of Britain and Rome relies instead on imagery that combines humans with the contested earth that one side defends and the other occupies. The distinction between human and earth in the play is deeply unstable because of the way one is always swallowing the other. Humans are also constantly incorporating earth into their own bodies—both literally and metaphorically. The Roman officer Petillius brags to his starving countryman Judas that his company “eat[s] Turf” without complaining (1.2.105). Similarly, Caratach’s adolescent nephew Hengo boasts that he “can eat mosse,” and “live on anger,/ to vex these Romanes” (4.2.87-8). The willingness of both Romans and Britons to sustain themselves on inedible British earth unites these foes in their dietary practices. But the earth is also constantly eating human bodies. In the Roman camp, for example, the renowned general Penyus stubbornly maintains his anti-imperialist position and refuses to send his men “into this Britain-gulf, this quick-sand ruine,/ That sinking, swallows us” (2.1.49-50). When his men mutiny and help to turn the tide of battle in favor of the Romans, Penyus decides to commit suicide in an effort to regain his honor. Caratach’s dirge for Penyus acknowledges his incorporation into British soil, and he hopes that “in thy earth,/ Some Lawrel fix his seat, there grow, and flourish,/ And make thy grave an

[51] Ibid., 219.

everlasting triumph" (5.1.62-4). Similarly, the British general's hope for Hengo--Britain's "Royall graft," (5.3.161) and "fair flower" (5.3.164)—whom Caratach fails to protect from his Roman adversaries, is that he shall receive "honourable earth to lie in" (5.3.186) from his Roman conquerors. With Hengo's burial and Caratach's surrender, British and Roman land become one.

The series of earthly incorporations represented in *Bonduca* reflect early modern English attitudes toward grafting, which was understood as a practice that could potentially enhance a baser graft through becoming a part of a nobler stock. However, because the results of a graft were not always favorable, a graft could also potentially debase the nobler stock. As other critics have shown, playwrights of the period often refer to grafting as a metaphor for an unstable social or racial hierarchy, where a sexual union could either enhance or debase its offspring. Rebecca Bushnell shows how grafting commonly functioned during the period as a "metaphor for the conjunction of disparate things."[52] In Shakespeare, for example, grafting frequently connotes the mixing of a noble blood with a lesser blood, and signals the potential for a noble blood to be debased,

---

[52] Rebecca Bushnell, Green Desire: Imagining Early Modern English Gardens, (Ithaca: Cornell University Press, 2003), 148.

or for a lesser blood to be made nobler.[53] Shakespeare's use of the metaphor is unique considering how horticultural manuals of the period call for a similarity between scion and stock to ensure a successful graft.[54] And though scholars have noted the "competing early modern uses of the language of botany and grafting for bastardy, marriage, and new, improved methods of creation in the period,"[55] only a handful of critics have explored the relation between the horticultural practice of grafting and the project of colonialism.

---

[53] Ibid., 149; Jean Feerick, "Botanical Shakespeare: The Racial Logic of Plant Life in *Titus Andronicus*," *South Central Review*, 26, no. 1 & 2, (2009): 98; Miranda Wilson, "Bastard Grafts, Crafted Fruits: Shakespeare's Planted Families," In *The Indistinct Human in Renaissance Literature,* eds. Jean E. Feerick and Vin Nardizzi, (New York: Palgrave Macmillan, 2012), 105; Vin Nardizzi, "Grafted to Falstaff and Compounded with Catherine: Mingling Hal in the Second Tetralogy," in *Queer Renaissance Historiography: Backward Gaze*, eds. Vin Nardizzi, Stephen Guy-Bray, and Will Stockton, (Burlington: Ashgate, 2009), 151; Erin Ellerbeck, "'A Bett'ring of Nature': Grafting and Embryonic Development in *The Duchess of Malfi*," in *The Indistinct Human in Renaissance Literature*, eds. Jean E. Feerick and Vin Nardizzi, (New York: Palgrave Macmillan, 2012), 90.
Bushnell argues, "In Shakespeare's history plays, grafting is used as a negative metaphor for the mixing of classes and for social transformation, whether the bastard scion is being grafted on a royal stock or a better plant on a wild one." Similarly, Feerick notes, "If grafting was readily available to Shakespeare as an image of mixture, it most often described the mingling of bloodlines perceived to be disparate in kind because disparate in rank." Wilson, too, recognizes how Shakespearean metaphors of grafting "not only mark a (potentially welcome) challenge to traditional hierarchies of gender and rank," but also "describe the moment when the unnatural masks itself as the natural." Nardizzi also discusses grafting as the joining of disparate elements in his discussion of the sodomitical and procreative grafts in the *Henriad*. Finally, Erin Ellerbeck describes how the metaphor works as both potentially debasing and potentially enhancing in Webster's *The Duchess of Malfi*.

[54] Ellerbeck offers a useful summary of what is necessary for a successful graft: "Typically, one plant is selected for the strength of its stock and roots, while the other, the scion or slip, is chosen for the value of its fruit, flowers, or leaves. Once placed in an incision made in the rootstock, the scion uses the nutrients provided by its host and becomes a distinct, yet integral, part of the new plant...In order for a successful graft to take place, the two combined plants must be closely related" (87).

[55] Ellerbeck, 94.

Gabriel Egan has analyzed the metaphor of grafting in *Henry V*, where it reinscribes the common ancestry between the French and the English. The grafting metaphor illuminates England as a site of colonial conquest for the Normans, which allows Henry's marriage to Catherine to produce yet another "cross-channel grafting."[56] Vin Nardizzi has similarly noted the sexual implications that color Henry's invasion of France, which seem to implicate the grafting metaphor in a colonial eugenic project.[57] Miranda Wilson, too, shows how "for both classical and early modern writers, grafting serves as a civilizing process, transforming the wild or unprofitable into something sweet, productive, and mild."[58] Fletcher's use of the grafting metaphor is unique, however, because the colonial context of *Bonduca* positions the graft as *both* a civilizing tool of colonization and as a means of resisting a hostile takeover. The play does not privilege one function of the graft over another; instead, the metaphor weighs the risks of colonization on an ecological scale. On both sides of the conflict, grafting provides the weapon of choice for defeating debased enemies through an enhancing incorporation. Whereas Caratach perceives the external Roman "graft" as a threat to his British "stock," Bonduca recognizes that the British are the ones equipped to enhance the Romans through their resistance. Standing

---

[56] Gabriel Egan, *Green Shakespeare: From Ecopolitics to Ecocriticism,* (London: Routledge, 2006), 77. According to Egan, the Dauphin's dismissal of the English as French "scions, put in a wild and savage stock" (3.5.7) of their Anglo-Saxon ancestors overlooks the way grafting was viewed as a method of enhancement, rather than debasement (75-76).

[57] Nardizzi, "Grafted to Falstaff," 164-5. For Nardizzi, grafting in *Henry V* reveals a connection between rape, dynastic reproduction, and imperial motivations. Through "compounding" with Catharine, the king intends to "continue in the marital lineage of his father and ancestor Edward by invading 'Constantinople and take the Turk by the beard' (V, ii, 195-96)".

[58] Wilson, 109.

over her daughters' suicides, as poison courses through her veins, Bonduca spends her last breath offering "counsel" to the Romans who seek to conquer her: "If you will keep your Laws and Empire whole,/ Place in your Romane flesh, a Britain soul" (4.4.152-3). On the one hand, this couplet suggests that the Romans have already accomplished the incorporating gesture of putting a British soul into their Roman flesh by defeating Bonduca; these words, after all, are her last. But on the other hand, Bonduca argues here that the Roman Empire still has room for improvement, which is to be facilitated by adopting a British soul. By this logic, the union between "Britain soul" and "Romane flesh" is not yet complete; the "hardy Romane" has yet to "begin his kindred under-ground," leaving Caratach's prerequisite for a pyrrhic Roman graft in Britain unfulfilled. Bonduca's paradoxical strategy of resisting incorporation through incorporation attempts to show how "Empire" is missing from the genetic makeup of the Romans, but forms an inherent "soul" in the British.

Horticultural Grafting and English Colonialism

The grafting imagery that disseminates throughout *Bonduca* crystallizes contemporary views of the potential enhancement that grafting can realize. At the same time, *Bonduca's* appropriation of early modern horticultural discourse reveals what is at stake when English gardeners graft. Some English grafters experimented with different plant combinations in order to turn a profit.[59] But as a commercial play, *Bonduca* attempts to profit from experimentation with colonial rather than botanical combinations in order to assess the risks of conquest. Furthermore, the play's appropriation of

---

59 Bushnell, 141.

horticultural discourse discovers the limitations of conceiving of the graft as a political tool of colonization. English horticulturalists argue that the potential enhancement bestowed on graft and grafter derives from the movement of plants, but only so long as it is facilitated by (English) humans. The play, on the other hand, suggests that enhancement or debasement is not determined by humans, but by the graft itself. Bonduca shows how a graft may happen accidentally or without any human facilitation at all.

In addition to offering prescriptive advice for how best to improve a particular graft or produce a new flower or fruit, early modern horticultural manuals reveal a strong connection between the practice of grafting and the formation of British national and imperial identity. For example, some authors perceived grafting as a pastime that could enhance the grafter in addition to the graft. In the paratextual epistle to *A Book of The Arte and Maner, Howe to Plant and Graffe* (1572), Leonard Mascall praises the physical labor of planting and grafting as a practice that not only promises to prevent idleness and make one more honorable, but that will also put the English, both "riche and poore," on par with certain emperors.[60] "Cyrus a great king of the Persians," he notes, "did so much delite in the Art of planting & graffing, (which did shew a great prayse and glorie vnto his personage,) that he had no greater desire or pleasure, than when he might occupy

---

[60] Leonard Mascall, *A Book of The Arte and Maner, Howe to Plant and Graffe,* (1572), Aivr. In praising the ability of the act of grafting itself to enhance one's social status, Mascall offers grafting as an alternative to the pastime of the theater: "Therevpon many great Lordes and noble personages, haue left their theatres, pleasant stages, goodly pastimes, forsaking and despising their pleasures, not much regarding rich Diademes, and costly perfumes, but haue giuen themselues to Planting and Graffing, and such like"(AiiV).

himselfe in Planting & Graffing to garnish the earth, to place and order thereon certaine number of trees."[61] Mascall suggests that it is not the amount of land one owns that makes one a "great king" over it, but that one delights in "graffing," "garnish[ing]" and "order[ing]" it. Similarly, Mascall points out that Emperor Dioclesian "did leaue the scepter of his Empire for to remain continually in the fields."[62] For Mascall, grafting figures as a task preferable to managing an empire, though it also positions the common gardener as a potential emperor. John Bonoeil's *Gracious letter to the earl of Southhampton* (1622), a publication promoting the cultivation of imported silk worms in Virginia, also emphasizes the ability to graft as a foundational trait of English colonial identity. Echoing Mascall's rhetorical strategy, Bonoeil describes acclimatization as part of a "profitable and pleasing Art,"[63] and positions grafting as a royal enterprise. He also creates a link between ancient Roman and contemporary British colonial identity:

> Let none be ignorant to sow, to set, to plant, to graft, to manure, to dresse, and order all plants, according to their kinds, and that in proper grounds and seasons fitting them. This is part of that skill, which Emperours, Kings, and Senators of Rome haue both writ of and practiced.[64]

Fletcher's Bonduca urges her conquerors to graft a British soul into their Roman flesh, and Bonoeil implies that the early modern English colonist must recognize the Roman

---

[61] Ibid., Aiiv.
[62] Ibid.
[63] John Bonoeil, His Maiesties gracious letter to the Earle of South-Hampton, treasurer, *and to the Councell and Company of Virginia heere commanding the present setting vp of silke works, and planting of vines in Virginia,* (1622), M2r.
[64] Ibid., L4r.

origins of the imperial "skill" of grafting; Bonoeil thus identifies grafting itself as a cultural component incorporated into Britain as a result of the Roman occupation. To graft, Bonoeil suggests, is to place within their British flesh a Roman soul.

At the same time that English horticulturalists recognized a debt to ancient Rome for teaching them to graft and for providing them with a model for their own burgeoning identity as a colonial force in the early modern period, they also recognized a need for an English literature of grafting. Wendy Wall shows how the contribution of the prolific English horticultural author Gervase Markham to a national myth of English land was informed by his own context in an English book market that was being infiltrated by "foreign books and advice."[65] Though Markham "argues powerfully for the necessity of a discourse of English husbandry," his xenophobia ultimately drove his nationalist project of cleansing "English practices and books from foreign influence."[66] But other authors saw a foreign influence as potentially productive, something to be embraced. While Markham sought to separate English from all other forms of husbandry, Mascall's *Epistle* attempts to graft an emergent English discourse onto established foreign practices. Ideologically, Mascall imagines a specific community of gardeners from which "this Realme might thereby receyue no small benefite."[67] At the same time, he pragmatically speaks to a difference of English soil and climate from that of other realms:

---

[65] Wendy Wall, "Renaissance National Husbandry: Gervase Marham and the Publication of England," *The Sixteenth Century Journal* 27, no. 3, (1996): 773.
[66] Ibid., 772.
[67] Mascall, Aivr

> …for euery one hath written according to the nature of his countrey. The Greekes for Greece, the Barbarians for Barbarie, the Italians for Italy, the French men for Fraunce· &c. which writing without the order and practise, doth very small profite for this our Realme of England, the which I can blame nothing more than the negligence of our nation, which hath had small care heretofore in planting and graffing.[68]

Mascall underscores how a Greek book on grafting, even in an English translation, will hardly be useful to an English gardener, whose plants and soil belong to a different climate and ecosystem. But he also fashions the urgency for an English literature of grafting as an economic necessity for his nation; where Greece, Barbary, Italy, and France seemingly do "profite" from their respective grafting literatures, England is missing out.

Edward Williams also surmised that the enhancement brought to English grafters through grafting in a colonial context would be economic. Williams, author of a publication about Virginia whose title promised to educate its readers on "*the meanes of raysing infinite profits to the adventurers and planters*" who lived there, theorized that any plant of a particular latitude could be acclimatized to a new continent on the same latitude. Reflecting on the similar climates between Virginia and Persia, he seeks to

---

[68] Ibid., Aiiiv. Mascall continues by describing grafting as a potential source of commodity exchange for England, especially if it succeeds in producing a new strain of fruit: "we might florish, and haue many a straunge kinde of fruit (which now we haue oftentimes the want thereof) that might greatly pleasure and serue manye wayes both for the rich and poore, as well as in Grece, Barbarie, Italy, or Fraunce, if our nation were giuen so well that way as they are" (Aiiiv).

demonstrate "what Commodities Nations so planted abound with, which found wee shall discover in this excellent Virgin a disposition ingrafted by Nature to be Mother of all those excellencies, and to be equall (if not superior) as well in all their noble Staples, as in nearenesse to their particular enricher the perpetually auspicious Sunne."[69] Williams assumes the "excellencies" of Persia will be easily "ingrafted" to the climate of Virginia, where through their transplantation, they will be "equall, (if not superior)" to the plant in its original climate. For Williams, acclimatizing Persian flora and fauna on "English" soil in Virginia could potentially eliminate an English dependence on foreign trade for exotic commodities. Sir Thomas Gates, whose report of the Virginia colony was published in 1610, shared Williams' sentiment. "There are innumerable white Mulberry trees," Gates asserted, "which in so warme a climate may cherish and feede millions of silke wormes, and returne vs in a very short time, as great a plenty of silke as is vented into the whole world from al the parts of Italy."[70] One incentive for trans-Atlantic acclimatization, then, was to eliminate the intermediary in England's global trade.

Above all, horticultural manuals that were meant for a colonial readership emphasize transplantation itself as the agent of enhancement. In the same way that Caratach closely associates grafting with planting in Fletcher's play, horticultural manuals further conflated grafting with the transplantation and acclimatization of plants,

---

[69] Edward Williams, *Virginia, more especially the south part thereof, richly and truly valued viz. the fertile Carolana, and no lesse excellent Isle of Roanoak, of latitude from 31 to 37 degr. relating the meanes of raysing infinite profits to the adventurers and planters*, (1650), D1v.
[70] Counseil for Virginia (England and Wales), *A true declaration of the estate of the colonie in Virginia*, (1610), H2r.

animals, humans, and diseases from one climate to another. For several early modern horticulturalists, grafting formed a foundational part of early English colonial practice. Bonoeil, for example, thought grafting improved the planter as much as the plant. But his argument resonates with Williams' enthusiasm because it stresses the mere physical movement of the plants from one location to another as the cause of enhancement:

> …by the Arte of skillfull planting, grafting, transplanting, and remoouing, the bad wilde plants are wonderfully bettered. As one of the best Authors of Husbandry saith, that euery replanting or remooing [removing] of wilde plants (hauing regard to the fitnesse of the soile and season) is worth halfe a grafting: so as two remooues then, are worth a whole grafting.[71]

Bonoeil treats "planting, grafting, transplanting, and remoouing" as interchangeable gestures of enhancement in order to show that the more a plant moves, the more it improves. But his logic, which literally equates a "whole grafting" with "two remo[v]es" of a wild or native plant, not only concentrates seemingly disparate horticultural practices into a single colonial gesture; Bonoeil also compares humans and plants in order to explicate how both stand to benefit from travel. Drawing from Pliny's *Natural History*, Bonoeil argues:

> this remoouing and transplanting of wild plants, doeth wonderfully mitigate and ingentle them, whether it bee … because that the nature of plants, as of men, is desirous of nouelty and peregrination, or because that at their parting (from the former grounds) they leaue there that ranke wildnesse, virulence, and ill quality

[71] Bonoeil, M1r-M1v.

> that is in them, and as wild beasts, so they become gentle by handling, whilst the Plant is pluckt vp by the roote.[72]

His argument for acclimatizing plants fosters an emergent colonial ideology by projecting his own human and English desire for "nouelty and peregrination" onto "wild" or native plants; for Bonoeil, it is the plants themselves that possess the desire to travel to new locations, and human intervention fulfills the plant's desires as much as the colonist's. Plants become "ingentle[d]" not only because they move, but also because their movement is facilitated by human travellers. But Bonoeil suggests that Pliny's logic should extend to humans too; he recognizes that the removal of English citizens to the colonies has the potential to "ingentle"[73] them as well. At the same time, the suggestion seeks to justify the displacement of those Americans already at home in "Virginia," as if they too would benefit from leaving their "ranke wildenesse" behind them.

Staging Ecological Consequences

Fletcher's play and early English horticultural manuals each promote grafting as a metonym for the colonial processes of social and biological incorporation. But whereas Bonoeil perceives the potential for the transplanted subject to improve because it moves, Caratach worries that the mobile graft threatens to debase his native and stationary stock.

---

[72] Ibid., M1v.
[73] Bonoeil also identifies a profit motive for grafting and transplantation, and uses the example of what the Spanish have done with the Sarsaparilla plant: "In the printed Booke of the valuations of the commodities of *Virginia*, Sarsaparillia wilde, is fiue pound the hundred, and Sarsaparillia domesticke, is ten pound the hundred: so as the *Spaniard* hauing no other but the wilde Sarsaparillia at first, yet by replanting and cultiua|ting it, that he made it domesticke, and so much thereby innobled it in worth and goodnesse, as raised it to a double price you see" (M1V).

However, the tragic components of *Bonduca* further complicate the consequential binary of the colonial graft. Instead of either threatening to debase British subjects (whether they are humans or plants), or conversely, promising to ennoble Roman subjects, grafting in *Bonduca* forces the audience to reckon with an alternative effect. In the process of grafting the discourse of early modern English colonialism onto ancient British history, Fletcher's play focuses the audience's attention on the consequences of the graft rather than on the intention of the grafters. In other words, Fletcher's play envisions colonial conquest as tragic, if not because of who is conquered, then because of how they are conquered. In *Bonduca*, human intention yields to non-human agents in determining colonial events.

The imperial resolution of *Bonduca* results from a disparity between the intentions of the grafters and the outcome of the graft. In the same way that neither Bonoeil nor Williams could have predicted that the project of importing silk worms to Virginia would fail,[74] or that diseases unwittingly carried across the Atlantic would cost so many human lives, no one in the first act of Bonduca could have predicted that the Roman graft would be successful in Britain. Grafters in the early stages of an experiment knew neither what new fruit the graft should produce, nor how the stock should be debased or enhanced; the plight faced by the Roman soldiers in the first act augments this

---

[74] Charles E. Hatch Jr., "Mulberry Trees and Silkworms: Sericulture in Early Virginia," *The Virginia Magazine of History and Biography*, 65. no. 1. (1957): 51. Hatch identifies a number of factors contributing to the failure of silk production in Virginia, which included "a lack of labor and settled communities ... inadequate customs and tax protection ... market and exchange difficulties ... the proven wealth in tobacco and the need for quick profit to finance slave labor," and, perhaps most crucially, "inexperience and a lack of trained workers" (51).

horticultural uncertainty into a colonial register. Even though Rome does eventually conquer Britain, this resolution seems to ensue in spite of (rather than because of) the intentions of the human characters. Neither Bonduca nor Caratach on the British side intend to lose the war (though some of Caratach's decisions are highly questionable), and Penyus in the Roman camp does not intend to win it. When Penyus refuses to supply reinforcements to the Roman counter-offensive, he imagines he is preserving the honor of his men, which he argues "Must not be lost in mists and fogs of people,/ Noteless, and out of name, but rude and naked" (2.1.41-42). Penyus certainly does not intend for his otherwise loyal soldiers to turn "to disobedience" (2.1.83), which places him in a position where only his suicide may recover his lost honor. Similarly, Junius does not intend to love Bonvica, which is perhaps why he compares his affection for his enemy to a contagious disease (2.2.10-11). Petillius clearly does not intend to love Bonvica either; in addition to hailing ridicule onto Junius for loving the same woman, Petillius only falls for her after she has already committed suicide, and loves her despite the fact that her body, which "stinks by this time strongly" (5.2.2), has already begun to decompose. Caratach does not intend to get Hengo killed by failing to protect him from Judas, though he does accept responsibility for releasing Judas from captivity: "I'll answer all" (2.3.54). Bonvica does not intend to let Junius go once she captures him in her trap, but Caratach orders his release as well, since he does not intend to defeat the Romans by "setting snares for Soldiers" (3.5.77). Fletcher's play privileges consequence over intention by staging a military conquest wher everyone appears to be on the losing side; as a result,

the audience has a clearer understanding of how the Roman conquest of Britain owes more to undermined intentions than to any inherent Roman superiority.

Additionally, *Bonduca* highlights the importance of the role of the graft—and its unpredictable consequences—by staging the process of acclimatization. At the beginning of the play, the Roman soldiers rely on importing to Britain the native produce to which they are accustomed in Rome. Incapable of sustaining themselves on British soil, the Romans argue that the problem with Britain is that it is not Rome. As the influential environmental historian Alfred Crosby points out, trans-continental colonial invaders are not biologically equipped to sustain themselves in a faraway colony without their own biological allies and provisions.[75] When the play begins, the Roman soldiers are in a bad way. Most of them are starving. Swetonius orders Petillius to "Look to those eating Rogues, that bawl for victuals," and notes, "provision/ Waits but the wind to reach us" (1.2.162-4). But according to Petillius, the Roman soldiers are not just hungry; they object to anything but a Roman diet:

> Sir, already
>
> I have been tampring with their stomacks, which I finde
>
> As deaf as Adders to delays: your clemency

[75] Alfred W. Crosby Jr., *The Columbian Exchange: Biological and Cultural Consequences of 1492,* 30th Anniversary Ed., (London: Praeger, 2003), 64; Alfred W. Crosby Jr., *Ecological Imperialism: The Biological Expansion of Europe, 900-1900,* (Cambridge: Cambridge University Press, 1986), 270. Crosby's thesis in *The Columbian Exchange* is that Europeans would not have been able to survive—let alone flourish—in the Americas without bringing Europe with them: "the successful exploitation of the New World by these people depended on their ability to 'Europeanize' the flora and fauna of the New World" (64). In *Ecological Imperialism,* Crosby uses the term "portmanteau biota" to define "the Europeans and all the organisms they brought with them" (270).

Hath made their murmurs, mutinies, nay, rebellions:

Now, and they want but Mustard, they're in uproars:

No oil but Candy, Lucitanian Figs

And Wine from Lesbos now can satisfie 'em:

The British waters are grown dull and muddy,

The fruit disgustful: Orontes must be sought for,

And Apples from the happie Isles: the truth is,

They are more curious now in having nothing,

Then if the sea and land turn'd up their treasures: (1.2.164-175)

Much like the early English colonists who became disillusioned with life in Virginia, so too are the Romans fed up with drinking "dull and muddy" water, and with eating what "disgustful" fruit the British landscape provides. Instead, they demand food to which they are already accustomed from the Mediterranean regions they have already conquered—the islands of Crete and Lesbos, and everything between Lusitania (or the Iberian peninsula), and the Orontes river. This scene stages the process involved in the creation of what Crosby, in his book *Ecological Imperialism*, describes as a "Neo-Europe" when speaking of the European colonization efforts after the fifteenth century.[76] Unwilling or unable to adapt themselves to the climate they seek to conquer, the Romans aim to reproduce their life in Rome abroad through shipping to Britain and then planting all of

---

[76] Crosby, *Ecological Imperialism,* xv. Crosby demonstrates how the popular narrative among white American and European historians only a century ago credited the formation of Neo-Europes to the simple fact that "Europeans were the best people in the world."

their favorite foods for sustenance, which of course disrupts existing ecological systems. But Fletcher also betrays a working knowledge of ecological history in the list of commodities that the Roman soldiers desire. According to Lukas Thommen, Britain did not have apples before the Romans invaded the island.[77] Petillius' description of an apple imported from "the happie Isles" or as a commodity from the "Orontes" should be read, then, as an attempt to exoticize for the ancient British setting what would have been a common "native" fruit in early modern England.[78] The ancient Romans also found the British soil unsuitable for wine and olives, and imported Mediterranean foods like figs—from Lusitania—and fish sauce.[79] Although the Romans cannot plant grape vines, wine seems to be the one commodity the soldiers do have enough of, since Petillius tempts pouting Junius with "new wine, new come over" (1.2.47). Petillius' list of commodities, then, which includes "Lucitanian Figs," "oil" from Crete or "Candy," and "Wine from Lesbos," is not only historically accurate; it also stages an early modern concern for

---

[77] Lukas Thommen, *An Environmental History of Ancient Greece and Rome*, Translated by Philip Hill, (Cambridge: Cambridge University Press, 2012), 136.

[78] Plums were also introduced to Britain through Roman colonization, and are referenced in *Bonduca* as a metaphor for Caratach's arsenal of stones, with which he will defend himself from the Roman force surrounding him. When the Romans have trapped Caratach on his rock, Judas warns them that they shall find him with "His sword by his side, plums of a pound weight by him/ Will make your chops ake" (5.2.126-7). The Roman import, Judas suggests, has been maliciously appropriated on British soil, and can no longer provide sustenance to the Romans.

[79] In *Agricola,* Tacitus reports that "The soil is productive of crops, except for olives, grapes and other natives of warmer climes, and rich in cattle." See Tacitus, *Agricola and Germania,* Translated by Harold Mattingly, (New York: Penguin, 2009), 10. Thommen notes that grapes were occasionally planted in the south of Britain, and that "...new vegetables, such as cabbage, peas and carrots; fruits, such as apples, plums, cherries and walnuts; and flowers, including roses, lilies, violets and poppies, were introduced to the island" by the Romans (136).

knowing where one's commodities come from, and speaks to the desire for economic enhancement through grafting in a colonial setting.

The Mediterranean origin of the biological imports listed by Petillius would have borne time that the Virginia Company was attempting to establish a colonial foothold in the Americas, other overseas trading companies, like the Levant Company and the East India Company, had already expanded their geographical reach to the South and East, and had access to several markets by way of the Mediterranean.[80] English merchants were profiting from importing and re-exporting commodities from the very regions Petillius mentions. The Levant Company, for example, had a monopoly on currants, which were imported to England from various Greek islands at an increasing rate during the first half of the seventeenth century.[81] And during the period just before English trading companies controlled their Mediterranean and Eastern markets, the Iberian—or Lusitanian—peninsula functioned as a key intermediary; it was through trade with Spain and Portugal that the English first acquired the precious commercial imports they sought from India and the Americas.[82]

But the entrance of the English into Mediterranean trade had as much to do with demand for foreign commodities in London as with the ecological consequences of other imperial pursuits in the region. In fact, the play makes use of yet another grafting image of incorporation that compares the colonial venture attempted by the Romans in the first

---

[80] Robert Brenner, *Merchants and Revolutions: Commercial Change, Political Conflict, and London's Overseas Traders*, 1550-1653, (London: Verso, 2003), 33.
[81] Ibid., 25. According to Brenner, currant imports more than quadrupled between 1600-1640.
[82] Ibid., 46.

century to the increased presence of English merchant vessels in the Mediterranean at the beginning of the seventeenth century. When Swetonius declares his intentions to turn the tide of battle in favor of the Romans, he describes how a tree felled by a storm can be repurposed as a ship's mast and thereby enable the transplantation of flora and fauna across a body of water:

> All shall be right again, and as a pine
>
> Rent from Oeta by a sweeping tempest,
>
> Joynted again, and made a Mast, defies
>
> Those angry windes that split him: so will I,
>
> Piec'd to my never-failing strength and fortune,
>
> Steer thorow these swelling dangers, plow their prides up,
>
> And bear like thunder through their loudest tempests:
>
> They keep the field still. (1.2.184-91)

Swetonious imagines appropriating an emasculated pine from Mount Oeta to sail against Bonduca's army and the very "angry windes that split him." The pine offers the Romans an opportunity to meet the British "tempests" with their own "thunder," and "plow" through the British "field" in order to complete their graft-like incorporation into the British soil. If *Bonduca* was performed at the Globe, then Swetonius' reference to a metaphorical pine may have evoked for audiences the material reality of the timber shortage plaguing England at the turn of the seventeenth century, in which London theaters directly participated; Vin Nardizzi demonstrates how the "constitutive woodenness" of the public theaters themselves allowed them to "revert to a former

material condition" during performance, thus producing a "rich array of eco-fantasies and nightmares about the shortage of wood and timber."[83] But this particular grafting image of a felled pine from Oeta moving across the Mediterranean in the form of a ship would have borne other significances for English audiences as well.

Spectators familiar with Ovid's *Metamorphoses* may have registered Swetonius' (perhaps unintentional) comparison of Bonduca to Astraea, the goddess of Justice whose swift departure from earth during the Iron Age leveled the mountain forests which flourished during the Golden Age; for Nardizzi, Ovid's version of the "fall," which marks civilization's movement from the Golden to the Iron Age with the transformation of forests into naval fleets, acknowledges that "the advancement of exploration (navigation) and the degeneration of sociopolitical stability (the loss of Astraea) are coincident."[84] But at the same time that audiences may have reflected on their own timber crisis, Swetonius' imagery also invites English spectators to reflect on how they were actually benefitting from the effects of deforestation abroad. The increased economic activity among English trading companies in the Mediterranean might not have been possible without the environmental degradation of southern Europe and northern Africa. The problem of deforestation, which Swetonius' felled pine evokes, was particularly acute. As Richard H. Grove shows, a growing need for ships during the fifteenth and sixteenth centuries had driven Venice's shipbuilding industry inland and had resulted in deforestation; Grove notes that "a general famine of timber was being experienced

---

[83] Vin Nardizzi, *Wooden Os: Shakespeare's Theatres and England's Trees*, (Toronto: University of Toronto Press, 2013), 23-4.
[84] Ibid., 104.

throughout the Mediterranean" by the turn of the seventeenth century, which is part of what allowed the English to penetrate Mediterranean trade routes.[85] To an early modern audience, then, Swetonius' pine that was "rent from Oeta" by a tempest, and then turned into "a Mast" through human initiative, speaks to the struggling shipbuilding industry and the ecological effects of deforestation being felt in the Mediterranean. For the English, that deforestation provided the economic opportunity to increase their "strength and fortune" in the region. Swetonius' grafting imagery conflates first-century Roman desires for the imperial conquest of Britain with seventeenth-century English desires to flourish in Mediterranean trade, and makes visible the ways in which the consequences of each colonial endeavor confound human intention.[86] In the same way that seventeenth-century

---

[85] Grove, 27-8. While the Mediterranean timber shortage was one factor that allowed the English to penetrate the new market, it was by no means the only factor. Brenner emphasizes the importance of the Dutch War for Independence and Venice's war with Turkey as distractions for England's competitors (16). The English made their own entrance through piracy and privateering in the region as well.

[86] Swetonius' identification of a "pine" as the specific conifer used for the mast not only betrays a knowledge of early modern shipbuilding, but also links Mediterranean deforestation with English colonial interests in Virginia. Karl Appuhn details the types of wood needed for the Venetian shipbuilding industry, which was completely dependent upon timber harvests from public reserves under Venetian control (Appuhn 6). According to Appuhn, firs, not pines, were used to construct masts in the Mediterranean: "Oak was used for the hull, main bulkheads, structural ribs, and knees, as well as the keel of galleys and round ships. The galley oars were made of beech, the masts of fir, the deck and minor bulkheads of larch, the spars of elm, and the rudder of walnut" (Appuhn 54). Unlike the Venetians, the English did have access to foreign reserves of wood—namely in the Americas—and used pine, in addition to firs, for masts (Nardizzi *Wooden* 57). Thus, assuming that Swetonius is not using "pine" and "fir" interchangeably here, the pine that he believes will form his mast shifts his metaphor from a Mediterranean context to a New World context; the staged provenance of his "pine" conflates the pines of Virginia with the firs from the depleting forests of the Mediterranean. See: Karl Richard Appuhn, *A Forest on the Sea: Environmental Expertise in Renaissance Venice*, (Baltimore: Johns Hopkins University Press, 2009).

English trade in the Mediterranean was made possible and successful not through any particular ingenuity of the English—except perhaps their ability to capitalize on the environmental crises and political disputes of other economic powers in the region—except perhaps their ability to capitalize on the environmental crises and political disputes of other economic powers in the region—Fletcher's play shows how some "sweeping tempest" outside of human control can be a blessing in disguise for the destitute Roman expeditionary force. The play offers a reminder to the early modern English that their economic expansion into the Mediterranean resembled the Roman conquest of Britain. The success of both endeavors depended on factors that were extra-intentional and non-human.

Though several critics have shown how *Bonduca* uses the colonization of pre-Christian Britain to comment on the early modern English expansion into Virginia,[87]

---

[87] While I resist the one-to-one correlation that Jowitt pushes for in her allegorical interpretation, she does note some important parallels between the play's representation of the Roman occupation of Britain and the English settlement at Jamestown, such as the "chronic shortage of food." Crawford also resists Jowitt's allegorical tendency, but follows her lead in identifying key parallels between Elizabeth and Bonduca, James and Caratach, and Henry and Hengo. Boling, Nielsen, and Neil have also shown how the play's representation of colonialism comments on other early modern English imperial interests and informs the audience's decision to sympathize with one side more than another. Boling has argued that the play is pro-British because it is not meant to endorse Caratach's behavior or misogyny. Nielsen reports that "according to all the play's interpretations excepting one, Bonduca represents an uncomfortably familiar Otherness, while the Romans and Caratach represent British audiences." Neil argues that the play stages a resistance to James' absolutist politics, which attempted to impose Scottish monarchical law onto England's common law and to join the two nations under his rule. See: Jowitt, 110; Julie Crawford, "Fletcher's *The Tragedie of Bonduca* and the Anxieties of the Masculine Government of James I," *Studies in English Literature, 1500-1900* 39, no. 2 (2009): 357-81; Ronald J. Boling, "Fletcher's Satire of Caratach in *Bonduca*,"

much less critical attention has been given to the differences—and the ecological differences in particular—between the two colonial situations. Although the play's literal and metaphorical grafts have no meaning outside of the discourse of early modern English colonialism, I am interested in how Fletcher's representation of the Roman occupation of Britain rewrites rather than rehearses the unfolding narrative regarding the grafting of European pathogens onto the native human population of Virginia. Thomas Hariot's account of a "rare and strange accident"[88] that befell the English while they were visiting the Powhatan in Virginia suffices to demonstrate the extent to which the English failed to understand their role in the spread of disease in the Americas. At the same time, it exposes how the English manipulated the consequence of an accidental biological graft to serve their own colonial intentions. In *A Brief and True Report* (1588), Hariot takes note of the mysterious illness and death that descends upon the Powhatan population after the healthy English visitors depart:

> There was no towne where wee had any subtile devise practiced against us, we leaving it unpunished or not revenge (because we sought by all meanes possible to win them by gentleness) but that within a few dayes after our departure from everie such towne, the people began to die very fast, and many in short space; in

---

Comparative Drama, 33.3 (1999): 392; Wendy C. Nielsen, "Boadicea Onstage before 1800, a Theatrical and Colonial History," *Studies in English Literature, 1500-1900* 49, no. 3 (2009): 599; Kelly Neil, "The Politics of Suicide in John Fletcher's *Tragedie of Bonduca*." *Journal for Early Modern Cultural Studies* 14, no. 1 (2014): 90.

[88] Thomas Hariot, "A Description of Virginia," In A Briefe and True Report, (1588), In Captain John Smith: Writings with other Narratives of Roanoke, Jamestown, and the First English Settlement of America, Ed. James Horn, (New York: The Library of America, 2007), 900.

> some townes about twentie, in some fourtie, in some sixtie, & in one sixe score, which in trueth was very manie in respect to their numbers.[89]

While neither the Powhatan nor the English can accurately explain the phenomenon, Hariot offers two hypotheses to his readers that work to justify the continuation of the English colonial project in Virginia. First, he suggests that God is on the side of the English. Since Hariot perceives he is the innocent victim of many a "subtile devise practiced against us," and since the English do not seek "revenge" for any misdeed, the disease that visits only the Powhatan must be the hand of God favoring the English. Second, Hariot reports that the Powhatan think the Englishmen to be gods themselves: "this marvelous accident … wrought so strange opinions of us, that some people could not tel whether to thinke us gods or men, and the rather because that all the space of their sickenesse, there was no man of ours knowne to die, or that was specially sicke."[90] Although Hariot characterizes this event as an "accident," it is also "marvelous" because of how he tailors it to fit the needs of a burgeoning English colonial ideology. After all, Hariot does not discover his mortality to the mistaken Powhatan in his narrative; instead, he assumes his accidental apotheosis means that the Powhatan will be more easily "brought through discreet dealing and government to the imbracing of the trueth, and consequently to honour, obey, feare and love us."[91] So even though Hariot's introduction of an Old World disease to the Powhatan population in colonial Virginia was accidental,

---

[89] Ibid.
[90] Ibid., 901-2.
[91] Ibid., 902.

his failure to tell the truth—that he did not know why the Powhatan were dying in masses—manipulates the accident into a political tool. His white lie turns a graft into a weapon. Neither the English nor the Powhatan could accurately explain why diseases were prone to attack certain populations more than others. Crosby's explanation, which relies more domesticated species of animals than the Amerindians, and therefore lived in closer contact with more animals and their diseases, had thousands of years to build antibodies to diseases they unknowingly bioengineered, and which in turn thrived on New World hosts who had no protection against the microscopic invaders.[92] And while Fletcher most likely did not know that Europeans were transplanting their own home-grown diseases to Virginia, his play registers a pathogenic understanding of disease, which was still emerging during the period. Jonathan Gil Harris marks the influence of transnational commerce on the development of shifting conceptions of disease transmission. For centuries, diseases were understood as miasmic and endogenous, resulting from "polluted air or vapors" which created a humoral imbalance within the body.[93] But in the early modern period, as Fletcher's play shows, pathogenic and exogenous understandings of disease emerged. Harris notes that "deviations from the Galenic mainstream never seriously undermined the humoural model; indeed, they were usually accommodated within it."[94] However, he also demonstrates how syphilis—which we now know was a

[92] Alfred W. Crosby, *Germs, Seeds and Animals: Studies in Ecological History*, (Armonk: M.E. Sharpe, 1994), 12.
[93] Jonathan Gil Harris, Sick Economies: Drama, Mercantilism, and Disease in Shakespeare's *England,* (Philadelphia: University of Pennsylvania Press, 2004), 13.
[94] Ibid.

disease carried *from* the Americas back to Europe[95]—became implicated in the nationalization of disease in Europe: disease "had begun to be seen as not only a *state* of humoral disarray but also a *thing* that migrated across national borders."[96] The xenophobic associations fostered by the nicknames of syphilis—the English called it the "French pox," for example—were a symptom of global commerce, and the transmission of syphilis between nations turned disease itself into a commodity in the early modern imaginary: "Communicable disease…was increasingly seen as an exotic if dangerous commodity, shipped into the nation by merchants, soldiers, and other alien migrants."[97] Harris's focus on how disease could be "shipped *into* the nation" from without supports his argument about how dramatizations of pathogenic and economic discourses shaped modern conceptions of an English national economy. But it also overlooks how the commodification of disease contributed to the fashioning of English colonial identity abroad.[98]

In *Bonduca*, rather than providing a justification for the conquest of colonial invaders like Hariot, disease instead threatens to infect those invaders. If disease was something that could penetrate national borders through commercial exchange, it was also something that could be acquired by travellers or colonists abroad. After all, syphilis

---

[95] Crosby, *Columbian Exchange,* 123.
[96] Harris, 17.
[97] Ibid.
[98] Harris's focus on English understandings of pathology also overlooks non-western conceptions of disease transmission. Crosby suggests that some Amerindian slaves understood contagion in pathological terms. Crosby summarizes Antonio de Herrera y Tordesillas's *Historia Generalia*: "The Indians became so enraged by the invulnerability of the Spaniards to epidemic disease that they kneaded infected blood into their masters' bread and secreted corpses in their wells—to little effect" (Crosby, *Columbian,* 38).

was brought to Europe by Europeans, and while syphilis was a veneral epidemic in Europe, the effects of air-borne Old World pathogens on New World human populations were far more devastating. In *Bonduca*, the diseases metaphorically afflicting Roman soldiers on British soil—pertussis, mumps, plague, and smallpox—are (we now know)all of European origin. And because these specific diseases that infect Fletcher's Roman camp were, at the same time the play was being written, wreaking havoc on human populations in the New World, Fletcher's tragedy about imperial grafts (regardless of the author's intention) registers European culpability in the depopulation of the Americas. Whereas Hariot passively accepts the mysterious deaths of the Powhatan as a colonial advantage, *Bonduca* suggests that the English could just as easily have been the devastated population. Through representing the *invaders* as the ones who are most threatened by, rather than immune to, diseases native to the foreign soil they occupy, Fletcher's play reverses a still-unfolding historical narrative and stages an accidental (though no less real) graft. Unlike the deliberate moving of a plant from one latitude to another with the intention of improving both the plant and the planter, moving a pathogen grafts an organism from one human population—equipped with the antibodies to defend themselves—to another population where the disease has no natural predators. And unlike the deliberate acclimatization of a plant, disease probably travelled without any human intention at all, though it solicited consequences that were beyond the scope of human control.

The diseases with which the Romans become metaphorically infected on British soil reflect—with or without Fletcher's intention—the literal acclimatization of Old

World diseases in Virginia; pertussis, mumps, plague, and smallpox are diseases that would have been familiar to an early modern English audience. But they were also already familiar to indigenous Americans through contact with European settlers. Without ignoring the metaphorical significance of these diseases—many of which work to emasculate first Junius, and then Petillius, for being in love with a British woman when they are supposed to be in love with war[99]—I want to acknowledge the reality of these diseases in the English colony of Virginia in order to show how the play registers and reverses their effects. Because we now know that these diseases were brought by Europeans to the Americas, their presence on British soil in Fletcher's play makes sense. And though Fletcher may have been unaware of the provenance of these pathogens, his play does call attention to Britain as a site of origin. The Romans carry no diseases with them, and the metaphorical diseases that do infect the Roman soldiers are only meaningful in the context of a colonial encounter. Although the metaphorical status of these diseases seems to support a Galenic or humoral representation of illness (possibly produced endogenously within the borders of Britain), the colonial encounter staged in

[99] Several critics emphasize how heterosexual love in the play is deemed effeminizing and poses a threat to the homosocial imperial embrace that the play moves toward. While Jowitt argues that Caratach's sexual desire for Roman military bodies unmans him, Crawford argues that "male love for women is seen as threatening to male power," and shows how the play offers an alternative homoerotic model, of which the play is also critical. Green argues that heterosexual love in *Bonduca* is "treated as a negative commodity" and highlights "the potential destructiveness of passion." Calder identifies Junius and Petillius as transgressive military figures for loving Bonduca's daughters, thus confusing "the masculine discourse of war with the feminine discourse of love." See: Jowitt, 119; Crawford, 367; Paul D. Green, "Theme and Structure in Fletcher's *Bonduca*," *Studies in English Literature, 1500-1900* 22, no. 2 (1982): 310-11; Calder, 222.

Fletcher's play promotes the emerging pathogenic understanding of disease transmission instead.

In *Bonduca*, disease is allied with the British. When Petillius is busy teasing Junius, tempting him with alcohol and prostitutes to alter his melancholic disposition (or his humoral imbalance), he reasons, "No, it shall ne'er be said in our Countrey,/ Thou dy'dst o'th'Chin-cough" (1.2.29-30). Petillius associates this particular disease with Junius' reputation back home, which suggests that rumors can be transported as easily as pathogens. More commonly known as "[w]hooping-cough"[100] or pertussis, "chin-cough" was a highly contagious bacterial infection, and it was also unknown to the Americas before the arrival of Europeans.[101] Later, Petillius reports to Swetonius that Junius can be found in his cabin, "sick o' th' mumps" (1.2.265). Though Petillius perhaps means this as an emasculating comment, since an early modern connotation for the "mumps" included a derogatory slur for an old woman,[102] he also implies that Petillius suffers from the inflammatory disease, unknown in the Americas before 1492.[103] Two scenes later, Junius

---

[100] "chincough, n." *OED Online*. Oxford University Press, June 2015. Web. 19 August 2015.

[101] Crosby, *Columbian Exchange,* 49. Crosby describes how it is likely that "several diseases were at work" during Cortés's attack on the Aztec capital of Tenochtitlán: "The Aztec sources mention the racking cough of those who had smallpox, which suggests a respiratory complication such as pneumonia or a streptococcal infection" (*Columbian* 49)—or pertussis.

[102] "† mumps, n.1." *OED Online*. Oxford University Press, June 2015. Web. 19 August 2015.

[103] Crosby, *Germs*, 12. Crosby notes, "The Valley of Mexico had fifty devastating epidemics between 1519 and 1810, including smallpox, typhus, measles, mumps, and pneumonia" (*Germs* 12).

tells Petillius that his torment in loving Bonvica is “like the plague” (2.2.3): “’Tis sure the plague, for no man dare come neer me/ Without an Antidote: ‘tis far worse; Hell” (2.2.10-11). Junius clearly comprehends the bubonic plague as highly contagious when he warns Petillius to stay away from him. And though plague devastated European populations throughout the sixteenth and seventeenth centuries, it was also one of the invasive diseases introduced to the Americas by Europeans. In fact, the bubonic plague was likely the disease attacking the indigenous population of the American coastline at the same time that Fletcher was writing Bonduca.[104] Junius’s adoration of his British opponent Bonvica seems to be the pathogen causing each one of these metaphorical diseases, which suggests that these diseases only have meaning (even as metaphors) in the colonial context of this play, and are therefore contracted from the British soil, rather than brought from Rome. On the other hand, Caratach accuses Judas of being a “pocky villain” (5.3.129) after he shoots Hengo, which can reference either the New World disease of syphilis or the Old World disease of smallpox. Regardless of which disease the pox signifies, by representing the Roman invaders as the ones with all the diseases, the play encourages its early modern English audience members—who were more than capable of unwittingly transporting their diseases (but not their antibodies) to the Americas—to speculate about what might cause a disease to decimate one human population and not another. While the British in the play are biologically equipped to

---

[104] Crosby, *Germs,* 36. Crosby points out that “an epidemic of plague or typhus decimated the Indians of the New England coast immediately before the founding of Plymouth” (*Germs* 36).

withstand the Roman invasion, the number of diseases—both real and metaphorical—that threaten the Roman invaders represents infection as a side-effect of colonial expansion. The play suggests that the non-human agents that participated in the European expansion across the Atlantic could have behaved differently and cancelled the "success" or even the possibility of European colonial conquest.

Rather than promote an imperialist (or anti-imperialist) agenda, *Bonduca* sanctions a more complex representation of empire formation, which privileges the role of non-human actants in determining the outcome of a political, military, and colonial struggle. If early modern audiences had trouble identifying with either the British or the Romans in Fletcher's play, it was because the play paints a more complicated picture of empire. Penyus' foiled pacifism, the proliferation of native diseases among the Roman soldiers, and Swetonius' ancient Roman expression of contemporary English desires for economic and colonial expansion—each of these scenes discourages seventeenth-century English audiences from seeing themselves as the inheritors of Rome's imperial legacy. At the same time, Bonduca's graft-like resistance to colonial incorporation and Caratach's sincere embrace of his Roman adversary discourage contemporary audiences from nourishing an emergent nationalist sentiment. Instead, *Bonduca* urges audiences to recognize empire itself as an ecology in which human volition plays only a partial role. The foiled intentions of the British and Roman characters in the tragedy reveal an early modern understanding of imperial conquest that is very different from a modern one. Whereas European colonial discourse of the late seventeenth and early eighteenth centuries furthers a narrative where white skin, alleged superior intelligence, and

advanced technology justify colonial exploitation, Fletcher's play reveals an early understanding of imperial conquest as an achievement that is seldom deliberate, and one that belongs more to things than to humans.

To lend our attention to the role of horticultural discourse and the agency of things in determining the formation of colonial states is neither to exonerate nor to apologize for the human European colonial invaders who inaugurated and catalyzed a long history of human violence and genocide in the American colonies. On the contrary, sixteenth- and seventeenth-century European colonial invaders appear more culpable than ever once we recognize their ability to take advantage of the biological events caused by their travels and transplantations. In *Bonduca*, the triumph of accident over intention mediates colonial conquest. As Hariot demonstrates and the play suggests, empire and human intention are seldom compatible. Hariot belatedly grafts his preposterous intentions to make the Powhatan "honour, obey, feare and love" the English onto an accidental epidemic—which was but one of the many consequences of the European trans-Atlantic biological and colonial exchange. And by staging an imperial victory where even the victors seem defeated, Fletcher's play reveals a process of colonial formation where the intention to conquer remains contingent upon the consequence of the graft. *Bonduca* highlights colonialism as a situation where intention follows consequence, rather than vice versa. Furthermore, the play works against justifications for colonial conquest that seek, as Hariot's does, to take advantage of accidents. I suspect that the play provides a cautionary tale to its early modern English audience. In particular, by imagining the Roman invaders as the party less equipped to handle novel pathogens encountered in

Britain within a colonial context, *Bonduca* invites its audience to speculate about an alternative historical narrative that might have unfolded had the English "graft" in Virginia—or the Columbian graft in the Caribbean—produced a different ecological outcome. What if Europe had been devastated by deadly American pathogens as a result of trans-Atlantic contact? What if more aggressive American pathogens made their way back across the Atlantic, and compromised the established social, political, and economic structures of an entire continent? And what if the rapid decrease in the European population along with the weakened political structures made conquest possible for some one hundred or so Incan or Powhatan warriors? Rather than apologizing for the Roman occupation of England, or for English settler colonialism in Virginia, *Bonduca* portrays an unpredictable ecological graft as a determining force of colonial conquest.

CHAPTER 2

HEWERS OF WOOD, DRAWERS OF GALL: THE WOODEN ECONOMIES OF RACE IN TITUS ANDRONICUS AND LUST'S DOMINION

> And the princes said unto them [the Gibeonites], Let them live; but let them be hewers of wood and drawers of water unto all the congregation.[105]

In my previous chapter, I showed how tightly ecological and military imperialism are connected on the stage through metaphors of grafting. In this chapter, I turn from the metaphors to the materials of early modern performance, which also link natural commodities and colonial expansion. Several physical properties featured in early modern plays were imported natural commodities, which positioned the London theaters as important players in a more global marketplace. Several natural commodities featured in early modern plays were the same items driving English economic and colonial expansion. The cosmetic ingredients I discuss in this chapter participated in a shifting economic landscape in England, one where the English began to rely less on their Iberian intermediaries for trade with the Mediterranean. But on stage, these materials also facilitated the ideological work that accompanied colonial expansion by connecting environmental violence to an emerging racial discourse.

In the opening scene of *Titus Andronicus* (ca. 1594), the victorious Andronicus clan demand that the Goth Queen's eldest son Alarbus be seized, "That we may hew his limbs and on a pile,/ *Ad manes fratrum*, sacrifice his flesh/ Before this earthly

[105] Josh. 9:21 KJV.

prison" (1.1.100-2, emphasis added).[106] When Tamora's plea for mercy fails to assuage her captors, Lucius orders his brothers to "make a fire straight,/ And with our swords upon a pile of wood/ Let's hew his limbs till they be clean consumed" (1.1.130-2, emphasis added). When the Andronicus sons return a few moments later, Lucius draws attention to the offstage spectacle of smoke rising in the air:

> See, lord and father, how we have performed
>
> Our Roman rites. Alarbus' limbs are lopped,
>
> And entrails feed the sacrificing fire
>
> Whose smoke like incense doth perfume the sky. (1.1.145-148)

Shakespeare's first revenge tragedy repeatedly conflates the hewing and consumption of bodies with the hewing and consumption of wood. The Romans characterize Alarbus' arms and legs in wooden terms; his "limbs" will add fuel to an already hewn "pile of wood," but not before they are "lopped" like branches from a tree. The Romans, however, are not the only ones to "hew" human limbs in this play. Aaron the Moor lends a hand in severing the hand of Titus, and Chiron and Demetrius, the licentious siblings of the fragmented Alarbus, later avenge their brother's death by raping and dismembering Titus's only daughter Lavinia. Upon beholding her ravished body, Lavinia's uncle Marcus asks, "What stern ungentle hands/ Hath lopped and *hewed* and made thy body bare/ Of her two branches?" (2.4.16-18, emphasis added). In addition to calling attention to his

[106] William Shakespeare, *The Arden Shakespeare: Titus Andronicus*, ed. Jonathan Bate, (London: Routledge, 1995).

niece's disfigured body, Marcus's metaphor conflates the violence of cutting off her hands with the excessive hewing and consumption of trees.

Marcus's metaphor may have struck a cord with his Elizabethan audience, who were in the throes of a devastating wood shortage. Early modern England was heavily dependent on wood for fuel, building materials, and (among other things) theatrical properties. As a result of overconsumption, timber prices more than tripled between 1500 and 1600.[107] *Titus* was by no means the only play to evoke the timber crisis onstage. As Vin Nardizzi has shown, the woodenness of the nine theaters built in London between 1567 and 1614 underscored the theater's complicity in the ecological crisis, informing several plays that indulged an "array of eco-fantasies and nightmares about the shortage of wood."[108] What is unique about the ecological "nightmare" of *Titus*, however, is the way it offers a suggestive link between the destruction of wooden timber, brutal violence against humans, and emerging racial discourses.

This material and linguistic link juxtaposes two different kinds of "hewn" bodies in the play. Alarbus, Lavinia, and Titus lose their limbs in a literal way, though the play measures the weight of this loss through their metaphorical comparison to a shorn, limbless, woody plant. At the same time, the verb "hew" (used three times in this play)

---

[107] Vin Nardizzi, *Wooden Os: Shakespeare's Theatres and England's Trees* (Toronto: University of Toronto Press, 2013), 10.

[108] Ibid., 20, 24.

operates ambiguously in relation to Aaron's black "hue" (used eight times in the play).[109] The linguistic and material interplay between the play's hews and hues fosters a connection between environmentally-destructive labor and the emergent racialization of African bodies. In the eighteenth century, Christian Europeans would later appropriate the scriptural "Curse of Ham" and the punitive condemnation of the Gibeonites to be "hewers of wood and drawers of water" in order to justify the enslavement of Africans on the basis of race.[110] By the nineteenth century, the epithet "hewers of wood and drawers of water" named a racialized workforce enslaved by terror, whose labor was "necessary

---

[109] Despite the auditory confusion that might be caused by the homophones in performance, the spelling for the three instances of "hew" and the eight mentions of "hue" remains consistent across the three quartos and in the first folio. The slippage between "hue" and "hew" in *Titus Andronicus,* which I am suggesting links blackface cosmetics and the cutting of wooden or human limbs, also has purchase elsewhere on the English stage. George Peele, who collaborated with Shakespeare on *Titus*, rehearses the pun in *The Battle of Alcazar* (1589) when the usurper of the crown of Barbary, Muly Mahamet, congratulates himself on his alliance with the Portuguese army by celebrating his exploitation of their labor, which will involve the slaughter of Moors, and necessitate his cosmetic makeup: "Now have I set these Portugals awork/ To hew a way for me unto the crown" (4.2.70-71). In Thomas Heywood's *The Fair Maid of the West Part 2* (ca. 1630)*,* Spenser describes the lengths to which he will go to return to Bess, and how many Moors he is prepared to cut: "Through twenty bashaws I will hew my way,/ But I will see thee ere morning" (2.4.21-22). In John Marston's *Sophonisba* (1605), Jugurth, who commands one Lybian army, anticipates that Asdrubal's own Lybian faction will "hew vs all to peeces" (C4v). See: Charles Edelman, ed, *The Stukeley Plays: The Battle of Alcazar by George Peele; THe famous history of the life and death of Captain Thomas Stukeley*, (Manchester, Manchester UP, 2005); Thomas Heywood, *The Fair Maid of the West, Parts I and II*, ed. Robert K. Turner Jr, (Lincoln: University of Nebraska Press, 1967); John Marston, *The vvonder of vvomen or The tragedie of Sophonisba as it hath beene sundry times acted at the Blacke Friers*, 1606.

[110] See Mary Floyd-Wilson, *English Ethnicity and Race in Early Modern Drama*, (Cambridge, Cambridge University Press, 2003), 10; Peter Linebaugh and Marcus Rediker, *The Many-Headed Hydra,* (Boston: Beacon Press, 1992), 42.

to the growth of capitalism."[111] But in the sixteenth century, this link between racialization and the damaging environmental labor of "hewing" was still emerging. Through the violence it stages against a dual human and environmental body, facilitated by the homophonic slippage between "hew" and "hue," Shakespeare's play reveals how early material constructions of African Moors both generated and reflected signs of environmental degradation.

I offer further insight into the link between the theatrical construction of proto-racial difference and environmental degradation by showing how the stage's physical materials for representing African Moors relied upon the exploitation of European and colonial environments. Two plays in particular, *Titus Andronicus* and Thomas Dekker's *Lust's Dominion* (1600),[112] each written during the height of the timber crisis in Elizabethan England, depend on physical and linguistic technologies to connect the materials used to represent the black skin of African Moors onstage with their ecological and social price tag. By focusing on the imported wooden ingredients that constituted the black skin of the white actors who played Aaron and Eleazar—Moors who have been both reduced by critics to racist representations of dark-hearted villains, and admired for

---

[111] Linebaugh and Rediker, 41-2.

[112] Thomas Dekker, *Lust's Dominion; or, The Lascivious Queen*, in *The Dramatic Works of Thomas Dekker,* Vol. 4, ed. Fredson Bowers, (Cambridge: Cambridge University Press, 1961), 114-230.

their rhetoric and intelligence[113]—I investigate how the materials of the stage may have mediated early modern representations and interpretations of emergent racial categories. Through re-orienting our understanding of Aaron and Eleazar around the wooden commodities that may have constituted their black skin in performance—namely cork and galls—I hope to show how the natural world exerts agency and influence on an emergent racial discourse on the English stage.

The English demand for foreign galls reframes our understanding of nature's role in representing Moors like Eleazar and Aaron on the English stage. Galls, as early modern playwrights would have known, were common wooden ingredients in both ink and blackface cosmetic recipes of the period. Eleazar and Aaron are two of several Moors of the English stage whose black skin associates them with a discursive deception, such as forgery or the dissemination of print.[114] Eleazar issues and distributes printed texts in order to gain leverage and power, and Aaron forges a letter to frame the Andronicii for a crime they did not commit. Eleazar even hints at the material technology responsible for his black skin when he refuses to "digest this Gall" (1.2.163) of banishment, and hopes that his revenge on Cardinal Mendoza for "this disgrace,/ Shall dye [his] soule, as Inky as

---

[113] Emily Bartels suggest that *Titus Andronicus* "does not challenge the racial stereotype" associated with blackness, while Ian Smith argues that Aaron is also "drawn from the exodus narrative, of Aaron the eloquent spokesman, the resistor in history's mimetic drama of ethnic and racial oppression." See: Emily Bartels, "Making More of the Moor: Aaron, Othello, and Renaissance Refashionings of Race," *Shakespeare Quarterly* 41.4 (1990), 442; Ian Smith, *Race and Rhetoric in the Renaissance: Barbarian Errors*, (New York: Palgrave MacMillan, 2009), 129.

[114] Other examples include Zanthia in The Knight of Malta, Beaupre (as the Moor Calista) in The Parliament of Love, and Zisco in Samuel Harding's Sicily and Naples, or The Fatal Union.

my face" (1.2.190-1). Punning on the material and humoral associations of "gall," Eleazar betrays an anxiety about how his audience will read or interpret his black body—his "inky" face. By calling attention to galls as a potential material ingredient in Eleazar's complexion, he invites audiences to reflect on the metonymic association between the specific provenance of galls and the Moor he embodies onstage. The galls with the highest tannin content, and therefore the best for making ink and for producing blackface paint on stage, were imported from Northern Africa and Turkey—where significant populations of Moors lived. But by naming gall/s as the substance responsible for his dark complexion, Eleazar also links his dark skin to the utilities and assumptions associated with imported galls in early modern England. If the English ranked and valued galls from different provenances for their tannin content, it is possible that this economic (and ecological) hierarchy informed the proto-racial discourse emerging on the stage. Furthermore, if galls were used to represent stage Moors like Aaron and Eleazar, the lasting effect of their material appearance and their villainous characterization may have influenced how early cecidologists would later understand the power dynamic between a passive host plant and a colonizing, gall-forming wasp.

Galls were not the only wooden commodities used in blackface cosmetics on the early modern stage. Cork wood, which did not grow in England, and which had been regularly imported to England from Portugal before the English trade embargo with the Iberian Peninsula, was also likely used to represent Moors on stage, and similarly reinforces a metonymic association between populations of Moors and the materials used to represent them. If cork was used to represent Aaron's black skin on stage, then the

play's discursive "hues" and "hews" might operate in a similar fashion to Eleazar's "gall" by linking black skin with a specific provenance of cork—Portugal—with a significant population of Moors. Aaron's pun ties his black "hue" not only to the violent hewing he orchestrates against the Romans, but also to the material and environmental hewing that a white actor playing a Moor likely required for a cosmetic paint made of wooden ingredients. The theatrical falseness of Aaron's black skin—or "hue"—emphasizes his control in managing his own representation, his mobility in Rome, and his ability to dissemble. At the same time, Aaron's references to his own "hue," especially as they work to justify the bodily "hews" he orchestrates against the Andronicii (which are figuratively associated with the cutting of timber) also operate as a racist justification for his villainy. Aaron and Eleazar each potentially exploit the materials that might compose their dark skin. And while both Aaron and Eleazar exploit ink to gain either revenge or advancement, Aaron's manipulation of the woods outside of Rome situates him in a more complicated relationship with the natural world.

A growing body of research emphasizes how the emergent status of "race" in the early modern period coalesced with the emergent status of the "human," which was ontologically indistinct from the natural world.[115] But in *Titus Andronicus*, Aaron

---

[115] Jean Feerick's work is most prominent in showing how early modern racial logic tied a discourse of "blood" and nobility to land and plant imagery. Much of the recent scholarly work on grafting in early modern England demonstrates how hierarchies in nature are appropriated for an emergent racial discourse to describe categorical differences between humans. See: Jean E. Feerick, *Strangers in Blood: Relocating Race in the Renaissance*, (Toronto: University of Toronto Press, 2010); Rebecca Bushnell, *Green Desire: Imagining Early Modern English Gardens*, (Ithaca: Cornell University Press, 2003); Erin Ellerbeck, "'A Bett'ring of Nature': Grafting and Embryonic Development in *The Duchess of Malfi*," in *The Indistinct Human in Renaissance*

embodies the fluid complexity of these emerging racial and ecological discourses. Aaron is aligned with the non-human and natural world, not only because he is defined by the hews required to darken his complexion before a given performance; he also vows to live as a single father on what Nature provides. On the other hand, Aaron is a true husbandman, a master at manipulating and exploiting his environments to gain his revenge. Aaron is also routinely positioned as an Other in Rome by the Andronicii, even though he is arguably the play's best father, and displays his most honest self before he is planted in the earth. What Aaron demonstrates, then, is that a modern racial ideology requires a degree of environmental violence. The modern concept of racial difference cannot be apprehended within an ontological framework where humans and nature are indistinct. The environmental violence required to bring cork, galls, (and by extension) stage Moors to England is exposed through the material representation of Aaron and Eleazar. Their wordplay catalyzes the discursive and environmental violence that must accompany the formation of a racial discourse. A hierarchy of one group of humans over another cannot exist without the damage dealt by these puns, which conflate the hued skin of Moors with a tree's hewn limbs, humoral gall with imported galls, and black characters of the stage with black characters of the page.

Cork and Moors on the Early Modern Stage

Although "race" bore a different connotation in early modern England than it does today, notions of racial identity were already emerging. Scholars have shown that early modern racial categories were rarely fully signified by skin color, and often conflated or intersected with gender, nationality, religion, class or nobility, and even political

affiliation.[116] But whereas most scholars discuss race as a deliberate and discursive social construction which justifies patriarchal, colonial, or class oppression, I believe we have more to gain by asking not what race is for, but rather: what are the materials race uses?[117] Cork is one substance whose use in blackface cosmetics may have issued some important consequences for the emerging racial discourse. For example, if cork was used by white actors to play Moors, it likely fashioned an associative link between the Moor character and the specific provenance from which cork derived. By attending to how cork wood and galls had the potential to link Aaron and Eleazar to specific geographical provenances and to various English commercial enterprises, we can more firmly understand the interconnectedness between environmental and economic circumstances and an emergent racial discourse. If the desire to represent Moors on the English stage derived in part from an anxiety about increasing trade between English and African ports, then focusing on the materials used to represent difference uncovers how English audiences manufacture ontological hierarchies less through projecting anxieties onstage, and more through consuming imported commodities. Furthermore, cork also create an

---

Literature, eds. Jean E. Feerick and Vin Nardizzi, (New York: Palgrave Macmillan, 2012), 85-99; Miranda Wilson, "Bastard Grafts, Crafted Fruits: Shakespeare's Planted Families," in *The Indistinct Human in Renaissance Literature*, eds. Jean E. Feerick and Vin Nardizzi, (New York: Palgrave Macmillan, 2012), 103-118.

[116] See: Emily C. Bartels, Speaking of the Moor: from Alcazar to Othello (Philadelphia: University of Pennsylvania Press, 2008); Kim F. Hall, Things of Darkness: Economies of Race and Gender in Early Modern England (Ithaca: Cornell University Press, 1995); Ayanna Thompson, Performing Race and Torture on the Early Modern Stage (New York: Routledge, 2008); Matthieu Chapman, Anti-Black Racism in Early Modern English Drama: The Other "Other" (New York: Routledge, 2017).

[117] I am indebted to Miles Grier for posing this question to his 2017 SAA Panel on Race and Materiality.

association on the stage between Moor characters and the specific uses to which these materials were put in English culture, which included enterprises linked to expanding trade, and the overconsumption of wooden commodities.

The white actor playing Aaron the Moor during any one of the several performances that *Titus Andronicus* enjoyed during Shakespeare's lifetime may have used any number of prosthetic devices to represent Aaron's black hue. Soot, which was used to blacken faces in village festivals during the mid-sixteenth century, was later abandoned for black velvet masks, gloves, and stockings.[118] Pleasance, "a fine, gauze-like material" used to represent black Moors during a 1510 revels at Whitehall, was preferable at court to a substance like soot.[119] A 1598 inventory of Philip Henslowe's includes "Moores lymes," which was presumably some type of black cloth for representing Moors.[120] Robert Greene's *Orlando Furioso* (1591) includes a scene where Orlando disguises himself as a Moor using only a "scarfe before his face" (ll. 1350). But cosmetics were also an option, and playwrights often incorporated popular cosmetic recipes into their plays.[121] Several early modern English cosmetic recipes called for imported ingredients, which were associated with a specific provenance, and which may have informed how

---

[118] Eldred Jones, *Othello's Countrymen: The African in English Renaissance Drama* (London: Oxford University Press, 1965), 120.
[119] Ian Smith, "Othello's Black Handkerchief," *Shakespeare Quarterly* 64, no. 1 (Spring 2013): 12.
[120] Virginia Mason Vaughan, *Performing Blackness on English Stages, 1500-1800*, (Cambridge: Cambridge University Press, 2005), 10.
[121] Kimberly Poitevin shows how Jonson very likely consulted Ruscelli's or Platt's cosmetic recipes in order to parrot them onstage in several plays, including *Cynthia's Revels* (1603), *Catiline* (1611), and *The Devil is an Ass* (1616). See: Kimberly Poitevin, "Inventing Whiteness: Cosmetics, Race, and Women in Early Modern England," *Journal for Early Modern Cultural Studies* 11, no. 1 (Spring/Summer 2011): 75.

Aaron's black "hue" and Eleazar's "inky" face were understood in relation to the stage's participation in an expanding economy of wood.[122]

A number of scholars—including Dympna Callaghan, Farah Karim-Cooper, Virginia Mason Vaughan, Andrea Stevens, and Richard Blunt—have proposed that Elizabethan actors may have used burnt cork to darken their white skin in order to play African Moors.[123] If cork was used, the cork most likely came from Portugal, since cork oak did not grow in England, and since the fifteenth-century Anglo-Iberian cork trade is well documented.[124] Thus, Aaron and Eleazar may have embodied a material and commercial triangulation between England, the Iberian Peninsula (from which the

---

[122] One recipe used "To make the Face Fresh and Ruddy" required "Brazeel-Wood." See Hannah Wooley, *The accomplish'd ladies delight in preserving, physick, beautifying and cookery,* 1683, F10r. One recipe for a "water that will make the face redde and glisteryng" calls for "an vnce of Brasill that is good, ten Cloues orientall, and ten graines of Nasturtium, otherwise called Cardamom." See Girolamo Ruscelli, *The seconde part of the Secretes of Master Alexis of Piemont*, 1560, B1v. Cloves were native and specific to the Moluccas, and cardamom was native to Southeast Asia.

[123] Dympna Callaghan, *Shakespeare Without Women: Representing Gender and Race on the Renaissance Stage*, (London: Routledge, 2000), 78; Farah Karim-Cooper, "'This alters not thy beauty': Face-paint, Gender, and Race in Richard Brome's *The English Moor*," *Early Theater,* 10, no. 2*,* (2007): 147; Vaughan, 11; Andrea Stevens, *Inventions of the Skin: The Painted Body in Early English Drama*, (Edinburgh: Edinburgh University Press, 2013), 91; Richard Blunt, "The Evolution of Blackface Cosmetics on the Early Modern Stage," in *The* Materiality of Color: The Production, Circulation, and Application of Dyes and Pigments, 1400-1800, ed. Andrea Feeser, Maureen Daly Goggin, and Beth Fowkes Tobin (Burlington: Ashgate, 2012), 222.

[124] For more on the fifteenth century Anglo-Iberian cork trade, see: Wendy R. Childs, "Anglo-Portuguese Trade in the Fifteenth Century," *Transactions of the Royal Historical Society*, Vol. 2 (1992): 204, 210; V.M. Shillington and A.B. Wallis Chapman, *The Commercial Relations of England and Portugal,* (London: Routledge, 1907), 39; Jennifer C. Geouge, "Anglo-Portuguese Trade During the Reign of Joao I of Portugal, 1385-1433," in *The New Middle Ages: England and Iberia in the Middle Ages, 12th-15th Century: Cultural and Political Exchanges,* ed. Maria Bullon-Fernandez, (New York: Palgrave Macmillan, 2007), 121.

English had once imported cork), and parts of Africa, where the English were increasing trade.

The history of Anglo-Iberian trade relations provides an important context to critical speculations that cork was used as a cosmetic ingredient on the early modern stage to represent African Moors, who had occupied the Iberian Peninsula for centuries. As a cosmetic agent onstage, cork may have cemented a material link between African Moors and the Iberian Peninsula in the English imagination, prompting Protestant audiences to associate Moors with Catholicism as well as Islam. The benevolence of fifteenth-century Anglo-Portuguese trade relations was owed in part, as Wendy Childs argues, to the close political ties that had solidified after English Crusaders helped drive Islamic Moors from Portugal during the Reconquest.[125] The geographical presence of Iberian cork forests may have even functioned as a symbolic religious border before the Moors were expelled; J. R. McNeill argues "the frontier between Christian and Muslim powers in medieval Spain was often a parklike expanse of cork oak woodland."[126] Cork was a monopolized trade under Dom Joao II in the late fifteenth century, the profits of which financed the king's "imports of copper for his new naval ordnance."[127] Several seventeenth-century English sources identify cork as a main import, though they remain

---

[125] Childs, "Anglo-Portuguese Trade in the Fifteenth Century," 197. In addition to identifying the Portuguese exportation of cork to England (204, 210), Childs also notes the 1386 Treaty of Windsor and the marriage between Joao I and Lancaster's English daughter Philippa as important markers for improving trade relations.
[126] J. R. McNeill, "Woods and Warfare in World History," *Environmental History*, 9 no. 3, (July 2004): 405.
[127] Richard Barker, "Sources for Lusitanian shipbuilding," *Proceedings of the International Symposium 'Archaeology of Medieval and Modern Ships of Iberian-Atlantic Tradition'*, Lisbon, 1998, 223.

nebulous about demand, quantity, and the purposes to which cork was put in England.[128] But as the sixteenth century wore on, a desire for Portuguese merchandise became laced with appetites for new commodities, spawned by Portuguese colonial expansion.[129] Eventually, motivated in part by an embargo on trade with the Iberian Peninsula, the English would follow the Portuguese example, and bypass their former intermediary for direct access to commodities from Africa, Asia, and the Mediterranean. In the case of *Lust's Dominion*—a play which ends with the newly installed King Philip banishing "all the Moors" (5.3.183) from Spain in reaction to Eleazar's rule (a decree which anticipated Philip III's actual banishment of Moors from Spain in 1609)[130]--the use of cork to represent Moors potentially undermines King Philip's decree by suggesting that one can separate the Moors from Iberia, but one cannot separate Iberia from the Moors.

If cork was used as a stage cosmetic, Moors on the English stage also may have been materially tied to a host of English industries that relied on wood to generate capital, including trades that were essential for English exploration and colonial expansion. Cork was used in fishing (for nets and lures), and shoemaking; it was used to stop barrels and bottles, and was believed to possess medicinal properties and meteorological value. It

---

[128] Both Roberts and Malynes list cork as one of the many commodities offered by Spain and Portugal. See: Lewes Roberts, *The Merchants Mappe of Commerce.* (London: 1638), Aa2v; Gerard Malynes, *Consuetudo, vel lex mercatoria, or The ancient law-merchant.* (London: 1622), H5r.
[129] As Robert Brenner points out, it was only through trade with the Iberian Peninsula "that English merchants initially sought those highly valued products of the Far East and the Americas." See: Robert Brenner, *Merchants and Revolution*, (London: Verso, 2003), 46. By the end of the fifteenth century, along with providing the English with cork, wax, wine, figs, and raisins, Portugal also began to provide sugar and other semi-luxury goods for the English (Childs, "Anglo-Portuguese Trade in the Fifteenth Century," 211).
[130] Bartels, 118.

was also used in shipbuilding.[131] As a navigational tool, William Barlow considered cork "very requisite for many purposes that euery Traueller either by land or especially by sea should always haue," especially since cork and a common sewing needle could be used to manufacture an improvised compass.[132] It is not difficult to imagine actors appropriating cork from fishing or shoemaking trades to use on the stage. Although cork was available in London, an embargo on Anglo-Iberian trade in 1585 likely drove the English either to seek it elsewhere, or else to learn to do without it.

---

[131] Philemon Holland's 1601 translation of Pliny's *The Historie of the World* notes some of the ancient uses of cork—as buoys, as stops for bottles and barrels, and as shoe- soles —which lasted into the early modern period. See Pliny, *The historie of the vvorld Commonly called, the naturall historie of C. Plinius Secundus.* (London, 1601), Rr3r. For cork as a shipbuilding material, see: James J. Parsons, "The Cork Oak Forests and the Evolution of the Cork Industry in Southern Spain and Portugal," *Economic Geography*, 38.3, (July 1962), 202; Barker, 216. For cork as a fishing lure and net, see: Juliana Berners, *The booke of hauking, hunting and fysshyng, with all the properties and medecynes that are necessary to be kept*, (1556), L2v-L3r; Leonard Mascall, *A booke of fishing with hooke & line, and of all other instruments thereunto belonging.* (London: 1590), F4v. Wendy Childs notes that cork that was used for floats and buoys by the English came primarily from Portugal and Seville. See: Wendy R. Childs, *Anglo-Castilian Trade in the later Middle Ages*, (Manchester: Manchester University Press, 1978), 122. For cork as a bottle stopper, see Parsons, 207; Americo M. S. Carvalho Mendes and Jose A. R. Graca, "Cork Bottle Stoppers and Other Cork Products," *Cork Oak Woodlands on the Edge: Ecology, Adaptive Management, and Restoration*. Eds. James Aaronson, Joao S Pereira, and Juli G. Pausas, (Washington DC: Island Press, 2009). Cork-soled shoes were incredibly popular among noblewomen in fourteenth and fifteenth century Spain, though the fashion clearly caught on in England by the sixteenth century (Parsons 206). Pliny also mentions medicinal uses for cork, including for the repression of bloody flux (Pliny Q5v). John Gerard notes a similar recipe, where corkcan work "against the bloudy flix." Gerard also clarifies that cork was good insulation for shoes. See: John Gerard, *The herball or Generall historie of plantes.* (London, 1633), Vuuuu6r. Cork was also used to fashion an early crude barometric device meant to predict rainfall. See: Anonymous, A table plainly teaching ye making and use of a wetherglas, (London, 1631).

[132] William Barlow, *Magneticall aduertisements: or Diuers pertinent obseruations, and approued experiments, concerning the natures and properties of the load-stone. 1618*. F1r

If cork was scarce in England because of an embargo on trade, other species of wood were scarce because of a general over-consumption of timber in England, and a lack of sustainable forest management practices. In turn, the scarcity of wood in England drove English endeavors of economic and colonial expansion abroad. According to Eoin Neeson, England's timber crisis had its roots in the new attention on building ships to strengthen the English navy, which coincided with corruption within the forest administration. The result shaped how the English regarded Ireland as a timber reserve ripe for exploitation.[133]

"The Best Galls": Moors, Inkface, and the Manipulation of Print

If the English wood shortage fuelled English economic and colonial expansion, the desire for other woody products also created incentive to increase trade in the Mediterranean. English playwrights likely contributed to the demand for galls, another material that race uses on the English stage, because of their importance as an ink ingredient.[134] Galls are abnormal growths on plants caused by parasitic insects. Like cork, galls also had a specific provenance, and may have been useful in creating blackface

---

[133] Eion Neeson, "Woodland in History and Culture," In *Nature in Ireland: A Scientific and Cultural History,* Ed. John Wilson Foster, (Dublin: The Lilliput Press, 1997), 139-40.
[134] One recipe for "black Ynk very good" calls for "three vnces of the waighttest Galles you can finde...two vnces of Romaine vitriolle...an vnce of Gomme Arabicke...and an vnce of the pill of Pomegranades" (Ruscelli, A1v). Galls and gum Arabic were common ink ingredients, and both were imported commodities. Botti et al notes that gum Arabic was found in "several species of African acacia trees, particularly the Senegal acacia." See Lorean Botti, Orietta Mantovani, and Daniele Ruggiero, "Calcium Phytate in the Treatment of Corrosion Caused by Iron Gall Inks: Effects on Paper," *Restaurator*. 26.1, (January 2005), 45. Early modern English ink recipes would have contained several ingredients from Africa. See also Blunt 224; See Mitchell M. Harris, "The Expense of Ink and Wastes of Shame: Poetic Generation, Black Ink, and Material Waste in Shakespeare's Sonnets," In *The Materiality of Color: The Production, Circulation, and Application of*

cosmetics on stage. Also like cork, galls on stage had the potential to link a Moor's black skin to various English industries, such as writing and husbandry. But because galls also had some supernatural associations among English audiences, they also exerted a different kind of agency on stage by linking black skin with a folk logic of augury and fortune-telling. This augural logic, along with the economic discourse that ranked galls from certain locations as more valuable than others, may have informed how audiences read Eleazar's black skin, and may have informed the emergence of a proto-racial discourse. Furthermore, by tying his gall to his "inky face," Eleazar also may have influenced how early cecidologists would later study and characterize galls with metaphors of infiltration and colonization.

Although various kinds of galls were available in England, the best galls for ink-making, dyeing, and tanning were imported by the Levant Company, primarily from Aleppo, Tripoli, and Iskenderun.[135] In a play like *Lust's Dominion*, where the Moor Eleazar connects his bitter "Gall" (1.2.163) to his "inky" (1.2.191) face, the pun on the ink ingredient and the bodily humor links artificial blackness, anger, and ink.[136] Ink

---

Dyes and Pigments, 1400-1800, Eds. Andrea Feeser, Maureen Daly Goggin, and Beth Fowkes Tobin, (Burlington: Ashgate, 2012), 69. Blunt cites Johann Jacob Wecker's *Cosmeticks or, the Beautifying Part of Physick* (1660), Harris cites Wecker's *Eighteen Books of the Secrets of Art & Nature* (1660) translation.

[135] Alfred C. Wood, *A History of the Levant Company*, (London: Frank Cass & Co., 1964), 76.

[136] As Mitchell Harris points out, Shakespeare makes use of the gall pun more than once to emphasize a material link between an ingredient in ink and a bitter secretion of the body. (Harris, "The Expense of Spirit," 70).

recipes proliferated in early modern England, and were common in books of housewifery, household chemistry, and magic.[137]

One recipe for "The best way to make Ink" from Johann Jacob Wecker's *Eighteen Books of the Secrets of Art & Nature* (1660), calls for "the best Galls," "Gum Arabick poudred half a pound, [and] Vitriol bruised eight ounces."[138] "The best galls" were presumably Aleppo Galls, thought to have the highest concentration of tannic acid.[139] This superlative is important because it endorses an economic hierarchy for galls from various locations. The "best galls" are, in this hierarchy, the highly-trafficked Aleppo galls, which are the result of an extremely specific ecological relationship between a cynipid gall wasp—*Andricus Infectorius or Andricus tinctoriusnostris*—which induces a gall on the Aleppo Oak, *Quercus Infectoria* or *Quercus Lusitanica*.[140] This insect-plant ecology made English trade with Aleppo viable and profitable for the Levant Company, because it yielded gall nuts that contained 70% tannins, compared to galls of Istria (40%) or Morea (30%) or even Bassora (25-30%), which were vastly inferior.[141] Playwrights likely made their own ink, and likely knew the foreign provenance of the imported ingredients.[142] This hierarchy of galls, which is only significant in an economic context,

---

[137] Ibid., 69.
[138] Johann Jacob Wecker, *Eighteen Books of the Secrets of Art & Nature*. 1660. Tt1v.
[139] Jonathan D. Briggs, "Historical Uses of Plant Galls," *Cecidology*, 1, no.1 (Spring, 1986), 7.
[140] Malpighi, 1.
[141] Franco Brunello, *The Art of Dyeing in the History of Mankind*, Trans. Bernard Hickey, (Vicenza: N. Pozza, 1973), 355.
[142] Mitchell Harris speculates that Shakespeare likely produced his own ink because Henslowe's diary does not include ink or paper as an expense (Harris, "The Expense of Ink," 69).

provided an ecological arena for early modern notions of botanical difference to take shape around constructions of economic value. The hierarchical thinking yielded from such economic-botanical logic is one way the materials of the stage might influence an emerging discourse of race. Some gall-inducing and host plant relationships, the reasoning suggests, are simply better than others at supplying tannins for human use.

The strongest evidence we have that galls may have been used as a blackface cosmetic on the stage comes from a different recipe for "Waters that black the Face," from Wecker's Cosmeticks (1660). The recipe instructs readers to extract

> a most clear water, from green Walnut-shells and Gaules; with which if you wet the face or hands, they grow black by degrees, like to an AEthiopian; which if afterwards you would restore to their former whiteness, you must distil Vinegar, Juice of Lemmons, and Colophonia, and washing with that will take off the blackness.[143]

Galls, along with walnuts and colophonia (a resin distilled from turpentine), were all natural commodities available in England.[144] But the English clearly preferred imported

---

[143] Johann Jacob Wecker, *Cosmeticks or, the beautifying part of physic*, 1660, D2r.
[144] While we now know that galls are growths on trees caused by parasitic insects, the early modern English were less certain. In his *Herbal*, John Gerard dedicates an entire chapter to the "Gall tree." Though he admits that "Of trees that bring forth Galls there be diuers sorts," and even notes that within galls, "there is also found a certaine excrescence of a light green colour, spongie and waterie, in the middle whereof now and then is found a little flie or worme," he nevertheless discusses the tree as if it were its own species, and galls as if they were the fruit of a tree, rather than the result of an insect-plant ecology (Gerard, Vuuuu6v). He also notes the popular early modern uses for galls; they are "fit for medicine, and to thicken skins with" (ie. useful in tanning) and also notes "Galls are vsed in dying and colouring of sundry things, and in making of inke" (Gerard, Xxxxx1r). Marcello Malpighi was the first to determine the origin of insect-inducing galls in the seventeenth century. See Marcello Malpighi, *De Gallis: On Galls*, eds. and trans. by

galls. The Levant Company's control over gall imports in the 1620's was significant enough to incite London grocers to lodge a complaint before Parliament against the company for "engrossing, or monopolizing, the trade in galls imported from the Near East."[145] Galls native to England contained far fewer tannins than galls imported from the Mediterranean, which made them inadequate for making ink. Thus, the foreign provenance of galls was widely known, and its use on the English stage to portray black skin may have influenced how authors represented or how audiences interpreted Moors on stage.

Like cork, galls had a number of uses in early modern culture, which also may have influenced how black bodies were read on the English stage. In addition to their commercial use in inks, dyes, and tanning, galls were used to treat common afflictions like toothaches,[146] and were even sources of food for livestock and humans.[147] Their chief utility was as an ingredient in recipes for iron gall inks, which were part of a material effort to create a more enduring, unified, and authoritative text. Iron gall inks were a relatively recent innovation in the early modern period. Developed during the middle ages, iron gall inks quickly superseded the use of carbon inks, which were "susceptible to spreading in the presence of humidity" and which "did not penetrate the support deeply

---

Margaret Redfern, Alexander J. Cameron, and Kevin Down, (London: The Ray Society, 2008), 1.
The OED defines "colophony" as "the dark or amber-coloured resin obtained by distilling turpentine with water." ("colophony," n. *Oxford English Dictionary*.)
[145] Brenner, 88.
[146] Margaret M. Fagan, "The Uses of Insect Galls," *The American Naturalist,* 52, no. 614 (Feb-Mar 1918), 159.
[147] Rosalind Blanche, *Life in a Gall: The Biology and Ecology of Insects that Live in Plant Galls*, (Collingwood: Csiro Publishing, 2012), 8.

and thus could be removed by washing, or even by simple abrasion."[148] Eventually, ink-makers discovered that "ferrous sulphate would react with tannic acid" found in gallnuts "to produce black particles"; this would prevent carbon ink from browning over time, and improved the bond between the ink and the fibrous structure to which it adhered.[149] When texts were written using an inferior carbon ink (and when paper was difficult to acquire), old texts could be wiped away and simply written over, sometimes leaving traces of the original text behind. Palimpsests reveal the two conflated texts simultaneously, yielding an effect of "supersession" or of "untimely irruption."[150] But palimpsests became obsolete with the iron gall innovation. The popularity of iron gall inks can be seen as an attempt to produce a more stable and permanent authoritative text. This is perhaps why iron gall inks became normalized for legal documents in the eleventh century,[151] and for bank notes in the twentieth century.[152] But if galls created a more authoritative written text, their potential role in representing Moors may have actually multiplied the valences attached to black skin on the English stage.

When Eleazar refuses to digest the "Gall" (1.2.163) of banishment, for example, he is primarily referring to the common humoral definition of gall, which identified the bitterness associated with black bile, and which was believed to produce a melancholic disposition within the body. Eleazar's pun depends on the color black as the associative

---

[148] Botti et al, 45.
[149] Ibid.
[150] Harris, *Untimely Matter*, 15.
[151] Botti et al 45. Fagan also notes: "In some places the law required that records be made with ink compounded of gall-nuts" (160).
[152] Briggs, 6.

connection between the ink that required galls to manufacture and the internal bile that generates gall. As Robert Burton notes in *The Anatomy of Melancholy* (1621), gall was also associated with anger or choler: "Choler is hot and dry, bitter, begotten of the hotter parts of the chylus, and gathered to the gall: it helps the natural heat and senses, and serves to the expelling of excrements."[153] But to understand Eleazar solely as an angry Moor reduces his material complexity to a stereotype that bore little weight during the period. As Mary Floyd-Wilson has shown, English colonial and economic expansion promoted an increasingly unstable understanding of blackness as a racial and ethnic signifier, especially as it related to the body's humors. A shifting geohumoral discourse sought to invert dominant notions of "northern 'whiteness' and English identity as barbaric, marginalized, and mutable" with notions of blackness as a symbol of "wisdom, spirituality, and resolution."[154] *Lust's Dominion* likely registers a material cause of this shift; as colonial expansion prompted the English to recast blackness in the terms of their own barbaric history, the blackness of "gall" materially associated the dark humoral condition with the increasing traffic of the imported natural commodity.

Lust's Dominion routinely exploits the associations between ink, black skin, and internal bodily humors. Eleazar's acquisition of the Spanish crown, for example, is only possible through his manipulation of print and ink—the best, longest lasting, most durable, and most authoritative of which required Aleppo galls. Eleazar becomes King of Spain through disseminating and regulating print in order to erode the legitimacy of

---

[153] Robert Burton, *The Anatomy of Melancholy*, (1621), Ed. Holbrook Jackson, (New York: New York Review Books, 2001), 148.
[154] Floyd-Wilson, 11.

Prince Philip's claim. At the same time, Philip and Hortenzo infiltrate Eleazar's court and regain the Spanish throne by racially cross-dressing as Moors, and through relying on a blackface technology, which may have also involved Aleppo galls.

Several Moors on the English stage, including Eleazar and Aaron, show skill in forging letters and manipulating ink, which strengthens a visual association between written and staged black characters. Eleazar controls ink in order to deceive his enemies and advance himself. Eleazar's "inkface"—a term coined by Miles P. Grier to denote the "shared field of blackface performance, tattooing, writing, and printing" which "enables a rich account of performances of literacy as rituals that invented an elastic racial category of illiterate, legible blacks"[155]—represents his blackness as a transferrable material. This is not to suggest that Eleazar himself cannot read; as a well-read and skilled rhetorician, Eleazar is the antithesis of illiteracy. Rather, the conflation of his black skin with ink paired with his paranoid regulation of print reveals a concern with how his black skin will be read and interpreted by an audience predisposed either to condemn or to celebrate him as a usurper.

Eleazar's concern is not unfounded. When Cardinal Mendoza seeks to have Eleazar banished from Spain, he points to the Moor's black body as evidence for his offenses: "His treasons," the Cardinal argues, "need no tryal, they're too plain" (1.2.157).

---

[155] Miles P. Grier, "Inkface: The Slave Stigma in England's Early Imperial Imagination," In *Scripturalizing the Human: The Written as the Political*, Ed. Vincent L. Wimbush, (New York: Routledge, 2015), 195. Grier shows how inkface services the imperial invention of a racial hierarchy by associating ink with property and slavery. He argues, "producing and interpreting inkface helped Britons struggling with memories of their own past as tattooed slaves in ancient Rome by transferring the ink mark of servility to other ethnicities as a property of their character" (195).

Eleazar perceives himself as the victim of a prejudiced gaze that regards his blackness as evidence of his prodigality and his promiscuity. He is not seen in public but

> …every hissing tongue cries, There's the Moor,
>
> That's he that makes a Cuckold of our King,
>
> There go's the Minion of the Spanish Queen;
>
> That's the black Prince of Divels, there go's hee
>
> That on smooth boies, on Masks and Revellings
>
> Spends the Revenues of the King of Spain. (1.1.87-92)

During the play's original performance, Eleazar's affair with the Queen may have been "too plain" due to the black and white cosmetic materials (transforming one male actor into a Moor and another into a woman) which perhaps accumulated on their faces after they privately kiss several times; a smudged cosmetic may even be the intention behind noting the Queen's "ashy cheeks" (1.1.119). But the Cardinal's justification also demonstrates a haphazard racist logic, which Eleazar's crusade in print aims to supplant by redirecting his audience's gaze to the ink on the page, rather than his own skin. Like the invisible ontology of "racecraft"[156]—a term coined by Karen and Barbara Fields to describe the tendency of racist folk logic to obstruct or intrude upon scientific reasoning

---

[156] Karen E. and Barbara J. Fields, *Racecraft: The Soul of Inequality in American Life*, (London: Verso, 2012). As the Fields sisters describe invisible ontology, "You never see it, yet you can always see it. Real-world evidence is ever at hand. By its nature, though, such evidence is miscellaneous" (203).

that would otherwise disprove the biological "fact" of race[157]—the play presents evidence from a variety of outlets to justify the banishment of the Moors. For the Cardinal, Eleazar's blackness is necessarily evidence of his offense—that, and his penchant for theater, "Masks and Revellings." Eleazar's affinity for performance underscores his own ability to dissemble, which may solicit an English audience into sharing Mendoza's gaze. Once Eleazar's banishment is pronounced, he refuses to "digest this Gall" (1.2.163), and vows revenge upon Cardinal Mendoza, noting "this disgrace,/ Shall dye thy soule, as Inky as my face" (1.2.190-1). Drawing attention to his humoral gall, Eleazar's inner anger seems to show on his skin, which is itself only a theatrical veneer masking an actor's white skin. Promising to "dye" the Cardinal's "soul," Eleazar himself seems to uphold his outward blackness as a sign of an inherent, inward, and contagious moral darkness. But at the same time that Eleazar is reduced to a mundane association between black ink and black skin, he also uses ink to win control over the court and the state.

If galls were used to stage the Moors in *Lust's Dominion*, then galls created a complex material network between Eleazar's presentation as a black character, his choice of print as a political weapon, and his inability to distinguish black skin from theatrical stage paint. The contest over the state between Philip and Eleazar turns out to be a battle over galls, and who can put them to the more effective political use. Although he recognizes the power of the black characters on the page to win him political favor,

---

[157] Ibid., 18. According to the authors, racecraft refers to the "mental terrain" that justifies the existence of race, which "originates not in nature, but in human action and imagination." Although the book situates racecraft in a twentieth-century American context, the book usefully compares the logic of early modern witchcraft to modern iterations of racecraft (210).

Eleazar is also beguiled by black characters on the stage when Philip and Hortenzo use a black cosmetic to disguise themselves as Moors. Eleazar's "gall" or anger facilitates the construction of a racist, scrutinizing gaze by linking his black skin to an imported commodity that can on the one hand pass off fake news as the truth, but that can also disguise Philip as a Moor on the other.

Eleazar's role as a manipulator of texts earns him a dubious position. On the one hand, Eleazar stands as a skilled rhetorician who is able to sway a contending public to trust him. As Emily Bartels argues, Eleazar positions himself "next to Philip as a Spanish insider and not a Moorish outsider" by giving "political action precedence over genealogy."[158] Eleazar's request that readers view him not by his birth, but by his "losse of blood,/ Which I have sacrificed in Spains defence" (3.2.207-8) displays a convincing rhetorical appeal, which "not only takes charge of the Spanish bloodline but also undermines its stability and significance."[159] So at the same time that Eleazar characterizes himself metonymically with ink, he also attempts to redirect how the Spanish population reads his "inky" face, especially in contrast to Philip.[160]

As the actor playing Eleazar might use galls to darken his white skin, the character himself uses galls in the form of the printed word in order to direct his

---

[158] Bartels, 131.
[159] Ibid.
[160] Eleazar's association with ink and galls seem to position him as a poor interpreter of black characters. As Miles Grier argues, "to link a person to ink was to designate [him or] her as one who could never be an insightful reader because [he or] she was meant *to be read* by a white expert" (Grier, 195, italics original). Eleazar may be a strong manipulator of gall and print, but his outward gall also *characterizes* him—that is, makes him into a printed character, emphasizing his ability to be read over his ability to read.

audience's attention away from his black body, and toward the false narrative about his political enemy's illegitimate birth. Eleazar seeks to regulate his own representation through print. He plans to have Prince Philip's own mother proclaim her son a bastard; in the absence of verifiable proof, Eleazar supplies readers with printed texts. He instructs the Queen to hire the friars "to *write books*, preach and proclaim abroad,/ That your son Philip is a bastard" (2.2.49-50, emphasis added). Eleazar invokes the gall trade once more in explaining his plan to the Queen:

> By this means shall you thrust him [Philip] from all hopes
> Of wearing Castiles diadem, and that spur
> *Galling* his sides, he will flye out, and fling,
> And grind the Cardinals heart to a new edg
> Of discontent. (2.2.53-7, emphasis added)

Both Eleazar and the printed texts he disseminates function as the "galling" spur responsible for the prince's evacuation from Spain. Through disseminating printed texts, Eleazar issues a vengeful banishment for Philip, and seeks control over the narrative.

In *Titus Andronicus*, Aaron's manipulation of ink is also the primary means by which he arranges for the vengeful hewing (or decapitation) of the Andronicus brothers. Aaron admits that he "wrote the letter" (5.1.106), the "fatal-plotted scroll" (2.2.47) that frames Quintus and Martius for the murder of Bassianus. His confession solidifies his association with dissembling and galls, and opens his "hue" to the audience's scrutiny about the meaning of his black skin. But Eleazar's regulation of print as a means of gaining power and revenge is more public than Aaron's. He cannot ascend the Spanish

throne without first influencing public opinion through the manipulation of written and oral media. His pawns, Friar Crab and Friar Cole—or *coal*, as the audience might hear it—demonstrate their loyalty to Eleazar in the dissemination of his message: “For you, our lives wee’l sacrifice…Cole will be burnt, and Crab be prest” (2.2.134, 139). Eleazar’s task is not merely to produce a rumor, but to manage the material dissemination of that rumor through print by using two credible (though corruptible) friars. Eleazar punctuates his message by having the Moors Zarack and Baltazar murder the friars during their oration in the middle of the Seville marketplace. After Cole pronounces Eleazar “a fair black gentleman” (3.3.72) who cannot be compared to “that bastard” (3.3.83) Philip, the friar is murdered, which convinces the lookers-on that “This is Philips treason” (3.3.89-90).

Philip’s riposte, however, also involves exploiting galls and friars, though he prefers disguise to public oratory and the dissemination of print. Prince Philip dresses up as both friar and Moor during the play—a friar to escape, and a Moor to infiltrate Eleazar’s court. It is of course troubling that Eleazar should be fooled by Philip’s cosmetic disguise involving “the oil of hell” (5.2.171), not only because it reduces Baltazar and Zarack to racial types whose personalities are effaced by their skin color, but also because Eleazar’s figurative language and dissembling character seem to establish his skill in recognizing disguise.

Philip and Hortenzo’s use of galls via blackface give them the privilege of reading and imitating Eleazar’s body in order to capture it. After the Queen, Cardinal Mendoza,

and Prince Philip have all been arrested, Eleazar turns his attention to Hortenzo and Alvero, noting,

> They have supple knees, sleack'd brows, but hearts of gall:
>
> Their bitterness shall be wash'd off with blood,
>
> Tyrants swim safest in a crimson flood (5.1.226-8).

Eleazar's metaphor for bitterness as some type of cosmetic material that might be "wash'd off" registers how the body's humors might become legible externally on the body, and identifies gall as both an internal humor as well as an external cosmetic ingredient. Hortenzo and Philip, through making their whiteness illegible to Eleazar, gain access to Eleazar's "library," and glimpse into his paranoid regulation of print. Hortenzo and Philip do not outsmart Eleazar beyond their disguises; rather, he sets his own trap. His explicit association with fetishized printed texts reaches its zenith when he characterizes himself as the hero of his own revenge tragedy—which of course he is:

> O! Saint revenge: to thee
>
> I consecrate my Murders, all my stabs
>
> My bloody labours, tortures, stratagems:
>
> The volume of all wounds, that wound from me;
>
> Mine is the stage, thine is the tragedy. (5.3.56-60)

Ecstatic to share his plan for how he will murder Philip and Mendoza, Eleazar transforms the "prison" (5.3.61) that houses the "*volume* of all wounds that wound from me" into both a theater—with "volume" enough to "stage" his consecrated murders, as well as his own "tragedy"—and a library, which houses the "volume[s]" of his "bloody labours."

Eleazar invites Zarack and Baltazar—Philip and Hortenzo in disguise—to “survey my Library” of “villainy” (5.3.62-3). And though he is eager to share a “good book” (5.3.65) with Zarack and a “better book” (5.3.67) with Baltazar, he saves one volume for himself: “The best of all:/ And therefore do I chain it every day,/ For fear the Readers steal the art away” (5.3.68-70). Eleazar’s “best” book is simply a metaphor for his plan to murder Philip and Mendoza. But the metaphor also exposes Eleazar’s secrecy and paranoia, his fear that his audience might “steal the art away,” or misinterpret him somehow. Furthermore, the metaphor of Eleazar’s “best book” might also demonstrate how a hierarchy of galls can translate to the stage and influence an emerging hierarchical or racial logic.

In the same way that Aleppo galls were the “best” for making ink, *Lust’s Dominion* reinforces the idea that some uses of galls are more effective than others. Eleazar’s “best book” shrouds his plan to outsmart and kill Philip and Mendoza in a metaphor of print. But Philip and Hortenzo’s *material use* of a blackface disguise (that may have required galls) ultimately outsmarts and outdoes Eleazar. By (potentially) using galls on stage in a blackface disguise, Philip and Mendoza not only regain control of the narrative that Eleazar’s dissemination of print seeks to upset; they also link galls to an emerging racial discourse that reinforces black skin as more duplicitous than white. Eleazar enlists Philip and Hortenzo in staging his proposed murder of Philip and Cardinal Mendoza; he asks that they help him to “play the Cardinall” (5.3.96) by handcuffing “his hands as thou dost mine” (5.3.99). Through ensnaring himself in his own performance, Eleazar stages the danger of sharing his inner self with his “readers.” His revelation

seems to justify a scrutinizing gaze by reinforcing the legibility of his black skin. The cosmetic used to represent Eleazar—likely composed of the same galls required to author a play, and no different from the one used by Philip and Hortenzo to trick him—suggests that he is hiding something beneath his skin, which cannot be apprehended without a closer reading. He unchains his secret text only to find himself in chains. Furthermore, Eleazar's suspicion that readers might "steal the art away" also proves prophetic, since his theatrical staging must come to a halt when Philip reveals himself, "ransom'd from that prison/ In which the Moor had cloistered him" (5.3.134-5). Philip views his racial disguise as a kind of prison, which keeps his external whiteness hidden; his liberation is only possible once Eleazar makes his inner text visible. Philip takes advantage of Eleazar's bondage, and slays "the Moor, the actor of these evills" (5.3.146). But Eleazar's anxiety about reader response is in the end a material concern about how to read and understand his inky face.

Another early modern association with galls has bearing on the way Eleazar's initial offense to Cardinal Mendoza is plainly written on his black body, as well as the subsequent anxiety Eleazar has about how his black body will be read and interpreted by his audience. Galls were also affiliated with the supernatural, a characteristic that made them a viable material avenue for carrying an invisible ontology of early hierarchical thinking to the English stage. In the middle ages, the English believed that galls held prophetic qualities. In his *Herbal*, John Gerard explains that "oak apples," or galls found on English oak leaves, would "foreshew the sequel of the yeare" when cut open, depending on what was found inside. If an ant was discovered within a gall, it promised

an abundance of grain; a maggot foretold a pestilence on sheep and cattle; a fly foreshadowed war; "if a spider, then...we shall haue a pestilence of some such like sicknesse to follow amongst men."[161] Such a belief system may sound like nonsense today, but a logic is clearly at work to explain the inexplicable. Galls were evidence of what was to come, and the folk logic associated with this material may have reinforced a similar folk logic regarding black bodies on the stage.

If galls facilitated Eleazar's representation as a Moor in *Lust's Dominion*, they expose a compelling parallel between Eleazar's bid for power and the gall-inducing insect—one that suggests that the use of galls to represent Moors on the English stage may even have influenced how cecidologists would later characterize the parasitic relationship between a wasp and a host plant. To ecologists, the tannin content of galls is negligible. Cecidologists (who study plant galls) are more concerned with the relationship between the gall-inducing organism and the host plant. The interaction between gall-inducers and host plants is not only parasitic; it embodies a natural master-slave relationship, a biological colonization of plants, in which gall-inducing organisms leach food, shelter, resources, and obtain a means and technology for procreation from an unconsenting host plant.[162] "It is important to understand that the gall is formed by the plant in response to the presence of a gall-inducing agent," writes one cecidologist. "The gall-inducing agent itself does not build the gall."[163] The actual method that gall-inducers use to force plants to build galls is actually still a mystery. One theory is that "initiation of

161 Gerard Vuuuu3r.
162 M. S. Mani, *Ecology of Plant Galls*, (The Hague: Dr. W. Junk, 1964), 2, 3.
163 Blanche, 1.

a gall results from the transfer of genetic material (DNA or RNA) from the insect to the plant...Gall-inducing insects may be natural genetic engineers!”[164] The metaphorical implication of imperialism and biopower behind such a suggestion has been emphasized by other cecidologists, though it was first suggested by Marcello Malpighi, whose 1679 study, *De Gallis* remains foundational for the field of cecidology. Malpighi, who overturned the popular notion that both flies and galls were “a product of spontaneous generation from putrescence and decay,”[165] was also the first to deduce that insects, through laying their eggs, could cause a host-plant to form a gall. However, Malpighi characterized the insect-plant ecology as nothing short of a brutal rape and conquest. Malpighi observed that insects and other “humble little creatures”

> ...not only exact from [the plant] their daily nourishment, but also compel plants to offer themselves as substitute wombs for the deposition of their offspring and subsequently as foster-mothers’ breasts. Therefore this enslavement of plants does not take place without mutilation: because of the demands of these insects, the plants’ internal functioning is upset, their methods of feeding are disrupted and their juices are corrupted and a new configuration of the plants’ parts develops.[166]

---

[164] Rosalind Blanche reviews several theories about how gall-inducers actually make plants form galls, but the short answer is that “No one knows for sure” (Blanche, 7). She suggests that “chemicals injected with the egg and/or the saliva of the gall-inducing insect are responsible for gall development, and that chemicals in the insect’s saliva...maintain the gall.” However, “What we don’t know is what these chemicals are or how they work” (Blanche, 7).

[165] Malpighi, 1.

[166] Malpighi, 54.

Malpighi sets a tone (which subsequent cecidologists follow) of sympathizing with the plant; he interprets the gall wasp or gall-inducing organism as an unwelcome, parasitic invader. For another cecidologist, M.S. Mani, galls represent “the reaction of the plant in a specific manner, viz. by growth, to *the attack of some foreign species*.”[167] Others specify that the plant’s growth of the gall is “regulated” by the gall-inducing organism.[168] Though early modern audiences would not have known that the galls they imported from Aleppo were the result of a cynipid gall wasp’s infiltration of an Aleppo Oak, these cecidologists represent this ecological relationship in terms of infiltration that resonate with the uses to which galls are put, both in print and as a cosmetic ingredient, in *Lust’s Dominion*.

Aaron and Eleazar: Embodying the “Indistinct Human” on the Early Modern Stage

While cosmetics involving burnt cork or galls were likely used to darken the skin of white actors on the English stage, skin color was by no means a stable marker—or the only marker—of difference or of “race” in the early modern period. In *Titus Andronicus*, Aaron’s black “hue” may position him as an outsider in Rome, but the “hews” he orchestrates against the Andronicii and his environment also signal his *belonging* in a city that burns hewn bodies atop piles of hewn wood. Concentrating on these materials that an emerging racial discourse uses in early modern England allows modern audiences to see the environmental violence that attends the formation of a racial hierarchy. *Titus Andronicus* suggests that the ontological categories of the human and the natural must be

[167] Mani, 3, emphasis added.
[168] Margaret Redfern and R. R. Askew, *Plant Galls*, (Slough: Richmond Publishing Co., 1992), 1.

severed—and violently—before a modern ideology of "race" can emerge. The racist logic that allows one group of humans to see themselves as superior to another group of humans emerges at the same time that humans begin to see themselves as superior to the natural world. Shakespeare's play engages with this ontological shift through staging Aaron's dubious relationship with his environment. Aaron's investment in protecting his son induces a shift in his attitude toward nature; his difference in Rome becomes marked by the communion he holds with nature in attempting to be its steward rather than its master. Violence in this play, which is almost always environmentally charged, aims to racialize Aaron's difference. But Aaron's environmental affiliation only reinforces the fluidity of early modern racial markers.

An unstable ontology of the "human" during this period only underscores the fluidity of emergent and proto-racial categorization. As several scholars have pointed out, this period marked a transition for the category of the "human," which was more often seen as a part *of* the natural world, rather than apart *from* it.[169] Jean Feerick's reading of *Titus Andronicus*, which demonstrates how the play's racial logic is rooted in the overlapping discourses of horticulture and nobility, foregrounds an important ontological premise of early modern thought: during this period, the ontological category of the

---

[169] For examples of how early modern culture positioned itself within rather than outside of the natural world, see Jean Feerick and Vin Nardizzi, eds. *The Indistinct Human in Renaissance Literature*, (New York: Palgrave Macmillan), 2012. More recently, Maisano and Campana's collection on *Renaissance Posthumanism* also offers examples of an "indistinct" human ontology. Renaissance Humanists were invested in asserting an anthropocentric worldview of human exceptionalism, but not exclusively. See: Kenneth Gouwens, "What Posthumanism Isn't: On Humanism and Human Exceptionalism in the Renaissance," in *Renaissance Posthumanism*, Eds. Joseph Campana and Scott Maisano, (New York: Fordham University Press, 2016), 50-1.

"human" was indistinct from the modern category of "nature." Shakespeare and Dekker were writing during a moment *before* "the differences structuring categories like human, animal, and plant would be emphasized and reinforced, and systems of discrimination would be set into place to perform the work of assigning each kind of body a discrete place within a vast and all-encompassing taxonomic order."[170] Nature, then, was both a human and a non-human conception at the same time that travel writers, scholars, and playwrights were calling into question the subjectivity (or humanity) of black Africans.[171]

In *Titus Andronicus*, the metaphors that connect human arms and legs to severed wooden "limbs" also link a natural ecology to a Roman body politic. If the early modern English conceptualized "nature" and "human" as indistinct categories, their philosophy extended to the belief in a natural body politic as well. A healthy, functioning body politic in early modern England meant a thriving store of natural resources. In *The Commons Complaint* (1611), for example, Arthur Standish correlated the unsustainable consumption of wood with the deterioration of the kingdom, and proposed a long-term tree-planting project to ensure a future wood supply—and a future state. Standish argued, "the want of wood causeth too many great losses by fire, that commeth by the burning of straw, and so it may be conceiued, no wood no Kingdome."[172] Unlike Standish's England, Rome at the opening of *Titus Andronicus* figures as a flourishing empire of wood. The Romans flaunt their wealth of natural resources and display a dubious civility

---

[170] Jean Feerick, "Botanical Shakespeare: The Racial Logic of Plant Life in *Titus Andronicus*," *South Central Review*, 26, no. 1 & 2, (Winter and Spring 2009), 82.
[171] Chapman, 3.
[172] Arthur Standish, *The commons complaint*, 1611. B2v.

against Gothic barbarism by burning Alarbus' fragmented body upon a wooden heap. The excessively violent hewing of Alarbus (accompanied by the unscrupulous consumption of wood) ironically overlaps with an attempt to reassemble a fragmented body politic in Rome. But Alarbus' offstage quartering presents a literal obstacle to the figurative task of reassembling the body politic; his blood lubricates the slippage between "hew" and "hue" which the first act trains its audience to hear. In order to "set a head on headless Rome" (1.1.189), Titus rejects the "palliament of white and spotless hue" (1.1.185) offered by the people who want him to be Emperor, and instead appoints Saturninus, the elder son of the former Emperor, to hold the office. But in re-attaching the head of Rome, Saturninus, who has promised to wed Lavinia out of gratitude for his appointment, lops off a different limb when he beholds the imprisoned Queen Tamora, "A goodly lady… of the hue/ That I would choose were I to choose anew" (1.1.265-6). While the audience chooses which "hue" to hear, Saturninus changes his mind, and chooses Tamora to be his Empress. Instead of situating a head on headless Rome, Saturninus, seduced by Tamora's hue, only severs the body politic further by emancipating and incorporating the vengeful and divisive Goths into the Roman social fabric.

Within Rome's wooden body politic, before an English audience feeling the economic and ecological effects of a wood shortage, *Titus Andronicus* conflates human and environmental violence, and registers the depletion of wood as a loss of body parts. Lavinia's rape and mutilation, for example, is also emphasized as a loss of limbs from a healthy body politic. Lavinia's mangled form is regarded with the eyes of an audience to

whom wood has become precious. When Marcus beholds her bereft "of her two branches" (2.4.18), when Chiron cruelly mocks her "stumps" (2.4.4), when Aaron boasts how she was "washed, and cut, and trimmed; and 'twas/ Trim sport for them which had the doing of it" (5.1.95-6), and when Titus regards her mangled form and asks, "What fool hath added water to the sea/ Or brought a faggot to bright-burning Troy?" (3.1.69-70)—they invite audiences to read Lavinia as a representation of Rome's (and England's) disjointed and un-natural body politic.

Although Aaron's skin color is neither a marker of his "race" in the play, nor what determines his behavior, he nevertheless offers his "hue" as an explanation for his villainy. When Aaron tricks Titus into sacrificing his hand—one of his "withered herbs...meet for plucking up" (3.1.178-9)—in exchange for (the heads of) Quintus and Martius, Aaron points to his hue to justify his double hewing: "Let fools do good and fair men call for grace;/ Aaron will have his soul black like his face" (3.1.205-6). Similar to Eleazar's reference to his "Inky face," Aaron's reference to his own hue seems to invoke an older theatrical tradition, and collapses a represented African Moor with devils and Vice characters who blackened their faces in medieval theatrical performances to signify their moral aberration.[173] Through matching his outer and inner darkness, Aaron conflates his black hue with the hewing of Titus's hand. At the same time, the pun he visualizes for his audience between his successful "hew" and his black "hue" underscores his wit and intelligence, qualities were also associated with black skin and the melancholic

---

[173] Annette Drew-Bear, *Painted Faces on the Renaissance Stage: The Moral Significance of Face-Painting Conventions*, (Lewisburg: Bucknell University Press, 1994), 18; Stevens, 92.

disposition resulting from black bile during the period.[174] Aaron's hewing of Titus's hand and the heads of Quintus and Martius could be read as retribution for the Roman hewing of Alarbus in the first scene; he is not the only hewer in the play, and his hewing is begotten by an earlier Roman hewing. Furthermore, the hewing he performs against the bodies of the Andronicii extends his exploitation of the wooded space outside of Rome back into and onto the body politic. Aaron's crude husbandry supplants the natural world and punishes the most loyal arm of the Roman military with a few simple strokes.

At the same time that the hewn and burnt cork, which might have supplied the material makeup of Aaron's physical hue on stage, seems to position him within the natural world, the hewings that he orchestrates in the play also situate him above nature. The play's scenes in the wooded space on the outskirts of Rome depict Aaron's preoccupation with manipulating and exploiting his environment in order to reap a hasty and profitable revenge against the Andronicus family. Aaron buries a bag of goldbeneath a tree (2.3.2), which he hopes will yield a profitable revenge. Beneath the same tree, Aaron digs a "subtle hole," covers it "with rude-growing briers" (2.3.199-200), and transforms the earth into a symbol of transgressive female sexuality, which operates as the site of both Tamora's revenge and Lavinia's rape. Aaron reshapes this landscape, both physically and rhetorically, in order to profit in his revenge. As a "swallowing womb" (2.3.239) that entraps, condemns, and ingests (rather than births) the bodies of Bassianus, Martius, and Quintus, Aaron's pit—which is also called a "loathsome pit" (2.3.176), an "unhallowed and bloodstained hole" (210), a "den…of blood and

---

174 Floyd-Wilson, 69.

death" (215-16), a "detested, dark, blood-drinking pit" (224), a "fell devouring receptacle" (235), and a "gaping hollow of the earth" (249)—bears the mark of Aaron's environmental penetration. Aaron's complicity in Lavinia's rape manifests itself through his subtle terraforming; he rehearses her rape through digging in the earth.

The wooden ingredients responsible for Aaron's skin on stage fail to distinguish him from the play's violent economy of vengeful hewings. What *does* distinguish Aaron in Rome is his investment in being a father, a responsibility that also induces a change in Aaron's attitude toward the natural world. Once he learns he has a son, Aaron's black "hue" becomes unmoored from its associations with moral aberration and environmental exploitation, and instead becomes affiliated with honesty and environmental stewardship. In a play where Roman, Goth, and Moor each commit heinous acts of violence against human and nature, Aaron's revised attitude towards the natural world becomes his most glaring trait of distinction. The nurse who brings the boy to Aaron reinforces the play's racist associations between blackness and evil. She exclaims the child is "A devil" (4.2.66), "A joyless, dismal, black, and sorrowful issue," and even implores Aaron to "christen it with [his] dagger's point" (4.2.68, 72) on Tamora's behalf. The violent death of the infant, the play suggests, is required to prevent Saturninus's discovery of Tamora's infidelity, and to ensure that the a black Moor will not have a claim to the empire. But the nurse also suggests that a violent death is required simply because it is a black child. In response, Aaron interrogates the nurse's racist interpretation of color and asks, "Is black so base a hue?" (4.2.73). In one of the few moments of the play where Aaron prevents rather than instigates violence, he aims to christen blackness with a

different connotation, one predicated on its permanence rather than its fluidity. To prevent the dagger from validating the nurse's racist judgment of the "black" and therefore "sorrowful issue," Aaron tells Chiron and Demetrius:

> What, what, you sanguine, shallow-hearted boys,
>
> You white-limed walls, you alehouse painted signs!
>
> Coal black is better than another hue
>
> In that it scorns to bear another hue;
>
> For all the water in the ocean
>
> Can never turn the swan's black legs to white,
>
> Although she lave them hourly in the flood. (4.2.99-105)

For Aaron, black is superior to white because it cannot be inscribed upon with any other color. His color, he believes, affords him the privilege of a private and inner self;[175] he is proud that he will never blush, as Chiron does when he reflects upon his mother's newborn. For Aaron, white is a "treacherous hue, that will betray with blushing/ The close enacts and counsels of thy heart" (4.2.119-20). The irony, of course, is that Aaron's hue is not permanent, and will wash off at the end of the performance. Thus, even his explicit attempt to rhetorically position black above white is undermined by the theatricality of his hue and the material that makes him appear black.

To preserve his son's life, Aaron eventually reveals the counsels of his own heart in an honest confession at the end of the play. Though Aaron has trained his audience to read a correlation between his inner "soul" and his outward "face," he spills his insides

---

[175] Stevens, 97.

outward in order to preserve his son's life. In addition to naming several other atrocities not staged in the play, Aaron also confesses that he "begot" the child (5.1.87), "wrote the letter," "hid the gold" (5.1.106-7), and "played the cheater for [Titus's] hand" (5.1.111). Aaron's honesty is important because it underscores how his son has caused a rupture of his principles. Aaron's black "hue" may scorn "to bear another hue," but blackness is not a fixed signifier of deception and evil. His honesty underscores his new concern for the preservation of his child, as well as a new regard for nature as something to be dependent upon rather than something to exploit and manipulate. The infant's "hue bewray[s] whose brat" (5.1.28) he is, and the perceived insolubility of his black skin creates a problem in the play that cannot be solved with a disguise.[176] Aaron thus prepares the child for a pilferer-scavenger's diet:

> I'll make you feed on berries and on roots,
>
> And feed on curds and whey, and suck the goat,
>
> And cabin in a cave, and bring you up
>
> To be a warrior and command a camp. (4.2.179-82)

---

[176] A consideration of the potential woodenness of some of the play's props only emphasizes the environmental hue of Aaron's stewardship over his son and the environment. If the infant was staged using a wooden doll, for example, then the child could even be read as the direct result of Aaron's hewing, the product of his illicit husbandry in the woods. Similarly, if the pie containing the flesh of Chiron and Demetrius that Titus serves to Tamora in the final act is also made of wood, it could accentuate Rome's (and London's) excessive consumption of wood by conflating the ingestion of wood with the taboo of cannibalism. Richard Brome's *The Antipodes* (1638) includes a scene where Peregrine stumbles into a playing company's tiring house and discovers "wooden pies" amongst the inventory (3.1.294). See: Richard Brome, *The Antipodes* (1636), In *Three Renaissance Travel Plays*, Edited by Anthony Parr, (Manchester: Manchester University Press, 1995).

Aaron's determination to preserve his child makes him a better parent than both Titus, who slays first his son Mutius (1.1.295) then his daughter Lavinia (5.3.46), and Tamora, who demands her newborn's death, and naively walks Chiron and Demetrius into Titus's kitchen. Aaron's brand of fatherhood also encompasses a unique pact with nature. He decides to live in secret, without agriculture, and to survive on what nature provides, or what he can steal from livestock. Imagining his life as a single father, Aaron supposes that the full potential of his child's military and political threat to Rome might be realized with little more than the pastoral fantasy of a cave to live in, a goat to suck, and a few berries and roots to sustain them both. As a father, Aaron shifts from perceiving himself as a black villain, who terraforms traps in the woods as a way of killing or framing his enemies in Rome, to instead perceiving himself as a resourceful thief, who must either live off of his own stewardship or else the stewardship of others. Once he becomes a father, his perception of nature as an abundant and exploitable resource shifts into something that is far more precious and scarce, since it must sustain him and his son.

Lust's Dominion and *Titus Andronicus* both stage the perceived political and environmental consequences of integrating Moors into European social structures. The violent spectacles produced by Aaron and Eleazar reflect potential English anxieties about increasing trade with Moors of Northern Africa. At the same time, each play draws attention to how English consumption of wooden commodities and printed texts was driving English expansion into more global economies of wood. While attending to the materials that physically composed Moors on the English stage might seem to privilege non-human objects over human subjects, it actually accentuates the agency of both

natural commodities and Moors on the English stage. Both *Titus Andronicus* and *Lust's Dominion* represent Moors who are capable colonizers, effective rulers, and brilliant rhetoricians. To reduce Aaron to a "black ill-favoured fly" (3.2.67), as Marcus does, is to fatally underestimate what Aaron is capable of accomplishing with little more than the woody product of a wasp's life cycle. Furthermore, through exploiting print and galls to gain or facilitate power, Aaron and Eleazar demonstrate and celebrate the agency of wooden commodities on the stage, and perhaps even test their limits. Modern racial discourse may be a damaging ideology structured on an invisible ontology, but even in its early iteration on the early modern stage, the invisibility of racial logic "turns out to have properties that can be explored empirically."[177] The emergent production of race on the English stage was far from immaterial; it was shaped by the ecology and economy—the wooden *oikos*—of the theater itself.

---

[177] Fields and Fields, 20

CHAPTER 3

MONKEYS, FLOODS, AND THE "IMMORTAL WILLIAM": ENDURING NATURE AND PLAYING SHAKESPEARE IN THE BRITISH EMPIRE

> Why not use the potential of the world to transport not terror or commodities, but sixteen human souls, armed with hope, technique and strong shoes, their set packed into their luggage, the play wired into their memories, and present to every corner of the world, with a playful truth, the strangest and most beautiful play ever written[?] Why not?
>
> -Dominic Dromgoole, Hamlet: Globe to Globe[178]

The early modern stage implemented metaphors of grafting and represented Moors with imported cosmetic ingredients, and both practices implicated the natural world in an increasingly global commercial network. But how did performance itself fit into the global economy? The first known performance of a Shakespeare play given outside of England was actually a 1607 performance of *Hamlet*, played aboard an East India Company vessel docked at Sierra Leone.[179] Shakespearean theater would not be confined to London, and became explicitly tied to England's overseas joint-stock enterprises even during Shakespeare's lifetime. But in order to see the far-reaching effect of Shakespearean performance within the history of British imperialism, globalization, and the Anthropocene, we need to look beyond the early modern period, and beyond England. Expanding our timeframe for analyzing Shakespearean performance history sheds light on a mutually reinforcing relationship fostered between Shakespearean performance and British imperial ideology. Furthermore, addressing Shakespearean performance on a more global stage allows us to align the history of British imperialism

---

[178] Dominic Dromgoole, *Hamlet: Globe to Globe*, (New York: Grove Press, 2017), 8.
[179] Richmond Barbour, *The Third Voyage Journals: Writing and Performance in the London East India Company, 1607-10*, (New York: Palgrave Macmillan, 2009).

with the narrative of the Anthropocene and the global consequence that humans are facing today. Turning from the commercial properties of the sixteenth-century stage that were indelibly linked to ecological imperialism and the globalization of nature, this chapter focuses on Shakespearean performance itself as a global commodity whose commercial value may have been more tied to the natural world than previously thought.

On April 23, 2014--Shakespeare's 450th birthday—a group of actors from the Globe Theater in London set out a tour of the globe with a single play in their repertoire: *Hamlet*. The tour was a success, as the subtitle to Dominic Dromgoole's memoir indicates: *Two years, 190,000 Miles, 197 Countries, One Play*. And while the company may have delivered on its geographical coverage and its quantity of individual performances, a tour of such magnitude also raises questions about the company's goals. Why just one play? Why *Hamlet*? And why every country in the world? Dromgoole confesses in the introduction to his book that the project began as a drunken proposition in a hotel bar: "Somewhere in that merry drinkathon, within a bleary mayhem of flirt and wind-up and raucous laughter, someone said, 'We need another big idea, something like the [Globe to Globe] festival.' With barely a pause for thought, I said, 'Let's take *Hamlet* to every country in the world.'"[180] Dromgoole's answer to the question, "Why?" seems to be a rather loaded "Why not?" Though conscious of the purchase that Shakespeare's name and works have in a global marketplace, Dromgoole seems at the same time oblivious to the more particular ideological purposes involved when drunken actors have

---

[180] bid., 2-3. Dromgoole explains that they were celebrating the end of their 2012 Globe to Globe festival, which aimed "to present within a six-week festival every one of Shakespeare's thirty-seven plays" (1).

proposed similar projects in the past. Furthermore, his answer to the question, "Why *Hamlet*?," that it is "the strangest and most beautiful play ever written," fails to question the ideology embedded in such a claim, and overlooks an important colonial and pedagogical history, which makes it possible for a general, English-speaking audience to take such a hyperbolic claim for granted.

Dromgoole is hardly the first Shakespearean actor to propose a global tour of Shakespeare; he is only the most recent. And not unlike the Shakespeareans who have preceded him, Dromgoole exposes the process by which Bardolotry takes place. It begins with an idea: that Shakespeare is the best writer, the national poet of England, and all of the world should be able to enjoy—and learn from—his work. The idea, of course, is tied to an ideology—that English is the best and most civilized language, that it should be understood if not spoken everywhere, and anyone who does not speak English is either less than, worse off, uncivilized, or Other. Shakespeare, after all, is for all time, and "*Hamlet* is one of those rare documents that can be said to have brought the world closer together."[181] In this chapter, I trace the lineage of this type of Bardolotry from its origin—not from sixteenth century England, but from the burgeoning British colonies of the eighteenth and nineteenth centuries. I show how Shakespeare's cultural status developed as the result of actors touring Shakespeare through the British colonies.

Although a Shakespearean performance may have represented to some colonial audiences an attempt by the British state to control, teach, or even "civilize" them, the difficulty and labor it required on the part of the actor often allowed actors to see themselves as martyrs

---

[181] Ibid., 6.

for Shakespeare. Most of the performances involved in the Globe to Globe project, much like the performances offered by British playing companies touring in the colonies of the nineteenth century, were performed in English, and provided no translation for non-English speaking audiences.[182] I want to explore how Shakespeare's imposition onto other cultures gives rise to his greatness, his universalism, and his "genius."

Shakespeare's role in legitimizing British colonial authority throughout the Empire has been well documented. Although Shakespeare was upheld as an idol of British cultural superiority, it is important to recognize, as Michael Dobson does, that Shakespeare did not produce the British Empire so much as the British Empire produced Shakespeare, and turned him into the cultural icon he is today. Before the Enlightenment, Shakespeare was just another early modern playwright; he only became the "national poet of England" as the Empire gained strength, and systematically employed his works in a pedagogical and civilizing mission, which also worked to disseminate the English language as the imperial vernacular.[183] In India, for example, Thomas Babington Macaulay was likely thinking of Shakespeare in his infamous "Minute of 2 Feb. 1835"

---

[182] Dromgoole describes an incident during a Mexico City performance where he offered to narrate scenes in which the actor playing Horatio, who had fallen ill with food poisoning, was meant to appear. When the audience complained that he was not narrating in Spanish, he grabs one of the nearby Mexican production managers, who "look[ed] terrified, never having been on stage before" (84). He then describes the trouble that occurs when she cannot translate the word for "battlements" into Spanish, all while the company is running back and forth to the bathroom (86-7).

[183] Michael Dobson, *The Making of a National Poet: Shakespeare, Adaptation, and Authorship, 1660-1769,* (Oxford: Clarendon Press, 1992), 5. Dobson traces how seventeenth- and eighteenth-century revisions of Shakespeare's plays contributed to his canonization. He argues that "adaptation and canonization, so far from being contradictory processes, were often mutually reinforcing ones."

when he wrote of “the intrinsic value of our literature,” which he claimed was essential for the production of “a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect.”[184] That same year, Indian Educational Act made English the official language of education in India, and Shakespeare was incorporated into the curriculum at schools and colleges, where his plays were taught as well as performed. Shakespeare’s popularity in India cannot be denied. There were a few different modes and venues for performing Shakespeare in India, and each had different political implications. Attendance at early British dramatic productions in Calcutta was initially reserved exclusively for English sahibs and memsahibs, though it was not long before elite Indians were allowed to access the number of European theaters in Calcutta.[185] The initial exclusivity of the theaters reinforced the cultural superiority of European art and culture over Indian forms of theater and performance, and attempted to cultivate an English taste among elite native populations. Indian actors were eventually allowed to perform Shakespeare, which was policed by British surveillance in some cases, but which also brought Shakespeare to a largely non-elite and illiterate

---

[184] Thomas Babington Macaulay, “Minute of 2 Feb. 1835.”

[185] Nandi Bhatia, *Acts of Authority, Acts of Resistance: Theater and Politics in Colonial and Postcolonial India*, (Ann Arbor: University of Michigan Press, 2004), 12-13. Though British theater in India can be traced back to 1757, when the East India Company came to power in Bengal, the prominent theaters of Calcutta were not built until the late eighteenth and early nineteenth centuries. By 1817, Calcutta had three prominent theaters and five smaller ones (12).

population.[186] Indian vernacular translations and appropriations of Shakespeare, which proliferated in Bengal after the 1870s, provided an outlet for political protest that were subversive, but at the same time “relatively safe from the rigors of censorship.”[187] Finally, touring companies, which carried popular comedies and musicals of London’s West End to colonial audiences, also brought Shakespeare to the Empire. Touring companies made it possible for colonial audiences to indulge in the same cultural consumption as audiences of the metropole, and thus they provided an important unifying function within the Empire.[188] However, the environmental conditions under which this cultural

---

[186] In 1848, the Bengali actor Baishnava Charan Adhya—also known as “Addy”—was invited to play the lead in *Othello* at the private residence of Mr. Berry. Bhatia reads this performance, which aroused anxieties about “the cultural contamination of the English stage,” as part of the English project to create Macaulay’s buffer class, who would possess English culture, and who would spread it to the rest of India (Bhatia 13). Addy’s performance was subject to intense scrutiny by an anxious European audience; the anxiety his performance aroused was illustrated before he even had the chance to perform. As noted in the *Bengal Hurkaru and India Gazette* following what was supposed to be the opening night, “the parties who were severally to have played Iago, Brabantio, and Emilia, were prohibited from doing so by the preremptory military order of the Brigadier of Dum Dum” (quoted in Frost, 97). Bhatia also shows how early Parsi theater companies which performed Shakespeare sought to entertain more than advance a political ideology, and even had names like the “Imperial Company” and the “Victorian Theatre Troupe” to highlight their fidelity to British colonial culture. These companies performed for non-elite audiences who had no access to education (Bhatia 54-55). See: Christine Mangala Frost, “30 Rupees for Shakespeare: A Consideration of Imperial Theatre in India,” *Modern Drama,* 35, no. 1 (1992): 90-100.
[187] Bhatia cites the example of Bharatendu Harishchandra, whose nationalistic and political dramas were often stifled under the Censorship Act. After the Vernacular Press Act was passed in 1879, however, Harishchandra wrote *Durlabh Bandhu* (1880), a Hindi adaptation of *The Merchant of Venice*, which reframes the play’s conflict between Antonio and Shylock as a conflict between the Britain and India. The play casts Shylock as the intrusive foreign (British) foe, and offers a “parable for a strategy for independence from the growing encroachment of British authority” (Bhatia 63-4).
[188] Tobias Becker, “Entertaining the Empire: Theatrical Touring Companies and Amateur Dramatics in Colonial India,” *The Historical Journal*, 57, no. 3 (2014): 702.

imperialism and dissemination of Shakespeare took place has yet to be sufficiently explored.

In spite of performing the same play night after night in a different country, the Globe to Globe project went far from smoothly; the company encountered several severe risks. During a performance in a Syrian refugee camp in Zaarati in the north of Jordan, an unexpected sandstorm forced the company to stop the show: "Here we were, with the walls shaking, the sky filled with a thick haze, and the sun well and truly shut out."[189] The history of Shakespearean performance in the British colonies is full of similar accounts of all kinds of storms and natural disasters and phenomena. But far from dooming these theatrical tours to certain failure, the copious risks, hazards, losses, accidents, and misfortunes encountered by British actors throughout the Empire turned the global stage into a haven for Shakespearean performance. Before introducing the non-human characters of this particular narrative, it is necessary to introduce the human players who endured the dubious privilege of playing Shakespeare in the colonies. I suggest that actors and actresses were motivated to perform Shakespeare not in spite of, but *because of* the ecological and environmental hazards they were bound to encounter. In the modern example provided by Dromgoole, the actor is all too keenly aware of the potential for the sand to bury "us all and all our silly gestures." And yet, because of the risk involved, Dromgoole is encouraged to defend Shakespeare's work from nature's wrath: "Shakespeare asserts the power of his words to survive, to endure beyond any

[189] Dromgoole, 331.

destruction. There is a perversity in his faith in the indestructibility of words."[190] Dromgoole's reflection participates in a tradition of defending Shakespeare from the elements.

For some actors and actresses, the chore of bringing Shakespeare to colonial audiences was its own reward, and more appealing than financial success or even fame. From 1879-1882, Daniel E. Bandmann toured all over Australia, New Zealand, India, and China. Bandmann, who was actually German, became one of the most famous crusaders of Shakespeare in the English-speaking world. Bandmann estimates that over three and a half years, he travelled seventy thousand miles, and gave seven hundred performances, two thirds of which were Shakespearean.[191] In India, Bandmann observed, Shakespeare was not so much desired as demanded: "the love of Shakespeare is inherent in the Hindu mind, or rather, it is an inevitable blossoming of inherent qualities and dispositions beneath the influence of European education, which all the higher classes in India now enjoy." Observing the effects of the English Education Act, Bandmann perceived that Shakespeare formed the foundation of Indian "taste." A true Bardolotrist, Bandmann even argued that Shakespeare had a kind of religious presence in India, since India's population was divided by religion, but united under Shakespeare.[192] When Bandmann played *The Merchant of Venice* and *Othello* for an audience in Calcutta, he found performing was its own reward: "It is a pleasure beyond description to see the natives of

---

[190] Ibid., 332.
[191] Daniel E. Bandmann, *An Actor's Tour, or Seventy Thousand Miles with Shakespeare,* (New York: Brentano Brothers, 1886), 302. Bandmann notes that he primarily played *Hamlet, The Merchant of Venice, Macbeth, Othello, Richard III,* and *Romeo and Juliet.*
[192] Ibid., 134.

India enjoying a Shakespearean performance...I have never been so well understood as Shylock as I was that evening by those three thousand Hindus and Moslems."[193] Bandmann's performance seemed to produce his own imperial justification as well. When Bandmann was persuaded to let a "Eurasian" man play the part of Dogberry, the man was "delighted at the concession, but when he came into the wardrobe he nearly swooned, and complained of the heat to such an extent that I had to send a servant to get him a pankha boy. Now, this man was born in India, and had lived all his life beneath its skies, and yet he was not able to stand as much as we were, although he had only to wear a light domino, while we were dressed in silks, velvets, and furs."[194] At the same time that Bandmann refuses to acknowledge the legitimacy of non-Western art forms,[195] he also suggests that only a European with his constitution for the heat of the Indian stage is equipped to perform Shakespeare in such conditions.

Allan Wilkie was another martyr of Shakespearean performance. Wilkie and his wife, Frediswyde Hunter-Watts, lugged eighty tons of scenery across Asia from 1911-1913,[196] and produced more than thirty plays. Wilkie, who was apparently mistaken for

---

[193] Ibid., 141-2.
[194] Ibid., 145.
[195] Ibid., 189. Bandmann finds "nothing charming" in Chinese theater, where "all true dramatic art is conspicuously absent."
[196] Richard Foulkes, *Performing Shakespeare in the Age of Empire*, (Cambridge: Cambridge University Press, 2002), 151. Allan Wilkie, *All the World my Stage: The Reminiscences of a Shakespearean Actor-Manager in Five Continents*. Unpublished autobiography, MSS 92 W6825, University of Adelaide Special Collections, 114, 135.

Shakespeare himself by some of his less educated Australian audiences,[197] claimed that he performed "Shakespeare in many places for the first time and frequently to alien races whose enthusiastic appreciation testified once more that not only is Shakespeare for all time but for all peoples."[198] In Bangalore, Wilkie's travels and efforts found validation in a group of students who had travelled sixty miles by foot through the jungle and three hundred more by train in order to see him perform *Hamlet*: "When it is realized that they were all men in very humble circumstances and that the expense of such a trip would probably demand rigid economy of their finances for a year afterwards, one cannot but lament that such extreme devotion to our national poet is rarely, if ever, to be found amongst his fellow countrymen."[199] From 1920-30, Wilkie, with his Australian Shakespeare Company, embarked on an ambitious venture to produce all thirty-seven of Shakespeare's plays on a prolonged tour of Australia and New Zealand. He only succeeded in producing twenty-seven, but gave 1,239 consecutive performances of Shakespeare over the course of the decade.[200] On one occasion, when Wilkie's finances were particularly dear, he turned down an enticing offer--"the like of which I have never

---

[197] Ibid., 286-7. "Frequently after seeing me upon the stage," Wilkie recalls, "people complained that I was not at all like a greatly enlarged portrait of Shakespeare displayed upon my posters on the hoardings and thought to represent me!" Wilkie perhaps relishes this association a bit too much when he recalls how he overheard one fellow tell some friends that Wilkie was not only the "original" Shylock, but that he actually authored the play. "Thus," Wilkie comments, "did he for ever dispose of the Baconian, and all other theories regarding the authorship of Shakespeare's plays."

[198] Ibid., 197; Foulkes, 151. Foulkes seems to echo Wilkie's imperialist homogeonizing sentiment: "Shakespeare's direct emotional force and thrilling story line transcended barriers of time, culture, race and language."

[199] Wilkie, 155.

[200] Ibid.,276.

had before or since," to star in Chu Chin Chow at one hundred pounds per week—in order to keep on with his Shakespeare project.[201] When he experienced difficulty booking theaters for Shakespeare's less popular plays, like Coriolanus and The Two Gentlemen of Verona, Wilkie admits, "I was playing a lone hand in my endeavours to keep the Shakespearean flag flying."[202] The Prime Minister of Australia commended Wilkie for "carrying on his self-appointed task," especially since "the production of Shakespearean plays cannot be regarded as the most lucrative of theatrical enterprises." The Prime Minister recognized that Wilkie was "really performing a duty of national character" for Australia.[203] Even after the theater in Geelong caught fire—a disaster that was not uncommon for touring players—and destroyed all of his (uninsured) property, Wilkie did not abandon his Shakespearean crusade. He managed to raise over four thousand pounds through the press and through benefit performances, which he saw as "a most welcome proof that our labours were considered of national importance, and that its termination would be a distinct loss to the community."[204]

Geoffrey Kendal's particular strain of Bardolotry emulated Bandmann's and Wilkie's, though it also carried nostalgia for an Empire united under Shakespeare as it routinely confronted an India transitioning toward independence. In 1945-6, Geoffrey Kendal's English Repertory Company toured India with *Macbeth*, *Julius Caesar*, *Othello*, and *Romeo and Juliet*. His company consisted of his wife Laura, their daughter Jennifer, their infant Felicity and others. They also picked up players along the way, including

[201] Ibid., 257.
[202] Ibid., 266.
[203] Quoted in Wilkie, 277.
[204] Wilkie, 280-2.

Utpal Dutt, who was known for his political theater. After the Partition, Kendal embarked on a second tour with his new Shakespeareana Company, whose repertoire consisted exclusively of Shakespeare and Shaw. From 1953-56, Kendal's troupe gave 879 performances of Shakespeare at schools, colleges, and theaters all over India, China, and Malaysia. Their tour became the subject of the Merchant and Ivory film, *Shakespeare Wallah* (1965), which stars Geoffrey, Laura, and Felicity Kendal, as well as Shashi Kapoor, who became part of the company, and then part of the family when he married Jennifer. Kendal initially objected to the film's premise: "The actors were seen as the last of the British Raj, hanging on to a dying culture in an out-of-date medium, while the cinema, representing modern India, took over with its new and vital power." Though Kendal asserts that his company "had been a great success and had brought Shakespeare to the furthest places of India,"[205] his own account of his tour *does* betray a degree of desperate clutching for a "dying culture"—though it is not the culture of theater or even of Shakespeare. Rather, it is the cultural imperialism that Shakespeare once represented in India, which was changing in the wake of Indian Independence. In the spring of 1947, after performing *Julius Caesar* and *Othello* at Trivandrum, the company received a letter from a local amateur group, who commended their performance, and who ended the letter by saying, "Let Shakespeare keep India and Britain united!"[206] Kendal's nostalgia for empire shows in other ways as well. Kendal imagines Shakespeare as a weapon of protection against a potentially dangerous political climate: "Armed with Shakespeare,

---

[205] Geoffrey Kendal and Clare Colvin, *The Shakespeare Wallah: The Autobiography of Geoffrey Kendal,* (London: Sidgewick & Jackson, 1986), 145.
[206] Ibid., 89.

whose plays were so much appreciated in India, we felt we could ignore the warnings about the nationalist movement and possible troubles."[207] His mission seems all the more important after experiencing Independence Day in Shillong: "People were walking idly along the roads, with an aimless, helpless look. There was no rejoicing, no singing or dancing. No one seemed to know what would happen next."[208] He cites one Calcutta reviewer, who felt that their performance of *Othello*, and their very presence had "raised the cultural level of the city, and could they be persuaded to make it their home, at least during every winter, Calcutta would be less cut off from the rest of the world."[209] When the company played *The Merchant of Venice* in Mysore before the Maharaja, he "did not smile or laugh, so none of his officials would be caught doing so" either. In fact, Kendal remembers playing "to dead silence throughout" the entire evening, which was unusual for this Shakespearean comedy, since it "happened to be one of the favourite plays of the repertoire in India."[210] Kendal is quick to blame himself for the laughless evening, but perhaps misses the political significance of the audience's performance of silence. Like Tamora, dressed as Revenge for an audience who can all too easily see through her disguise, Kendal clings to an illusion that his performance was desired, necessary, and effective. In reality, the Maharaja may have wrested control of the audience away from Kendal and away from Shakespeare, and in an important political gesture, did not laugh at the playwright who had long been a symbol of British colonial occupation in India. In China, Kendal experienced another uphill battle from an audience with whom he was

[207] Ibid., 85.
[208] Ibid., 95.
[209] Ibid., 100.
[210] Ibid., 114.

eager to share Shakespeare. Chinese audiences, he comments, "always laughed or smiled, and the more you put on your dramatics in a play, the more they would see the funny side of your efforts and kill themselves laughing, which could be frustrating for those who saw themselves as serious actors portraying the classics and tragedies of this world."[211] Again, rather than accept that his audiences were laughing at him, Kendal dismisses this as a "strange sense of humor."[212]

Other British actors were equally fixated on staging Shakespeare in the British Empire. George Crichton Miln toured India, China, and Japan from 1890-91 with an all-Shakespearean repertoire. Miln's company was the first to perform several Shakespeare plays in their entirety in Japan. During their two-week stay in Yokohama in May of 1891, Miln's company performed *Hamlet*, *The Merchant of Venice, Romeo and Juliet*, *Macbeth*, *Othello*, *Julius Caesar,* and *Richard III*.[213] Miln had also toured the US in 1882, performing *Hamlet*, *Macbeth*, and *Othello* seventy times in forty different cities over the

---

[211] Ibid., 135. Frank Gerald makes a similar observation playing to a segregated audience on Thursday Island: "What an audience! The coloured people laughed, generally in the wrong place, and applauded everything and everybody, heroes and villains indiscriminately" (60). While Gerald's comment seems intended to highlight an inability for this audience potentially consisting of "Chinese, Japanese, Cingalese, Kanakas, Malays, and Aboriginals" (58) to appreciate Western theater, he also underscores the subversive potential for an audience to wrest power away from the performers merely by laughing or applauding in the "wrong" places. See: Frank Gerald, *A Millionaire in Memories*, (London: Routledge, 1936).
[212] Kendal and Colvin, 135. "This sense of humor," he continues, "extended to their own dramas. I remember seeing a Chinese standing by the side of the road where his car had been wrecked in an accident, laughing his head off."
[213] Kaori Kobayashi, "Touring in Asia: The Miln Company's Shakespearean Productions in Japan," in *Shakespeare and his Contemporaries in Performance*, ed. Edward J. Esche, (Aldershot: Ashgate, 2000), 58.

course of two months.[214] Miln was criticized in the states for his antiquated acting style with Shakespeare, though it won him praise in Australia and Japan.[215] Genevieve Ward performed *Macbeth, Othello, Hamlet, Merry Wives of Windsor, The Merchant of Venice*, and *Much Ado About Nothing*, along with twenty other plays during her nine-month tour of South Africa in 1891-2.[216] Matheson Lang toured various parts of the Empire with different companies. He toured with his wife, Hutin Britton, and W.E. Holloway in South Africa, India, China, and Malaysia, performing *The Merchant of Venice, Romeo and Juliet, Hamlet,* and *The Taming of the Shrew*.[217] With Frank Benson's company, Lang visited Jamaica, Trinidad, Barbados, and British Guyana, playing *The Merry Wives of Windsor, The Merchant of Venice, Hamlet, Much Ado About Nothing, Twelfth Night, Richard III*, and *The Taming of the Shrew*.[218] Frank Benson, who one actor described as "an actor-manager with a mission...to present the classics, notably Shakespeare, in the provinces and the farther corners of the British Empire, wherever there was promise of an audience,"[219] organized a tour of South Africa in 1913. His North Company performed *As You Like It, The Merry Wives of Windsor, Hamlet,* and *The Merchant of Venice* all over South Africa. When the tour ended, a few members of the company decided to stay on

---

[214] Ibid., 58.
[215] Ibid., 58-61.
[216] Genevieve Ward and Richard Whiteing, *Both Sides of the Curtain,* (London: Cassell and Co., 1918), 182.
[217] Matheson Lang, *Mr. Wu Looks Back: Thoughts and Memories,* (London: Stanley Paul & Co., 1941), 106. Lang describes how he was also persuaded to perform *Macbeth* by the Scottish Society in Shanghai, even though it wasn't part of his repertoire.
[218] Ibid., 65.
[219] Cedric Hardwicke, *A Victorian in Orbit: The Irreverent Memoirs of Sir Cedric Hardwicke*, (Westport: Greenwood Press, 1961), 81.

and “play Shakespeare on the veldt,” travelling by train and ox wagon, performing in schools, town halls, bars, and hotel dining rooms.[220] Cedric Hardwicke characterized the tour by its hardships, which were always somehow successes: “No matter what the conditions, Shakespeare triumphed.”[221] Leonard Rayne, who was part of the Holloway Company that visited Johannesburg in 1895, and who eventually leased the Opera House and of the Standard Theatre in Johannesburg,[222] organized a Grand Shakespeare Festival in 1907. Over the course of only one week, Rayne produced and starred in *Macbeth, Hamlet, The Merchant of Venice,* and *Richard III.*[223]

Memoirs and written accounts of actors who toured the Empire playing Shakespeare raise questions about what motivated these excursions. Although touring provided occasional opportunities for stars to enjoy potentially more successful careers than they might have had in London and the English provinces, touring the empire was usually not lucrative.[224] After a tour of South Africa with Frank Benson’s North

---

[220] Ibid., 90-1.
[221] Ibid., 91. Hardwicke’s own triskaidekaphobia colors his recollection of their ill fortune on the tour: “There were thirteen men in the company, with a repertoire of thirteen plays. We left on September 13, 1913, and we opened at Capetown on October 13, with out next stop due on November 13 in Johannesburg” (85).
[222] Jill Fletcher, *The Story of Theatre in South Africa: A Guide to its History from 1780-1930,* (Cape Town: Vlaeberg, 1994), 120.

[223] Ibid., 123.
[224] Booth and Heckenberg note that Barry Sullivan, Frank Benson, and Genevieve Ward each fashioned a greater reputation abroad than they ever had in London. See: Michael R. Booth and Pamela Heckenberg, “Touring the Empire,” *Essays in Theatre*, 6, (1987), 51. They also note that touring the states often was lucrative, since it was a short voyage and guaranteed full houses at large urban centers, which were relatively easy to access via railways (50). Becker also mentions that Marie Tempest and Ada Reeve were two London stars who visited the colonies, but most colonial audiences rarely saw London stars (Becker, 708).

Company, for example, Cedric Hardwicke had fourpence in his pocket "as the net cash gain" from his Shakespearean circuit.[225] Travelling made sense for actors who were not well paid, but travel costs often ate up profits.[226] Touring provided some opportunities for fame, especially for performers who could not cut it on the London stage. Perhaps more than acting ability or discipline, touring the empire required "adventurousness, perseverance and adaptability."[227] At the same time, it may have also required the gullibility to be swindled into a bad contract by a desperate company manager. The anonymous author of a brief article published in 1917 called "Theatrical Touring in the Far East by one who has tried it" offers more of a warning than an endorsement of touring to potential travelling actors and actresses: "My purpose is to let my fellow-actors know exactly what they may expect when they sign their contracts for an Eastern tour."[228] Providing advice on health, money, playing conditions, and sight-seeing, the author primes performers to "be prepared for a certain amount of disillusionment wherever you go."[229] Serious professionals, the author advises, should just stay home: "every month

---

[225] Hardwicke, 97.
[226] Becker, 703. Becker notes, "For stars, a long, winding tour through the empire was simply not profitable." Becker also notes that voyages from one place to another could be lengthy and drain profits (705). Because touring was an alternative to the London stage, it meant that touring companies were often composed of amateurs, and companies often allowed amateur actors from the communities they visited to join them on stage (Becker 709).
[227] Booth and Heckenberg, 52.
[228] Anonymous, "Theatrical touring in the Far East: by one who has tried it," In *The Stage Year Book 1917,* 48.
[229] Ibid. Though this author's description of colonial life is extremely subjective, the description of "an extraordinary lack of vitality, of enthusiasm in it" is insightful, if only because it describes a discontent that is borne by colonial subjects and British colonists alike.

spent in foreign countries is a month wasted so far as the building up of a London reputation is concerned."[230] Money could be made while touring, but only if it was saved and spent wisely.[231] Colonial audiences could be harsh critics and impossible to predict, despite the fact that British colonial audiences, according to the author, endured droughts of entertainment: "In many places the theatres are empty for weeks at a stretch. The exiled European positively gasps to be entertained."[232] Nevertheless, plays and genres that were successful in London were not guaranteed to succeed in the colonies.[233] Another author, writing from the perspective of a colonial audience member in Bombay, argues that it is too expensive to import good companies, and that the amateur companies that entertain between visits from touring companies "fail signally to amuse, and...to fill their own pockets."[234] One patron of Allan Wilkie's company in Quetta complained that it was more expensive to see Wilkie in the colonies than it was to see a lavish spectacle by Beerbohm Tree in London.[235] With little prospect of fame or fortune, and promising only disappointment, touring the British Empire seemed to some a road better left untraveled.

---

[230] Ibid., 43.

[231] Ibid., 45. The author accounts for travel and boarding costs, and how long journeys between playing venues can get expensive: "If we are not earning money we are losing it. In addition to that, there are certain expenses entailed in boat or train journeys which can scarcely be avoided. Boats have stewards, and stewards expect tips. We must still smoke or have an occasional drink, or pass the time in some way. On railways there are porters to be reckoned with."

[232] Ibid., 47.

[233] The same was true of acting styles. Kobayashi shows how Miln's acting style was largely panned as antiquated by critics in Britain and in the US, but was celebrated in Australia (Kobayashi, 59).

[234] H.A.D. Simpson, "Art in Afghanistan," *The Theatre*, 4 (1881): 141.

[235] Wilkie, 138. Wilkie explains that the expensive price of a ticket in the colonies pays for the labor of brining a spectacle to the Empire.

But for those who decided that the Empire needed Shakespeare more than they needed fame, fortune, or even their health, their cause was more often than not justified by the environments they endured. The natural environments through which travelling companies passed on their circumnavigational tours of the British Empire shaped the playing conditions in which Shakespeare's plays were performed—for the first time, in some cases—in colonial settings. I suggest that this allows us to see an overlooked ecological aspect to the imperial production of "Bardolotry." In other words, Shakespeare's cultural capital owes itself in part to the floods, typhoons, hurricanes, dust storms, heat waves, droughts, earthquakes, and thunderstorms that actors endured to parade—or to drag, as the case may have been--Shakespeare's name and plays through the Empire.

For example, the animals and insects encountered by Shakespearean actors in the colonies often proved dangerous, deadly, or disturbing. Deadly snakes in Rangoon and man-eating tigers in Nain-i-Tal posed a threat to Allan Wilkie and his wife.[236] Genevieve Ward complained of vermin in Johannesburg hotels, as well as in Sydney and in Brisbane: "One night I felt a great rumbling under my pillow—rats!"[237] Another author

---

[236] Wilkie, 130, 147. Wilkie describes being nonchalantly warned about kraits—"a particularly venomous little snake whose bite is almost certain death in about twenty minutes" (130)—under their dinner table by one hostess in Rangoon. The non-chalant attitude of this woman incurred a reflection on "the phlegm and sangfroid of the Anglo-Saxon race," which have "played no small part in their process of Empire building, and demonstrate how they can adapt themselves and indeed become almost oblivious of conditions that are happily unknown in their own 'precious isle'" (129). In Nain-i-Tal, Wilkie and his wife were abandoned by their dandy-carriers in the middle of the jungle on their way between the theater and the hotel; they arrived at the hotel to reports that they had already been devoured by a tiger (147-8).

[237] Ward and Whiteing, 115, 173.

forewarned prospective actors travelling through Asia: "If you are afraid of insects, be prepared for shocks. Insects abound. There are huge cockroaches (with wings), vast spiders, long-bodied winged ants, smaller-bodied wingless ants in myriads, white ants that eat your books and clothes, red ants that eat your food, black ants that eat you."[238] Russell Craufurd loathed the mosquitoes of Brisbane and claimed the mosquitoes of Calcutta were venomous from feeding on garbage in the streets.[239] He also describes battling a cloud of locusts on the veldt of South Africa.[240] Some locations were preferred among performers for their *lack* of insects—like New Zealand, Tasmania, and Barbados.[241] In Trinidad, while dressing for the part of Petruchio, Matheson Lang was fortunate enough to discover a tarantula in his boot before slipping his foot into it.[242] Geoffrey Kendal, who performed a Shakespeare repertoire with his family all over India before and after the Partition, remembers insects being a nuisance during performances as well: "If you played out of doors, tiny insects would creep under your wig, and mosquitoes would nibble at your ankles. We would make our exits calmly; then once out

---

[238] "Theatrical touring," 48. The author continues: "There are scorpions, centipedes, lizards, hornets, mosquitoes, sandflies, flying beetles, dragon-flies, snakes, huge rats, and every description of crawling and creeping thing that it is possible to conceive, save—by a merciful dispensation of Providence—the common or garden English flea and bug of commerce!"
[239] Russell Craufurd, *Ramblings of an Old Mummer*, (London: Greening, 1909), 123, 157.
[240] Ibid., 151.
[241] Craufurd, 143; Bandmann, 77; Lang, 65. Craufurd praised New Zealand for having no mosquitoes or reptiles and a good climate. Daniel Bandmann noted Tasmania was "like New Zealand in having no disagreeable bugs, mosquitoes, snakes, or wild animals of any kind, except the black opossum, which abounds in considerable numbers." Matheson Lang praised Barbados for having "No malaria, no poisonous insects, and the most perfect sea-bathing in the world."
[242] Lang, 67.

of sight of the audience, fall into a frenzy of scratching. At an alfresco evening, all the moths and mosquitoes of the area converged on our stage-lights and then turned their attention to us."[243] During one performance, Kendal, playing Othello, inhaled a bluebottle fly during his line to Desdemona. The fly likely made her next line that much more meaningful and effective: "Why do you speak so faintly?/ Are you not well?" Kendal also recalls how the insects made playing dead onstage extremely difficult, since they would gnaw on any exposed skin the performers might reveal.[244]

The heat was another common complaint among actors. Summer temperatures in Colombo, Allahbad, Napier, Adelaide, Brisbane, Johannesburg, and Pietermaritzburg caused considerable strain for performers: "Only madmen and actors could endure it."[245] In Calcutta, the heat made late night performances common and practical; performances regularly went on after nine and ended well after midnight, simply because the temperatures were less extreme.[246] In Pietermaritzburg, Henry Herbert refused to play Falstaff in *The Merry Wives of Windsor*, because he found the fat knight's padding too

---

[243] Kendal and Colvin, 124-5.
[244] Ibid.
[245] Hardwicke, 89. Ward says, "I think Colombo was the hottest place I was ever in" which owed, according to Ward, more to the fact that "the rays of the sun are vertical and you have no shadow" than to the actual temperature. She also notes the heat in Napier is "sweltering." Bandmann recounts, "Six months in the year Adelaide is unbearable on account of its dreadful dry heat, three months it rains, and the rest are the only endurable portion of the year." Craufurd, who got sunstroke in Port Lincoln reported a temperature of 180 on Christmas in Brisbane, and noted that the only cool place was beneath the stage. Wilkie recalls temperatures in Allahbad reaching 125 degrees. Ward and Whiteing 105-6, 113; Bandmann, 103; Craufurd, 128, 127; Wilkie, 149.
[246] Wilkie, 119. Wilkie also reports playing only open-air performances in the middle of the night in Allahbad, when the temperature was a mere ninety-eight degrees; Allahbad was 125 degrees during the day (149).

intolerable.[247] The heat drenched players' costumes, and melted face-paint.[248] For Lieutenant H.A.D. Simpson, India's climate, and its heat in particular, was the very thing that prevented the performing arts from thriving in the colonies: "In no part of the world is the theatre a more acceptable form of amusement, and no part of the world is, from its climate, more thoroughly unsuited for it than India." According to Simpson, India is simply too hot for an elite Indian to "appreciate what he sees" on stage, and "the enervating effect of the climate produces its evil results on the Englishman" as well, since "a play which the same man would watch with interest at home he turns from in disgust in India... 'We don't want the legitimate drama out here,' he says, 'with a thermometer at

---

[247] Hardwicke, 89. Hardwicke recounts how Herbert "rapidly substituted *Comus* on the bill, in which he wore nothing but a tiger skin. The rest of us paid for his air-conditioning. In addition to our massive costumes, which were no lighter than before, we had to wear masks to represent the various animals which appear in Milton's allegory. The temperature inside the masks was searing, and vision through the narrow eye slits was reduced close to zero." Hardwicke also includes an anecdote about the heat which seems intended to show the virility and backbone of the Shakespearean troupe. After noting that the temperature sometimes reached 115 degrees, and that they performed during "the hottest summer in living memory," he explains how the company "recruited members of the Natal Mounted Police" to fill out the crowd scenes. These were "lean, robust, outdoor men, who frequently reeled offstage half-fainting from the feverish climate behind the footlights. Yet not a single member of the Benson company failed to complete the night's performance" (89).

[248] Craufurd remarks on having his costumes dried of the sweat after each performance in Calcutta. Kendal's description of performing in Indian heat is more intimate: "Often the stage clothes ended a performance wringing wet with perspiration. It was inevitable if you played in a temperature of 110F in costume, wig, make-up, false beard. Your tights would be drooping in wet folds, your beard on the verge of dropping off, and beads of perspiration would trickle down your nose to be passed on to your partner in an embrace." Hardwicke recounts the heat of Pietermaritzburg: "Grease paint would not stay on our slippery faces." Similarly, Lang remembers playing a Benjamin-Button Shylockin the tropical heat of Kingston, Jamaica: "I would commence a scene looking, according to the demands of the character, like an old Jew, but by the time that the scene was over all the make-up would have washed off and my ordinary young face would have taken its place." Craufurd, 162; Kendal and Colvin 124; Hardwicke, 89; Lang, 64.

a century. Give us a light comedy, or better still a burlesque, or comic opera, but not too long.'"[249] By contrast, others saw the heat as the true test of a cultivated English taste. One author argues, "I know from many years' experience of the East that temperatures have no effect upon the ardent playgoer, and if the performers do not mind the heat in India and the Straits Settlements, or the cold in North China, the public will turn out to welcome them at any time."[250]

Storms, floods, and droughts also made living conditions difficult for Shakespearean players at the same time that they worked to justify their Shakespearean crusade in the colonies. Daniel Bandmann was prepared to depart Adelaide for a tour of India when four members of his company refused to go with him, simply because they were afraid of the climate they would encounter there.[251] Bandmann experienced a "slight typhoon" in Hong Kong, which claimed sixteen lives; the Shakespearean was surprised to learn that several thousand had perished in the previous one.[252] While driving in a car on the road between Manipur and Panitola, Kendal and his family were caught in a flash flood, and had to abandon their vehicle. Most of their costumes were ruined beyond repair, and when they finally salvaged their car, they discovered it had been looted by divers.[253] Dust storms were frequent and unpleasant in Johannesburg, and lightning strikes and thunderstorms were common on the veldt.[254] The Holloway Theater Company

---

[249] Simpson, 140.
[250] Campbell Henderson, "Touring in the Orient," *The Stage Year Book, 1920,* 87.
[251] Bandmann, 105.
[252] Ibid., 226-8. Craufurd also notes how unpleasant monsoons can be (137).
[253] Kendal and Colvin, 97-99.
[254] Craufurd mentions dust storms. Ward recounts watching a storm on the veldt. Craufurd, 150; Ward and Whiteing, 177.

visited Johannesburg in 1895 during a drought. The water shortage prompted W.J. and John Holloway to pilfer water rations from the other guests at the Victoria Hotel for bathing. The drought also inspired some residents to send charges of dynamite skyward, tied to balloons, in the hope of exploding the rain out of passing clouds. President Kruger, however, put a stop to this dynamite idea by invoking another: "The Lord is angry with the cities of Sodom and Gomorrah. When He has punished them, He will send the rain."[255] Actors experienced earthquakes in New Zealand, Japan, and India.[256] Kendal offers an example of the earth-moving force of Shakespeare's language during a performance of Othello at a school outside of Delhi: "I had just declaimed, 'There should be now a huge eclipse of sun and moon and the affrightened globe should yawn in alteration,' when the whole building was rocked by an earthquake."[257]

Perhaps the most common cause of death among Shakespearean actors touring the Empire was disease. After the Scottish actor John Moody made a name for himself as a Shakespearean performer in Jamaica in the mid-eighteenth century, he imported his own

---

[255] Quoted in Holloway. See: David Holloway, *Playing the Empire: The Acts of the Holloway Touring Theatre Company*, (London: Harrap, 1979), 68-9.

[256] Bandmann records a twenty-second earthquake at 5am on June 26, 1881, in the town of Howera, New Zealand. Craufurd experienced an earthquake in Wellington, New Zealand and in Yokohama, Japan. Wilkie recalls experiencing the great New Zealand earthquake of 1929 in the Hawkes Bay area of the North Island. Wilkie's account is somewhat humorous: "On the morning of our arrival in this town, as my wife and I were walking down the centre of the main street, we were both astonished and flattered to see all the inhabitants rushing from their houses and shops to gaze at their famous visitors. Or so we imagined for the moment, but were soon disillusioned when we realized they were merely collecting in the roadway for safety, as their buildings were swaying from the effect of the slight earth waves extending from the great 'quake then taking place in the South Island." Bandmann, 145; Craufurd, 145, 176; Wilkie, 292-3.

[257] Kendal and Colvin, 125.

company to the colony from England, most of whom were wiped out by Jamaican Fever.[258] Typhoid, dengue fever, and other tropical ailments affected the cast size of Allan Wilkie's company in India; his ailing company inspired Wilkie to perform an "unprecedented feat" of trebling the parts of Friar Laurence, Mercutio, and Prince Escalus in a performance of *Romeo and Juilet*.[259] Wilkie became ill himself with influenza in Osaka, Japan, but still managed to play "Shlyock, Hamlet, and Othello on three consecutive nights with a temperature hovering between 103 and 104" degrees.[260] The dust of Johannesburg caused a disease of the lungs, and proved fatal to both the juvenile lead of Ward's South African tour, and to the tour itself in 1892.[261] Ward herself contracted influenza in Johannesburg, but refused to see a doctor. Her dismissive attitude toward medical treatment, and her miraculous recovery three days later made her illness much ado about nothing, which also happens to be the play she was performing when she got sick: "I wore two fur coats in the wings, while everyone else was melting with the heat, yet I shivered during the whole performance."[262] The great influenza epidemic closed theaters in Sydney in 1919.[263] Daniel Bandmann declined an invitation to perform

---

[258] Errol Hill, *The Jamaican Stage, 1655-1900: Profile of a Colonial Theatre*, (Amherst: University of Massachusetts Press, 1992), 76; Richardson Wright, *Revels in Jamaica, 1682-1838*, (New York: Dodd, Mead & Co., 1937), 27.
[259] WIlkie, 154.
[260] Ibid., 182.
[261] Ward and Whiteing, 180-1. After Mr. Eyre's death, Ward's company did not wish to continue their season. John Holloway identifies a poisonous agent in Johannesburg dust, which was an costly environmental side-effect of mining practices: "In dry weather, clouds of dust from the mine dumps, charged with cyanide of potassium, swept along, bringing discomfort to all, and death to the unfortunate with weak lungs and throats" (Quoted in Holloway, 68).
[262] Ward and Whiteing, 174-5.
[263] Wilkie, 243.

in Manila after learning of a cholera outbreak that killed an entire opera company there.[264] While on their way to Shanghai in 1893, the Kyrle Bellew and Mrs. Brown-Potter Company became trapped by a quarantine when the plague broke out in Hong Kong. One member of that company, Sally Booth, survived the plague in Hong Kong, but succumbed to another plague years later in Sydney.[265]

Travel for actors and actresses touring the Empire sometimes provided opportunities for additional performances and revenue, but travel conditions could also be extremely dangerous. The innovations of the steam-powered ship and railroads made travel across the globe more feasible, and enhanced the popularity of travelling theater companies in the Empire.[266] Theater companies often made time to rehearse on their

---

[264] Bandmann, 229.
[265] Craufurd, 172-4. Craufurd describes how he and Ted Smart managed to escape the quarantine in Hong Kong and make their way to Yokohama.
[266] Booth and Heckenberg, 49.

voyages, and even performed for audiences on deck.[267] In 1953, Geoffrey Kendal's Shakespeareana Company began their tour of India (with an all-Shakespeare and Shaw repertoire), travelling from England to Bombay through the Red Sea. At the captain's request, the company performed (in the sweltering heat of the Arabian Sea) *Arms and the Man*, and selections from *Twelfth Night* and *Macbeth*. During his soliloquy—"Is this a dagger which I see before me"—which was delivered on the choppy and swelling waters, Kendal had a "disconcerting moment as Macbeth when [he] was addressing the lounge floor with grim solemnity—'The sure and firm-set earth...'—and it gave a sudden lurch."[268] While performances of Shakespeare at sea present their own set of challenges

---

[267] The history of performing Shakespeare aboard ships dates all the way back to 1607, when the crew of two ships belonging to the East India Company staged performances of *Hamlet* and *Richard II. Hamlet* was staged for a Portuguese audience while moored in Sierra Leone. These are the first known productions of Shakespeare performed outside of England, and this was only the third voyage of the East India Company. The ships were on their way to open factories in Cambaya, Sumatra, Bantam, and the Moluccas. Richmond Barbour speculates that theater was used on these voyages as a disciplinary measure for discouraging idleness, though the performance also served a diplomatic function before the Portuguese. During a voyage on a Pacific Mail Steamer between Aukland and Honolulu, Daniel Bandmann's company gave a profitable performance for the Seaman's Shipwreck and Orphan Society of Sydney. In 1893, the Bellew and Brown-Potter Company rehearsed their twenty-play repertoire (which included *Romeo and Juliet* and *Hamlet*) on the voyage through the Suez Canal on the way to Calcutta. Russell Craufurd, a member of that company, also played for first class passengers on a voyage from Japan to Vancouver in the following year. He also recalls performances given by John Hare and GW Anson on his voyage from Sydney back to England. Ward's company rehearsed several of their plays on the voyage between England and Cape Town in 1891. Her repertoire included twenty-six plays, including *Macbeth, Hamlet, Othello, The Merry Wives of Windsor, The Merchant of Venice,* and *Much Ado About Nothing*. Kendal's company also rehearsed *The Merchant of Venice* and selections from *Macbeth* on board the *Strathmore*, which carried them from Southampton to Bombay through the Suez Canal in 1947. See Barbour, 7; Bandmann, 276; Craufurd, 156, 176, 147; Ward and Whiteing, 170; Kendal and Colvin, 85.

[268] Kendal and Colvin, 106.

and ecological implications, sea-travel also involved risks, both real and imagined.[269] The eminent tragedian G.V. Brooke perished in a shipwreck in January of 1866, when his vessel, the *London*, en route from Plymouth to Australia, was caught in a storm.[270] The Holloway Theater Company lost its sets and costumes when the ship carrying them sank in the Green Cape Reef.[271] In 1911, during a voyage from Zanzibar to Bombay on the *Palamcotta*, the Holloway Company was beset by a cyclone. The European company members were trapped in the ship's saloon for three days of violent and ceaseless rocking. Matheson Lang expressed little concern for the ship's native passengers, who were confined among the baggage; in fact, Lang thought their proximity to the company's scenery produced something of a miracle, straight out of one of Shakespeare's romances: "They came up again after what must have been a terrible two or three days apparently smiling and unconcerned—and yet during the worst night of the storm an old man died

[269] By considering "imagined risks," I am trying to think of these memoirs of touring the Empire as participating in the tropes of the travel literature genre. As such, authors perceive some threats which cannot be substantiated. For example, Daniel Bandmann records visiting a "cannibal village" outside of Port Darwin. Bandmann notes, "It is not seldom that a child, or stray Chinaman falls a victim to their ferocity and brutal tastes," and imagines that the women of his party "were considered as so many desirable sweet morsels." Bandmann also recalls how, when his vessel collided with the coral reef as it passed through the Torres Straits, an engineer seemed very anxious about landing on the coast of Queensland, "where the natives are all cannibals, and dine off any poor, unfortunate, shipwrecked crews that are cast among them." Bandmann, 258-9, 262.
[270] See H. L. Oppenheim, "Brooke, Gustavus Vaughan (1818-1866)," *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, 17 March, 2017, http://adb.anu.edu.au/biography/brooke-gustavus-vaughan- 3064/text4519.
[271] Holloway, 88.

and a baby was born!"[272] On his voyage to Australia in 1881 around the Cape of Good Hope, Russell Craufurd's ship lost its propeller and began taking on water; luckily, he managed to land at Cape Town.[273] Ward recalls a stormy 960 mile voyage between Hobart and Dunedin in 1884.[274] Kendal remembers an "appalling storm" between Miri and Brunei in Borneo.[275] When trains were not available for traversing land, stage-coaches were used. When Ward toured in South Africa in 1892, the railroads did not yet connect between all the major cities, so they travelled by coach, which was "frightfully dusty."[276] One of Ward's company, Ms. Josephine St. Ange, was killed in a carriage accident on the veldt; news of her death was delivered during their production of *Hamlet* in Johannesburg, and the company was too sad to continue the show.[277] Wilkie travelled by stagecoach through New Zealand's Otira Gorge in a snowstorm in 1919.[278] Craufurd went "bushwacking" in the suburbs of Melbourne, taking a stagecoach over terrible roads.[279] Travelling by train after the monsoon floods in India was always more certain than travelling by bus, since the roads often disappeared underwater.[280] But train travel brought risks too. Frank Benson's South African tour almost ended prematurely when the train car holding their scenery caught fire as it travelled between Cape Town and

---

[272] Lang, 98. John Holloway remembers, in slightly more sympathetic terms, how the deck passengers "had been bundled below decks and battened under hatches, there to fend for themselves in pitch blackness and, of course, without any form of sanitary arrangements" (Quoted in Holloway, 140).
[273] Craufurd, 117.
[274] Ward and Whiteing, 110.
[275] Kendal and Colvin, 143.
[276] Ward and Whiteing, 172.
[277] Ibid., 178-9.
[278] Wilkie, 246-7.
[279] Craufurd,128.
[280] Kendal and Colvin, 129.

Johannesburg.[281] On one train ride, Benson's players became stranded when the train was divided into two. Benson's actors passed the time by joining forces with the Steele Payne Bell-Ringers. Together, they performed a concert in an idle dining car. Meanwhile, the first half of the train jumped the tracks, and the next engine that arrived was full of dead and injured passengers.[282] In the Himalayas, companies relied on the mule and the dandy—or "a wooden hammock made exactly like an out-size coffin with the lid off"— which was carried by no less than nine men. Wilkie hired a team of three hundred men to transport his baggage and scenery to Nainital in the Himalayas.[283]

In a colonial environment, especially in areas where theaters had not yet been built, Shakespearean performances were exposed to a range of ecological factors that could change the effect—and the affect—of the Shakespearean text. Touring in Australia in the nineteenth century often meant visiting places where theaters were improvised spaces of entertainment: "tents, makeshift halls, hotel saloons and dining rooms—these were very often the theatres of the outback."[284] Frank Gerald, one of the founding members of the Gerald and Duff Dramatic Company, once performed in a railway goods yard, where "railway tarpaulins formed the proscenium and the station bell rang the audience in and the curtain up."[285] The company also played *The Lights O' London* on the seventh level of a silver mine in Broken Hill, New South Wales, and on a billiard table in Malvern, Victoria, where G.V. Brooke had once performed *Othello* to a crowd of miners

---

[281] Hardwicke, 86.
[282] Ibid., 96-7.
[283] Wilkie, 146.
[284] Booth and Hackenberg, 53.
[285] Gerald, 38.

who threw gold nuggets onto the "stage."[286] In Colombo, Daniel Bandmann played in the schoolroom of an army barracks, and Genevieve Ward played on the rickety tables of a club when there was no other stage.[287] In India, Allan Wilkie tried to find public gardens and private houses at which to give performances, and often his hosts would erect tents to function as dressing rooms.[288] At one performance in Lucknow, Wilkie gave a performance in the public gardens, which housed the tombs of the Kings of Oudh. The company used the bat-infested catacombs as their dressing quarters.[289] At one performance of *Hamlet*, staged in the small dining room of a hotel somewhere in South Africa, the actor playing Claudius could not find a place on stage to die: "He thereupon picked his way carefully over the bodies of Gertrude and Laertes and expired with standing room only in the wings."[290] Before there were theaters in the British Caribbean —in Jamaica, Barbados, Antigua, St. Lucia, and Trinidad—performances were given in taverns, in long rooms, or even in "temporary sheds erected to house an audience." Courtyards of plantation houses also functioned as performance venues.[291]

Travelling players also had several opportunities to play in outdoor venues, where weather events and other ecological factors could influence a performance. For example, delivering a Shakespearean monologue may have been second nature to some well-

---

[286] Ibid., 38-9. W.J. Holloway also played *Macbeth* atop a billiard table in rural Queensland, where gold miners were accustomed to throwing gold nuggets onstage in lieu of admission. Holloway, 34.
[287] Bandmann, 244; Ward and Whiteing, 105.
[288] Wilkie, 149.
[289] Ibid., 150.
[290] Hardwicke, 91.
[291] Kole Omotoso, *The Theatrical into Theatre: A Study of Drama and Theatre in the English-Speaking Caribbean*, (London: New Beacon Books, 1982), 16-18.

rehearsed actors, but at eight thousand feet above sea level, visitors to Mussoorie had to adapt their craft to the altitude.[292] In Rangoon, when Bandmann asked to see the theater, he was shown "a large open place without walls, with a stage at the end." The walls of this theater had been removed for a ball a few days prior; Bandmann refused to perform in an "invisible hall."[293] Charles Duval, who toured South Africa in the 1880's with his one-man show entitled, "Odds and Ends," describes an open-air theater at the Good Hope Gardens in Cape Town.[294] On Saint Patrick's Day, Duval performed in Pretoria under "canvas awnings through which the rain descended to the detriment of our grog, by watering it too much."[295] In 1846, the 45th regiment at Fort Napier in Natal gave an open- air production of *Arden of Faversham*.[296] The Himalayas formed the backdrop of the Doon School's open-air theater in Dehra Dun, where Kendal's company performed.[297] Ward recalls seeing a Singalese play in Colombo at an open-air theater in the city's gardens. The theater was "octagonal, with columns open to the air, and lighted by coconut shells with oil and a wick in them."[298] In Kanpur, 1912, a dust storm concluded

---

[292] Wilkie, 151.
[293] Bandmann, 254.
[294] Charles Duval, *With a Show Through Southern Africa*, Vol 1., (London: Tinsley Brothers, 1882), 54.
[295] Charles Duval, *With a Show Through Southern Africa*. Vol 2., (London: Tinsley Brothers, 1882), 160.
[296] Fletcher, 81. See also: Alan F. Hattersley, *Pietermaritzburg Panorama: A Survey of One Hundred Years of an African City*, (Pietermaritzburg: Shuter and Shooter, 1938), 39. Arden of Faversham has been attributed to Shakespeare by some scholars.
[297] Kendal and Colvin, 92.
[298] Ward and Whiteing, 105.

an open-air performance of *The Taming of the Shrew*.[299] Wilkie supposes he was the first to give a "pastoral performance" of *As You Like It* in Melbourne on the grounds of the Federal Government House; he also gave outdoor performances of this play in Lahore and in Nainital.[300] In the latter, the actor playing Touchstone had trouble climbing the nearly perpendicular slope that formed the backdrop of the natural stage, which theactors used to make their exits and entrances. Once he managed to get offstage, Touchstone, exhausted, would fall asleep behind a bush and miss his cues.[301] More recently, in apartheid South Africa, Leslie French's 1972 production of *A Midsummer Night's Dream* performed in the Mannville open-air theatre of Port Elizabeth "was punctuated with frequent heavy rain. French was heard to remark, 'I think I was the only dry Bottom at the theatre tonight.'"[302] The record we have of outdoor performances of Shakespeare in the British colonies is far from complete, and the performance history of this theater ecology remains largely undocumented. However, the number of outdoor theaters and

---

[299] Wilkie, 150. Wilkie remarks that dust storms are common before the rainy season, but this storm seemed to devastate the performance space: "The dressing tents were blown down and our garments scattered to the four winds of heaven were hastily retrieved by our native servants from the neighboring undergrowth, while the audience made a hurried departure."

[300] Wilkie, 230, 139, 148.

[301] Ibid., 148-9.

[302] J.B. Hamber and Eugene Olivier, (Compiled by Laurence Wright and Lin Gubb), "A Tribute to 'Stratford-on-Baakens': Thirty Years of the Port Elizabeth Shakespearean Festival," *Shakespeare in Southern Africa*, 3, (1989): 5. The authors note that this outdoor theatre also has a history of ecological interruptions during the Port Elizabeth Shakespeare Festival: "Birds would flutter and twitter, sometimes appropriately, sometimes not. Once a dog made a guest appearance and on another occasion a frog hopped about the stage doing an unchoreographed dance of his own. There was even a performance during which a burglar tried to escape the long arm of the law by hiding in the shrubs at the side of the show. Such are the perils of open-air theatre..."

improvised venues in the colonies suggest that many performances were subjected to unintended ecological events.

While open-air colonial theaters invited their own set of ecological parameters to each performance, indoor colonial theaters also created conditions that could augment or diminish the effect of a performance. Monkeys, which would climb in the rafters of the Grand Opera House in Calcutta and throw screws and bolts down at the performers below, proved a nuisance to Allan Wilkie. During one performance of *The Merchant of Venice*, Frediswyde Hunter-Watts (Wilkie's wife) who played Portia, had just explained to Shylock, "The quality of mercy is not strained,/ It droppeth as a gentle rain from heaven/ Upon the place beneath" (4.1.190-2) when a heavy wrench fell to the stage, narrowly missing her head. After the show, a furious Wilkie, who seems to have taken the projectile as a deliberate and malicious criticism (from a monkey!) rather than as a mere accident, responded accordingly: "I considered that whatever their opinion of her performance, they should at least have some respect for the immortal William. If that was all they thought of Mercy, I would have none, and very reluctantly I had one of them shot, when the others, realizing with Falstaff that discretion was the better part of valour,

quickly disappeared to another, and I trust more suitable, roosting place."[303] On a different occasion in Colombo, Wilkie staged "the most beautiful and effective scene I have ever seen in any theater," which (he is humble enough to admit) was "purely accidental and entirely due to Nature's artful aid." Instead of using a painted backdrop, Wilkie decided to open the folding doors at the back of the stage, to reveal a beautiful "natural" setting outside: "Palm trees gently stirred against an indigo sky studded with stars and a bright tropical moon was shining, all with an effect of illimitable distance, providing a setting that was utterly beyond the arts of the scene-painter and electrician."[304] Wilkie's description of the theater at Kandy in Ceylon provides another example of the natural world inhabiting the theater: "The lusty jungle growth had shot up underneath the stage and forced it into a series of waves and hollows...Bamboo trees had been allowed to penetrate the floors of the dressing rooms and with their branches

---

[303] Wilkie, 124. Wilkie seems more bothered that the monkeys interrupted a play by "the immortal William" than he is concerned for his wife's safety. His interpretation of "mercy" is also interesting, because it tells us how he interprets animal agency within a performance space. To Wilkie, these monkeys are not just monkeys, but saboteurs, non-human enemies of the immortal bard. He is at once unwilling to see them as part of the performance, but at the same time, suggests that they have some kind of malicious theatrical agency. Wilkie does not miss the significance of the wrench falling—violently, not gently—at that particular moment; the wrench embodies mercy, falling upon the place beneath. But at the same time the wrench seems to imbue the monkeys with the agency of a theater critic, it also seems to present monkeys as merciful creatures. At the very moment that Portia shows the law, the bond, and the doctrine of "mercy" to be malleable, this falling wrench makes monkeys merciful; if the audience accepts that the monkeys can throw a wrench deliberately, then perhaps they can accept that they can throw it accurately enough to miss a human target. Wilkie's reaction to these monkeys, by killing one of them unmercifully, ignores the nuances of Portia's speech and the ecological implications of this performance, which makes a mockery of mercy, a monkey of a monarch, and perhaps even "God himself" (4.1.201).

[304] Ibid., 157-8. The scene was created for a performance of Wilde's *Salome*.

trimmed served as clothes pegs."[305] During a performance at the Great Opera House in Brisbane, the Gerald and Duff Dramatic Company was surprised by a flood: "It had rained for weeks, and that night the water poured down a long passage, burst through and flooded the stage and the great Opera House. The footlights were put out, the ladies screamed, the orchestra got a ducking, the show closed down, and we went home by boat."[306] In Kimberley, the Theatre Royal had a roof of galvanized iron; in a light rain, the drizzle could make the loudest of speeches inaudible: "vain is the attempt of singer or speaker to make the voice heard over the obnoxious din produced."[307] The same was true of the Theatre Royal in Pietermaritzburg. Morton Tavares's production of *Macbeth* performed there in 1882 was completely inaudible due to the sound of rain on the roof.[308] In February of 1782, the New American Company of Comedians played a Shakespearean farce called *Catherine and Petruchio* in Kingston, Jamaica, after which was displayed "A Grand Set of Chinese and Italian Fire-Works." Members of the company had performed a similar display of fireworks in Philadelphia in 1768, where the ceiling of the theater had been opened to allow smoke to escape. Richardson Wright speculates that the theater in

---

[305] Ibid., 159. Though Wilkie is abhorred by the condition of this theater, his view is not shared by the theater's patrons: "Fortunately the public of Kandy were not deterred by the obvious defects of this extremely primitive temple of the drama and attended our performances in goodly numbers" (159-60).
[306] Gerald, 44-5.
[307] Duval remarks, "the roof of the Kimberley theatre, in a semi-tropical rain shower, would have made the old man [Demosthenes] offer a stout reward for the loan of a speaking-trumpet" (Vol 1, 90).
[308] Dennis Schauffer, "Shakespeare Performance in Pietermaritzburg, Natal, prior to 1914," *Shakespeare in Southern Africa*. Vol. 19, (2007): 13-14. See also: *Natal Witness* 3 April 1882.

Kingston may have also had a retractable or removable roof.[309] When Matheson Lang visited the Scottish Society in Shanghai, they insisted that his company perform *Macbeth*, even though it was not part of their repertoire. The Shanghai Amateur Dramatic Society even offered them a Skiopticon for the Witches' scenes, to represent the moon on a stormy evening. The company decided that the effect was too powerful, however: "We started to rehearse with the Skiopticon, but, so effective was it, and so fascinating to watch these angry stormclouds racing across a watery moon, that I very quickly realized that not a word of *Shakespeare* would be listened to or any of the action of the play paid the slightest attention to! In fact, the Skiopticon would have been very much the star of the whole show."[310] In order to keep the projection device from stealing Shakespeare's thunder, it was omitted from the performance. Fires were also a common hazard of indoor performances. In January of 1785, a fire broke out during a performance in Kingston Jamaica, caused by whale-oil lamps which had been over-filled.[311] A fire at a theater in Geelong almost ruined Allan Wilkie's Shakespearean tour of Australia.[312] During a performance in Tasmania, a dog knocked over an oil lamp and started a small fire, which an audience member managed to extinguish with his coat.[313]

Clearly, performing Shakespeare in the colonies was no picnic for actors and actresses. But each ecological obstacle provided a triumphant scaffolding for

---

[309] Wright, 168-9. For a description of the Philadelphia performance by the Douglass Company, see: Pennsylvania *Gazette*, December 8, 1766.
[310] Lang, 107.
[311] Wright, 210.
[312] Wilkie, 281.
[313] Craufurd, 129.

Shakespeare’s cultural iconicity and apotheosis. Shakespeare’s commercial value to theater patrons, Shakespearean actors, and even to English departments derives in part from this theater history in which non-human nature plays no small part. The more difficult the playing conditions, this history suggests, the greater the payoff, and the more important the performance. Dromgoole’s Globe to Globe tour participates in this same theater history, and calls attention to the danger of claims that seek to immortalize William Shakespeare. I do not intend to disparage Shakespeare here; on the contrary, it is my own love for Shakespeare that drives me to be cautious in singing his praises. By entertaining the possibility that Shakespeare’s cultural status today could be an accident, if not a mistake, the product of an ecology between an imperial ideology and the natural world—I hope Shakespeareans will be more reflective about the violent colonial and ecological history that has normalized claims regarding Shakespeare’s universalism. At the same time, I hope that attending to the non-human agents of Shakespearean performance can illuminate our own capacity for accidents off-stage. The colonial history of Shakespeare in performance overlaps with the history of globalization, industrialization, and climate change. In my next chapter, I focus more closely on the potential for non-human natural agents to affect the meaning of a Shakespearean performance, in the hopes that the unplanned accidents of a given performance can teach us to understand our accidentally-acquired geologic agency in a more productive way.

CHAPTER 4

STOLEN THUNDER: PERFORMING SHAKESPEAREAN WEATHER EVENTS IN THE ANTHROPOCENE

> Columbus was undoubtedly a skilled mariner, but he was also a very lucky one. About ninety percent of all tropical storms in the Atlantic form between the latitudes of 10° North and 35° North. Yet in September 1492, at the height of the hurricane season, Columbus voyaged uneventfully from the Canary Islands to his landfall in the Bahamas with good weather, sailing as he did along the predominant track of the great Atlantic hurricanes.[314]

In my first chapter, I suggest that that the early modern stage can operate as a site for imagining an alternative history for the dissemination of natural materials and pathogens—the globalizing of nature—that accompanied trans-Atlantic exploration and exploitation. What *Bonduca* offers, I suggest, is the speculation that things (material things, as well as events) might have gone differently if, say, indigenous Americans had spread more dangerous pathogens to European invaders instead of the other way around. What if instead of carrying a venereal disease back to Europe, Columbus had brought something far more deadly? By the late sixteenth century, a similar thought must have crossed the minds of many a mariner, especially those who knew about weather patterns in the Caribbean. How might the history of globalization have altered, the ensuing relationship between Europe and the Americas changed, if, on Columbus's first voyage, his three ships had sailed headlong into a hurricane? That Columbus arrived in the "New World" in early October, 1492, is nothing short of miraculous, considering it was the middle of hurricane season.

---

[314] Stuart B. Schwartz, *Sea of Storms: A History of Hurricanes in the Greater Caribbean from Columbus to Katrina*, (Princeton: Princeton University Press, 2015), 10.

But rather than entertain the hypothetical scenario of what might have been had Columbus perished in a hurricane on his initial voyage, I raise his good luck in order to foreground the determining role of accident in the last five centuries of European imperialism and globalization. Europe and the global North have overwhelmingly benefitted from the redistribution of wealth, labor, and natural resources that Columbian and capital exchange engendered at the expense of the global South. At the heart of Columbus's accident lies another, because this history of exchange has also been the history of the Anthropocene. In Columbus's blind stumbling into the Americas, I find a salient analogy for the accidental discovery that we have only recently made: that human behaviors are irreversibly changing the planet, the climate, and even the intensity of weather events. The history of anthropogenic climate change and the history of nature's globalization began with the same stroke of dumb luck—or blind misfortune, depending on where one is standing.

As the term "Anthropocene" continues to gain traction in both the sciences and the humanities, it also continues to generate a considerable amount of debate. Climate scientists, geologists, and biologists agree that the term defines our current geological epoch, where "humankind has become a global geological force in its own right," altering the earth's carbon and nitrogen cycles, terrestrial water cycles (including "water vapour flow from the land to the atmosphere"), and driving the earth's sixth major extinction event.[315] Scholars are in less agreement about when this epoch began, or whether

---

[315] Will Steffen, Jacques Grinevald, Paul Crutzen, and John McNeill, "The Anthropocene: Conceptual and Historical Perspectives," *Philosophical Transactions of the Royal Society,* 369 (2011): 843.

"Anthropocene" is the best term to describe it.[316] The term privileges human beings as the primary agents of change, and risks essentializing the behavior of all humans into a narrative about the species, rather than individual human behaviors.

While it is true that we (*homo sapiens*) "have stumbled into" the Anthropocene without intending to[317]—that we do all share in the catastrophe promised by this epoch—it is also true that individual humans neither contribute to nor bear the consequences of climate change equally across the globe.[318] As the history of capitalism, European colonialism, and globalization demonstrates, the global North's "stumbling into" the Anthropocene looks very different from the global South's. Although individuals cannot be held accountable for producing natural disasters or causing extreme weather events—like hurricanes Harvey, Irma, and Maria which devastated Florida, Puerto Rico, and parts of Texas during the fall of 2017—the Anthropocene has increased awareness of human geologic agency, and has raised new ethical concerns about accountability and blame in the wake of certain disasters. The emerging field of "weather event attribution science," which studies anthropogenic climate change as a causal agent for specific weather events, even suggests that storms should no longer be thought of as purely "natural" phenomena.

---

[316] Steve Mentz's attempt to "pluralize the Anthropocene!" has generated such alternatives as: the Neologismcene, the Capitalocene, the Chthulucene, and the Naufragocene. Steve Mentz, "The Neologismcene," *Arcade: Literature, the Humanities, & the World*, July 1, 2018, https://arcade.stanford.edu/blogs/neologismcene

[317] Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry*, 35, no. 2, (2009): 217.

[318] Chakrabarty insists that "species cannot be thought of in essentialist terms," and that "to speak of species thinking is not to resist the politics of 'common but differentiated responsibility' that China, India, and other developing countries seem keen to pursue when it comes to reducing greenhouse gas emissions" Chakrabarty, 214, 218.

As Kevin E. Trenberth argues, “the atmospheric environment is now warmer and moister than it was prior to about 40 years ago. All storms develop in this changed environment.”[319] The task of attributing the intensification of weather events to carbon-surplus nations brings with it a host of political issues. As the climate scientist Myles Allen points out, it is not just citizens of climate debt nations who wonder if they are victims of climate change, and who have incentive to seek compensation for relief from natural disasters: “In the absence of agreed standards of attribution, many countries and communities are claiming to be adversely affected. Which of these claims are valid? And whose interests are being ignored, simply because they do not have the science base or political nous to complain?”[320] Allen’s observation highlights a trend where people are more interested in seeing themselves as victims of climate change than they are in recognizing their role as contributors to a changing climate.[321]

---

[319] Kevin E. Trenberth, “Attribution of climate variations and trends to human influences and natural variability,” *WIREs Clim Change*, 2, (2011): 929. Mike Hulme identifies Trenberth’s “philosophical” approach to weather event attribution as one of four methods for attributing human influence to weather events. The other three include (1) physical reasoning, (2) using classical statistical analysis of meteorological data as a kind of control with which to compare more recent extreme weather events, and (3) establishing the Fractional Attributable Risk (FAR) of an extreme weather event. Mike Hulme, “Attributing weather extremes to ‘climate change’: A review,” *Progress in Physical Geography*, 38, no. 4 (2014): 502-4.

[320] Myles Allen, “In defense of the traditional null hypothesis: remarks on the Trenberth and Curry *WIREs* opinion articles,” *WIREs Clim Change*, 2, (2011): 933.

[321] Ibid. Allen’s observation demonstrates some of the political debates of attribution studies. He adds, “For almost anyone I talk to who is not a climate scientist or environmentalist, the question of whether they are being adversely affected by climate change today is far more interesting than the question of what the climate will be like in 2100.”

To help negotiate "our" accidentally-acquired geologic agency as a species with "our" intentional agency as individuals, I turn to the Shakespearean stage as a place where we might begin to provincialize—rather than "pluralize"[322]—the Anthropocene. Because the Anthropocene has made it much more difficult to distinguish between human and natural agency—especially where both climate and weather are concerned—we might theorize a theater of the Anthropocene by attending to the interplay between human intention and extra-human agents that create meaning during a performance. More specifically, by focusing on Shakespearean representations of the weather that intersect with real atmospheric phenomena during performance, I hope to make three observations about a theater of the Anthropocene, which can also be fruitful for determining the implications of a human agency in the epoch of human-induced catastrophe.

First, when live theater intersects with actual weather, the atmospheric scale of the performance can challenge the artifice of the theater, which Shakespearean representations of the weather embrace. Prospero is *meant* to have control over his storm and his theater, which are one and the same thing; but in a real storm, his stage-managing becomes unmanageable, as a history of outdoor performances of *The Tempest* demonstrates. At the same time, a theater that involves real weather events reinforces the ecological unpredictability of live performance. In this sense, the early modern stage itself might be thought of as a theater of the Anthropocene.

Second, the performance of live weather on stage showcases the ethical dilemma with seeing weather as the product of a homogeneous human agency. Anthropocene

---

[322] Mentz, "The Neologismcene."

theater positions the audience as both knowing participants in the act of weather on stage, and as passive recipients sharing in an atmospheric phenomenon that exceeds human control. And though an audience might share the same experience of weather and theater during a given performance, they will likely not share in what that experience means, or in understanding how they have participated in its creation. The Anthropocene narrative offered by attribution science suggests that humans exert some degree of influence on weather events; the stage suggests that humans can fully control the weather, or at least how it is intentionally represented. But while some may read a storm's performance as a felicitous conflation of human and nature performing together, others may see it as an unhappy evening, a reason to keep Shakespeare indoors. Furthermore, actors ultimately possess *more* agency than audience members in choosing how to engage the weather during a given performance, which highlights the unequal distribution of human agency in the production of a theatrical or non-theatrical weather event.

Finally, directing our attention to real weather in performance grounds each Shakespearean performance in a particular place, time, and context, where the weather carries on with or without Shakespeare. I offer two examples of how we might read Shakespearean performance through the lens of a more provincial, less homogeneous, geologic agency. A stormy performance of *The Tempest* in colonial Bermuda during hurricane season draws attention to the island's colonial history, while simultaneously underscoring the limits of Prospero's—and by extension Shakespeare's—colonial authority on the island. A rainy performance of *Romeo and Juliet* in Cape Town, 1892, similarly signals the failure of colonial power to subdue the weather, while also pointing

to the enduring environmental legacy of letting it rain where Romeo exchanged gold for poison. As we continue to come to terms with the geologic agency that has been thrust upon us as a species, a theater of the Anthropocene can be a useful tool for provincializing that agency, especially as we begin to see the history of British colonialism, Shakespearean performance, and our future as a species on this planet in a new light.

How to Do Things with Storms: A Theater of the Anthropocene

On Labor Day weekend, 1950, a newly formed theater company in Hamilton, Bermuda performed *The Tempest* for their maiden production. Staged outdoors in a "grassy glen," this particular performance was marked by the felicitous entrance of an unplanned weather event:

> …nature also provided some of the most effective and exciting lightning and off-stage sound effects. At this season South Atlantic hurricanes flirt with the Colony, producing crashes of thunder and flashes of lightning. With such realism the synthetic roar of a wind machine was quite unnecessary. During the last of the three performances the weather cooperated somewhat too well and His Excellency, the dignified and intrepid Governor and Commander in Chief of Bermuda, sat through a thunder shower that realistically appeared while Prospero's tempest was raging. Under the circumstances Trinculo's comments on

> ‘the foul weather’ drew laughter from the damp audience that Shakespearean humor rarely provokes.[323]

The weather’s behavior “on stage” during this performance raises questions about the company’s intention, the storm’s autonomy, and its effect on the “damp” audience. Perhaps the storm clouds, full of “crashes of thunder and flashes of lightning,” even entered on cue with Trinculo’s speech, and gave the actor something tangible to point at: “Yond same black cloud, yond huge one, looks like a foul bombard that would shed his liquor. If it should thunder as it did before, I know not where to hide my head: yond same cloud cannot choose but fall by pailfuls” (2.2.21-24). Perhaps an audience in the open air would envy Trinculo, who at least has Caliban’s gabardine to shelter himself beneath. For Trinculo, a real storm adds comedy and credibility to his performance. But what does a real storm do for a character like Prospero, whose power over Ariel, Caliban, Miranda, and Ferdinand seems to depend upon his ability both to “put the wild waters in this roar” and also to “allay them” (1.2.2)? What happens when an audience sees that Prospero has no control over his storm? The stakes of this question are high, especially at a performance in colonial Bermuda, with “the dignified and intrepid Governor and Commander in Chief” Sir Alexander Hood weathering the storm in the audience. The Tempest was one of several works by Shakespeare that functioned as a vehicle for

[323] Mary Johnson Tweedy. “Bermuda ‘Tempest’: Presentation in Hamilton Recalls Belief That Island Was Scene of Play.” *New York Times*. Sept. 17, 1950. ProQuest Historical Newspapers: *The New York Times (1851-2010)*, 111.

disseminating an imperial ideology throughout the British Empire.[324] If the Walsingham Players intended to stage Prospero's subjugation over Caliban before the Governor of Bermuda, the weather, which "cooperated somewhat too well," may have productively disrupted Prospero's colonial, environmental, and patriarchal display by entering without the magician's permission, and exposing his power as a mere performance. There is no record of Governor Hood's response to the performance; we only know that he sat through it, and got wet.

The storm that interrupted *The Tempest* in Hamilton, Bermuda was not an isolated incident; weather events coalesce with Shakespearean performance all the time. The question is: what does the weather *do* to the performance? The spectrum of audience interpretations will range from seeing the weather as an unhappy accident capable of ruining the evening to seeing the weather as a felicitous marriage of Shakespeare and the atmosphere. Reviewers are more inclined to comment when the latter interpretation is available. During a performance of *Macbeth* in Washington Square in the summer of 1966, Duncan entered Macbeth's castle amidst an intensifying downpour. His observation, "This castle hath a pleasant seat: The air/ Nimbly and sweetly recommends itself" (1.6.1-2), became all the more ironic in the rain, and earned him a "roar of laughter" from the audience.[325] The Delacourt Theater, established in 1962, has a long history of staging wet productions of Shakespeare in the Park. During a particularly damp

---

[324] The play's role in the promoting an imperial ideology is also emphasized by later post-colonial adaptations of the work, such as Aimé Césaire's. See: Aimé Césaire, *A Tempest*, Richard Miller, trans. (New York: Theatre Communications Group,1992).
[325] Harry Gilroy, "Rain and Praise Shower on 'Macbeth,'" *New York Times*, June 29, 1966, ProQuest Historical Newspapers: *The New York Times (1851-2010),* 38.

season in the summer of 1988, rain interrupted a performance of *Much Ado About Nothing.* After a twenty-five minute pause, the show restarted with Benedick asking, “Lady Beatrice, have you wept all this while?” (4.1.264)— a quip which, under the circumstances, “brought the house down.”[326] Reviewers are quick to notice how the atmosphere can enhance a production of *The Tempest*, which might help to explain this play’s popularity in summer Shakespeare Festivals. During one performance by Connecticut’s Flock Theater, “as Prospero was calling up the winds and the rains, there was a storm front moving through, so as luck would have it, you could see little streaks of lightning in the distance and wind rustling through his cloak.”[327]

Just as often, however, the weather can altogether ruin a performance. In 2010, the Optimist Theater in Milwaukee staged a production of *The Tempest* where a storm arrived at a different moment: “around the time that Prospero asks Ariel to call on the goddess Juno to bless the coupling he’s arranged between daughter Miranda and shipwrecked prince Ferdinand, in which giant puppets from Milwaukee Mask andPuppet Theatre appear—the sky was aglow with lightning and the show was called before the rain came down.”[328] In this instance, instead of delighting the audience, the weather stifles the capacity of audience members to suspend their disbelief about Prospero’s

---

[326] Richard F. Shepard, “Weather, ‘Tis Not Always Nobler at the Delacorte,” *New York Times.* Aug. 14, 1988. ProQuest Historical Newspapers: *The New York Times (1851-2010)*, H5.
[327] ristina Dorsey, “‘Oh Bugspray, Where Art Thou?’: Birds, Drunks, Sirens Conspire to make Outdoor Shakespeare a comedy of errors,” *The Day,* July 23, 2002, C2.
[328] Brian Jacobson, “Optimist Theater’s Tempest interrupted by tempest,” 20 June 2010, http://urbanmilwaukeedial.com/2010/06/optimist-theatres-tempest-interrupted-by-tempest/

supposed control over the weather. Because the weather is so capable of destroying the illusion of Prospero's power, it is likely that Shakespeare, who wrote *The Tempest* after his company acquired the Blackfriars Theater, never *intended* his one play about a storm ever to be performed outdoors.[329] Unlike the open-roofed venues of London's public theaters, the Blackfriars Theater provided a space where Prospero's magic could be effectively stage-managed under the protection of a roof.

Nevertheless, we might think of the weather as a performative event if it meets the right circumstances during a performance. In his discussion of the "appropriate circumstances" which must underpin a performative speech act, J. L. Austin suggests that "a good many other things have as a general rule to be right and to go right if we are to be said to have happily brought off our action."[330] In the same way that a performative utterance must meet certain criteria, such as containing verbs in the "first person singular present indicative active,"[331] so must storms behave in a certain way in order to be perceived as felicitous or meaningful within the action of the play or performance. Austin names "the doctrine of *the things that can be and go wrong* on the occasion of such utterances, the doctrine of the *Infelicities*."[332] Whether or not a storm is infelicitous or felicitous during the performance of a play depends on the intention of the company, the action of the actors, and how the storm is interpreted by the audience. An unplanned or

---

[329] Andrew Gurr, "*The Tempest*'s Tempest at Blackfriars," (1989), In *The Tempest, Norton Critical Edition,* Peter Hulme and William H. Sherman, eds. (New York: Norton, 2004), 251.
[330] J. L. Austin, *How To Do Things With Words,* (Oxford: Oxford University Press, 1962), 13-14.
[331] Ibid., 56.
[332] Ibid., 14.

accidental weather event does not necessarily spell failure for the intention behind the production, as Mary Johnson Tweedy's description suggests of the Bermudan tempest, which rendered "the synthetic roar of a wind machine ... quite unnecessary." And yet, in the same way that humans cannot act intentionally where the weather or our geologic agency is concerned, neither can the weather intend to behave a certain way. The circumstances of the performance's setting create the illusion that the weather is functioning within the world of the play, rather than the play functioning within an atmosphere altered by human behaviors.

Whether audiences interpret the weather as felicitous or accidental during a performance, they will agree that the weather always acts independently of the intentions of actors and directors. Jody Enders and Baz Kershaw offer helpful reminders that there is always an intention behind a production which, when confronted with an extra-dramatic element—like a drop in barometric pressure, a clap of thunder, or even an actor's death—may nevertheless change the meaning of the action on stage in potentially meaningful ways. As Enders argues, "if an utterance and, more importantly, an *action* during a play is *meant* as anything at all, that is because it is both meant and *performed by someone* and understood by someone else."[333] In her book, *Murder by Accident*, Enders details the ethical and legal ramifications of determining human intention (or lack thereof) during a performance by looking at examples of real deaths that took place during medieval stage performances. In asking at what point performance becomes

[333] Jody Enders, *Murder by Accident: Medieval Theater, Modern Media, Critical Intentions*, (Chicago: University of Chicago Press, 2009), 9. Emphasis original.

murder, Enders suggests that performance can be legally actionable, "but only when the intentions are clear."[334] A similar problem confronts proponents of attribution science. As attribution science moves toward suggesting that nations experiencing both a carbon debt and the brunt of climate change might be justified in pursuing legal action against carbon-surplus nations, or even individual multinational corporations, determining human intention becomes a crucial, but nevertheless murky and difficult, business. Even if CEOs quit denying the anthropogenic reality of climate change, the tools still do not exist to establish legal culpability where climate change or weather event intensification is concerned. On stage, however, an audience can clearly make out the distinction between the intention of the performers and the heavy clouds rolling over the little scene. The arrival of an unintentional weather event gives the actor a choice either to incorporate the weather into the action of the play, or to pretend it isn't happening until the scene ends or the rain ends it.

Baz Kershaw more fully explores the productive potential of a performance straying from a deliberate human agenda. The Shakespearean weather event that occurred in Bermuda, 1950, is an example of what Kershaw calls a "deconstructive spectacle," which "work[s] paradoxically to open up new domains for radical revisions of the way

[334] Ibid., 3.

things are."[335] In that particular production, setting, and context, the storm's performance potentially undermines Prospero's authority over his island, as well as Shakespeare's colonial authority in Bermuda. *The Tempest* has been largely ignored for the political potential of its non-human players in performance. Kershaw's articulation of theatre ecology usefully acknowledges how a theatrical accident—or the type of Shakespearean weather event I am interested in analyzing—carries political significance and great potential as a tool for activism and revolution. Kershaw traces a modern division between spectacle and "legitimate theatre in the West"[336] from early modern iterations of spectacle, which were divided between spectacles of the commons on the one hand, where the people's performance of power in fairs and festivals was centripetal and diffuse, and spectacles of the court and church on the other, where state power was centrifugally concentrated in the monarch. Over time, as theater architecture and set designs reinforced a hierarchy of perspective within performance spaces, and as the technologies of "legitimate theater" created a more contained theatrical space, pushing

---

[335] Baz Kershaw, *Theatre Ecology: Environments and Performance Events*, Cambridge: Cambridge University Press, 2007, 219. Kershaw's own example of a deconstructive spectacle is the scene from Buster Keaton's silent classic *Steamboat Bill Jr.* (1928), where a cyclone causes the one-ton edifice of a house to collapse onto Keaton, who stands precisely where the top window is located, which miraculously spares his life. Kershaw argues that this scene "resonates with the ambivalent pleasure characteristic of spectacles of deconstruction and paradox" because it makes the world "both contemptuous and curious, disgusting and alluring" (Kershaw 217-18). He defines the paradox of this moment in the way that Keaton risks his life for a stunt: "the utter vulnerability on display is heightened because the distance between Keaton and his character collapses with the wall" (Kershaw 218). Though Keaton's disaster is staged and premeditated, the collapse between actor and character that his disaster produces resonates with my understanding of how storms make meaning of theatrical performance and acquire political agency.

[336] Ibid., 208.

the action back behind the proscenium arch and the gas lights, spectacle came under suspicion for drama critics and theorists.[337] "The dominant traditions of Western theater," Kershaw argues, "have aimed to tame spectacle, to incorporate spectacle in a reduced form into its disciplinary regimes."[338] But anything can happen during a performance, especially when the performance space is located outdoors, beyond the disciplinary architecture of a theater. Outside, a theater's disciplinary structures are far from absolute. A theatrical mishap, or "theatre *in extremis*," gives birth to a different kind of

---

[337] Ibid., 224. See also Una Chaudhuri, "Land/Scape Theory," *Land/Scape Theater*, Una Chaudhuri and Elinor Fuchs, eds., (Ann Arbor: University of Michigan Press, 2005), 20. Chaudhuri shows how the political valences of perspective fostered by landscape painting had a significant impact on the stage: "The stage aesthetic that developed rapidly thereafter proved to be a costly bargain: with the illusion of depth now available to it, set design could supply astonishing degrees of realism, but only—and always—within the confines of the picture frame, the proscenium arch. Pushed outside this frame, banished from participating in the life-art dialectic that is theatrical process, the spectator became a viewer and had to relinquish the unique experiential mode of receiving art that is offered by this art alone. True, this new mode of spectatorship recast the ideal spectator as a sovereign, giving him a model of individuality, centrality, and authority to aspire to: the position in the auditorium from which the perspectival effects were seen to perfection. But the bargain was a Faustian one: the average spectator's chances of actually sitting in the 'duke's seat' were nil, just as bleak as his or her chances of actually 'mastering' the social world" (20).

[338] Kershaw, 221. *The Tempest* is actually a great example of a play that was likely written with the "disciplinary regimes" of indoor theater in mind. Shakespeare's theater was meant to constrict spectacle to the realm of the intentional, but perhaps at some cost: "Staging the tempest just dampens it down" (Kershaw, 222).

performance, which can create productive sites of political and ecological action.[339] As an example, in my previous chapter, I discuss Shakespeare's cultural status as a consequence of the improvised and often unpredictable playing conditions of British colonial theater. When a real storm converges with a Shakespearean performance, spectacle triumphs. Especially in a colonial environment, where a different kind of environmental and cultural taming was under way, and where Shakespeare was deployed to serve pedagogical and recreational purposes (which were nonetheless disciplinary), the effects of such a spectacle bear significant political weight.

---

[339] Ibid., 58. In his first chapter, Kershaw offers several examples of what he terms "theatre at the end of its tether" to "show how at the limits of theatre another kind of performance begins" (Kershaw 55). These are moments where "the protocols that create the theatrical frame begins to unravel under the pressure of mishaps" and where "performance that in some crucial sense is *not an intended part of the theatrical frame* has to be called on to preserve it, restore it, or connect it to some other more urgently meaningful domain" (Kershaw 57-8). His explanation helps us negotiate theatrical mishaps as something that may not be intentional from the perspective of the playing company, but that are not altogether unproductive. He also points out that the risk of something going wrong is part of the allure of the theater, which also demonstrates how performance functions as "an ecology that can be very finely tuned" (58). Once we can see performance as an ecology, we can also see how nature is the best example of an unpredictable performance: "nature is awash with unpredictability, even as humans like to think they have 'mastered' it through science and technology...The performance of the climate ultimately answers no one's bidding" (59).

Shakespeare's plays are already preoccupied with representing the weather,[340] but accounting for how the *actual* weather functions differently from theatrical representations of weather in performance seems particularly pressing, especially in light of the recent turn to climate change and weather in Shakespeare studies. In *Shakespeare's Storms* (2015), Gwilym Jones reads Shakespeare's representation of storms in context with early modern theatrical traditions, performance practices, and ideas about the weather. He argues that Shakespeare's storms serve the functional purpose of separating characters, but in performance, Shakespeare's storms repeatedly subvert audience expectation by distancing theatrical thunder and lightning from their conventional association with supernatural forces.[341] Similarly, Jennifer Mae Hamilton's *This Contentious Storm* (2017) offers a concentrated theater history of the storm scenes from *King Lear*, and traces how the storm has transformed from a literal event in the

---

[340] In early modern theater, the weather served a very specific function, depending on how it was cued and staged. Prospero's tempest, for example, may have borne only metaphorical significance to its initial audiences. The play's storm scenes are punctuated by stage directions specifically for "thunder and lightning," rather than "storm and tempest," which proliferate throughout other plays. According to Leslie Thomson, executing the former stage direction would have signaled to audiences that something supernatural was occurring on stage, while the latter would have signaled a mere weather event. In a play like *Macbeth* (1606), the stage technology would have supplied additional hints to audiences that something unnatural was unfolding. Squibs—stage explosives made of sulfurous brimstone, coal, and saltpeter—were particularly effective for creating not only the supernatural "thunder and lightning" that opens *Macbeth,* but also the "fog and filthy air" (1.1.12) in which the weird sisters first show themselves. The weather in *King Lear*, on the other hand, does not serve a supernatural function; a storm is just a storm in *Lear,* though it remains charged with a symbolic function. See Leslie Thomson, "The Meaning of Thunder and Lightning: Stage Directions and Audience Expectations," *Early Theatre,* 2, (1999): 11-24. For a discussion of early modern squibs, see Chapter 4 in Harris, *Untimely Matter*, 119-140.

[341] Gwilym Jones, *Shakespeare's Storms*, (Manchester: Manchester University Press, 2015), 2, 10.

seventeenth century into a psychological metaphor for Lear's inner storm in twentieth century productions. Hamilton's meteorological theater history shows how "the literal or meteorological is given meaning through design, adaptation and interpretation,"[342] which presupposes that the meaning of a storm onstage derives from a presumably human intention provided by actor, set-designer, and director.

But how should audiences interpret Lear's storm when it is represented by the *actual* weather itself? Jones's book actually begins with his own anecdote of watching a 2008 production of *Lear* from the pit of the Globe when, towards the end of act 2, scene 2, "the skies above the open roof begin to darken," just in time for the storm scenes in the following act.[343] Jones suggests that his experience of the rain during an open-roofed performance of *Lear* demonstrates an environmentally-inflected "dramatic irony."[344] But beyond offering an interpretation of a felicitous weather event, this dramatic irony and others like it carry important implications for how we understand the function and meaning of weather, and by extension human agency, in Shakespeare's plays.

One thing that a real weather event *does* for a Shakespearean performance is challenge the artifice of weather that Shakespeare's plays and theater embrace and construct. If portraying a realistic weather event was attempted on the early modern stage, it was likely done to emphasize the storm's theatricality. Speculating on the original representation of the storms scenes in *The Tempest*, Jones argues,

---

[342] Jennifer Mae Hamilton, *This Contentious Storm: An Ecocritical and Performance History of King Lear*, (London: Bloomsbury, 2017), 113.
[343] Jones, 1.
[344] Ibid., 9.

> everything in the text points towards an attempt to present a theatrical tempest which is as close to a real one as possible. In doing so, the scene works to diminish the obviousness of its own 'aesthetic framework': that is the mechanics of representation which draw attention to the drama's artificiality.[345]

While the audience may experience a realistic storm in the opening act of the play, the realism is all in service of revealing the play's aesthetic framework when Miranda asks her father to "allay" the "wild waters" (1.2.2) he has conjured with his stage managing. Similarly, Hamilton shows that when performances of *Lear* began to emphasize the storm scenes as metaphorical representations of Lear's inward psychological state in the twentieth century, the storm scenes lost their elaborate sets and storm machinery. When John Gielgud played Lear in Harley Granville-Barker's 1940 performance at the Old Vic in London, for example, "the storm was evoked quite simply by means of the recorded sound effects of thunder, wind and the occasional flash of light."[346] Even as stage technologies progressed to fashion more realistic weather events on stage, actors and directors of Shakespeare's storms routinely demonstrate that realism is not always the point.

On the other hand, representing the weather on stage has revealed a certain ingenuity among Shakespeareans over the last few centuries, as well as an obsessive concern for maintaining human control over the weather during a performance. In Shakespeare's day, the open-courtyard of the Globe Theater probably provided its own

---

[345] Ibid., 127.
[346] Hamilton, 163.

storm effects to be felt by the groundlings on occasion, especially during plays like *Macbeth* (1606), *King Lear* (1608), *Pericles* (1609), and *The Winter's Tale* (1609). But early modern playhouses also made use of drums and gunfire to create artificial thunder. Another method involved rolling a ball down a metal trough. Fireworks and rosin could supply lightning flashes when necessary, and were preferred at open-roofed venues because of the smell.[347] Squibs on lines could create the effect of a thunderbolt.[348] In the early eighteenth century, stage hands would pound mustard seeds in a giant metal bowl to generate stage thunder. In 1709, John Dennis perfected a method that used wooden troughs with stops in them for his revision of John Webster's *Appius and Virginia*.[349] When his play closed, Drury Lane got rid of every trace of his tragedy—except his "thunder run."[350] When Dennis attended a production of Macbeth a few weeks later and heard the sound of his own handiwork, he rose from his seat, shook his fist, and inadvertently coined an idiom: "See how these villains use me!" he cried. "They will not let my play run, and yet they steal my thunder!"[351]

As John Dennis's stormy outburst demonstrated, there was more than one way to create thunder inside a theater. When the intention behind stage thunder is to be realistic and to mask the theater's artifice, stage hands have to remain invisible from the

---

[347] Gurr, 256.
[348] Hamilton, 116.
[349] "Foreign Miscellany: Stage Thunder, From *Once a Week*," *New York Times*. July 8, 1866. ProQuest Historical Newspapers: *The New York Times (1851-2010)*. 2. Gurr suggests that rolling balls down troughs was a method used during Shakespeare's time, so it is likely that Dennis was reviving an old method, rather than inventing a new one (Gurr, 256).
[350] Hamilton, 116.
[351] "Foreign Miscellany," 2.

audience's scrutinizing gaze. One labor-intensive method involved shaking the lower corner of a large sheet of copper that was suspended by a chain.[352] A stage hand working for the Leonard Rayne Dramatic Company at the Gaiety Theatre in Johannesburg recalls using "a sheet of thin, black iron strung to a beam. The electrician flashed the lights for lightning and I grabbed the bottom of the iron and shook and bent it. A very little practice enabled me to make the thunder roll and die away."[353] Another method used elsewhere involved "rolling to and fro a large empty cask on the floor of the room above the ceiling of the theatre."[354]

But even the intention to control the weather indoors is prone to unforseeable accidents, and sometimes a "realistic" storm's artifice is unwittingly exposed to the audience. One production of *King Lear* at the Edinburgh Theatre used a wheel-barrow full of nine-pound cannonballs, which was to be rolled over a ridged surface by a backstage hand. This particular device seemed "ingenious" enough, until the barrow-operator's foot slipped, and the barrow tipped over. The cannon-balls rolled onto stage; the ones that the half-naked elderly Lear managed to dance around made their way into the pit and disbanded the orchestra.[355] When audiences are unwittingly exposed to the "I" of the storm in this way, human error is responsible for altering a rehearsed performance of human intention.

---

[352] Hamilton, 140.
[353] William T. Powell, "Excerpts from the memoirs of William T. Powell," In *Johannesburg pioneer journals, 1888-1909,* Maryna Fraser, ed. (Cape Town: Van Riebeeck Society, 1986), 236.
[354] "Foreign Miscellany,"2.
[355] Ibid.

In addition to mediating the level of artifice given to the representation of weather, a real storm also reinforces the unpredictability of live theater in a performance. Acknowledging the legitimacy of a storm's agency to debase or enhance a performance grants modern audiences access to the kind of theater ecology that would have been routine for early modern audiences. As Ellen MacKay shows, the history of early modern theater was fraught with theatrical accident and disaster of biblical proportions; anti-theatricalists were not wrong to see the theater as a place of judgment.[356] But performance also operated according to an ecological principle in the seventeenth century that made audiences more forgiving of theatrical blunders. Tiffany Stern's work on actors' parts demonstrates the degree to which plays were assemblages that came together according to a distributive agency. Because paper was expensive, actors were given only their "parts" and "cues," and thus had to see each line as an essential element to a larger whole. From the early modern parts that survive today, Stern deduces that the speaker of the cues was not named, and the amount of time between each line was not clear to the actor.[357] Each line of the performance completely depended on the line that preceded it. If a player spoke his cue incorrectly, the performance could grind to a halt.[358] And with only a few rehearsals—sometimes just one, and sometimes none at all—before

---

[356] MacKay argues that anti-theatricalists like Philip Gawdy supplies "intriguing testimony of how theater was thought to happen in early modern England: by careening off the course of its expected event and headlong into disaster." See Ellen MacKay, *Persecution, Plague, and Fire: Fugitive Histories of the Stage in Early Modern England*, (Chicago: University of Chicago Press, 2011), 3.
[357] Tiffany Stern, "Actors' Parts," *The Oxford Handbook of Early Modern Theatre,* Richard Dutton, ed. (Oxford: Oxford University Press, 2009), 501.
[358] Ibid., 511.

performing in front of an audience, actors retained an organic element with each new performance, listening to their fellow actors—if only for their cue—as though for the first time. A storm during one of Shakespeare's now iconic plays can thus reinvigorate the performance with the ecological uncertainty familiar to Shakespeare's players and audiences, who really did not know what would happen next.

Assisting the Storm: Provincializing the Species Narrative of the Anthropocene

When real weather events participate in Shakespearean performances, audiences in the Anthropocene are confronted with a dubious spectacle. On the one hand, if the weather behaves felicitously with the human performers, it creates the illusion, if only for a moment, that the weather is an intentional part of the show. From this perspective, the audience is invited to see their anthropogenic agency reflected in the weather's on-stage performance; it appears as if the actors on stage are controlling the weather (instead of generically contributing to its changing behavior within a particular climate, which human behaviors are more precisely responsible for altering). And while it is true that audiences do participate in the weather events they might experience or behold, they also do not contribute to them equally or in the same way. Neither will individual audience members interpret the weather in a performance in the same way. In short, the theater showcases the problem with thinking of human agency as a homogenous narrative about the species.

On stage, it becomes clear that actors have more agency than passive audience members do in making the weather meaningful. This demonstrates, by way of the stage as a metaphor, how the agency that can be attributed to climate change and weather event

intensification is not equally distributed among the species. When an actor chooses to engage with the weather within a dramatic space, the action can enhance the performance. During a performance of *The Tempest* at the College of St. Elizabeth by the Shakespeare Theater of New Jersey in 2005, one reviewer noted the weather's felicitous behavior: "At exactly the moment when Trinculo, a drunken jester anticipating foul weather, looked skyward and proclaimed, 'Yond same black cloud, yond huge one,' an ominous dark mass appeared directly above the stage."[359] While this reviewer's remarks lend agency to the "moment" that a cloud "appeared," it is ultimately the actor who chooses to engage with the natural environment of a play's outdoor setting. Furthermore, the illusion created by the weather's performance that "Yond same black cloud" will remain within Prospero's control for the duration of the play creates a contract between the actor, the atmosphere, and the audience that the atmosphere will not sustain for the entire performance.

At the same time, a congenial audience can be the difference between a theatrical disaster and a felicitous performance of the weather. During an 1895 production of King *Lear* at the Standard Theatre in Johannesburg, for example, the Holloway Theatre Company unintentionally appropriated the storm outside into their performance:

> One night they were playing *King Lear* and the rain was pelting down on the tin roof, accompanied by loud thunder and vivid lightning. There was no need to use their own sound effects, though the storm almost succeeded in killing the play: "It

---

[359] Naomi Siegel, "Weather Adds Touch To Outdoor 'Tempest,'" *New York Times*, July 5, 2009, NJ10.

> was almost a nightly occurrence for the electric light to fail, being newly installed, and the 'thud-thud' of the donkey engine could be plainly heard all over the building . . . The audience were very good-natured, taking everything as it came, and indulging in community singing during unavoidable 'accidents.'"[360]

With a "very good-natured audience," almost anything is possible onstage.

Attending to the weather's behavior on stage can help us to see human agency as unequally distributive in the Anthropocene. But a performance theory for Anthropocene theater might be best illustrated by the early modern stage itself. Early modern audiences perceived the weather in terms compatible with attribution and climate science today; in Shakespeare's lifetime, the weather was understood as a reflection of *individual* human agency, rather than as a result of a collective human agency. When we compare the religious and moral meteorology of the sixteenth century with recent developments in climate science, a strange bridge develops between early modern faith and modern scientific logic about the weather. As Stuart Schwartz defines them, early modern weather events, but especially Caribbean hurricanes, were

> ...set in a social, political, and conceptual frame that made an understanding of this catastrophe [a hurricane] a moment for reflection on human sin and moral failure as the cause of God's anger. That interpretation would change over time from a providentialist view to one that by the eighteenth century emphasized the normal risks of the natural world, and thus no longer made humans the cause of

---

[360] Reader's Digest, *South Africa's Yesterdays*, (Cape Town: Reader's Digest Association South Africa, 1981), 121.

> their own suffering. Explanations would then shift again in the late twentieth century to an emphasis on climate change that once again placed the onus for natural disasters on human error, but this time on human decisions and policies, not on sin or moral failures.[361]

Although "sin and moral failures" no longer dictate the hermeneutics of weather events, I suggest that recent developments in "attribution science" revive the ethical considerations of interpreting the weather. Climate science increasingly represents anthropogenic agency as an ethical problem for which people are morally accountable, making it increasingly compatible with an early modern perspective. In short, early modern interpretations of the weather can help us to further provincialize human geologic agency by locating causal explanations in individual human behaviors.

One place we might look for a provincial human influence on global ecology and climate in the early modern period is the inaugural phase of European colonialism. Although the starting point of the Anthropocene is still contested among scholars and scientists, I privilege the proposed 1610 start date—also known as the "Orbis hypothesis"—because it compels us to see the global predicament we face today as the legacy of European colonialism. Simon Lewis and Mark Maslin show with stratographic evidence how human behaviors were responsible for a substantial *decrease* in atmospheric carbon dioxide around 1610. The authors speculate that the rapid depopulation of the Americas and the resulting cessation of American farming practices, paired with the increased traffic of European biota across the Atlantic, resulted in floral

---

361 Schwartz, 3-4.

growth substantial enough to affect atmospheric carbon dioxide levels.[362] As Lewis and Maslin point out, accepting the 1610 start date means accepting a narrative where "colonialism, global trade, and coal brought about the Anthropocene."[363] Furthermore, accepting 1610 as the start date of the Anthropocene foregrounds the economic inequalities between the global North and South, resulting from centuries of ecological imperialism, resource extraction, and human exploitation. Thus, the unequal distribution of human agency in the Anthropocene can also be traced back to the environmentally exploitative practices of the early modern period.

Although attribution science seems compatible with early modern interpretations of the weather because they each uphold human behaviors as causal agents of specific weather events, there are two important distinctions to be made. First, whereas attribution science claims that human behaviors exert a direct influence on the atmosphere by way of a slow, progressive climate change, sixteenth century authors and pamphleteers held the providential view that human action could incite God's judgment to manifest as a more immediate weather event. One author interpreted the flood in Monmouthshire, Wales during January of 1607 as a divine expression of God's displeasure with pride, gluttony, drunkenness, and a general "contempt of the Ministerie of the word."[364] Similarly, in *Pericles*, a "fire from heaven" (2.4.9) strikes Antiochus and his daughter dead for their incest; since plague is responsible for the death of Antiochus in the play's source,

---

362 Lewis and Maslin, 175.
363 Ibid., 177.
364 Anonymous, Lamentable newes out of Monmouthshire in VVales, 1607, C3r

Shakespeare's amended lightning strike "ensures that Antiochus does not have time for redemption."[365]

Secondly, while the narrative of the Anthropocene suggests that the collective human species shares in the geologic agency responsible for intensifying weather events, early modern moralists were inclined to point to specific sins practiced by some as the causal force of a storm or a flood, which served as punishment or warning for all. To one pamphleteer, the overflowing of the Severn was of biblical proportion, on par with Noah's flood; the resulting inundation seemed "altogether to be a second deluge: or an universal, punishment by Water."[366] To sixteenth-century moralists, it was understood that storms were caused by individual human behaviors rather than by the species as a whole. Lightning was seen as God's "judicial" punishment for blasphemy, sorcery, ambition, adultery, and usury, though it was also thought to teach offenders to fear God, and to warn of greater punishments to come.[367] The "blacke fatall winter" of 1613 was interpreted by one author as a punishment for wealth inequality in London: "we may behold the fury of his high offended power in witnessing the spoiles of stately houses, and the high turrets of great personages, by these unruly winds defaced, and as it were, in their greatest pride torne in sunder."[368] Though the specific sins for which humans were being punished with natural disasters were often vaguely named, interpreters of such

---

[365] Jones, 53.
[366] William Jones, *God's vvarning to his people of England*, 1607, A2v.
[367] Simon Harward, *A discourse of the seuerall kinds and causes of lightnings*, 1607.
[368] Anonymous, *The vvonders of this windie winter*, 1613, B2r.

disasters agreed that God's intentions were always justified, and always good.[369] On October 21, 1638 in Devonshire, a lightning storm killed several members of a congregation worshipping at Church.[370] A similar incident occurred in a Church in Cornwall in 1640. These seemingly natural phenomena were interpreted as signs of God's mercy, even if they also demonstrated God's wrath. An eyewitness account of *The voyce of the Lord in the temple* in 1640 emphasized the redemptive function of such a terrifying display: "you have seene flames scorching, but not consuming: A Ball of Fire shot, and striking, but not killing; yea killing of Beasts, and unreasonable creatures, but sparing the reasonable; casting downe, but not destroying."[371] When lightning struck the steeple of a church in Bletchingley, on November 17, 1606, it started a fire which "miraculouslie" did not spread to the rest of the town. Thus, "in the middest of iudgement there shined mercie."[372] Attributing natural disasters and weather events to God's wrath or mercy was so common in early modern England that charges of atheism were cast

---

[369] Alexandra Walsham, *Providence in Early Modern England*, (Oxford: Oxford University Press, 1999), 123.
[370] John Taylor, *Newes and strange newes from St. Christophers of a tempestuous spirit, which is called by the Indians a hurry-cano or whirlewind*, 1638.
[371] Richard Carew, *The voyce of the Lord in the temple*, 1640, B4r
[372] Harward, B1v. Harward also suggests that God's judgment worked according to a Protestant ideology in this instance. The fire melted and destroyed the church's bells, which were "framed in time of Poperie, so (no doubt) they had the blessing and baptizing at that time vsed, and were hallowed by that praier in the Masse book" (B2r). Although Harward concludes that the "cause indeede why the lightning at this time did preuaile both against bels and steeple, was because it was the good pleasure of God, thus to shew his omnipotent power...[and] to giue vs some taste of his iudgments, to summon vs all to true repentance" (B2r), God's iconoclasm here services a Protestant cause.

upon anyone who thought to name nature, chance, or accident as the causal agent behind a tempest, flood, or famine.[373]

In the Americas, the weather was used both to defend and to condemn European colonialism. After a hurricane destroyed the port of Veracruz in New Spain, Father Bartolome Romero offered a standard explanation for the loss: “God...was served to punish us all by the loss of our possessions and homes, and to leave us our lives so we could do penance for our sins.”[374] The “sins” of the Spanish were, of course, open to interpretation. Gonzalo Fernandez de Oviedo, on the one hand, saw Spanish colonialism as a virtue, and suggested that hurricanes had become less frequent since the Spanish brought Catholicism to the Americas.[375] On the other hand, Bartolome de Las Casas argued that the frequency and intensity of hurricanes had increased since the Spanish occupation of the Caribbean as divine punishment for the atrocities committed against the indigenous populations.[376]

In addition to thunderstorms and lightning strikes, a handful of other weather-related events such as heavy snowfall, flooding, and harvest failure were also interpreted as signs from God.[377] But interpreting the weather through a lens of human sin carried significant cultural consequences, as Wolfgang Behringer shows. When harvests failed because of poor weather, when there were late frosts, sudden summer hailstorms, or

---

[373] Walsham, 124.
[374] Quoted in Schwartz, 4.
[375] Ibid., 14.
[376] Ibid., 21.
[377] Wolfgang Behringer, *A Cultural History of Climate*, Patrick Camiller, trans. (Malden: Polity Press, 2010), 121.

persistent rains—when these weather events occurred too infrequently to be the work of "chance," witchcraft was a popular alternative explanation.[378] Reading the weather as a moral consequence of human sin helped fuel the fires of witch hunts in early modern Europe. Today, witch hunts have a less literal connotation. But in the time since climate scientists have begun to demonstrate the reach of human geologic agency, the sentiment for holding "sinners" accountable for the weather has revived.

Stolen Thunder: Performing Weather Events on the Colonial Stage

Finally, I turn to two examples of the weather's potential as a political agent in performance, which allow us to see each Shakespearean performance in a wider environmental context, and within the broader temporal frame of the Anthropocene. Both performances demonstrate how the weather can turn a performance space into a site of anti-colonial resistance. But each performance also seems all the more significant from our present vantage in the Anthropocene. The offshore hurricane that provided the scenery for Shakespeare's *Tempest* during a 1950 performance in Hamilton, Bermuda, locates the stage at the site of the storm and shipwreck that may have initially inspired the play. It also allows modern audiences to see the history of British colonialism as invariably linked to a history of mid-Atlantic storms, which are increasing in intensity as a result of climate change. Similarly, the performance of *Romeo and Juliet* given by the Brown-Potter and Bellew Company in Cape Town, in January of 1892, positions the stage at the gates of a different kind of environmental catastrophe, one more explicitly human-made: a South African gold rush. The poison that Romeo purchases with his own

[378] Ibid., 129.

gold takes on a new significance during a gold rush, but also when he makes his purchase in a downpour. A chemical innovation in cyanide during the 1890s made gold extraction more efficient, but also more deadly. Rainwater carried the poison into the groundwater, and transformed the dust of the mine dumps into toxic sands. While *Romeo and Juliet* has not lost its playing power over the last century, the same amount of time has carried slow but irreversible consequences for the environs surrounding the Johannesburg gold mines.

Cora Urquart Brown-Potter and Kyrle Bellew arrived in Cape Town with their own company from England. They "introduced themselves to prospective Cape Town audiences with an 'At Home'" performance of *Romeo and Juliet,* which they gave at the Rhine Villa on Kloof Street. A crowd arrived, despite the weather; "it happened to be one of the Peninsula's summer soakers."[379] Mrs. Brown-Potter's Worth of Paris dresses and stage costumes were well advertised wherever she went, and drew largely female audiences to see her.[380] Olga Racster, a historian of the Cape Town stage, summarizes one review of the performance:

> Between praise and pricks, Romeo and Juliet came through successfully, though the wind and rain created such a hullabaloo that Romeo and Juliet had to shout at one another, the scenery sagged from the roof, and the Worth dresses 'tended to produce contortions of the Javanese dancer.' Yet, there was also praise when Mrs. Potter came to the closing tragic scene.[381]

---

[379] Olga Racster, *Curtain Up!* (Cape Town: Juta & Co., 1951), 76.
[380]Jill Fletcher, *The Story of Theatre in South Africa: A Guide to its History from 1780-1930*, (Cape Town: Vlaeberg, 1994), 118.
[381] Racster, 77.

The rainy performance on Kloof Street proved a portentous start to their South African tour; shortly after their season at the Exhibition opened in Cape Town, the theater burned to the ground with all of the company's uninsured property inside. Bellew estimated his losses stood at 1,500 pounds.[382]

The performances in Cape Town and Hamilton showcase the weather's role in producing a "deconstructive spectacle" during a performance, but these two theater ecologies are also worth comparing for the intention they share. Despite being two different weather events occurring at two different times and places during two different Shakespearean performances in the British Empire, these events together show how the weather's performative agency demands provincialization—to be located in a specific time, environment, and social context. As I discuss in my previous chapter, Shakespeare played no small part in the cultural and pedagogical project of British colonialism, thanks to touring companies like Bellew and Brown-Potter's. And even though Shakespeare's role in promoting British cultural superiority in the colonies may have been largely accidental and contingent on a host of ecological and environmental factors, it was nonetheless prominent. One could see Shakespeare performed in any corner of the empire.

Both of these Shakespearean weather events blur the distinction between human intention and natural phenomenon. But as performance events that engage the natural world, they also trouble the predictability and the ephemerality of stage performance.

---

[382] Ibid., 78.

Each performance, I suggest, turns its respective stage into a potential site of anti-colonial resistance by disrupting the political message of playing Shakespeare in the colonies. If the theatrical frame of the play makes an audience regard the weather on stage differently, then it should also draw attention to how weather performs in a given climate. Hurricanes are not out of the ordinary in Bermuda, especially around Labor Day weekend. The Bermuda performance is all the more ironic for the way it commemorates the tempest on which Shakespeare's play is originally based. Sir William Strachey's *True Reportory of the Wreck and Redemption of Sir Thomas Gates, Knight*, which catalogues the wreck of The Sea Venture on Bermuda in 1609, and which served as a source text for Shakespeare's play, acknowledges a kind of "staying power"[383] of storms. Strachey flounders to describe the storm and the strain it caused those aboard the vessel, and can only compare the storm to other storms he has experienced:

> Winds and seas were as mad as fury and rage could make them. For my own part, I had been in some storms before, as well upon the coast of Barbary and Algiers, in the Levant, and once, more distressful, in the Adriatic gulf in a bottom of Candy…Yet all that I had ever suffered gathered together might not hold comparison with this: there was not a moment in which the sudden splitting or instant oversetting of the ship was not expected.[384]

---

[383] Rebecca Schneider, *Performing Remains: Art and War in Times of Theatrical Reenactment*, (New York: Routledge, 2011), 37. Jonathan Gil Harris and Andrew Sofer articulate similar theories of the staying power of objects in performance. See: Harris, *Untimely Matter in the Time of Shakespeare*, 11; Sofer, *The Stage Life of Props,* 2.
[384] William Strachey, *A True Reportory of the Wreck and Redemption of Sir Thomas Gates, Knight*, 1625, 7-8.

The Walsingham Players' *Tempest* is thus materially and textually linked to previous weather events around Bermuda, including the one that may have inspired Shakespeare to dream up Prospero.

The weather event in Cape Town, 1892, bears a similar resonance, which helps us to see how the storm's consequence—a centuries-long slow violence caused by rainwater mixing with toxic tailing dumps from the gold mines of the Witwatersrand basin—is invariably tied to human behaviors. Bellew and Brown-Potter's *Romeo and Juliet* was performed in spite of an unplanned weather event, but it was also likely staged because of a flourishing gold rush. The discovery of gold in the Witwatersrand basin in the Transvaal in 1886 created a frenzy of gold prospectors, many of whom passed though Cape Town, and may have even composed some of the audience at the Kloof street downpour. Cape Town saw its own gold mining syndicate form around the same time, but its members could not obtain enough capital to keep the operation going, since so much local capital was being invested in the Witwatersrand.[385] The Witwatersrand mines were coveted by the British, and would eventually reignite combat with the Boers in 1899. Almost nothing is known of the actual audience who attended this rainy performance of *Romeo and Juliet*, but it is likely that the quest for gold had impacted their lives in some capacity by 1892. The context of a gold rush may have added further ecological irony to this production of Shakespeare's play, in which gold is only fit to purchase poison. When

---

[385] P. E. Spargo, "The Lion's Head Gold Mine," *Bulletin of the National Library of South Africa*, 69, no. 1 (2015): 28-40. Spargo shows one figure indicating that as much as 6 million pounds of Cape Town's capital was being invested in the Transvaal Mines (38).

Romeo receives word of Juliet's death, he quickly visits an apothecary to buy a deadly concoction for himself:

> There is thy gold—worse poison to men's souls,
>
> Doing more murder in this loathsome world,
>
> Than these poor compounds that thou mayst not sell.
>
> I sell thee poison; thou hast sold me none.
>
> Farewell, buy food, and get thyself in flesh.
>
> Come, cordial and not poison, go with me
>
> To Juliet's grave, for there must I use thee. (5.1.80-6)

Romeo's exchange of gold for poison and his metaphorical conflation of the two substances may have had an enhanced significance for Bellew's damp Cape Town audience, especially because potassium cyanide became the chemical upon which gold mining syndicates depended in the Witwatersrand. Though the main gold reef was discovered in 1886, by the early 1890's, many gold mines had stopped production. In addition to unrestrained and corrupt trading practices in the Johannesburg Stock Exchange, the earth itself presented an obstacle to the continuation of gold mining. The gold of the main reef was stratified in pre-Cambrian slate and quartzite. As the mines grew deeper, miners discovered that the gold was entombed in pyrite, which meant that the amalgamation process for extracting gold from the ore using mercury was no longer

viable.[386] However, William and Robert Forrest and John MacArthur had recently patented a new extraction process, which instead of mercury used a weak solution of potassium (or sodium) cyanide—"the same substance," one historian notes, "with which jilted lovers took their lives in shame and despair, if the popular fiction of the day is to be believed."[387] Their process involved dissolving gold in an aerated solution of sodium cyanide, then recovering the gold through zinc precipitation or carbon absorption.[388] Cyanidation made the mining of low-grade ores, like the ore in the Witwatersrand, economically feasible, since it was so efficient.[389] This new process, which was already being tested on the Witwatersrand mines by 1890, not only revived investor confidence in the mining industry, but also boosted gold production, and sparked another boom in

---

[386] Douglas Fetherling, *The Gold Crusades: A Social History of Gold Rushes, 1849-1929,* (Toronto: University of Toronto Press, 2015), 117. Another extracting method, which involved passing chlorine gas over crushed ore to yield a soluble gold chloride that could be dissolved in water, and then extracted using a ferrous sulfate, hydrogen sulfide, or charcoal, had also been used in South Africa gold mining before cyanide solutions. See: John O. Marsden and C. Iain House, *Chemistry of Gold Extraction*, John O. Marsden and C. Iain House, eds. (SME, 2006), 16.

[387] Fetherling, 118. I am not suggesting that Romeo would have used potassium cyanide, which Fetherling names here, and which was not discovered until the nineteenth century, nor sodium cyanide, which was not discovered until the eighteenth century.

[388] George M. Wong-Chong, David V. Nakles, and David A. Dzombak, "Management of Cyanide in Industrial Process Wastewaters," In *Cyanide in Water and Soil: Chemistry, Risk, Management,* David A. Dzombak, Rajat S. Ghosh, and George M. Wong-Chong, eds. (London: Taylor & Francis, 2006), 524. Fetherling notes the process involves potassium cyanide, rather than sodium cyanide (Fetherling 118).

[389] Wong-Chong et al. show that cyanide is the most effective lixiviant, or extracting agent. It yields 73% of gold from ore samples; it only takes .5 to 1.3 grams of the cyanide ion per ton of ore to yield 1.4-5.6 grams of gold (524, 530-2). Marsden and House suggest that cyanidation increased gold recoveries from 70% to 95% (18).

1895.[390] South African gold miners thus had an intimate relationship with poison—the effects of which will continue to be felt by generations of South Africans to come. Cyanidation may have revolutionized the gold mining industry, but it has also carried a troubling environmental legacy, made worse by frequent rainfall. Gold mining produces large dumps of crushed ore, which are then exposed to a cyanide solution. The dust from these dumps could be hazardous to miners and to nearby communities. The well-travelled actor John Holloway recalls the nuisance of poisonous dust during his visit to Johannesburg in 1895: "In dry weather, clouds of dust from the mine dumps, charged with cyanide of potassium, swept along, bringing discomfort to all, and death to the unfortunate with weak lungs and throats."[391] More recently, inhalation of quartz dust from mine dumps has been cited as a cause for the high incidence of silicosis and tuberculosis among mining communities in Ghana.[392] Rainwater exacerbates the environmental problem of the ore heaps, even without cyanide. The Witwatersrand ore deposits are rich in pyrite (or iron disulfide), which oxidizes when it comes in contact with oxygenated water. When it rains on the dumps, or when abandoned mines fill with rainwater, the pyrite oxidizes. This process yields ferrous sulfate, ferric hydroxide, and sulfuric acid—a corrosive mineral acid and the main ingredient in some drain cleaners. This environmental hazard of gold mining, better known as acid mine drainage, can have a serious impact on surrounding ecological life, especially when this toxic water seeps

---

[390] Feathering, 118.
[391] Holloway, 68.
[392] Abraham Kumah, "Sustainability and gold mining in the developing world," *Journal of Cleaner Production*, 14, (2006), 321.

into ground and river water. Sulphuric acid also dissolves other heavy metals in the Witwatersrand dumps, including uranium. Acid mine drainage is potentially a centuries-long problem, since the process will only stop when all of the exposed pyrite oxidizes.[393]

Cyanide spills are another devastating consequence of gold mining. Gold mines have been recovering cyanide from their mining processes since the 1930s by using impoundment ponds for treating waste waters.[394] However, there have also been more than a dozen environmental disasters caused by spills or tailing discharges in the last three decades.[395] For example, in 1994, ten miners were killed by cyanide-laced mud at the Harmony Mine in South Africa.[396] Because many multinational gold mining companies have turned to the mineral-rich deposits in the third world, these disasters

---

[393] Terence S. McCarthy, "The impact of acid mine drainage in South Africa," *South African Journal of Science*, 107, no. 5/6, (2011), 1-7.

[394] Wong-Chong et al, 533.

[395] Wong-Chong cites several examples: the Brewer Mine in South Carolina and the Summitville Mine in Colorado (1990), the Omai Mine in Guyana (1995), the Gold Quarry Mine in Nevada (1997), the Homestake Mine in South Dakota (1998), the Los Frailes Zinc Mine in Spain (1998), the Aural Mine in Romania (2000), and the Goldfields Ltd. in the Wassa West (2001)—all had cyanide spills (Wong-Chong et al, 529). Kumah adds several to the list. A truck transporting cyanide to Kumtor spilled 2 tons of sodium cyanide in Kyrgyzstan, which killed 4 and displaced communities in 1998; a helicopter delivering sodium cyanide pellets to the Tolukuma mine in Papua New Guinea in 2000 dropped the one-ton crate into the rainforest, and infected the water system. In Ghana, cyanide spills occurred at the Bogoso Goldfields in 1994, the Teberebie Goldfields in 1996, the Ashanti Goldfields in 1998, and (twice in two weeks) at the South African-owned Goldfields in 2001, which resulted in skin rashes, relocations, and devastation to agriculture and wildlife. The Placer Dome tailings disposal in the Philippines between 1975-1991 killed aquatic life forms in the Mogpog River and in Calancan Bay; the Grasberg Mine in Indonesia in 1996 spilled 40 million tons of tailings into the Ajkwa River. Freeport acknowledged their dumping of 125,000 tons of toxic rock waste into the Irian Jaya River on a daily basis, and also admitted involvement in human rights abuses (Kumah 319).

[396] Kumah, 319.

have disproportionately affected poor indigenous communities and women.[397] Most recently, in 2016, the Canadian-based company Barrick Gold contaminated five rivers in western Argentina with 265,000 gallons of cyanide solution.[398] Thus, while the weather that occurred in Bermuda in 1950 looks backward to the pattern of hurricanes that brought the English to the unpeopled isle in 1609, the rain in Cape Town directs its audience to look west to the Witwatersrand, and to the future, where the environmental damage of gold mining will continue to rehearse Romeo's suicidal purchase. And so when Romeo pays forty gold ducats *in the rain* to commit suicide, he unwittingly exposes an ecological relation between anthropogenic behaviors and a seemingly natural atmospheric weather event. Whereas audiences in 1892 were perhaps unaware of just how closely rainwater, gold mining, and poison were linked, those of us consciously

---

[397] Kumah, 321. In Ghana, the male heads of families are compensated for relocation; sometimes, they abandon their wives and children (Kumah 321). Kumah also explains the paradox of establishing gold mines in developing countries: "whilst an increase in gold mine investment is necessary to propel economies, an expansion of operations is often associated with persistent environmental and socioeconomic problems" (317). Kumah cites a study by Hilson and Murck which demonstrates how multinational corporations use language of environmental sustainability to promote their developmental plans in the third world, but because environmental laws in developing countries are "still in their infancy, and...accompanying enforcement programs are far from effective" (317), multinationals can get away with skirting around safety regulations that would be commonplace in the first world. The environmental disasters that result from this type of neoliberal racism might be compared to the atrocities committed by Shell Oil against the Ogani in Nigeria or those committed by Dow Chemical against the people of Bhopal. See Rob Nixon, *Slow Violence and the Environmentalism of the Poor*, (Cambridge: Harvard University Press, 2011). Kumah notes, "the major environmental and socioeconomic problems caused by gold mining in the developing world include deforestation; acid mine drainage; noise, dust, air and water pollution from arsenic, cyanide and mercury; social disorganization; a loss of livelihoods and mass displacement" (Kumah, 317).

[398] Erik Shilling, "Massive Cyanide Spill at Gold Mine Leaked Into 5 Different Rivers," *Atlas Obscura*, February 25, 2016.

living in the Anthropocene today need to see the rain, the gold, and Romeo's suicide as an accidental performance of our own capacity to destroy ourselves.

While little is known about the audience that made up either of these two performances, the political intention of each performance—which the weather's agency disrupts—can be clarified with some historical context. The social climate of Bermuda in 1950 was characterized by racial tension and segregation. The island, which remains a British territory in 2018, has a long history of slavery and racial inequality, despite its unsuccessful record with growing sugar and tobacco in the seventeenth century. When it was discovered by the Spanish explorer Juan de Bermudez in 1503, the island was uninhabited by human populations.[399] So even though English colonization of the island in 1612 did not displace any native populations, the English began importing African slaves from the West Indies in 1616. About 5,000 slaves were brought to the island before slavery was abolished.[400] After abolition, legislation like the 1834 Voting Act kept power in the hands of whites through segregation.[401] In 1946, only 7% of the adult population was registered to vote in Bermuda, and these were mostly white landowners. In 1949, though the black population on the island exceeded the white population by more than ten

---

[399] Schwartz suggests that the Spanish decided not to colonize the island because of its hurricanes (Schwartz, 37).

[400] Virginia Bernhard, *Slaves and Slaveholders in Bermuda, 1616-1782,* (Columbia: University of Missouri Press, 1999), 17. Bernhard also notes that Bermuda's history with slavery is unique since not all Africans who arrived on the island were slaves, and many possessed privileges in the colony that they would not have possessed elsewhere (Bernhard 28).

[401] Quito Swan, *Black Power in Bermuda: The Struggle for Decolonization*, (New York: Palgrave Macmillan, 2009), 11.

thousand, there were 2,290 whites registered to vote, and only 1,920 blacks.[402] The Walsingham Players likely performed before a segregated, all-white audience. In 1953, the Select Committee on Racial Relations deemed racial segregation to be an economic necessity in the colony. Six years later, in 1959, the successful Theatre Boycott of the Island Theatre chain, organized by the island's Progressive Group of young black students, compelled the desegregation of Bermuda's hotels, restaurants, and movie theaters in a matter of days.[403]

The Walsingham group was also likely an all-white company. "Composed of Bermudians and resident Englishmen," the company included David Huxley (novelist Aldous Huxley's brother), a schoolboy, David Dill (who played Caliban), and "an elder statesman, W. E. S. Zuill, as Gonzalo."[404] The context of this particular production—a white company performing in 1950 before a segregated audience, which included the Governor of Bermuda—reveals the play's intention. This was not a postcolonial reclamation of the play, with a villainous Prospero and a sympathetic Caliban. This was political propaganda, with Prospero modeling for Governor Hood how best to control his island.

---

[402] Ibid., 17. The population was 36,770, with 13,310 whites, and 23,460 blacks. In 1950, the black population was 22,638 and the white was 14,765.
[403] Ibid., 14-15.
[404] Tweedy, 111. The play was also produced by John Rosewarne, with Dr. Simon Frazer as Prospero, Sylvia Ware as Miranda, Penelope Fisher as Ariel, and John Hart, as Antonio. The production was directed by Arthur and Gilbert Cooper, and made use of Elizabethan-style costumes, handmade by a committee headed by Mrs. Bayard Dill. See: Lois Bauer, [Unknown Title], *The Bermudian,* October 1950, 31.

In Cape Town, staging Shakespeare in English was part of an aggressive effort to champion British culture and the English language over the proliferation of Afrikaans.[405] Purging the colony of the Dutch-influenced language, as many British colonists in the nineteenth century hoped to do, would prove impossible; the Afrikaans-speaking population was too large. Speaking of Cape Town in the late nineteenth century, one minister recalls, "Out of Cape Town I will venture to say that there are not more than 400 who can converse in English, and not 200 who write it or can read it."[406] Nevertheless, British schools relied on corporal punishment and public shaming to discourage students from speaking anything but English.[407] Schools also taught descendants of the Dutch colonists to be "ashamed of their ancestry" and that to be English was the "ultimate bliss"[408]—a sentiment that clearly extended to the indigenous populations of Cape Town as well. Staging Shakespeare served a pedagogical and ideological purpose, and helped to fan the flames of British nationalism in the Cape as well.[409]

---

[405] Fletcher, 62-116. Between the beginning of theater in Cape Town and Bellew and Brown-Potter's arrival in 1892, Shakespeare had been intermittently staged with varying degrees of success.

[406] Quoted in Fletcher, 107.

[407] Ibid., 106. Professor J.D. du Toit remembers that students who were caught speaking Dutch during school hours had to carry around their necks a piece of wood with nails driven through it. They were then forced to write one hundred times: "I must not speak Dutch and ought to know it by now."

[408] Ibid., 107.

[409] Nevertheless, Shakespeare was also performed in Dutch in the 1830s. On May 28, 1836, a performance of *Othello, of De Jaloersche Zwart* (Othello, or the Jealous Husband) was performed in Cape Town, and in March of 1837, the Dutch-speaking Society, *Voor Vlyt en Kunst* (For Diligence and Art) gave another performance of *Othello* in Dutch, featuring a "Gentleman lately arrived from India" to play the role of Iago. See: Eric Rosenthal, "Early Shakespeare Productions in South Africa," *English Studies in Africa*, 7, no. 2, (1964), 210.

The deconstructive spectacle offered by the weather event in Hamilton, Bermuda carries the potential to undermine both Prospero's authority over "his" island, as well as Governor Hood's colonial authority over Bermuda. To a colonial audience, Prospero's colonial authority over his subjects and the natural resources available on his island—symbolized by Caliban and Ariel—depends on his ability to control the weather. When a real storm reveals that Prospero does not in fact control the weather, then all of his power—over Ariel, over Caliban, over Ferdinand, and Miranda—becomes suspect. When an errant storm misses its cue, Prospero's power is compromised. Prospero has two slaves—one human, one sprite—and both seem prematurely disenfranchised in the Hamilton performance. Ariel, who already performs a majority of Prospero's "magic" for him, suddenly appears to be "free/ As mountain winds" (1.2.496-497) without Prospero's permission. Although Prospero claims "It was mine art,/ When I arrived and heard thee, that made gape/ The pine, and let thee out" (1.2.291-293), the audience's fidelity in his "art" hinges upon the control he maintains over the storm in the first scene. Prospero is only sovereign of the cloven pine if he is also sovereign of the storm. Similarly, his enslavement of Caliban, who "serves in offices/ that profit us" (1.2.312-313), depends upon Prospero's narrative that Caliban "didst seek to violate/ The honor of my child" (1.2.346-347). But if Prospero's art is *not* "of such power,/ It would control my dam's god, Setebos,/ and make a vassal of him" (1.2.371-373) as Caliban supposes it to be, then Caliban's final words in the play seem to apply as much to the drunken Stephano as to the charlatan Prospero:

I'll be wise hereafter,

> And seek for grace. What a thrice-double ass
>
> Was I to take this drunkard for a god,
>
> And worship this dull fool. (5.1.294-297)

Furthermore, the errant storm helps to legitimize Caliban's claim to his own private property: "This island's mine by Sycorax my mother,/ Which thou tak'st from me" (1.2.331-2). Prospero justifies his enslavement of Caliban with a racial hierarchy, which the real storm undoes: "Thy vile race,/ Though thou didst learn, had that in't which good natures/ Could not abide to be with" (1.2.357-9). Prospero's logic, that his own "good natures" are superior to Caliban's "vile race," falls to pieces if he is not master of the storm. An amateur production with a white cast and an all-white, segregated audience in colonial Bermuda reinforces the same racist logic—which the storm denies. Prospero's power depends on his ability to manage his stage, especially for Miranda, who must be assured that no one was harmed in the making of this tempest:

> The direful spectacle of the wrack, which touched
>
> The very virtue of compassion in thee,
>
> I have with such provision in mine art
>
> So safely ordered that there is no soul—
>
> No, not so much perdition as an hair
>
> Betid to any creature in the vessel
>
> Which thou heard'st cry, which thou saw'st sink. (1.2.26-32)

Because Prospero summons a storm in part to secure "an hair" or "an heir"—early modern homophones[410]—for Miranda through Ferdinand, he requires the safety of all the passengers on board. But with a second, unplanned storm, spectators see the extent to which Prospero's lineage lies not in his control, but at the mercy of the winds. The Walsingham Players' storm-tossed *Tempest* thus potentially turns a play about human dominion over nature into a performance of nature's dynamic community with humanity. Furthermore, it makes the performance itself sovereign over the players' intent to situate Shakespeare's play within an imperialist framework.

Although British players in the Cape Colony built up Shakespeare's colonial authority during the nineteenth century, that authority was also potentially subverted in the context of the deconstructive spectacle offered by this rainy performance of *Romeo and Juliet* in 1892. Shakespeare, as the symbol of British cultural superiority and the apogee of the English language, signifies something else when Romeo and Juliet have to "shout at one another" over the noise of the wind and the rain. If Romeo must shout at Juliet—during the balcony scene, perhaps—then his plea, "O, wilt thou leave me so unsatisfied?" (2.1.167), runs the risk of sounding like an angry threat. Juliet's metaphorical despair might seem either weakly expressed or too powerful in poor weather:

> I have no joy of this contract tonight.
>
> It is too rash, too unadvised, too sudden,

---

[410] See: Jonathan Gil Harris, *Sick Economies: Drama, Mercantilism, and Disease in Shakespeare's England*, (Philadelphia: University of Pennsylvania Press, 2004), 47.

Too like the lightning, which doth cease to be

Ere one can say it lightens. (2.1.159-162)

In a rainstorm, Romeo can add weight to his conceits regarding Juliet, especially if she is on some sort of covered balcony: “But, soft! what light through yonder window breaks?/ It is the east, and Juliet is the sun./ Arise, fair sun...” (2.1.44-6). While a stormy production of *Romeo and Juliet* provides opportunities for felicitous moments, the weather also exposes the artifice of theater—the extent to which it is little more than a human endeavor. The distance between actor and character, actor and audience, reality and performance, becomes blurred by the rain, the crumbling set, and Brown-Potter’s “contortions” in her wet costume. When this play is performed indoors, *Romeo and Juliet* can invent the dawn with their language alone, without even an elaborate set or technical lighting; they use imagery to tell the audience what to see. The same task seems tragically pointless, or perhaps playfully ironic, when the weather is so glaringly un-sunny. Romeo directs Juliet’s attention to a morning sun that simply is not there on Kloof street:

Look, love, what envious streaks

Do lace the severing clouds in yonder east.

Night’s candles are burnt out, and jocund day

Stands tiptoe on the misty mountain tops. (3.5.7-10)

Juliet, on the other hand, invites audiences to regard the light differently:

Yon light is not daylight; I know it, I.

It is some meteor that the sun exhaled

To be to thee this night a torchbearer,

And light thee on thy way to Mantua. (3.5.12-15)

In this performance, these lines have the potential to showcase the innocent and hopeful projections of these two young lovers, who mistake rain and wind for "jocund day." On the other hand, rain and clouds offer a felicitous stage for the Prince's final dark observation: "A glooming peace this morning with it brings./ The sun for sorrow will not show his head" (5.3.304-5). Though it is entirely possible that these references to the physical environment were simply omitted during this staging—full of such "hulabaloo" as it was—the agency of non-human actors is hardly negligible in this performance. Non-human actors retain the potential to exert agency in Shakespearean performances, and to wrest control away from an intentional imperialist human agenda.

A broader ecological theater history of Shakespearean performance in the British colonies might prove useful to the project of provincializing "our" geologic agency in the Anthropocene, both on and off stage. It supplies a more thorough archive of performance documentation than performance records from early modern England, while also cataloguing performances where British actors were confronting new environments and frequently playing Shakespeare outside. Furthermore, insofar as the history of British colonialism functions as a narrative of the global North acquiring geologic agency at the expense of the global South, this performance archive allows us to revisit the history of European colonialism through the lens of the Anthropocene. When a real storm upsets a dramatic performance, the human intention behind the performance is thrown into crisis, which rehearses our crisis in the Anthropocene of acquiring geologic agency without *meaning* to. Early modern theater may seem an unlikely ally as we confront a future of

global warming, sea-level rise, mass extinction, and other imminent threats shaped by anthropogenic climate change. But it would be a mistake to think that Shakespeare's globe was not also facing a dubious future due to human behaviors. In addition to offering accidentally postcolonial stagings, the Shakespearean weather events in Hamilton and Cape Town also anticipate our predicament in the Anthropocene of knowing the extent of our impact on the global environment. The stage teaches us that the climate, like a performance, involves different degrees of audience participation. I suggest this knowledge is a virtue because unlike early modern Providentialist thinking or proposed policy solutions for repaying climate debtors, the theater does not aim to hold us accountable for our "sins." Instead, the natural agency of a Shakespearean weather event leaves our individual human agency in tact. The theater does not punish its audience. Rather, it can help remind us of the impact of our decisions on the non-human world. Our thoughts are still ours, even if their ends are none of our own. The virtue of the theater's hybrid agency between humans and nature is that it nurtures a greater capacity for both ecological thinking and reflection on the consequences of our agency.

CHAPTER 5

SHAKING THE SUPERFLUX: SIN AND REDEMPTION ALONG GEOLOGICAL FAULTS IN KING LEAR

In the previous chapters, I have analyzed ways in which the English stage engages with globalization as both an anthropocentric and non-human phenomenon. Trans-Atlantic grafts of pathogens and biota, along with shifting patterns of trade in wooden commodities like galls and corkwood helped to shape how the English represented and understood emerging ideas about colonialism and race. I have shown how the early modern stage and Shakespearean performances of weather events can help audiences understand and think about their geologic agency in local rather than global terms. I have also traced Shakespeare's transformation into a global commodity as an ecological result of British actors confronting colonial environments. In short, each of the previous chapters has addressed globalization and British colonialism as an imbalance in power and natural commodities resulting from an ecological network involving both human and non-human agents. But to conclude this dissertation, I discuss Nature's agency as a potential corrective measure to the (partially) human-generated imbalances discussed in the previous chapters. The imbalance of wealth, natural resources, and carbon dioxide between the global North and South is one of the legacies of British imperialism in the Anthropocene. But even before Britain had an empire, the stage was rehearsing strategies for allowing the non-human world to correct ecological and economic faults. Regarding the non-human world as an ally in correcting human error has arguably never been more important than it is today.

But even the culture that Shakespeare grew up in was obsessed with reading natural events—like storms, floods, or earthquakes—as divine prescriptions for altering sinful behaviors. In Shakespeare's England, the crown, the pulpit, and the classroom each offered an overwhelmingly disciplinary message of retribution for sin or disobedience, one where the general sinning population was trained to see the natural world as a reflection of their own earthly offenses. Even before theaters became a commercial institution in London, the mystery play cycles performed throughout rural parts of England promoted the same message. While much of Shakespeare's early life remains a mystery to modern scholars, there are two places I want to imagine a young Shakespeare before turning to his dramatic conception of Nature's balancing act. The first is in Coventry, or perhaps Warwickshire—each only about twenty miles from Stratford—when Shakespeare was an eleven-year-old, watching a mystery cycle in full.[411]

Scholarship regarding the influence of the medieval mystery play cycles on Shakespeare's tragedies has been extensive,[412] but an analysis of Shakespeare's contribution to an emerging notion of ecological and economic balance begs a return to

---

[411] R. Chris Hassel Jr. speculates that Shakespeare may have seen a mystery cycle at Coventry or Warwickshire as late as 1575. See: R. Chris Hassel, Jr., "Shakespeare's 'Removed Mysteries,'" *Connotations*, 7, no. 3, (1997), 355.

[412] As a sample, see: Hassel Jr., 355; Emrys Jones, *The Origins of Shakespeare,* (Oxford: Clarendon Press, 1978); Glynne William Gladstone Wickham, *Shakespeare's Dramatic Heritage: Collected Studies in Medieval, Tudor, and Shakespearean Drama,* (London: Routledge & K. Paul, 1969); Cherrell Guilfoyle, *Shakespeare's Play Within Play: Medieval Imagery and Scenic Form in Hamlet, Othello, and King Lear,* (Kalamazoo: Western Michigan University Press, 1990); Maurice Hunt, "Old England, Nostalgia, and the 'Warwickshire' of Shakespeare's Mind," *Connotations*, 1, no. 2, (1997): 159-80.

the playwright's medieval religious sources. Shakespeare's reliance on the Noah's flood plays, for example, have been overlooked as an influence on *King Lear* (c. 1605-6). Three of the five extant flood plays depict Noah's wife refusing to board the ark amidst the apocalyptic downpour. In the Chester play, Noah commands, "Now come, a God's name, time it were/ For fear lest we drown." His wife refuses because she is unwilling to abandon her friends: "I will not out of our town./ For I have my gossips everyone."[413] Her duty is not to her husband: "So row you forth, Noah, when you list/ And get thee a new wife."[414] In the York play, Noah similarly implores his wife, "Come hither fast, dame, I thee pray," (ll. 76)[415] but even after "forty days are near-hand past/ And gone since it began to rain" (ll. 85-6), his wife refuses to board the ark. In the Towneley play, even after the "cataracts all/ That are open full even" bring "That deluge about," Noah's wife refuses to "come in the ship fast." In this play, she does not want to leave her spinning.[416] In all three plays, Noah's wife must be forced on board with violence, where she subsequently turns obedient, submissive, and docile. The flood plays bear a strong resemblance to 3.2 of *Lear*, when the fool implores his King to seek shelter from the storm: "O nuncle, court holy water in a dry house is better than this rainwater out o' door. Good nuncle, in. Ask thy daughters' blessing. Here's a night pities neither wise men nor fools" (3.2.12-15). In 3.4, too, Kent brings Lear to a hovel and begs him to go inside:

---

[413] Maurice Hussey, ed. The Chester Mystery Plays: Sixteen Pageant Plays from the Chester Craft Cycle, (London: W. Heinemann, 1957).
[414] Ibid.
[415] Richard Beadle and Pamela M. King, eds. *York Mystery Plays: A Selection in Modern Spelling*, (Oxford: Oxford University Press, 2009), 76.
[416] Garrett P. J. Epp, *The Towneley Plays*, (Kalamazoo: Western Michigan University, 2017), 99.

“Here is the place, my lord. Good my lord, enter./ The tyranny of the open night’s too rough/ For nature to endure” (3.4.1-3). But like Noah’s wife, Lear stands in the rain as long as he can:

> Rumble thy bellyful! Spit, fire! Spout, rain!
>
> Nor rain, wind, thunder, fire are my daughters.
>
> I tax you not, you elements, with unkindness.
>
> I never gave you kingdom, called you children;
>
> You owe me no subscription (3.2.16-20)

Critics have read the obstinacy of Noah’s wife as a rehearsal of the fall, as a comic interlude, and as a feminist posturing for both her rejection of patriarchal subjugation, and her independence as a worker.[417] Allegorical interpretations of the flood plays position Noah’s wife as the “recalcitrant sinner”[418] who waits until the final possible moment to enter the Church or to accept Christ.[419] Shakespeare’s appropriation of Mrs. Noah in *Lear*, however, betrays an interest in the future she is willing and able to imagine on earth before it is destroyed—an interest that humans living in the age ofanthropogenic climate change are compelled to share .

In this chapter, I suggest that *Lear* overturns a religious model of redemption offered by the medieval flood plays—where human sin is punished with divine retribution and global deluge—in favor of a more secular model of redemption, where

---

[417] Katie Normington, *Gender and Medieval Drama,* (Woodbridge: D.S. Brewer, 2004), 124-5.

[418] Woolf, quoted in Normington, 125. See: Rosemary Woolf, *The English Mystery Plays,* (Berkeley: University of California Press, 1972).

[419] Beadle and King, 21.

self-correcting imbalances in nature provide solutions to economic imbalances between kingly pomp and houseless poverty. Gloucester and Lear each seek redemption in this play. Lear, who hopes Goneril and Regan will pay him "subscription" for giving them "kingdom" and for calling them "children," seeks (like blind Gloucester) to atone for the "fault" (1.4.277) of doubting the credit of his faithful child. But whereas "faults" are recognizable as human sins in the flood plays, they are also in Lear the geological fault lines by which nature achieves balance.

The second place I am trying to imagine a young, now fifteen year old Shakespeare, is where he might have been during Easter of 1580, when the greater part of southern England was rocked by a massive earthquake. If Shakespeare was in Stratford, he may have felt the quake in its full force. But if he was in Lancashire during this time, as E. A. J. Honingmann suggests he may have been, he may have only been able to read about it after the fact.[420] Seismologists now know that the epicenter of the quake was along a fault line somewhere between Dover and Calais. So while moralizing pamphleteers may have located the cause of the quake in human behaviors and sins, seismologists today are able to pinpoint the cause at an active fault between two bodies of land that were once connected by a land bridge. And it is here, at the cliffs of Dover, where Shakespeare (or Edgar) places Gloucester—where the balancing floods once bulldozed the land bridge between England and France, where the unseen underwater

---

[420] Scholars have debated about where Shakespeare was during his infamous "lost years"; E. A. J. Honingmann suggests Shakespeare may have been in Lancashire in 1580, about 300 miles from the epicenter of the quake. See: E. A. J. Honingmann, *Shakespeare: The "Lost Years,"* (Manchester: Manchester University Press, 1998), 1.

fault rocked the English countryside, and where Gloucester redeems his own unseen faults by giving the remainder of his wealth to Edgar. Although Lear and Gloucester seek atonement through different avenues—Lear through a stormy flood, and Gloucester on the edge of a cliff—they also both imagine a future in which the debtor/debtee paradigm of Christian redemption, the zero-sum scheme in which one's "pomp" (3.4.37) is necessarily another's "houseless poverty" (3.4.30), is replaced with a more distributive justice. As Lear realizes that he "may'st shake the superflux" and "show the heavens more just" (3.4.40-1), Gloucester hopes that "distribution should undo excess,/ And each man have enough" (4.1.80-1). The future conditional of Lear's "mayst" and Gloucester's "should" overturns the apocalyptic scenario of the flood plays in order to imagine instead what J. K. Barret calls "an earthly future shaped by the activity of human beings rather than classical precedent or divine providence."[421] The play's abdication of religious redemption depends on two key non-human properties, the storm and the cliffs, which are both present and absent on stage at once. I suggest that the storm and the cliffs allow Lear to see his Kingly past from his present vantage of Uxor Noah in the storm, and allow Gloucester, who cannot see at all, to relive his own "fall" through his theatrical perception of the phantom Dover cliffs.

In this way, the play registers a contemporary antiquarian interest in an emergent form of "natural history," which developed in part when scholars began to supplement

[421] J. K. Barret, *Untold Futures: Time and Literary Culture in Renaissance England*, (Ithaca: Cornell University Press, 2016), 8.

historical texts and documents with artifacts and evidence from the physical world.[422] One antiquarian, Richard Verstegan, imagined that the white cliffs of Dover had formed as the result of a superflux finding its balance in nature, a theory which informs the white cliffs as the site of Gloucester's economic redistribution. Both storm and cliffs are central to the action of the play because they suggest that the play's economic imbalances might be restored not with God, but with the help of the earth's restoration of natural imbalances. Lear's fault to Cordelia and Gloucester's fault to Edgar are economic because they do not bestow upon their children the riches they deserve. But Cordelia and Edgar are redeemed by their fathers, not through a rehearsal of Adam's fall or Noah's flood, but through a plunge more secular, a deluge more natural.

In the age of anthropogenic climate change, where science has proven the damaging global reach of human behaviors, *Lear's* lesson has never been more important: we need to learn to see economic imbalance as resolvable not through God's divine grace, but through the distributive justice made possible by an alliance between human and natural agency. We need to take responsibility for the economic imbalances created by a long history of human (and geologic) "faults."

"Bond of Childhood": Lear and Gloucester's Unbalanced FamilyAccounts

Lear and Gloucester both feel they are owed a debt by their children, and each seeks in vain for a balancing of their familial accounts. When Cordelia tells her father she

[422] Martin J. S. Rudwick, *Earth's Deep History: How It Was Discovered and Why It Matters*, (Chicago: University of Chicago Press, 2014), 31; Paolo Rossi, *The Dark Abyss of Time: The History of the Earth and the History of Nations from Hooke to Vico*, (Chicago: University of Chicago Press, 1984), 4.

loves him “according to [her] bond, no more nor less” (1.1.101), she underlines the bad math her sisters commit with their flattery: “Why have my sisters husbands if they say/ They love you all?...Sure I shall never marry like my sisters,/ To love my father all” (1.1.109-115). By portioning out the “largest bounty” (1.1.57) of the kingdom to his daughters according to their professed affections, Lear assigns a tangible value to their love, which leaves him vulnerable to Regan’s subtracting negotiations. To Lear, the number of knights he is allowed to keep quantifies the affection he reciprocates for his daughters, and he tells Goneril, “Thy fifty yet doth double five-and-twenty,/ And thou art twice her love” (2.4.299-300). Lear speaks an economic language (familiar to the heroes of revenge tragedy and tragicomedy) of balance, repayment, and redemption.[423] He reminds Regan, “I gave you all” (2.4.287), and urges her to remember her debt:

> Thou better know’st
> The offices of nature, bond of childhood,
> Effects of courtesy, dues of gratitude.
> Thy half o’ th’ kingdom hast thou not forgot,
> Wherein I thee endowed. (2.4.201-5)

For Lear, fatherhood has been an economic investment, and a bad one where Goneril and Regan are concerned. Their “bond” and “dues” to him will not be repaid.

Like Lear, Gloucester imagines his child’s alleged offense to be all the more sinister for the economic imbalance it reflects between a father who has imparted his

---

[423] Forman, *Tragicomic Redemptions, 8; Woodbridge, English Revenge Drama*, 61.

wealth onto his ungrateful son. Gloucester can hardly fathom Edgar's ingratitude against his own father, "that so *tenderly* and *entirely* loves him!" (1.2.101-2, emphasis added). The love that Gloucester tenders "entirely" to his legitimate son helps to sow the seeds of Edmund's jealous revenge; it demonstrates that Gloucester's money is hardly distributed evenly between his two sons. Much like Lear, Gloucester imagines he is owed for providing his sons with childhood; Edgar's alleged offense is an economic affront, a defaulted loan, a "bond cracked 'twixt son and father" (1.2.114-115). For both Lear and Gloucester, paternal love is an overbalanced account in need of reckoning.

But the economics of *King Lear* differ from revenge tragedy (where blood repays blood) and tragicomedy (where losses are redeemed with interest) in part because Lear and Gloucester possess enough introspection to confront their own debts and imbalances. At the same time that Lear seeks repayment from Goneril and Regan, he also wants to atone for his mistreatment of Cordelia. When he is finally reunited with Cordelia, Lear tells her, "If you have poison for me, I will drink it" (4.7.82). He acknowledges that she, unlike her sisters, may have "some cause" (4.7.85) not to love him. In the stocks, Kent imagines Cordelia as the play's great redeemer; he hopes she will "find time ... to give/ losses their remedies" (2.3.183-5). She does remedy her father's madness, but Lear's redemption is short-lived. Having just acquired his daughter's forgiveness, Lear is quickly burdened with responsibility for her death. Though he slays her murderer, Lear blames himself for Cordelia's demise: "I might have saved her" (5.3.326). Lear hopes in vain that she might be left alive, "a chance which does *redeem* all sorrows/ That ever I have felt" (5.3.320-1, emphasis added). But the play repeatedly denies his redemption; he

dies waiting for her to breathe. If the storm teaches Lear how he has misestimated the fidelity of his daughters, it also teaches him to see his wealth as a grossly overbalanced account. Lear admits, "I have ta'en/ too little care of this," (3.4.36-7).

Similarly, Gloucester's blindness—along with Edgar's costumed performance of poverty and the illusory cliffs of Dover—illuminate the fault of the unfair distribution of wealth in the realm. Gloucester, a self-proclaimed "superfluous and lust-dieted man" (4.1.77), might agree with Edgar's didactic estimation of him, that "the dark and vicious place where [Edmund] he got/ Cost him his eyes" (5.3.206-7). Gloucester and Lear each perceive their superfluity, their excess, their overdrawn accounts only when they are suffering; they are not without vices of their own, and each ponders the equity of their trials. But the future conditional that both Gloucester and Lear are able to imagine as an alternative for an inadequate redemption is an environmental concern for Shakespeare as much as a temporal one. In other words, a future in which the superflux is shaken—when both Lear's wealth and his current "overflow of water"[424] are more evenly distributed, less concentrated, and when distribution undoes excess and superfluity—is only perceptible to the audience if they can see the water through which Lear wades in the present, and the cliff which Gloucester thinks he stands on.

"O most small fault!": Economic Imbalances and Geological Redemptions

By appropriating the medieval flood plays in King Lear, Shakespeare maps the economic and emotional registers of redemption sought by Lear and Gloucester onto the flood's parable of spiritual redemption. Lear's epiphany in the storm—his pivot from

---

424 Oxford English Dictionary, "superflux," n. 2.

perceiving himself as a man "more sinned against than sinning" (3.2.63) into acknowledging himself as a King with enough economic agency to redeem the poor, to "shake the superflux," and to "show the heavens more just"—participates in a shifting discourse about the meaning of redemption on the English stage. Even before the Reformation, Christian redemption was understood as a kind of spiritual economics. As Valerie Forman describes it, "man owes an infinite and ultimately unpayable debt to God for an original sin understood as the result of defrauding God." However, this debt is repaid, "even overpaid, by Christ, who is both man and God and whose life has infinite value."[425] Christ's redemption for man's fall is the great theme of the mystery cycle plays. God's salvation of Noah and his family from the flood anticipates the second, more important redemption later in the cycle. Forman shows how the productive potential of Christ's redemption for human debts, sins, and losses found purchase on the Renaissance stage through the genre of tragicomedy, especially after an economic debate erupted between mercantilists over the causes of and remedies for England's depleting store of bullion in the early seventeenth century.

Lear was written shortly after the mercantilist George Malynes diagnosed the depletion of bullion as England's economic "disease" in his 1601 pamphlet, *A treatise of the canker of Englands common wealth*.[426] A few years later, the economic treatises of Edward Misselden and Thomas Mun would propose that English merchants could restore an upset "balance of trade" through exporting more than they imported, and offered an

---

[425] Forman, 11.
[426] George Malynes, *A treatise of the canker of Englands common wealth*, (London, 1601), B1r.

early theorization of the interchangability between money and commodities.[427] Scholars who have addressed the impact of the economic debates between Malynes, Misselden, and Mun on the English stage have overlooked Lear with good reason. As a tragedy, the play hardly explores the productive potential of the play's initial losses.[428] But these competing economic and spiritual registers of redemption and "balance" are not wholly irrelevant to the economy of Lear's "physic." They are, however, incomplete without a consideration of the play's central restorative agent of economic imbalance: nature. Lear demonstrates how economic imbalances are inextricably linked to imbalances in nature. The play also models tragedy as a genre of economic and ecological imbalances. The mislaid fortunes of Edgar and Cordelia later beget the squalor of their fathers Lear and Gloucester. The imbalance of wealth in the kingdom, represented by the play's destitute wanderers, is reflected in the play's unbalanced environments. An excess of water exacerbates Lear's poverty, and a crooked drop at the imaginary cliffs of Dover—also formed by an excess of water—positions Gloucester on the brink of a suicidal despair. As Jennifer Mae Hamilton argues, the play is "not only about seeking shelter in a pragmatic sense, it also offers a rich and complex ethical and political enquiry into the tensions between privileged excess and base necessity in relation to exposure."[429] This tragic convention of unbalanced excess of both the economy of the state and the ecology of the country might also identify a convention of Anthropocene Theater, which shows

---

[427] Ryner, *Performing Economic Thought*, 85.
[428] In tragicomedy, on the other hand, the play's initial losses generate the play's later redemptive gains, which reflects the novel idea of "investment" proposed by Misselden and Mun in the early seventeenth century. See Forman, 6.
[429] Hamilton, *This Contentious Storm*, 40.

audiences that their own behaviors have taken them to a point where redemption by human hands may be out of reach.

Lear's vision of a shaken superflux anticipates the economic debates of the 1620s because of the way Lear understands the potential for the crown to correct economic imbalances. Although Mun and Misselden disagreed with Malynes on what to do about the depleting bullion, they each "subscribed to a zero-sum conception of global wealth, according to which one nation's gain was almost invariably another's loss."[430] In the storm, Lear shares a zero-sum conception of the wealth circulating *within* his realm; he understands for the first time that his gain has been at someone else's expense. One might be tempted to read Lear as a "bullionist," since he acknowledges the crown's capacity to enforce the value of money and perhaps to determine the flow of wealth to and from the realm as well.[431] He admits, "I have ta'en/ Too little care of this" (3.4.36-7, emphasis added), and suggests that he, the King (not God) might "feel what wretches feel" (3.4.39), "shake the superflux" (3.4.40), and "show the heavens more just" (3.4.41). If anyone has the power to do something about wealth inequality in Lear's England, it is the king. Or at least it used to be.

Like Lear, Malynes advocated for the crown's intervention to restore economic imbalances. Malynes perceived that bullion was leaving England through trade, through selling English commodities at low prices, and through buying foreign commodities at high prices.[432] The King, however, "(being as it were the father of the family) ought to

---

[430] Harris, *Sick Economies*, 6.
[431] Ryner, 53.
[432] Malynes, B2r.

keep a certaine equality in the trade or trafficke betweixt his realme and other countries, not suffering an ouerballancing of forreine commodities with his home commodities, or in buying more then he selleth."[433] For Malynes, the King managed the commonwealth's "houshold"[434] or *oikos*—which serves as the etymological root for the modern studies of both economics and ecology.[435] But scholars preoccupied with the economic side of Malynes' *oikos* have overlooked how Malynes also conceived of trade between nations as a necessary human response to an ecological imbalance in nature: "God caused nature to distribute her benefits, or his blessings to seuerall climates, supplying the barenness of some things in our countrey, with the fruitfulnesse and store of other countries, to the ende that enterchangeably one common-weale should liue with another."[436] For Malynes, then, international trade is a strategy for redistributing a natural disproportion of commodities (and wealth) more evenly among nations, so that each might, in Gloucester's words, "have enough."

Though Malynes predates the modern fields of economics and ecology, he was not the only theorist of the balance within nature's household who has bearing on Lear's vision of a "just" economic future in England. The economic and spiritual redemption

---

[433] Ibid., B1v.
[434] Ibid.
[435] Natasha Korda discusses the gendered labor of the early modern English household through the etymology of the term "oeconomy," from the Greek "oikos," or house, and "nomos," or law. "The housewife's oeconomy," she concludes, "thus positioned her in an active, managerial role that required her not only to keep or hold goods, but to deal out, distribute and dispense them, and thereby to 'govern' the household economy." See Natasha Korda, *Shakespeare's Domestic Economies: Gender and Property in Early Modern England,* (Philadelphia: University of Pennsylvania Press, 2002), 27.
[436] Ibid., B3v.

that Lear and Gloucester seek and then abjure has roots in the emergence of the medieval notion of balance as well. Equity and balance were not just economic or religious concerns of the early modern period, but, as Joel Kaye points out, ideas that emerged in the medieval period under the discipline of natural philosophy. Jean Buridan, the thirteenth-century Parisian natural philosopher, for example, investigated the question of why the proportion of dry land and water on earth should remain constant in an Aristotilian universe (which is eternal). The problem, as Buridan saw it, was that given enough time, "the whole depth of the sea ought to be filled with the earth, thus consuming the [portion of] earth that was elevated... Therefore, nothing ought to remain habitable."[437] Buridan's solution to this problem was to imagine a dynamic, dual-centered earth, which was responsible for pushing land out of the sea in a balanced proportion to the land swallowed beneath the waves.[438]

Lear was also written around the same time that Francis Bacon was conceptualizing what ecologists would later view as an "imperial" view of nature, which was influenced by Christian and pastoral ideas. Under this view, "nature was [man's] domain, to be altered and rearranged more or less as he chose."[439] For Bacon, nature might never be out of balance if humans had complete control over it. In his *New Atlantis* (1627), Bacon envisions a society dedicated to the scientific probing of nature, which

---

[437] Quoted in Joel Kaye, "The (Re)Balance of Nature, ca. 1250-1350," in *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe*, Barbara J. Hanawalt and Lisa J. Kiser, eds. (Notre Dame: University of Notre Dame Press, 2008), 95.
[438] Ibid., 96.
[439] Donald Worster, *Nature's Economy: A History of Ecological Ideas*, (Cambridge: Cambridge University Press, 1977), 29.

allows for the "enlarging of the bounds of Human Empire, to the effecting of all things possible."[440] His fictive society of "Salomon's House" on the utopic isle of Bensalem is in part dedicated to the "prevention and remedy" of "tempests, earthquakes, [and] great inundations."[441] In the same way that Buridan anxiously strives to justify the impossibility of another universal deluge, Bacon's commercially isolated islanders also seem particularly worried by the prospect of a flood. The governor of Bensalem explains how the "simple and savage people" of America, or the "great Atlantis," were once host to "proud kingdoms in arms, shipping and riches." They "abounded in tall ships," and "the navigation of the world" was "greater then than now," until "the great Atlantis was utterly lost and destroyed...by a particular deluge or inundation."[442] Bacon, like Malynes, imagines trade as a corrective measure against natural imbalances in commodity distribution between nations; but he prefers to trade in "Light"[443] or knowledge, and to correct superflux by preventing it altogether.

Much like Bacon and Buriden, Shakespeare also ponders nature's balance using flood imagery in *Lear*, which extends to the play's economic imbalances as well. That *King Lear* embraces a redemption coded as natural rather than spiritual is evident, ironically, from the play's engagement with the imagery of the flood plays, and with animal imagery in particular. Lear's similarity to Noah—or Noah's wife, as the case may be—in the storm scenes serves to distance him from the spiritual redemption staged in the

---

[440] Francis Bacon, *New Atlantis*, in *Francis Bacon: The Major Works,* Brian Vickers, ed, (Oxford: Oxford University Press, 2008), 480.
[441] Ibid., 488.
[442] Ibid., 467-70.
[443] Ibid., 486.

mystery cycle plays. The play's animal metaphors conflate human with non-human forms, and situate Lear within a kind of ark. Unlike Uxor Noah of the flood plays, however, who finds grace and redemption (along with patriarchal oppression) aboard the ark, Lear finds only animals. Lear's Fool conflates Kent in the stocks with the "cruel garters" worn by animals in an image that reinforces both human domain over beasts, and the indistinction that grows between humans and animals when they are quartered with one another: "Horses are tied by the heads, dogs and bears by th' neck, monkeys by th' loins, and men by th' legs" (2.4.10-12). When Regan proposes that Lear should return to dwell with Goneril, Lear protests that he would rather "be a comrade with the wolf and owl" (2.4.243). Kent learns from a gentleman that Lear is parading "unbonneted" through the storm on a night when "the cub-drawn bear would couch,/ The lion and the belly-pinched wolf/ Keep their fur dry" (3.1.14-16). Cordelia later uses animal imagery to describe the intensity of the same storm: "Mine enemy's dog,/ Though he had bit me, should have stood that night/ Against my fire" (4.7.42-4). When Lear is finally persuaded to enter the ark-like hovel, he meets the ragged figure of Edgar, who recounts his sins to Lear using animalistic metaphors, further disintegrating the distinction between human and beast. Edgar confesses that he has been a "hog in sloth, fox in stealth, wolf in greediness, dog in madness, lion in prey" (3.4.99-101). Lear consoles Edgar by reinforcing his community with animals at the same time that he underscores Christian redemption as an outrageous doctrine. It is unthinkable to Lear that a man of such poverty, "such a poor, bare, forked animal" (3.4.111-115) would owe God—or even a worm—a debt: "Thou ow'st the worm no silk, the beast no hide, the sheep no wool, the

cat no perfume" (3.4.110-12). There is no redemption aboard this ark; all debts are off, even if economic inequality endures. Furthermore, the hovel Edgar shares with Lear is populated, like Noah's ark, with animals. Their purpose, however, is to sustain human life; Edgar is hardly their custodian, and Lear is no Noah. He tells Lear that he has sustained himself on "the swimming frog, the toad, the tadpole, the wall newt, and the water," on "cow dung," on "the old rat and the ditch-dog," and on "mice and rats and such small deer" (3.4.136-147). Cordelia later asks the slumbering King, "[W]ast thou fain, poor father,/ To hovel thee with swine and rogues forlorn/ In short and musty straw?" (4.7.44-6). Cordelia beholds the depths to which Lear has fallen, but his time within the hovel affords him no retribution. Finally, when divine grace fails to redeem Cordelia's death, Lear fathoms this inequity by contrasting her death with the lives of animals: "Why should a dog, a horse, a rat have life,/ And thou no breath at all?" (5.3.370-1). In the flood plays, Lear's rhetorical question might have an answer: these animals have life because Noah (by God's will) saved them. Sinners, on the other hand, perished. But the spectacle of Lear holding his innocent and faithful daughter dead in his arms invites audiences to reevaluate the Christian notion of redemption because it fails to explain adequately the debt she must repay with her life.

Lear pays dearly for his initial fault. But "faults" in this play are never simply moral mistakes; they metaphorically link the play's concern for economic equity and alternative modes of redemption with the natural (and unnatural) fracturing and dividing of landforms. Although the term "fault"—meaning a "dislocation or break in continuity

of the strata or vein"[444]—was not associated with the practice of mining or the study of geology until the late eighteenth century, *Lear* anticipates these valences by confronting moral failings with uneven English topography and geography.

The word "fault" appears eleven times in the conflated text, and often bridges moral mistakes with natural or man-made divisions of land. Gloucester and Lear, for example, each fracture their families by distributing unequal quantities of land to their children. When the play opens, Gloucester inquires whether Kent can detect Edmund's illegitimacy by asking, "Do you smell a fault?" (1.1.16). His question not only reduces Edmund (who is on stage) to an unhappy blunder or error of his past, but also suggests Edmund cannot be his brother's equal. Kent politely replies, "I cannot wish the fault undone, the issue of it being so proper" (1.1.17-18). Though Gloucester admits that Edgar is "no dearer in my account" (1.1.20) than Edmund, Gloucester's pre-marital "fault" will reap the division of his family, which will only play out after Lear commits a fault of his own with the misestimated geographical division of his kingdom. Gloucester weighs the inequity of his two sons only after considering how Lear will divide the kingdom between Albany and Cornwall: "it appears not which of the dukes he values most, for equalities are so weighed that curiosity in neither can make choice of either's moiety" (1.1.4-7). But by describing Edmund as a "fault" who is also "no dearer in my account" than Edgar, Gloucester betrays his own inability to fairly determine equality between his two sons, and between the two dukes.

[444] OED, "fault" n. 9.a.

Poor judgment of equality is a flaw that Lear shares in hoping to balance the love of his daughters in a rhetorical scale. Once she is bereft of her dowry, Cordelia tells her sisters that she is "most loath to call/ Your faults as they are named" (1.1.313-14), but warns them that those "Who cover faults at last with shame derides" (1.1.326). But the "faults" of her sisters also belong to her father, and this scene stages his egregious portioning. When Lear bestows part of his kingdom to Goneril, he emphasizes the geographical line that represents her boundary on the map:

> Of all these bounds, even from this line to this,
>
> With shadowy forests and with champains riched,
>
> With plenteous rivers and wide-skirted meads,
>
> We make thee lady. (1.1.69-72)

The border of Goneril's territory may be fixed on the map, but because Goneril's portion contains "plenteous rivers," her dowry seems prone to internal, natural, geological divisions, exacerbated by the increase of water or superflux. It is likely that Lear metonymically associates Goneril with her "champains riched," "plenteous rivers," and "wide-skirted meads," since he later curses her through distorting his vision of her verdant and fertile territory. Using imagery of desertification and drought, Lear calls on Nature to prevent her from being "fruitful," to promote her "sterility," to "*Dry* up in her the organs of increase," so that from her body a child may "never *spring*" (1.4.289-295, emphasis added). Conflating her body with her dowry and estate, Lear also transforms her "plenteous rivers" into a curse about excess of water:

> If she must teem,

> Create her child of spleen, that it may live
>
> And be thwart disnatured torment to her.
>
> Let it stamp wrinkles in her brow of youth,
>
> With cadent tears fret channels in her cheeks,
>
> Turn all her mother's pains and benefits
>
> To laughter and contempt, that she may feel
>
> How sharper than a serpent's tooth it is
>
> To have a thankless child. (1.4.295-303)

Lear hopes Goneril will wear "channels" on her face if her lands remain fertile. Ingratitude in Goneril incites Lear to curse her issue and the dowry he gave to her. But when it comes from Cordelia, ingratitude, that "most small fault," proves tantamount to an earthquake along a geologic fault; "like an engine," Cordelia's fault "wrenche[s Lear's] frame of nature/ From the fixed place" (1.4.278-281). Even in the throes of his anger, Lear acknowledges the devastating destruction that can come from a "small fault." Eventually, he will see his faults—his unjust distribution of land among his daughters, and his unjust distribution of wealth within his kingdom—as his own. But because Lear's moral faults deal a greater offense to the physical makeup of his kingdom and his family than to his God, the play's faults—the kingdom's wealth inequality, and the mislaid paternalism of two unhappy fathers—appear more redeemable through a secular and natural avenue than through a spiritual one.

Gloucester's Cliff and Lear's Flood: Nature's Redemptive Dark Matter

Whereas faults register as human sins that can only be redeemed by God in the medieval flood plays, the geologic tenor of faults in *King Lear*—the way landed properties and estates remain, after they have been portioned and distributed, prone to further fracturing and division, either metaphorically or else literally along unseen but active seismic boundaries--suggest that redemption is possible without God. For Gloucester, geologic faults are not only a physical embodiment of the uneven distribution of land promised to his two sons; they also form a necessary step—or fall—in Gloucester's economic rebalancing. I suggest that the white cliffs of Dover from which Gloucester hopes to leap to his death, but which the audience can perceive as a trick of Edgar's theater, function as "dark matter" in the play. According to Andrew Sofer, theatrical dark matter refers to the "invisible phenomena" which "continually structure and focus an audience's theatrical experience"; they are "incorporeal yet are crucial to the performed event."[445] Though Sofer refrains from identifying the play's cliffs as dark matter, I suggest that the Dover cliffs are a central "felt absence"[446] in *King Lear* precisely because of the play's fractured landscapes and economic imbalances.

The cliffs of Dover are also central to Shakespeare's appropriation of the flood plays because of contemporary debates regarding how the earth's topography formed, which pivoted on Noah's deluge as a relatively recent earth-shaping event. While Buridan was able to imagine the earth supplying its own defense against superflux and deluge in an eternal universe, scholars of the seventeenth century harbored a more Biblical temporal

---

[445] Andrew Sofer, *Dark Matter: Invisibility in Drama, Theater, and Performance*, (Ann Arbor: University of Michigan Press, 2013), 4.
[446] Ibid.

conception for the earth's history. Human beings and the earth were each thought to have been only about six thousand years old, and Noah's flood was thought to be a real historical event, occurring about 1500 years after creation.[447] The history of the earth, furthermore, was divided into "seven ages," (an idea which Jaques in *As You Like It* famously parodies), and the living human "present" was thought to be the last and final age.[448] This conception of time gave rise to three prevailing theories about the earth's topography in the seventeenth century: that it was formed six thousand years ago by God on the day of Creation as is, that it was formed by the deluge that Noah and his family escaped, and that it was formed by post-Diluvian earthquakes.[449] Though much of this debate occurred in the latter half of the seventeenth century, decades after *Lear* was first performed, it nevertheless sheds light on how Shakespeare's secular, theatrical construction of time more closely resembles geologic "deep" time than the chronologies imagined by his contemporaries.

Richard Verstegan, a Catholic antiquarian living in exile from Elizabethan England, was one proponent of the third theory, that the universal deluge had shaped most of the earth's topography, but not all of it.[450] In *A Restitution of Decayed Intelligence in Antiquities* (1605), published around the same time that Lear was first performed, Verstegan muses on how the island of England formed, and considers it

---

[447] Rudwick, 20.
[448] Ibid., 24. Other temporal schemes imagined that human history spanned three, four, six, or even twelve distinct ages. See Burrow, *The Ages of Man,* 2.
[449] Gordon L. Davies, "Early British Geomorphology," *The Geographical Journal*, 132, no. 2, (1966): 253-4.
[450] Ibid., 260.

unlikely "that there were any Iles before the deluge; and so much may be gathered by the words of the scripture."[451] Verstegan's *Restitution* may have seemed "scientific" because it privileged natural antiquities over the armchair science of his forebears,[452] but his observations about the natural world were also tinted with his own national, racial, and linguistic ideology. Verstegan was bent on proving the Germanic and Saxon origins of the English people, and sought to overturn the popular mythical and historical connections to Rome and Troy by tracing the lineage from a more biblical genealogy.[453] Instead of suggesting that the flood created England, Verstegan proposed that, long ago, "Albion hath bin continent with Gallia."[454] He suggested that England was once connected to France by "a bridge or Isthmus of land, beeing altogether of chalk and flint,"[455] citing for evidence the "neernes of land between England and France...from the Clifs of Douer, unto the lyke clifs lying between Calis and Bullen," as well as their opposing faces, their similar composition "of chalk and flint," the way they appear "to bee broken of[f] from some more of the same stuf or matter," and their matching length, and the distance between them.[456] Although Verstegan believed that "Almightie God" was "the cause and conductor of Nature" who "in creating the world did leaue no parte of his work imperfect or broken,"[457] he was willing to see that the real force that drove England apart from

---

451 Richard Verstegan, *A Restitution of Decayed Intelligence in Antiquities*, (London, 1605), M4r.
452 Rudwick, 51.
453 Graham Parry, *The Trophies of Time: English Antiquarians of the Seventeenth Century*, (Oxford: Oxford University Press, 1995), 51.
454 Verstegan, M4v.
455 Ibid., N1r.
456 Ibid.
457 Ibid., N2v.

France and created the cliffs of Dover was not God, but a kind of superflux, or the property of water finding its level between two unbalanced bodies:

> That the sea on the west syde of the said Isthmos was lower then the sea on the east syde thereof, is besides this great work thereby wrought, to bee iudged by the sundry flats and shallowes on the east syde, aswel on the coste of England as of Flanders, yea one in a manner lying between Douer and Calis, of about three English myles in length, of some called our Ladyes sand. And contrariwise on the west syde no such flats at all to bee found, whereby may wel bee gathered that as the land vnder the sea remaineth on the one syde lower then one the other, so accordingly did the sea also.[458]

Verstegan believed that waters of the North Sea stood higher than the waters of the English channel, and he attempts to show similar imbalances in places where two bodies of water "haue but narrow separations of land between them"[459]—between the higher Red Sea and the lower Mediterranean, and between the higher Pacific Ocean and the lower Atlantic on each side of Panama.[460] Thus, for Verstegan, Dover's white cliffs were not shaped by the original deluge, but stood as a visible monument to water's natural ability to redeem its own imbalances over a long period of time after the flood.

Though Verstegan is perhaps unknown to most marine geologists, his theory has been all but confirmed with modern bathymetry mapping techniques. In fact, recent studies in seismology and geology reveal two features of the Dover cliffs that enhance

---

[458] Ibid., O3r.
[459] Ibid.
[460] Ibid., O3v.

their "incorporeal yet crucial" status as the site of Gloucester's economic and paternal redemption in *King Lear:* not only were the cliffs partly formed by a catastrophic flooding event, they also lie in close proximity to a nest of active faults, responsible for significant seismic activity in southeast England. As Verstegan observed without any modern scientific instruments, England *was* once connected to the mainland of Europe by a ridge, known by geologists today as the Weald-Artois anticline.[461] Sometime around 300,000 years ago, a large glacial lake in the southern North Sea overflowed, and caused a "catastrophic breach" of the Weald-Artois barrier.[462] The geology of the sea floor of the English Channel bears the traces of this flood event. Verstegan's hypothesis that the waters of the North Sea stood higher than the waters of the English Channel was thus not incorrect, though the two bodies of water likely achieved their balance during the flood in a much less gradual manner than he imagined. Gloucester may select Dover as the location for his suicide for its convenient proximity. But because it is also the location where he seeks redemption through a redistribution of his wealth, Dover's topographical reminder of a natural redistribution of water also emphasizes a physical model of

---

[461] Sanjeev Gupta, Jenny S. Collier, Andy Palmer-Felgate, and Graeme Potter, "Catastrophic Flooding Origin of Shelf Valley Systems in the English Channel," *Nature*, 448, (2007), 342.

[462] Gupta et al, 344. Gupta et al hypothesize that the breach caused the decline and eventual disappearance of early human populations in England. Human colonization peaked in England between Marine Isotope Stage 13 (533,000 years ago) and MIS 10 (374,000 years ago), but they began to decline around in MIS 8 (300,00 years ago), and disappeared entirely for 100,000 years during MIS 6 (191,000 years ago) (Gupta et al. 344-5).

redemption over a spiritual one.[463] Furthermore, in the same way that Gloucester cannot see his faults until he cannot see at all, his "perspective" from the top of Dover cliffs, even as it is falsely mediated and interpreted by Edgar, affords his audience no visibility of the submarine geologic fault that was responsible for the earthquake of 1580. Earthquakes have been recorded in Southeast England in 1133, 1247, 1382, 1449, 1580, 1692, 1776, 1938, and 2007.[464] The earthquakes in 1382, 1449, 1580, and 1776 have each had epicenters in the Dover Strait-Pas de Calais region,[465] and the Sangatte Fault in the Dover Strait has been identified as the source of the significant seismic events in 1580, 1776, and 2007.[466]

The providential discourse surrounding an earthquake that Shakespeare must have read about (if he did not experience it first hand) helps to establish human error as a

---

[463] Jennifer Mae Hamilton suggests that the reason Gloucester sends Lear to Dover is because "there 'the sea,' a metonymy for the French army, led by Cordelia, has the capacity to rise up and change the organization of power in the kingdom" (Hamilton, 36). This reading of the sea reinforces a connection between a natural environment correcting the imbalance of power in the kingdom.

[464] G. Neilson, R. M. W. Musson, and P. W. Burton, "The 'London' Earthquake of 1580, April 6," *Engineering Geology,* 20, no. 1-2, (1984), 113. For a more thorough list of earthquakes recorded in the British Isles, see R. M. W. Musson, "British earthquakes," *Proceedings of the Geologists' Association,* 118, 2007: 305-337.

[465] C. P. Melville, A. Levret, P. Alexandre, J. Lambert, and J. Vogt, "Historical Seismicity of the Strait of Dover-Pas de Calais," *Terra Nova*, 8, no. 6, (1996), 644.

[466] D. Garcia Moreno, K. Verbeek, T. Camelbeeck, M. De Batist, F. Oggioni, O. Zurita Hurtado, W. Versteeg, H. Jomard, J. S. Collier, S. Gupta, A. Trentesaux, and K. Vanneste, "Fault Activity in the Epicentral Area of the 1580 Dover Strait (Pas-de-Calais) Earthquake (Northwestern Europe)," *Geophysical Journal International*, 201, (2015), 528-9. Musson discusses some of the problems with trying to determine active faults to predict future seismic activity. For one, the USEPA defines an active fault as any fault that has "produced an earthquake in the last 10,000 years." Musson prefers to "scrap the idea of active faults" in favor of determining "controlling faults," or the main expressions of ongoing deformational activity (Musson 334).

cause, and thus establishes a precedent of human and geologic faults coalescing. Two and a half weeks before Shakespeare's sixteenth birthday, an earthquake rocked Dover and Calais. The quake of April 6, 1580 occurred three days after Easter, and was felt in London, Paris, and Amsterdam.[467] In London, two apprentices were killed by stones falling from the roof of Christ's Church.[468] In Dover, where the intensity was strongest, a section of the cliff face slid into the sea.[469] Most first-hand accounts of the quake identify human sins as the cause for the quake. Richard Tarlton, the famed clown of the Queen Elizabeth's Men, who is perhaps an ironic source for the type of providential moralizing more likely to be expected from antitheatricalist Puritans, nevertheless viewed the quake as a demonstration of God's judgment in a publication he shared with Thomas Churchyard. Tarlton recounted how "honest men...were upon a suddain tumbled down with such violence," and "The very waters and diches shooke and frothed wonderfully."[470] The quake caused flooding in Calais, and powerful waves in the Dover Strait.[471] Tarlton concluded his account with a prophetic poem, which perhaps anticipates the tenor (if not the anaphora) of Lear's fool's prophesy that "the realm of Albion" shall "Come to great confusion" (3.3.98-99): "Our health of soules must hang in great

---

467 Melville et al, 634.
468 Nielson et al, 117.
469 Melville et al, 636.
470 Quoted in Lily B. Campbell, "Richard Tarlton and the Earthquake of 1580," *Huntington Library Quarterly,* 4, no. 3, (1941), 298.
471 Melville et al, 636. The authors doubt, however, that this "modest" quake would have produced a tsunami, even if its epicenter was in the Strait (636).

suspence/ When earth and Sea doo quake for our offence."[472] The quake occurred in the afternoon, when plays were being performed at the Theatre and at the Curtain. Spectators "were so shaken, especially those that stoode in the highest roomthes and standings, that they were not a little dismayed, considering, that they coulde no waye shifte for themselves, unlesse they woulde, by leaping, hazarde their lives or limes, as some did in deede, leaping fro[m] the lowest standings."[473] Like Tarlton, Churchyard interpreted the event as a sign of God's wrath, and as a precursor to a future apocalyptic quake. At the same time, the quake demonstrated God's love, and invited those who experienced it to reflect on their "faults":

> But those that grace hath toucht within,
>
> By outward signes will show,
>
> That hart forethinks foule former faults,

---

[472] Campbell, 300. Tarlton writes:

> When Mountaines mooue as late they did in wales
> great signe it is that nature then is crost:
> When Monsterous Infants tels such doctors tales
> The token shews some fauour hath bin lost...
> When blasing stares, and bloody cloudes doo show
> Then time it is for men too search a new... (Campbell 299).

Though Robert Armin likely played Lear's Fool, he was an apprentice of Tarlton's. It may not be too farfetched to suggest that Armin and Shakespeare are parodying Tarlton's style here. The fool pronounces:

> When priests are more in word than matter;
> When brewers mar their malt with water;
> When nobles are their tailors' tutors;...
> When usurers tell their gold I' the field;
> And bawds and whores do churches build;
> Then shall the realm of Albion
> Come to great confusion (3.3.88-99).

[473] Thomas Churchyard, *A warning for the wise, a feare to the fond, a bridle to the lewde, and a glasse to the good*, (London: 1580), B2r.

for feare of greater blowe,

Than now they feele through Earthquake strange,

wherin Gods might in knowne,

And London (if Gods loue had lackt)

had surely bin orethrowne.[474]

Another pamphleteer viewed the earthquake not only as a premonition of coming war, pestilence, and famine,[475] but as a forewarning of an imminent judgment, tantamount to the destruction Noah escaped: “I thinke if the general day of iudgement had come vpon vs, as this was but a forewarning of it, we had all beene founde no lesse vnprouided, than were they in Noes floud, we had all stoode in the state of condemnation.”[476] On the brink of a cliff that only he can see, Gloucester kneels before the “mighty gods.” And rather than seeking God’s mercy or redemption from a divine source, Gloucester prefers to “shake patiently [his] great affliction off” (4.6.44-46). His rejection of divinity and his botched suicide may add to the list of faults, which barring only himself, everyone can see. But at the same time, it creates a space to embrace a physical mode of redemption—one that requires blindness to perceive, and one where nature’s hidden faults, rather than God’s secret will, inspire wonder at our state of condemnation, and to conclude our “life’s a miracle” (4.6.69).

---

474 Ibid., B3r.

475 Abraham Fleming, *A bright burning beacon forewarning all wise virgins to trim their lampes against the coming of the Bridegroom*, (London: 1580), E1v.

476 Ibid., P1r-v.

Rather than speculate on Verstegan's *Restitution* as a source for Shakespeare's tragedy, I suggest instead that Shakespeare and Verstegan were each capable of thinking about the effects of time and water on the English landscape in a similar way. Through conceiving of the flood and the cliffs of Dover as present absences, Shakespeare imagines a topographical scheme where the agent changing the earth's surface is not God, but secular forces of excess. When Lear conceives of a future in which he "may'st shake the superflux," he conflates his former excess of wealth with the overflow of water he endures. Lear laments that he was unable to distribute his wealth more evenly before he gave it to his ungrateful daughters. In this way, his tragedy operates according to the forces of excess as well. But Gloucester does manage, at least financially, to undo his excess as he stands atop the cliffs of Dover, which some in Shakespeare's audience may have imagined as the record of a natural imbalance finding stability. In the diluvian narratives of Noah, Lear, and Gloucester, water acts as a great equalizer; water not only erases economic disparity, and cleanses the earth of sin and sinner alike, it also finds its own level. God is the cleansing agent for audiences of the medieval flood plays, but Shakespeare imagines water itself as the agent of natural and economic equity.

Gloucester's decision to commit suicide at the cliffs of Dover dramatizes more than his second fall or his redemption; for Shakespeare, the cliffs model an alternative model of redemption, rooted in nature. As soon as Gloucester gives Poor Tom his purse in an effort to "undo excess," he immediately asks the beggar, "Dost thou know Dover?" (4.1.80-1). For Gloucester, the rocky fault provides a means to economic and moral redemption. "Bring me to the very brim of it," he instructs Poor Tom, "And I'll

repair the misery thou dost bear/ With something rich about me" (4.1.85-7). Gloucester does not know that Poor Tom's misery is in fact his fault, and Edgar only realizes that his disguise as Poor Tom prevents a proper reconciliation between father and son once it is too late. When Edgar recounts his father's death, he narrates that he "became his guide,/ Led him, begged for him, saved him from despair" (5.3.226-7). But he "Never—O fault! — revealed [him]self unto him/ Until some half hour past" (5.3.228-9). Edgar's fault gives way to other fractures, cracks, and bucklings: after recounting how Gloucester's heart "burst smilingly" (5.3.235), which leaves Albany "ready to dissolve" (5.3.240), Edgar tells of Kent's confession, which ends when "the strings of life began to crack" (5.3.254- 5). It is as if Edgar's well-intentioned jest of leading his father to the edge of a theatrical cliff invites the audience to witness Gloucester's inward rupture as a symptom of the play's ruptured landscapes. When Gloucester, bereft of his sight, is being led to the place from which he "shall no leading need" (4.1.89), the audience is also blind to what Edgar describes. As Erika Lin argues, Edgar is theatrically privileged as a *platea* character in this scene, since he is "aware of the playhouse conventions through which visual, aural, and verbal cues onstage come to signify within the represented fiction."[477] Gloucester's contradictory experience of Edgar's narration lets spectators know that Edgar is exploiting the conventions of theater to "trifle thus with his despair" in order to "cure it" (4.6.42-3):

Edgar. Look how we labor.

---

[477] Erika T. Lin, *Shakespeare and the Materiality of Performance*, (New York: Palgrave Macmillan, 2012), 35.

Gloucester. Methinks the ground is even.

Edgar. Horrible steep.

Do you hear the sea?

Gloucester. No, truly. (4.6.2-6).

On the other hand, Gloucester believes that he has been brought "within a foot/ Of th' extreme verge" (4.6.31-2), even if the audience does not. Edgar's descriptions before and after Gloucester falls—of fisherman who "upon the beach/ Appear like mice" (4.6.22-3) from above, and of the "shrill-gorged lark so far/ [which] Cannot be seen or heard" (4.6.72-3) from below—are enough to convince Gloucester that his "life's a miracle" (4.6.69) after his small tumble on the stage. Even though the "dread summit of this chalky bourne" (4.6.71) of Dover is physically absent from the play, it is present for Gloucester. This scene relies on the audience's knowledge of Dover's topography. Spectators must hold the cliffs of Dover in their mind—both from the top, looking down, and from the bottom, looking up—when they see only a stage. Thus, Edgar's use of this theatrical dark matter solicits his audience into experiencing topographical space in a new way. But because it is on the clifftop where Gloucester practices his new economy of "distribution"—giving Edgar "another purse" containing "a jewel/ Well worth a poor man's taking" (4.6.35-6)—the cliff becomes a necessary pivot for Gloucester to bring his imagined future into being.

"That things might change or cease": Imagined Futures and Deep Time

The cliff's centrality to the play's redemption of economic and moral faults is not only spatial. Although Edgar's jest on his disoriented father forces the audience to imagine the cliffs from varying perspectives, the cliffs as dark matter also ask us to see the cliffs through a fluid temporal lens. At the same time that antiquarians like Verstegan were beginning to privilege natural objects over ancient manuscripts, leading to new hypotheses about the age of the earth and the place of the human within it, Shakespeare's play represented England's pre-Christian past for a sixteenth century audience preoccupied with an apocalyptic future. As Ellen McKay shows, anti-theatricalist sentiments that viewed the stage as a precursor to doomsday were not without foundation; both early modern and earlier traditions of theatrical performance were understood to be "age-endingly unsustainable."[478] Time in *King Lear* is both forward-looking and anachronistically backward-looking; the play represents time as a secular agent capable of changing the earth's topography, and anticipates the deep time scale by which topographical imbalances are measured and through which they are restored.

The apocalyptic connotations of the storm Lear endures would not have been lost on early modern audiences. Since many believed that they were living during the seventh and final age of man, the end of time is one possible future that the play imagines through the storm. To lookers-on, Lear's raving in the storm may be an attempt to bring about change, though it proves about as fruitful as catching the wind; he "Bids the winds blow the earth into the sea,/ Or swell the curled water 'bove the main,/ That things might change or cease" (3.1.5-7). The earth will manifest one of these two options; it will either

---

[478] MacKay, *Persecution, Plague, and Fire,* 7.

be destroyed by the storm, or will bring about a "change"—in the earth, in the kingdom, and in the economy. The storm is a great equalizer; Lear hopes that it will "strike flat the thick rotundity o' the world" (3.2.8). Although one topographical theory held that Noah's flood was a similar leveler, and was responsible for the creation of plains,[479] his call for flattening the earth's "rotundity" unites Lear's concern for a more just economic distribution with the play's representation of natural redemption. But while the play balances the possible outcomes of the storm, it also represents time anachronistically through the fool's jest. Immediately after Lear finally enters the hovel, the fool "speak[s] a prophesy" (3.3.86) in which he predicts that "the realm of Albion" will "come to great confusion" (3.3.98-9). That time, he suggests is now: "Then comes the time, who lives to see't,/ That going shall be used with feet" (3.3.101). But because the fool occupies the audience's past, his prophesy about the future is directed toward the audience's present: "This prophecy Merlin shall make; for I live before his time" (3.3.102). Through his prophesy, then, the fool occupies the past, the present, and the future all at once. While his prediction may be only a jest, it is a jest the play asks that we take seriously because it reminds us that our present was someone else's future, and our future will become someone else's past.

Perhaps more pressing than understanding why Shakespeare's interest in secularizing his religious dramatic sources matters is understanding why it matters *today*. Although J.K. Barret's project of recuperating the imagined futures of seventeenth-century literature problematizes the authority of the term "Renaissance" and the

---

[479] Davies, 253.

deterministic connotation of "early modern,"[480] I believe Shakespeare's imagined futures are precious—especially Lear's—because they offer us a model for how to confront our own uncertain future in the age of anthropogenic climate change. Perhaps the term "early modern" does reduce all potential futures into the certainty "of one particular outcome: modernity."[481] But I also think we as scholars need to begin to see our present and Shakespeare's early "modern" present—or perhaps early "Anthropocene" present—as ecologically connected. For example, whereas Verstegan's *Restitution* used fossils and other natural antiquities to deduce how the white cliffs of Dover formed in order to show their geologic significance to his recovery of England's Saxon heritage, scientists have since determined that the white cliffs and "chalky bourne" of Dover, which (do not) appear in Shakespeare's play, are in fact fossils themselves. The cliffs are mostly fossilized phytoplankton, which at one time in earth's history managed the earth's CO2 distribution, and served as the basis for all marine ecosystems.[482] Thus, the geology of *King Lear* is important for understanding how the play's theme of wealth redistribution relates to carbon distribution in the deep past and to human-generated emissions today. Furthermore, the play's unique staging of the cliffs of Dover as dark matter exposes audiences to a spatial and temporal experience of English topography in order to imagine alternative models of redemption and restored economic balance. Because economic imbalances between the earth's seven continents are the legacy of the British Empire's

---

480 Barret, 6.
481 Ibid.
482 Russ George, "Origin of White Cliffs of Dover Phytoplankton Ehux Genome Sequenced," June 19, 2013, http://russgeorge.net/2013/06/19/ehux-genome/

exploitation of natural resources, this play's attention to how nature restores economic imbalances makes it uniquely relevant to recent postcolonial projects. As Elizabeth DeLoughrey and George Handley argue, "human political and social inequalities cannot be successfully and sustainably resolved without some engagement with the more-than-human world and with deep time."[483] Whether we read the white cliffs as a tombstone to the atmospheric carbon regulation of the pre-Anthropocene, or as a monument to Nature's power to correct its own superfluxes and imbalances and to make life more sustainable on earth, the play invites us to connect the inequalities of nature to the economic imbalances we face in our present and our future. It invites us to make connections between the past histories, present violences, and possible futures of global capitalism in an age of global climate change, intensifying weather events, sea level rise, and superflux.

[483] DeLoughrey and Handley, *Postcolonial Ecologies*, 25.

CHAPTER 6

CODA: THE EMPTY DRAINPIPE

> "The male frog, in mating season," said Crake, "makes as much noise as it can. The females are attracted to the male frog with the biggest, deepest voice because it suggests a more powerful frog, one with superior genes. Small male frogs—it's been documented—discover that if they position themselves in empty drainpipes, the pipe acts as a voice amplifier, and the small frog appears much larger than it really is."
>
> "So?"
>
> "So that's what art is, for the artist," said Crake. "An empty drainpipe. An amplifier. A stab at getting laid."
>
> -Margaret Atwood, Oryx and Crake[484]

In Margaret Atwood's *Oryx and Crake*, Crake's chauvinist explanation for the "biological purpose" of "doodling, scribbling, and fiddling[485]" cynically praises artistic production for its eugenic capacity (eg. through the production of "superior genes"), while simultaneously reducing art into the drab image of "an empty drainpipe." Crake's metaphor calls attention to the mating ritual of an amphibian, a class of the animal kingdom that is rapidly declining as a result of human behaviors and anthropogenic climate change. An empty drainpipe may help an individual male frog during mating season, but it cannot save the species. Crake, who nearly succeeds in wiping out the human species in Atwood's novel, raises an important question with his metaphor: what is the purpose—biological or otherwise—of art if it cannot stave off mass extinction or other ecological consequences of human behaviors? While I believe it would be a fatal mistake to endorse Crake's brand of mad science, or to embrace his cynical perspective

---

[484] Margaret Atwood, *Oryx and Crake*, (New York: Anchor Books, 2004), 168.
[485] Ibid., 167.

of the humanities, I am also compelled to follow him in asking: What does the humanities have to offer as we continue to adapt and prepare to live in a changing world?

This has been one of the questions driving this dissertation. As funding continues to shuffle from humanities departments into the STEM fields, a defense of the environmental humanities seems to be in order. I bookend this dissertation about the early modern stage with quotations from authors like Jamaica Kincaid and Margaret Atwood because my objective has been to build a narrative with prose as much as it has been to make an argument about dramatic production. The ecological problems confronting early modern dramatists were not confined to a period of history, but have persisted and disseminated throughout the last few centuries. They are still being wrestled with by authors today. Through engaging with representations of nature on stage, and through positioning the stage as an important hub for expanding commercial interests in natural commodities, I have tried to uphold a dialogue between the humanities and the sciences. Only through a transdisciplinary dialogue can we begin to provincialize the Anthropocene—to recognize that the burden of anthropogenic climate change is not borne equally across the globe, to recognize that "we" who inhabit the Anthropocene are prevented from sharing in a collective experience as a species because of wealth inequality and the legacy of European colonialism.

I believe the humanities do serve a biological purpose if they are able to change how human beings consume natural resources and regard the natural world. I do not think that the sciences can fix climate change, or curb the flood that has already begun, without looking to the humanities for help. The humanities have tools—such as narrative, pathos,

theater, and performance—that STEM fields lack. In this dissertation, I have tried to privilege the narrative of biological globalization as a primary cause of the ecological and global predicament we face in the Anthropocene. The colonization of nature and the growth of capital exchange have brought us here. I am inclined to agree with Naomi Klein, who diagnoses capitalism and neoliberalism as the heart of the problem. I am also inclined to agree with Timothy Morton, who believes in the power that simply thinking differently has to offer.[486] If we continue to regard Nature as a non-human force, behaving independently from human wills and fates, perhaps we will continue to despair. I want to believe that if we can connect the past with our present and our future, if we can see how the history of globalization has bequeathed climate change, sea level rise, ocean acidification, and the earth's sixth mass extinction event, perhaps there will be hope.

At the same time, however, I am not naieve enough to think that harboring a more "ecological thought" will work to tear down an ideology of capitalist consumption grounded in hundreds of years of habit. Racism, sexism, trans- and homophobia, and a host of other problems persist despite the amount of ink spilled—the number of galls culled, and wasp life cycles interrupted—to change ideological thinking. Nevertheless, I remain hopeful that the work I have done here will contribute something to the humanities. My hope is that studies of the environment in literary production will become nested within English departments in the same way that postcolonial studies, feminist and gender studies, and critical race and African American studies have become a part of the

---

486 Naomi Klein, *This Changes Everything: Capitalism vs. the Climate,* (New York: Simon & Schuster, 2014); Timothy Morton, The Ecological Thought, (Cambridge: Harvard University Press, 2010).

curricula. It is my hope that our consideration and commitment to "diversity" also might expand to include a consideration of the non-human in order to better serve the humanities.

BIBLIOGRAPHY

Abu-Lughod, Janet L. *Before European Hegemony: The World-System A.D. 1250-1350*. Oxford: Oxford University Press, 1989.

Allen, Myles. “In defense of the traditional null hypothesis: remarks on the Trenberth and Curry *WIREs* opinion articles.” *WIREs Clim Change 2*. (2011): 931-934.

Appuhn, Karl Richard. *A Forest on the Sea: Environmental Expertise in Renaissance Venice.* Baltimore: Johns Hopkins University Press, 2009.

Atwood, Margaret. *Oryx and Crake*. New York: Anchor Books, 2004.

Austin, J. L. *How To Do Things With Words.* Oxford: Oxford University Press, 1962.

Bacon, Francis. *New Atlantis.* In *Francis Bacon: The Major Works*. Edited by Brian Vickers. Oxford: Oxford University Press, 2008. 457-90.

Bandmann, Daniel E. *An Actor's Tour, or Seventy Thousand Miles with Shakespeare*. New York: Brentano Brothers, 1886.

Barad, Karen. “Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter.” *Signs: Journal of Women in Culture and Society* 28, no. 3 (2003): 801-31.

Barbour, Richmond. *The Third Voyage Journals: Writing and Performance in the London East India Company, 1607-10.* New York: Palgrave Macmillan, 2009.

Barker, Richard. “Sources for Lusitanian Shipbuilding.” In *Proceedings of the International Symposium 'Archaeology of Medieval and Modern Ships of Iberian-Atlantic Tradition,' Lisbon.* (1998): 213-228.

Barlow, William. *Magneticall aduertisements: or Diuers pertinent obseruations, and approued experiments, concerning the natures and properties of the load-stone.* London. 1618.

Barret, J. K. *Untold Futures: Time and Literary Culture in Renaissance England.* Ithaca: Cornell University Press, 2016.

Bartels, Emily C. “Making More of the Moor: Aaron, Othello, and Renaissance Refashionings of Race.” *Shakespeare Quarterly 41*, no. 4 (1990): 433-454.

---. *Speaking of the Moor: from Alcazar to Othello.* Philadelphia: University of Pennsylvania Press, 2008.

Bauer, Lois. [Unknown Title]. *The Bermudian*, October 1950.

Beadle, Richard and Pamela M. King, eds. *York Mystery Plays: A Selection in Modern Spelling.* Oxford: Oxford University Press, 2009.

Becker, Tobias. "Entertaining the Empire: Theatrical Touring Companies and Amateur Dramatics in Colonial India." *The Historical Journal* 57, no. 3 (2014): 699-725.

Behringer, Wolfgang. *A Cultural History of Climate.* Translated by Patrick Camiller. Malden: Polity Press, 2010.

Bellincampi, Suzan. "Norway Maples Grow Fast, Live Long." *The Vineyard Gazette*. April 30, 2018. https://vineyardgazette.com/news/2015/05/06/norway-maples-grow-fast-live-long

Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press, 2010.

Berners, Juliana. *The booke of hauking, hunting and fysshyng, with all the properties and medecynes that are necessary to be kept.* London. 1556.

Bernhard, Virginia. *Slaves and Slaveholders in Bermuda, 1616-1782*. Columbia: University of Missouri Press, 1999.

Bhatia, Nandi. *Acts of Authority, Acts of Resistance: Theater and Politics in Colonial and Postcolonial India.* Ann Arbor: University of Michigan Press, 2004.

Bible. Josh. 9:21 KJV

Blanche, Rosalind. *Life in a Gall: The Biology and Ecology of Insects that Live in Plant Galls.* Collingwood: Csiro Publishing, 2012.

Blunt, Richard. "The Evolution of Blackface Cosmetics on the Early Modern Stage." In *The Materiality of Color: The Production, Circulation, and Application of Dyes and Pigments, 1400-1800*. Edited by Andrea Feeser, Maureen Daly Goggin, and Beth Fowkes Tobin. Burlington: Ashgate, 2012. 217-234.

Boehrer, Bruce. *Environmental Degradation in Jacobean Drama*. Cambridge: Cambridge University Press, 2013.

Bogost, Ian. *Alien Phenomenology or What It's Like to Be a Thing*. Minneapolis: University of Minnesota Press, 2012.

Boling, Ronald J. "Fletcher's Satire of Caratach in *Bonduca*." *Comparative Drama 33,* no. 3, (1999): 390-406.

Bonoeil, John. *His Maiesties gracious letter to the Earle of South-Hampton, treasurer, and to the Councell and Company of Virginia heere commanding the present setting vp of silke works, and planting of vines in Virginia.* 1622.

Booth, Michael R. and Pamela Heckenberg."Touring the Empire." *Essays in Theatre 6,* (1987): 49-60.

Botti, Lorean , Orietta Mantovani, and Daniele Ruggiero. "Calcium Phytate in the Treatment of Corrosion Caused by Iron Gall Inks: Effects on Paper." *Restaurator 26*, no. 1, (2005): 44-62.

Brayton, Daniel. *Shakespeare's Ocean: An Ecocritical Exploration*. Charlottesville: University of Virginia Press, 2012.

Brenner, Robert. *Merchants and Revolutions: Commercial Change, Political Conflict, and London's Overseas Traders, 1550-1653*. London: Verso, 2003.

Briggs, Jonathan D. "Historical Uses of Plant Galls." *Cecidology 1*, no.1 (1986): 6-7.

Brome, Richard. The Antipodes (1636). In *Three Renaissance Travel Plays*. Edited by Anthony Parr. Manchester: Manchester University Press, 1995.

Brunello, Franco. The Art of Dyeing in the History of Mankind. Translated by Bernard Hickey. Vicenza: N. Pozza, 1973.

Burrow, John Anthony. *The Ages of Man: A Study in Medieval Writing and Thought.* Oxford: Clarendon Press, 1988.

Burton, Robert. *The Anatomy of Melancholy.* (1621). Edited by Holbrook Jackson. New York: New York Review Books, 2001.

Bushnell, Rebecca. *Green Desire: Imagining Early Modern English Gardens.* Ithaca: Cornell University Press, 2003.

Calder, Alison. "'I am unacquainted with that language, Roman': Male and Female Experiences of War in Fletcher's *Bonduca*." *Medieval and Renaissance Drama in England 8*, no. 1. (1996): 211-226.

Callaghan, Dympna. *Shakespeare Without Women: Representing Gender and Race on the Renaissance Stage.* London: Routledge, 2000.

Campbell, Lily B. "Richard Tarlton and the Earthquake of 1580." *Huntington Library Quarterly 4,* no. 3, (1941): 293-301.

Carew, Richard. *The voyce of the Lord in the temple*. London. 1640.

Césaire, Aimé. *A Tempest.* Translated by Richard Miller. New York: Theatre Communications Group, 1992.

Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry 35,* no. 2, (2009): 197-222.

Chapman, Matthieu. *Anti-Black Racism in Early Modern English Drama: The Other "Other."* New York: Routledge, 2017.

Chaudhuri, Una. "Land/Scape Theory." In *Land/Scape Theater.* Edited by Una Chaudhuri and Elinor Fuchs. Ann Arbor: University of Michigan Press, 2005. 11- 29.

Childs, Wendy R. *Anglo-Castilian Trade in the later Middle Ages.* Manchester: Manchester University Press, 1978.

---. "Anglo-Portuguese Trade in the Fifteenth Century." *Transactions of the Royal Historical Society.* Vol. 2 (1992): 195-219.

Churchyard, Thomas. *A warning for the wise, a feare to the fond, a bridle to the lewde, and a glasse to the good.* London. 1580.

Counseil for Virginia (England and Wales), *A true declaration of the estate of the colonie in Virginia.* London. 1610.

Craufurd, Russell. *Ramblings of an Old Mummer.* London: Greening, 1909.

Crawford, Julie. "Fletcher's *The Tragedie of Bonduca* and the Anxieties of the Masculine Government of James I." *Studies in English Literature, 1500-1900 39*, no. 2, (2009): 357-381.

Crosby, Alfred W. *The Columbian Exchange: Biological and Cultural Consequences of 1492.* 30th Anniversary Edition. London: Praeger, 2003.

---. *Ecological Imperialism: The Biological Expansion of Europe, 900-1900.* Cambridge: Cambridge University Press, 1986.

---. *Germs, Seeds and Animals: Studies in Ecological History.* Armonk: M.E. Sharpe, 1994.

Davies, Gordon L. "Early British Geomorphology." *The Geographical Journal 132*, no. 2, (1966): 252-62.

Dekker, Thomas. *Lust's Dominion*; *or, The Lascivious Queen*, in *The Dramatic Works of Thomas Dekker.* Vol. 4. Edited by Fredson Bowers. Cambridge: Cambridge University Press, 1961. 114-230.

DeLoughrey, Elizabeth, and George B. Handley. Introduction to *Postcolonial Ecologies: Literatures of the Environment.* Edited by Elizabeth DeLoughrey and George B. Handley. Oxford: Oxford University Press, 2011.

Dobson, Michael. *The Making of a National Poet: Shakespeare, Adaptation, and Authorship, 1660-1769.* Oxford: Clarendon Press, 1992.

Dorsey, Kristina. "'Oh Bugspray, Where Art Thou?': Birds, Drunks, Sirens Conspire to make Outdoor Shakespeare a comedy of errors." *The Day*. July 23, 2002, C1-2.

Drew-Bear, Annette. *Painted Faces on the Renaissance Stage: The Moral Significance of Face-Painting Conventions.* Lewisburg: Bucknell University Press, 1994.

Dromgoole, Dominic. *Hamlet: Globe to Globe.* New York: Grove Press, 2017.

Duval, Charles. *With a Show Through Southern Africa.* Vols. 1 & 2. London: Tinsley Brothers, 1882.

Edelman, Charles, ed. *The Stukeley Plays: The Battle of Alcazar by George Peele; The famous history of the life and death of Captain Thomas Stukeley.* Manchester: Manchester University Press, 2005.

Egan, Gabriel. *Green Shakespeare: From Ecopolitics to Ecocriticism*. London: Routledge, 2006.

Ellerbeck, Erin. "'A Bett'ring of Nature': Grafting and Embryonic Development in *The Duchess of Malfi.*" In *The Indistinct Human in Renaissance Literature.* Edited by Jean E. Feerick and Vin Nardizzi. New York: Palgrave Macmillan, 2012. 85-99.

Enders, Jody. *Murder by Accident: Medieval Theater, Modern Media, Critical Intentions*. Chicago: University of Chicago Press, 2009.

Epp, Garrett P. J. *The Towneley Plays.* Kalamazoo: Western Michigan University, 2017.

Estok, Simon C. "Reading Ecophobia: A Manifesto." *Ecozon@ 1,* no. 1. (2010): 75-79.

Fagan, Margaret M. "The Uses of Insect Galls." *The American Naturalist 52*, no. 614 (1918): 15-176.

Feerick, Jean. "Botanical Shakespeare: The Racial Logic of Plant Life in *Titus Andronicus*." *South Central Review 26*, no. 1 & 2, (2009). 82-102.

---. *Strangers in Blood: Relocating Race in the Renaissance.* Toronto: University of Toronto Press, 2010.

Feerick, Jean, and Vin Nardizzi, eds. *The Indistinct Human in Renaissance Literature*. New York: Palgrave Macmillan, 2012.

Fetherling, Douglas. *The Gold Crusades: A Social History of Gold Rushes, 1849-1929*. Toronto: University of Toronto Press, 2015.

Fields, Karen E. and Barbara J. *Racecraft: The Soul of Inequality in American Life*. London: Verso, 2012.

Fleming, Abraham. *A bright burning beacon forewarning all wise virgins to trim their lampes against the coming of the Bridegroom.* London. 1580.

Fletcher, Jill. *The Story of Theatre in South Africa: A Guide to its History from 1780-1930.* Cape Town: Vlaeberg, 1994.

Fletcher, John. *The Knight of Malta.* In *Comedies and Tragedies*. London. 1647.

Fletcher, John. *Bonduca*. Edited by Cyrus Hoy. In *The Dramatic Works in the Beaumont and Fletcher Canon.* 10 Vols. Cambridge: Cambridge University Press, 1979. 4: 149-259.

Floyd-Wilson, Mary. *English Ethnicity and Race in Early Modern Drama.* Cambridge: Cambridge University Press, 2003.

"Foreign Miscellany: Stage Thunder, From *Once a Week*." *New York Times.* July 8, 1866. ProQuest Historical Newspapers: *The New York Times* (1851-2010). 2.

Forman, Valerie. *Tragicomic Redemptions: Global Economics and the Early Modern English Stage.* Philadelphia: University of Pennsylvania Press, 2008.

Foulkes, Richard. *Performing Shakespeare in the Age of Empire.* Cambridge: Cambridge University Press, 2002.

Frost, Christine Mangala, "30 Rupees for Shakespeare: A Consideration of Imperial Theatre in India," *Modern Drama 35*, no. 1 (1992): 90-100.

George, Russ. "Origin of White Cliffs of Dover Phytoplankton Ehux Genome Sequenced." June 19, 2013, http://russgeorge.net/2013/06/19/ehux-genome/

Geouge, Jennifer C. "Anglo-Portuguese Trade During the Reign of Joao I of Portugal, 1385-1433." In *The New Middle Ages: England and Iberia in the Middle Ages, 12th-15th Century: Cultural and Political Exchanges.* Edited by Maria Bullon-Fernandez. New York: Palgrave Macmillan, 2007. 119-134.

Gerald, Frank. *A Millionaire in Memories.* London: Routledge, 1936.

Gerard, John. *The herball or Generall historie of plantes.* London. 1633.

Gilroy, Harry. "Rain and Praise Shower on 'Macbeth.'" *New York Times,* June 29, 1966. ProQuest Historical Newspapers: *The New York Times* (1851-2010), 38.

Gouwens, Kenneth. "What Posthumanism Isn't: On Humanism and Human Exceptionalism in the Renaissance." In *Renaissance Posthumanism.* Edited by Joseph Campana and Scott Maisano. New York: Fordham University Press, 2016. 37-63.

Grazia, Margreta de. *Hamlet Without Hamlet.* Cambridge: Cambridge University Press, 2007.

Green, Paul D. "Theme and Structure in Fletcher's Bonduca." *Studies in English Literature, 1500-1900 22*, no. 2, (1982): 305-316.

Greene, Robert. *The historie of Orlando Furioso, one of the twelue pieres of France, As it was plaid before the Queenes Maiestie.* London. 1594.

Grier, Miles P. "Inkface: The Slave Stigma in England's Early Imperial Imagination." In *Scripturalizing the Human: The Written as the Political.* Edited by Vincent L. Wimbush. New York: Routledge, 2015. 193-220.

Grove, Richard H. *Green Imperialism: Colonial Expansion, Tropical Island Edens and*

the Origins of Environmentalism, 1600-1860. Cambridge: Cambridge University Press, 1995.

Guilfoyle, Cherrell. *Shakespeare's Play Within Play: Medieval Imagery and Scenic Form in Hamlet, Othello, and King Lear.* Kalamazoo: Western Michigan University Press, 1990.

Gupta, Sanjeev, Jenny S. Collier, Andy Palmer-Felgate, and Graeme Potter. "Catastrophic Flooding Origin of Shelf Valley Systems in the English Channel." *Nature 448*, (2007): 342-6.

Gurr, Andrew. "*The Tempest*'s Tempest at Blackfriars." (1989), In *The Tempest, Norton Critical Edition.* Edited by Peter Hulme and William H. Sherman. New York: Norton, 2004. 250-265.

Hageneder, Fred. *Botanical: Yew.* London: Reaktion, 2013.

Hall, Kim F. *Things of Darkness: Economies of Race and Gender in Early Modern England.* Ithaca: Cornell University Press, 1995.

Hamber, J. B. and Eugene Olivier. (Compiled by Laurence Wright and Lin Gubb). "A Tribute to 'Stratford-on-Baakens': Thirty Years of the Port Elizabeth Shakespearean Festival." *Shakespeare in Southern Africa 3,* (1989): 1-8.

Hamilton, Jennifer Mae. *This Contentious Storm: An Ecocritical and Performance History of* King Lear. London: Bloomsbury, 2017.

Harding, Samuel. *Sicily and Naples, or The Fatal Union: A Tragedy.* William Turner: London, 1640.

Hardwicke, Cedric. *A Victorian in Orbit: The Irreverent Memoirs of Sir Cedric Hardwicke.* Westport: Greenwood Press, 1961.

Hariot, Thomas. "A Description of Virginia." *From A Briefe and True Report. 1588. In Captain John Smith: Writings with other Narratives of Roanoke, Jamestown, and the First English Settlement of America*. Edited by James Horn. New York: The Library of America, 2007. 874-905.

Harman, Graham. "The Well-Wrought Broken Hammer: Object-Oriented Literary Criticism."*New Literary History 43*, no. 2 (2012): 183–203.

Harris, Jonathan Gil. *Sick Economies: Drama, Mercantilism, and Disease in Shakespeare's England.* Philadelphia: University of Pennsylvania Press, 2004.

---. *Untimely Matter in the Time of Shakespeare.* Philadelphia: University of Pennsylvania Press, 2009.

Harris, Mitchell M. "The Expense of Ink and Wastes of Shame: Poetic Generation, Black Ink, and Material Waste in Shakespeare's Sonnets." In *The Materiality of Color: The Production, Circulation, and Application of Dyes and Pigments, 1400-1800*, Edited by Andrea Feeser, Maureen Daly Goggin, and Beth Fowkes Tobin. Burlington: Ashgate, 2012. 65-80.

Harward, Simon. *A discourse of the seuerall kinds and causes of lightnings.* London, 1607.

Hassel, Jr., R. Chris. "Shakespeare's 'Removed Mysteries.'" *Connotations 7*, no. 3 (1997): 355-67.

Hatch, Jr., Charles E. "Mulberry Trees and Silkworms: Sericulture in Early Virginia." *The Virginia Magazine of History and Biography 65*, no. 1 (1957): 3-61.

Hattersley, Alan F. *Pietermaritzburg Panorama: A Survey of One Hundred Years of an African City*. Pietermaritzburg: Shuter and Shooter, 1938.

Henderson, Campbell. "Touring in the Orient." *The Stage Year Book*, 1920.

Heywood, Thomas. *The Fair Maid of the West, Parts I and II.* Edited by Robert K. Turner Jr. Lincoln: University of Nebraska Press, 1967.

Hill, Errol. *The Jamaican Stage, 1655-1900: Profile of a Colonial Theatre*. Amherst: University of Massachusetts Press, 1992.

Hiltner, Ken. *What Else is Pastoral?: Renaissance Literature and the Environment.* Ithaca: Cornell University Press, 2011.

Hobhouse, Henry. *Seeds of Change: Six Plants that Transformed Mankind.* Washington DC: Shoemaker & Hoard, 2005.

Holloway, David. *Playing the Empire: The Acts of the Holloway Touring Theatre Company*. London: Harrap, 1979.

Honingmann, E. A. J. *Shakespeare: The "Lost Years."* Manchester: Manchester University Press, 1998.

Hulme, Mike. "Attributing weather extremes to 'climate change': A review." *Progress in Physical Geography 38*, no. 4 (2014): 499-511.

Hunt, Maurice. "Old England, Nostalgia, and the 'Warwickshire' of Shakespeare's Mind." *Connotations 1*, no. 2 (1997): 159-80.

Hussey, Maurice, ed. *The Chester Mystery Plays: Sixteen Pageant Plays from the Chester Craft Cycle*. London: W. Heinemann, 1957.

Ivory, James, dir. *Shakespeare Wallah*, 1965. DVD

Jacobson, Brian. "Optimist Theater's Tempest interrupted by tempest." 20 June 2010, http://urbanmilwaukeedial.com/2010/06/optimist-theatres-tempest-interrupted-by¨-tempest/

Jones, Eldred. *Othello's Countrymen: The African in English Renaissance Drama.* London: Oxford University Press, 1965.

Jones, Emrys. *The Origins of Shakespeare.* Oxford: Clarendon Press, 1978.

Jones, Gwilym. *Shakespeare's Storms.* Manchester: Manchester University Press, 2015.

Jones, William. *God's vvarning to his people of England.* London. 1607.

Jowitt, Claire. *Voyage Drama and Gender Politics, 1589-1642: Real and Imagined Worlds.* Manchester: Manchester University Press, 2003.

Karim-Cooper, Farah. "'This alters not thy beauty': Face-paint, Gender, and Race in Richard Brome's *The English Moor." Early Theater 10*, no. 2 (2007): 140-149.

Kaye, Joel. "The (Re)Balance of Nature, ca. 1250-1350." In *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe.* Edited by Barbara J. Hanawalt and Lisa J. Kiser. Notre Dame: University of Notre Dame Press, 2008. 85-114.

Kendal, Geoffrey and Clare Colvin. *The Shakespeare Wallah: The Autobiography of Geoffrey Kendal.* London: Sidgewick & Jackson, 1986.

Kershaw, Baz. *Theatre Ecology: Environments and Performance Events*. Cambridge: Cambridge University Press, 2007.

Kincaid, Jamaica. *My Garden.* New York: Farrar, Straus, Giroux, 1999.

Klein, Naomi. *This Changes Everything: Capitalism vs. the Climate.* New York: Simon & Schuster, 2014.

Kobayashi, Kaori. "Touring in Asia: The Miln Company's Shakespearean Productions in Japan." In *Shakespeare and his Contemporaries in Performance.* Edited by Edward J. Esche. Aldershot: Ashgate, 2000. 53-72.

Korda, Natasha. *Shakespeare's Domestic Economies: Gender and Property in Early Modern England*. Philadelphia: University of Pennsylvania Press, 2002.

Kumah, Abraham. "Sustainability and gold mining in the developing world." *Journal of Cleaner Production.* 14, (2006): 315-323.

Lamentable newes out of Monmouthshire in VVales. London. 1607.

Lang, Matheson. *Mr. Wu Looks Back: Thoughts and Memories.* London: Stanley Paul & Co., 1941.

Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network Theory.* Oxford: Oxford University Press, 2005.

Lewis, Simon L., and Mark A. Maslin. "Defining the Anthropocene." *Nature*. 519. (12 March 2015): 171-180. http://www.nature.com/nature/journal/v519/n7542/full/nature14258.html

Lin, Erika T. *Shakespeare and the Materiality of Performance.* New York: Palgrave Macmillan, 2012.

Linebaugh, Peter and Marcus Rediker. *The Many-Headed Hydra*. Boston: Beacon Press, 1992.

Macaulay, Thomas Babington. "Minute of 2 Feb. 1835."

MacKay, Ellen. *Persecution, Plague, and Fire: Fugitive Histories of the Stage in Early Modern England.* Chicago: University of Chicago Press, 2010.

Malpighi, Marcello. *De Gallis: On Galls.* Edited and Translated by Margaret Redfern, Alexander J. Cameron, and Kevin Down. London: The Ray Society, 2008.

Malynes, George. *A treatise of the canker of Englands common wealth.* London. 1601.

Malynes, Gerard. *Consuetudo, vel lex mercatoria, or The ancient law-merchant.* London. 1622.

Mani, M. S. *Ecology of Plant Galls.* The Hague: Dr. W. Junk, 1964.

Marsden, John O. and C. Iain House. *Chemistry of Gold Extraction.* Edited by John O. Marsden and C. Iain House. SME, 2006.

Marston, John. *The vvonder of vvomen or The tragedie of Sophonisba as it hath beene sundry times acted at the Blacke Friers.* 1606.

Mascall, Leonard. *A booke of the arte and maner, howe to plant and graffe all sortes of trees howe to set stones, and sowe pepines to make wylde trees to graffe on, as also remedies and medicines.* London. 1572.

---. *A booke of fishing with hooke & line, and of all other instruments thereunto belonging.* London. 1590.

Massinger, Philip. *The Parliament of Love. In The Plays of Philip Massinger, in Four Volumes.* Edited by William Gifford. Vol. 2. London. 1813.

McCarthy, Terence S. "The impact of acid mine drainage in South Africa." *South African Journal of Science 107*, no.5/6 (2011): 1-7.

McMullan, Gordon. "The Colonization of Early Britain on the Jacobean Stage." In *Reading the Medieval in Early Modern England.* Edited by Gordon McMullan and David Matthews. Cambridge: Cambridge University Press, 2007. 119-140.

McNeill, J. R. "Woods and Warfare in World History." *Environmental History 9*, no. 3 (2004): 388-410.

Melville, C. P., A. Levret, P. Alexandre, J. Lambert, and J. Vogt. "Historical Seismicity of the Strait of Dover-Pas de Calais." *Terra Nova 8,* no. 6 (1996): 626-47.

Mendes, Americo M. S. Carvalho and Jose A. R. Graca. "Cork Bottle Stoppers and Other Cork Products." In *Cork Oak Woodlands on the Edge: Ecology, Adaptive Management, and Restoration.* Edited by James Aaronson, Joao S Pereira, and Juli G. Pausas. Washington DC: Island Press, 2009. 59-69.

Mentz, Steve. *At the Bottom of Shakespeare's Ocean.* London: Continuum, 2009.

---. *Shipwreck Modernity: Ecologies of Globalization, 1550-1719.* Minneapolis: University of Minnesota Press, 2015.

---. “The Neologismcene.” *Arcade: Literature, the Humanities, & the World*, July 1, 2018, https://arcade.stanford.edu/blogs/neologismcene.

Mikalachki, Jodi. *The Legacy of Boadicea: Gender and Nation in early modern England.* London: Routledge, 1998.

Monsanto. Monsanto’s Commitment to Sustainable Yield. July 1, 2018 http://www.aganytime.com/Documents/DemonstrationReportsPDFs/2013%20Demonstration%20Summaries/MON_GLC_MonsantosCommitmenttoSustainableYield.pdf

Moreno, D. Garcia, K. Verbeek, T. Camelbeeck, M. De Batist, F. Oggioni, O. Zurita Hurtado, W. Versteeg, H. Jomard, J. S. Collier, S. Gupta, A. Trentesaux, and K. Vanneste “Fault Activity in the Epicentral Area of the 1580 Dover Strait (Pas-de-Calais) Earthquake (Northwestern Europe).” *Geophysical Journal International.* 201, (2015): 528-42.

Morris, Martha. “Naval Cordage Procurement in Early Modern England.” *International Journal of Maritime History 11*, no. 1 (1999): 81-99.

Morton, Timothy. *The Ecological Thought*. Cambridge: Harvard University Press, 2010.

Musson, R. M. W. “British earthquakes.” *Proceedings of the Geologists’ Association 118* (2007): 305-337.

Nardizzi, Vin. “Grafted to Falstaff and Compounded with Catherine: Mingling Hal in the Second Tetralogy.” In *Queer Renaissance Historiography: Backward Gaze*. Edited by Vin Nardizzi, Stephen Guy-Bray, and Will Stockton. Burlington: Ashgate, 2009.

---. *Wooden Os: Shakespeare’s Theatres and England’s Trees.* Toronto: University of Toronto Press, 2013.

Natal Witness, 3 April 1882.

Neeson, Eion. “Woodland in History and Culture.” In *Nature in Ireland: A Scientific and Cultural History.* Edited by John Wilson Foster. Dublin: The Lilliput Press, 1997. 133-156.

Neil, Kelly. “The Politics of Suicide in John Fletcher’s *Tragedie of Bonduca*.” *Journal for Early Modern Cultural Studies 14*, no. 1 (2014): 88-114.

Neilson, G., R. M. W. Musson, and P. W. Burton. “The ‘London’ Earthquake of 1580, April 6.” *Engineering Geology 20*, no. 1-2 (1984): 113-141.

Nielsen, Wendy C. “Boadicea Onstage before 1800, a Theatrical and Colonial History.” *Studies in English Literature, 1500-1900 49*, no. 3 (2009): 595-614.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor.* Cambridge: Harvard University Press, 2011.

Normington, Katie. *Gender and Medieval Drama.* Woodbridge: D.S. Brewer, 2004.

Omotoso, Kole. *The Theatrical into Theatre: A Study of Drama and Theatre in the English-Speaking Caribbean.* London: New Beacon Books, 1982.

Oppenheim, H. L. “Brooke, Gustavus Vaughan (1818-1866).” *Australian Dictionary of Biography.* National Centre of Biography, Australian National University. 17 March, 2017. http://adb.anu.edu.au/biography/brooke-gustavus-vaughan- 3064/text4519.

Parry, Graham. *The Trophies of Time: English Antiquarians of the Seventeenth Century*. Oxford: Oxford University Press, 1995.

Parsons, James J. “The Cork Oak Forests and the Evolution of the Cork Industry in Southern Spain and Portugal.” *Economic Geography 38* no. 3 (1962): 195-214.

Pennsylvania Gazette, December 8, 1766.

Pietz, William. “Death of the Deodand: Accursed Objects and the Money Value of Human Life.” *Anthropology and Aesthetics 31*, no. 1 (1997): 97-108.

Pliny. *The historie of the vvorld Commonly called, the naturall historie of C. Plinius Secundus.* Translated by Philemon Holland. London. 1601.

Poitevin, Kimberly. “Inventing Whiteness: Cosmetics, Race, and Women in Early Modern England.” *Journal for Early Modern Cultural Studies 11,* no. 1 (2011): 59-89.

Powell, William T. “Excerpts from the memoirs of William T. Powell.” In *Johannesburg pioneer journals, 1888-1909.* Maryna Fraser, ed. Cape Town: Van Riebeeck Society, 1986.

Primack, Richard B., Abrahama Miller-Rushing, and Kiruba Dharaneesaran. “Changes in the Flora of Thoreau’s Concord.” *Biological Conservation 142*, no. 3 (2009): 500-8.

Racster, Olga. *Curtain Up!* Cape Town: Juta & Co., 1951.

Reader’s Digest. *South Africa’s Yesterdays.* Cape Town: Reader’s Digest Association South Africa, 1981.

Redfern, Margaret and R. R. Askew. *Plant Galls.* Slough: Richmond Publishing Co., 1992.

Roberts, Lewes. *The Merchants Mappe of Commerce.* London. 1638.

Rosenthal, Eric. “Early Shakespeare Productions in South Africa.” *English Studies in Africa 7*, no. 2 (1964): 202-216.

Rossi, Paolo. *The Dark Abyss of Time: The History of the Earth and the History of Nations from Hooke to Vico.* Chicago: University of Chicago Press, 1984.

Rudwick, Martin J. S. *Earth’s Deep History: How It Was Discovered and Why It Matters.* Chicago: University of Chicago Press, 2014.

Ruscelli, Girolamo. *The seconde part of the Secretes of Master Alexis of Piemont.* 1560.

Ryner, Bradley. *Performing Economic Thought: English Drama and Mercantile Writing 1600-1642.* Edinburgh: Edinburgh University Press, 2014.

Schauffer, Dennis. “Shakespeare Performance in Pietermaritzburg, Natal, prior to 1914.” *Shakespeare in Southern Africa*. Vol. 19. (2007): 9-23.

Schneider, Rebecca. *Performing Remains: Art and War in Times of Theatrical Reenactment.* New York: Routledge, 2011.

Schwartz, Stuart B. *Sea of Storms: A History of Hurricanes in the Greater Caribbean from Columbus to Katrina.* Princeton: Princeton University Press, 2015.

Seed, Patricia. *Ceremonies of Possession in Europe’s Conquest of the New World, 1492-1640.* Cambridge: University of Cambridge Press, 1995.

Simpson, H.A.D. “Art in Afghanistan.” *The Theatre 4*, (1881): 140-3.

Shakespeare, William. *As You Like It.* Edited by Barbara A. Mowat and Paul Werstine. New York: Washington Square Press, 1997.

---. *The Merchant of Venice.* Edited by Barbara A. Mowat and Paul Werstine. New York: Washington Square Press, 2010.

---. *The Arden Shakespeare: Titus Andronicus.* Edited by Jonathan Bate. London: Routledge, 1995.

---. *Macbeth*. Edited by Jonathan Bate and Eric Rasmussen. New York: The Modern Library, 2009.

---. *Much Ado About Nothing.* Edited by Jonathan Bate and Eric Rasmussen. New York: The Modern Library, 2009.

---. *Pericles*. Edited by Barbara A. Mowat and Paul Werstine. New York: Washington Square Press, 2005.

---. *The Tempest*. Edited by Jonathan Bate and Eric Rasmussen. New York: The Modern Library, 2008.

---. *Romeo and Juliet.* Edited by Barbara A. Mowat and Paul Werstine. New York: Washington Square Press, 1992.

---. *King Lear.* Edited by Barbara A. Mowat and Paul Werstine. New York: Washington Square Press, 1993.

Shepard, Richard F. "Weather, 'Tis Not Always Nobler at the Delacorte." *New York Times.* Aug. 14, 1988. ProQuest Historical Newspapers: *The New York Times* (1851-2010), H5.

Shilling, Erik. "Massive Cyanide Spill at Gold Mine Leaked Into 5 Different Rivers." *Atlas Obscura.* February 25, 2016. http://www.atlasobscura.com/articles/massive-cyanide-spill-at-gold-mine-leaked-into-5-different-rivers

Shillington, V.M. and A.B. Wallis Chapman. *The Commercial Relations of England and Portugal.* London: Routledge, 1907.

Siegel, Naomi. "Weather Adds Touch To Outdoor 'Tempest.'" *New York Times*, July 5, 2009, NJ10.

Smith, Ian. *Race and Rhetoric in the Renaissance: Barbarian Errors.* New York: Palgrave MacMillan, 2009.

---. "Othello's Black Handkerchief." *Shakespeare Quarterly 64*, no. 1 (2013): 1-25.

Sofer, Andrew. *The Stage Life of Props.* Ann Arbor: University of Michigan Press, 2003.

---. *Dark Matter: Invisibility in Drama, Theater, and Performance.* Ann Arbor: University of Michigan Press, 2013.

Spargo, P. E. "The Lion's Head Gold Mine." *Bulletin of the National Library of South Africa 69*, no. 1 (2015): 28-40.

Standish, Arthur. *The commons complaint.* London. 1611.

Steffen, Will, Jacques Grinevald, Paul Crutzen, and John McNeill. "The Anthropocene: Conceptual and Historical Perspectives." *Philosophical Transactions of the Royal Society 369* (2011): 842-67.

Stern, Tiffany. "Actors' Parts." In *The Oxford Handbook of Early Modern Theatre.* Edited by Richard Dutton. Oxford: Oxford University Press, 2009.496-512.

Stevens, Andrea. *Inventions of the Skin: The Painted Body in Early English Drama.* Edinburgh: Edinburgh University Press, 2013.

Strachey, William. *A True Reportory of the Wreck and Redemption of Sir Thomas Gates, Knight.* 1625.

Subramanian, Meera. "The City and the Sea." Orion Magazine. 2015. https://orionmagazine.org/article/the-city-and-the-sea/

Swan, Quito. *Black Power in Bermuda: The Struggle for Decolonization.* New York: Palgrave Macmillan, 2009.

A table plainly teaching ye making and use of a wetherglas. London. 1631.

Tacitus. *Agricola and Germania.* Translated by Harold Mattingly. New York: Penguin, 2009.

Taylor, John. *Newes and strange newes from St. Christophers of a tempestuous spirit, which is called by the Indians a hurry-cano or whirlewind.* London. 1638.

Tenner, Edward. *Why Things Bite Back: Technology and the Revenge of Unintended Consequences.* New York: Vintage, 1997.

"Theatrical touring in the Far East: by one who has tried it." In *The Stage Year Book* 1917.

Thomas, Keith. *Religion and the Decline of Magic.* New York: Charles Scribner's Sons, 1971.

Thommen, Lukas. *An Environmental History of Ancient Greece and Rome.* Translated by Philip Hill. Cambridge: Cambridge University Press, 2012.

Thompson, Ayanna. *Performing Race and Torture on the Early Modern Stage.* New York: Routledge, 2008.

Thomson, Leslie. "The Meaning of Thunder and Lightning: Stage Directions and Audience Expectations." *Early Theatre 2*, (1999): 11-24.

Todd, Kim. *Tinkering With Eden: A Natural History of Exotics in America.* New York: W.W. Norton & Co., 2001.

Trenberth, Kevin E. "Attribution of climate variations and trends to human influences and natural variability." *WIREs Clim Change 2,* (2011): 925-930.

Tweedy, Mary Johnson. "Bermuda 'Tempest': Presentation in Hamilton Recalls Belief That Island Was Scene of Play." *New York Times.* Sept. 17, 1950. ProQuest Historical Newspapers: *The New York Times* (1851-2010), 111.

Vaughan, Virginia Mason. *Performing Blackness on English Stages, 1500-1800*. Cambridge: Cambridge University Press, 2005.

Verstegan, Richard. *A Restitution of Decayed Intelligence in Antiquities.* London, 1605.

Wall, Wendy. "Renaissance National Husbandry: Gervase Markham and the Publication of England." *The Sixteenth Century Journal 27,* no. 3 (1996): 767-785.

Walsham, Alexandra. *Providence in Early Modern England*. Oxford: Oxford University Press, 1999.

Ward, Genevieve and Richard Whiteing. *Both Sides of the Curtain.* London: Cassell and Co., 1918.

Wecker, Johann Jacob. *Cosmeticks or, the Beautifying Part of Physick.* London. 1660.

---. *Eighteen Books of the Secrets of Art & Nature.* London. 1660.

Wickham, Glynne William Gladstone. *Shakespeare's Dramatic Heritage: Collected Studies in Medieval, Tudor, and Shakespearean Drama*. London: Routledge & K. Paul, 1969.

Wilkie, Allan. *All the World my Stage: The Reminiscences of a Shakespearean Actor-Manager in Five Continents.* Unpublished autobiography. MSS 92 W6825. University of Adelaide Special Collections.

Williams, Edward. *Virginia, more especially the south part thereof, richly and truly valued viz. the fertile Carolana, and no lesse excellent Isle of Roanoak, of latitude from 31 to 37 degr. relating the meanes of raysing infinite profits to the adventurers and planters.* 1650.

Wilson, Miranda. "Bastard Grafts, Crafted Fruits: Shakespeare's Planted Families." In *The Indistinct Human in Renaissance Literature*. Edited by Jean E. Feerick and Vin Nardizzi. New York: Palgrave Macmillan, 2012. 103-118.

Woodbridge, Linda. *English Revenge Drama: Money, Resistance, Equality.* Cambridge: Cambridge University Press, 2010.

The vvonders of this windie winter. London, 1613.

Wong-Chong, George M., David V. Nakles, and David A. Dzombak, "Management of Cyanide in Industrial Process Wastewaters." In *Cyanide in Water and Soil: Chemistry, Risk, Management.* Edited by David A. Dzombak, Rajat S. Ghosh, and George M. Wong-Chong. London: Taylor & Francis, 2006. 517-570.

Wood, Alfred C. *A History of the Levant Company.* London: Frank Cass & Co., 1964.

Wooley, Hannah. *The accomplish'd ladies delight in preserving, physick, beautifying and cookery.* London, 1683.

Woolf, Rosemary. *The English Mystery Plays.* Berkeley: University of California Press, 1972.

Worster, Donald. *Nature's Economy: A History of Ecological Ideas.* Cambridge: Cambridge University Press, 1977.

Wright, Richardson. *Revels in Jamaica*, 1682-1838. New York: Dodd, Mead & Co., 1937.